



Office of Statewide Health
Planning & Development

COMMUNITY PARAMEDICINE PILOT PROJECT

HWPP #173

ADDENDUM #1

Revised June 6, 2014

The Emergency Medical Services Authority (EMSA) submitted an application to pilot a Community Paramedicine Pilot Project (HWPP#173) to OSHPD on February 6, 2014 and which subsequently was released to the Healing Arts Boards and other interested Stakeholders for a 45 day public comment period on February 14, 2014. In addition, a Public Comment meeting was convened by OSHPD on April 9, 2014 for the purpose of receiving comments from the public.

It is important to note that the use of the HWPP process provides the most controlled environment to evaluate the concepts proposed in the EMSA Application and determine whether they are effective. There are multiple and even redundant levels of safety built into the design and stakeholders have been provided with direct influence over the project.

Issues were brought forward by a number of organizations that warrant the submission of this Addendum to clarify or provide additional detail to EMSA's Application in the following areas, including operational procedures and protocols, and additional information about the management and oversight of the projects:

Need for Project

As addressed in EMSA's application, Community paramedicine (CP) is a new and evolving model of community-based health care in which paramedics function outside their customary emergency response and transport roles in ways that facilitate more appropriate use of emergency care resources and/or enhance access to primary care for medically underserved populations. CP programs typically are designed to address specific local problems and to take advantage of locally developed linkages and collaborations between and among emergency medical services (EMS) and other health care and social service providers; thus, they are varied and determined by local needs. Interest in community paramedicine has substantially grown in recent years based on the belief that it may improve access to and quality of care while also reducing costs.

A report entitled *Community Paramedicine: "A Promising Model for Integrated Emergency and Primary Care,"* funded by The California HealthCare Foundation and prepared by the UC Davis Institute for Population Health Improvement (IPHI), outlines the opportunities and barriers that exist for CP in California and discusses the policy options that are available to further explore the development of the Community Paramedicine in California. Additional organizations that have reported on this subject are listed in **Appendix A** of EMSA's application.

While the reports contained within **Appendix A** show a global need, EMSA requested and received additional information in reference to the "Local Need for the Project" from all of the proposed Pilot Sites, which is contained within **Appendix S** of this Addendum.

Patient Safety and Quality Assurance/Improvement

Increased medical control and oversight will be necessary to ensure patient safety and for quality improvement. The LEMSA Medical Director or their designee (*with the same or higher credentials or experience*), will act as the principal investigator and has primary responsibility for medical control for any project in her/his jurisdiction. A Local CP Project Advisory Committee has been established for each pilot site and includes the LEMSA Medical Director or their designee, the LEMSA administrator or designee, as well as a medical director and administrator from any participating Healthcare systems and EMS provider agency.

Patient Safety and Quality Assurance/Improvement will be monitored using approved Quality Assurance programs within each LEMSA. (CCR Title 22, Div 9, Chapter 12, EMS System Quality Improvement) Prospective and retrospective quality review processes will include administrative and medical treatment of protocols, which are found within each of the Pilot Site proposals contained within **Appendix S**. In addition, for the purposes of this project, a 100% retrospective review of all patients treated by a Community Paramedic will be conducted.

The specific medical protocols and operational protocols for each project are overseen by emergency physicians who have additional expertise in Emergency Medical Services and the statutory authority for oversight of EMS practice. The operational protocols, conduct of the project, and quality assurance/improvement are overseen by emergency physicians, nurse educators with experience in emergency medicine and

Public Health, and multiple other healthcare and EMS personnel from the local jurisdiction through their Local Oversight Committee.

Informed Consent

Informed Consent

Patient Consent Forms for each individual concept have been included within this addendum, and will be required to be used by all Pilot Sites. **Appendix R.** This Appendix replaces **Appendix J** which was included in EMSA's original application. All of the Consent forms contain the following:

1. Explanation that treatment by the Community Paramedic is part of a demonstration project conducted under the authority of the California Office of Statewide Health Planning and Development,
2. Statement that a supervising health care professional is available for consultation at all times of treatment by the Community Paramedic,
3. Assurance that the patient can refuse care from a trainee without penalty, and
4. Identification that consenting to treatment by a trainee does not constitute assumption of risk by the patient.

Patients who cannot consent due to inebriation, mental incapacity, or no responsiveness will be treated in accordance with current regulations and local protocols governing EMT-Paramedics.

Community Paramedicine "Core" Education Plan (*Appendix P*)

The UCLA Center for Prehospital Care will be responsible for the coordination and delivery of the core curriculum using affiliated faculty made up of Nurses and Physician educators who are considered well versed in educating allied health professionals, who have been screened and approved by Dr. Baxter Larmon. (*Names and Credentials to be provided to OSHPD prior to commencement of training*)

The UCLA Center for Prehospital Care is a division of the UCLA Emergency Medicine Center at the David Geffen School of Medicine. For 27 years, UCLA has offered both primary and continuing education programs for Emergency Medical Technicians, Paramedics, Medical Students, Registered Nurses, Physicians as well as the lay public. UCLA is also actively engaged in research and quality improvement to contribute to the fund of knowledge that examines prehospital medicine.

UCLA faculty assisted in the creation the paramedic national curriculum used by all training programs. UCLA was one of eleven high performing education programs in the nation that created 12 strategies to maximize student success, including national accreditation, valid examinations and innovative curriculum delivery (Prehospital Emergency Care, 2009; 13: 505-511).

The curriculum outlines were included in **Appendix C** of our February 6, 2014 application. The curriculum was developed by the Community Healthcare and Education Cooperative (CHEC), a unit of the North Central EMS Institute which is made up of the University of Nebraska Medical Center, Creighton University, Dalhousie University, Mayo Clinic Medical Transport, Health Education - Industry Partnership of Minnesota, the Rural Centre of Nova Scotia, Offutt Air Force Base EMS Education, the state rural health offices of Nebraska and Minnesota, and the

Centre for Prehospital Research in Queensland. It was reviewed and approved by an EMSA Curriculum Advisory Review Committee.

A copy of the full Curriculum and Lesson Plans, which are currently being used by 35 colleges throughout the United States to teach Community Paramedics has been submitted to OSHPD under separate cover for viewing by interested parties.

Site-specific Curricula

The site-specific approved curricula will be taught locally by physicians, nurse educators with experience in emergency medicine and Public Health, who have been screened and approved by Dr. Baxter Larmon, in classrooms that are currently used for the provision of didactic and clinical training for health care providers and offer access to reference materials, medical simulations, and laboratory materials required for instruction. (*Names and Credentials of Instructors to be provided to OSHPD prior to commencement of training*) The details related to each of the individual site specific Curricula can be found in **Appendix S**.

UCLA Teaching Staff

For the purpose of providing the Community Paramedicine Curriculum, UCLA will use the following principal instructors, augmented by collaboration with two key external organizations on the CP Education Program. The North Central EMS Institute (NCEMSI) in Minnesota developed Community Paramedicine curriculum that will be used as the foundation for this course in California. UCLA is also partnering with key members of the Paramedic Foundation, also in Minnesota, which has expertise in delivering the CP Education Program to rural providers in Colorado. *Additional Names and Credentials to be provided to OSHPD prior to commencement of training*

Baxter Larmon, PhD, MICP will serve as the principle investigator and principle faculty for the CP Education Program. Dr. Larmon will serve as the key curricula, lesson and examination architect of the program. Dr. Larmon is a professor of medicine in the David Geffen School of Medicine at UCLA, is the founder of the UCLA Center for Prehospital Care, and founder of the Prehospital Care Research Forum. Dr. Larmon is a nationally renowned EMS expert, presents at many national and international conferences, and serves on the editorial board of several nationally recognized EMS publications.

Steven J. Rottman, MD, FACEP, will serve as co-principle investigator, medical director and instructor for the CP Education Program. Dr. Rottman will serve as the key public health and clinical expert in the development of the program. Dr. Rottman has been actively involved in Emergency Medical Services education, research and practice for over 20 years and has served as the medical director of the UCLA Center for Prehospital Care since its inception. He is a senior attending physician in the UCLA Emergency Medicine Center and a professor of Emergency Medicine and Community Health Sciences at the David Geffen School of Medicine and the School of Public Health at UCLA. Dr. Rottman is a principal investigator on several research and training grants, and has authored numerous scientific papers in the fields of EMS and emergency public health.

Todd F. LeGassick, MPH, is the co-founder and Executive Director for the UCLA Center for Prehospital Care. Mr. LeGassick will serve as a public health instructor and key management expert in directing the logistics for the delivery of the CP Education Program. He earned his master's degree in health services policy and management and has led the development of innovative educational and operational systems in EMS for over 30 years.

Training Evaluation Measurement

The success of CP Education Program will be assessed through the use of both quantitative and qualitative measures. These measures will be created with EMSA and the UCSF project evaluation team targeted to evaluate the following:

1. The approved CP education program is developed and delivered according to the approved work plan, enabling pilot projects to implement their approved projects.
2. The number of students starting each program and completing it (completion rate)
3. The performance on examinations and assessments (competency evaluation)
4. The satisfaction of students at the completion of the CP education program (student evaluations)

5. The evaluation of faculty during and at the completion of the CP education program (faculty evaluations)
6. The satisfaction of these same students after they have been practicing as a CP for 3-6 months (graduate evaluation)
7. The evaluation of the pilot project site managers after paramedics have been practicing as a CP for 3-6 months (employer evaluation)

This information will be discussed in a quality improvement meeting and presented in a report to EMSA. Dr. Larmon, the Principle Investigator and co-investigators, Dr. Rottman and Mr. Todd LeGassick will be responsible for the tracking and reporting the results of the CP Education Program.

In addition, the California HealthCare Foundation (CHCF) has engaged the University of California San Francisco, Phillip R. Lee Institute for Health Policy Studies and the Center for the Health Professions to fulfill the role of Independent Evaluator for this project. The evaluation of the Community Paramedicine Pilot Project will be a three phase process. Phase I will be focused on the collection of baseline data required by the California Code of Regulations to describe the way in which care is provided under current law. Phase II will be focused on the training of the Community Paramedic (CP). Phase III will be focused on the clinical CP Intervention period.

Evaluation of the training will consist of documentation that each EMT-P selected to participate in a pilot has completed the required number of hours in didactic training in each of the required curricula, and the required number of hours in clinical training during the site specific module. In addition, performance on written examinations, (*with a passing grade of 80% or better*), based on didactic training and the instructors' evaluations of EMT-P's performance in clinical practicum's will be used to evaluate CP training.

The training/testing period will end when trainees have successfully completed both the Core Training and Specific Site training, inclusive of Clinical Experience with a passing grade of 80% or higher. The employment/utilization phase will begin using only those trainees that have successfully passed the course, and is anticipated to begin in January 2015.

Supervisor to CP Ratio

The sites will utilize seasoned Supervisor or Management personnel who have completed the approved CP training program or who hold licensure as registered nurses or MD's.

Each site Project Manager will ensure that each site supervisor possesses a knowledge depth of the current operating EMS system, as well as the Community Paramedicine concepts being piloted. This will be accomplished through interaction and collaboration with all healthcare provider agency participants.

Project Site	Ratio	Project Site	Ratio
CP 001 LA	1/6	CP 002 LA	1/6
CP 003 Orange	1/6	CP 004 Butte	1/3
CP 005 Ventura (TB)	1/3	CP 006 SB/Ventura (Hospice)	1/1
CP 007 Alameda	1/6	CP 008 San Bernardino	1/4
CP 009 Carlsbad	1/6	CP 010 San Diego	1/5
CP 012 Stanislaus	1/1	CP 013 Solano	1/3

Description of Baseline Data Project Activity information to be Collected

As required under the California Code of Regulations, the evaluator will collect and provide baseline data to HWPP within six months of project approval. Baseline data will describe the provision of health care prior to utilization of the CP and cover patient demographics cost of care, EMS utilization, and utilization of other health care services. Baseline data will be provided for the 3 months prior to beginning of the CP training period. Similar baseline data measures of utilization and cost will be used across all pilot sites to the greatest extent feasible. There will be some variation in measures across pilot sites because the sites are demonstrating different concepts in scope of practice expansion. Sites demonstrating the same concept will collect data on standardized measures pertinent to that concept. Baseline data measures are identified and described in **Appendix H** of our original application. In addition we have included in **Appendix Q** to this Addendum the Data Collection Tool for each of the Concepts being tested. This information will be forwarded to the Independent Evaluator by the individual project sites.

Modifications

The EMSA Project Manager will be responsible for submitting any modification or additions to an approved project in writing to program staff for approval prior to implementation. Modification will include, but are not limited to the following:

- (a) Changes in the scope or nature of the project,
- (b) Changes in selection criteria for trainees, supervisors, or employment/utilization sites
- (c) Changes in project staff or instructors

Appendix P

Community Paramedicine "Core" Education Plan

Developed and delivered by the UCLA Center for Prehospital Care in partnership with the California EMS Authority, California Health Care Foundation, North Central EMS Institute, Paramedic Foundation and the California Community College Chancellor's Office.

Who should attend:

All Community Paramedicine Pilot Programs must successfully complete this program (no exceptions). Alternate Transportation Destination Pilots are required to send at least one, but no more than two paramedics to this course.

Course description:

This 6-week, 100+ hour course meets the Community Paramedicine "Core" Education requirements for the approved pilot programs for the State of California EMS Authority. Paramedics completing this 100 + hour course will be competent in the objectives set forth by the State Community Paramedicine Educational Advisory Committee. **This course does not address the site specific training required for each pilot.**

Delivery Plan:

This course will be delivered in the Los Angeles area twice and broadcast to remote sites with an onsite public health coordinator/educator.

Course Dates:

Course #1 Aug 19th - Sept 25th

Students will be expected to be present to all class sessions on Tuesdays and Thursdays from 8am to 5pm. In addition students will be required to do outside class work that is estimated to be approximately 8 hours per week. The proposed broadcasting locations for the first course are the counties of Alameda and either San Diego or San Bernardino.

Course #2 Oct 14th - Nov 20th

Students will be expected to be present to all class sessions on Tuesdays and Thursdays from 8am to 5pm. In addition Students will be required to do outside class work that is estimated to be approximately 8 hours per week. The proposed broadcasting locations are counties of Butte, Alameda and San Diego or San Bernardino.

Minimum Student Requirements

A minimum of 4 years of working experience as a Paramedic

Recommended by the Local EMS Agency medical director

Able to attend all sessions

Computer with Internet access to complete out of class assignments

How to Enroll:

In order to facilitate planning Pilot Sites should provide the anticipated number of Students and their preferred Training Location to tlegassick@mednet.ucla.edu and lou.meyer@emsa.ca.gov no later than June 1, 2014. Class size will be limited to 25 Students per training location.

To comply with the OSHPD requirements, the medical director of the LEMSA shall approve all potential community paramedic applicants. Enrollments may only be sent from the Local EMS Agency to the UCLA Center for Prehospital Care. LEMSA's should provide paramedic's name, license #, fire department or ambulance company, email and telephone number and email to tlegassick@mednet.ucla.edu and lou.meyer@emsa.ca.gov no later than July 15, 2014.

Appendix Q

Data Collection Tool

Hospice

Q1.1 Please identify your site:

- UCLA Alternate Destination
- UCLA Post-hospital
- Orange County Alternate Destination
- Butte County Post-hospital
- Ventura Tuberculosis
- Ventura/SB Hospice
- Alameda Post-hospital
- Alameda Frequent 911
- San Bernardino Post-hospital
- Carlsbad Alternate Destination
- San Diego Frequent 911
- Medic Ambulance Post-hospital
- Stanislaus Alternate Destination
- Other

Q1.2 For all of the following questions where you are asked to provide a number, please type in only numbers and decimals, if relevant. E.G., type 5 instead of typing "five". Where you are asked to fill in data relevant to a specific type of patient, please leave the write-in space BLANK for any patients not included in your pilot, but type 0 if your site includes the patient type, but none were treated. During baseline data collection, "eligible" patients include those who would be eligible for your project based on the protocols at your site if the pilot were currently operational.

Demographics

Q2.1 The following questions largely define eligible patients as those "transported to an ED in the last month." For your pilot site, we understand that very few if any patients will be transported to an ED. Please answer the following questions for all eligible patients, even though they have not been transported to an ED.

Q2.5 Please provide the average number of household members who received grief/crisis among all eligible patients in the last month. (All household members - children and adults - should be included)

Q2.6 Please provide the average patient age among all eligible patients transported to a partner ED in the last month. (No patients under age 18 are eligible for the pilot)

Q2.8 Please provide the average age of household members receiving grief/crisis counseling among all eligible patients in the last month. (Household members may be under 18)

Q2.12 In the last month, how many eligible patients were male?

Q2.14 In the last month, how many eligible patients' family members receiving grief/crisis counseling were male?

Q2.18 In the last month, how many eligible patients were female?

Q2.20 In the last month, how many eligible patients' family members receiving grief/crisis counseling were female?

Q2.24 Please identify how many eligible patients of each ethnicity shown below were transported in the last month?1 = Hispanic2 = Non-Hispanic3 = Unknown

- Hispanic _____
- Non-Hispanic _____
- Unknown _____

Q2.26 Please identify how many eligible patients' family members receiving grief/crisis counseling were of each ethnicity shown below in the last month?1 = Hispanic2 = Non-Hispanic3 = Unknown

- Hispanic _____
- Non-Hispanic _____
- Unknown _____

Q2.36 Please identify how many eligible patients of each race/ethnicity shown below were transported in the last month?1 = White2 = Black3 = Native American / Eskimo / Aleut4 = Asian / Pacific Islander5 = Other6 = Unknown

- White _____
- Black _____
- Native American / Eskimo / Aleut _____
- Asian / Pacific Islander _____
- Other _____
- Unknown _____

Q2.38 Please identify how many eligible patients' family members receiving grief/crisis counseling were of each race/ethnicity shown below in the last month?1 = White2 = Black3 = Native American / Eskimo / Aleut4 = Asian / Pacific Islander5 = Other6 = Unknown

- White _____
- Black _____
- Native American / Eskimo / Aleut _____
- Asian / Pacific Islander _____
- Other _____
- Unknown _____

Q2.57 Please identify how many patients speaking the languages shown below were treated in the last month?

- English (ENG) _____
- Amharic (AMH) _____
- Arabic (ARA) _____
- Armenian (AMR) _____
- Cantonese - Yue Chinese (YUE) _____
- Chinese (CHI) _____
- Croatian (HRV) _____
- Farsi (PES) _____
- French (FRE) _____
- French Creole (CPF) _____
- German (GER) _____
- Greek (GRE) _____
- Gujarati (GUJ) _____
- Hebrew (HEB) _____
- Hindi (HIN) _____
- Hmong (HMN) _____
- Hungarian (HUN) _____
- Ilocano - Iloko (ILO) _____
- Indonesian (IND) _____
- Italian (ITA) _____
- Japanese (JPN) _____
- Korean (KOR) _____
- Lao (LAO) _____
- Mandarin (CMN) _____
- Mien - Iu Mien (IUM) _____
- Mon-Khmer (MKH) _____
- Navajo (NAV) _____
- Panjabi - Punjabi (PAN) _____
- Persian (PER) _____
- Polish (POL) _____
- Portuguese (POR) _____
- Russian (RUS) _____
- Sign Language (SGN) _____
- Samoan (SMO) _____
- Serbian (SRP) _____
- Spanish (SPA) _____
- Swahili (SWA) _____
- Tagalog (TGL) _____
- Telugu (TGL) _____
- Thai (THA) _____
- Tonga (TON) _____
- Ukrainian (UKR) _____
- Urdu (URD) _____
- Vietnamese (VIE) _____
- Yiddish (YID) _____

- Yoruba (YOR) _____
- Unknown (999) _____
- Other (Please write in language and number of patients) _____
- Mexteca _____

Q2.58 Please type in all of the zip codes, separated by commas, in which your provider agencies answered 911 calls by eligible patients in the last month. (For the test period, please type in all of the most common zip codes or most expected zip codes for your pilot site).

Q2.59 Please identify how many patients with each of following types of insurance coverage were treated in the last month?

- Private _____
- Medicare _____
- Medicaid _____
- Self-pay _____

EMS Utilization

Q3.1 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.2 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call for your ELIGIBLE population:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.3 How many patients did your partner provider agencies transport to all EDs in the last month?

Q3.4 How many patients did your partner provider agencies transport to partner EDs in the last month?

Q3.5 How many UNIQUE patients did your partner provider agencies transport to partner EDs in the last month?

Q3.6 How many eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.10 How many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.14 What was the AVERAGE length of time in minutes from arrival on scene to arrival at the ED for transports of eligible patients to partner EDs in the last month?

Q3.18 What was the AVERAGE length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.22 What was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.26 What was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.30 What was the total number of your transports that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.31 What was the total number of your transports of ELIGIBLE patients that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.35 What was the AVERAGE number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.36 What was the SHORTEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.37 What was the LONGEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.38 Please enter the number of transports of eligible patients to partner EDs that occurred in the last month in each of the following time frames? (Use the arrival time at ED to classify transports)

- Morning 9:01am-12:00pm _____
- Afternoon 12:01pm-5:00pm _____
- Evening 5:01pm-12:00am _____
- Night 12:01am-4:00am _____
- Early morning 4:01am-9:00am _____

Hospital Data

Q4.1 In the spaces below please enter the name of each of your partner EDs. After you enter the ED's name, you'll be asked to provide the number of minutes that each was closed to general traffic and were on diversion in the last month.

- Partner ED 1 _____
- Partner ED 2 _____
- Partner ED 3 _____
- Partner ED 4 _____
- Partner ED 5 _____
- Partner ED 6 _____
- Partner ED 7 _____
- Partner ED 8 _____
- Partner ED 9 _____
- Partner ED 10 _____

Q4.2 Please enter the number of minutes that ED 1 was closed to general traffic and was on diversion in the last month.

Q4.3 Please enter the number of minutes that ED 2 was closed to general traffic and was on diversion in the last month.

Q4.4 Please enter the number of minutes that ED 3 was closed to general traffic and was on diversion in the last month.

Q4.5 Please enter the number of minutes that ED 4 was closed to general traffic and was on diversion in the last month.

Q4.6 Please enter the number of minutes that ED 5 was closed to general traffic and was on diversion in the last month.

Q4.7 Please enter the number of minutes that ED 6 was closed to general traffic and was on diversion in the last month.

Q4.8 Please enter the number of minutes that ED 7 was closed to general traffic and was on diversion in the last month.

Q4.9 Please enter the number of minutes that ED 8 was closed to general traffic and was on diversion in the last month.

Q4.10 Please enter the number of minutes that ED 9 was closed to general traffic and was on diversion in the last month.

Q4.11 Please enter the number of minutes that ED 10 was closed to general traffic and was on diversion in the last month.

Q4.12 What was the average length of time in minutes from arrival at partner ED to disposition for all transported patients in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.13 What was the average length of time in minutes from arrival at partner ED to disposition for all ELIGIBLE transported patients? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.33 Among transported eligible patients who were admitted, what was the average length of stay (in days) in the hospital in the last month?

Finance Data

Q5.1 If applicable to your EMS provider agencies, please provide the average cost of fire response readiness across your partner public provider agencies in the last month: fire response readiness = (salaries & benefits + maintenance + operations + vehicle & facility amortization) / number of EMS responses

- Average readiness cost _____
- Not applicable

Q5.2 Please provide the average cost of each transport across your partner public and private provider agencies to an ED in the last month: Cost of transport = (Crew wages & benefits + fleet amortization & maintenance) / number of EMS responses

Q5.3 Please provide the average charges for each transport to an ED in the last month.

Q5.4 Please provide the average charges for care for eligible patients transported to your partner EDs in the last month.

Q5.8 Please provide the average charges for inpatient care for eligible patients transported to your partner hospitals.

Q5.12 Please provide the average claims paid by health insurance plans/networks for ED visits by eligible patients transported to your partner EDs.

Q5.16 Please provide the average claims paid by health insurance plans/networks for inpatient stays by eligible patients transported to your partner EDs in the last month.

Q5.20 Please provide the average cost of salary & benefits for an EMT-P who would be a candidate for CP training.

Q6.1 Cost of the administration DOT treatment per patient when administered in home.

Q6.2 Charges for the administration DOT treatment per patient when administered in home.

Q7.1 Please provide the average cost of the administration of comfort care medication per home hospice patient.

Q7.2 Please provide the average charges for the administration of comfort care medication per home hospice patient.

Q7.3 Please provide the average cost of grief/crisis counseling per home hospice patient.

Q7.4 Please provide the average charges for grief/crisis counseling per home hospice patient.

CP Baseline Data Reporting Tuberculosis

Q1.1 Please identify your site:

- UCLA Alternate Destination
- UCLA Post-hospital
- Orange County Alternate Destination
- Butte County Post-hospital
- Ventura Tuberculosis
- Ventura/SB Hospice
- Alameda Post-hospital
- Alameda Frequent 911
- San Bernardino Post-hospital
- Carlsbad Alternate Destination
- San Diego Frequent 911
- Medic Ambulance Post-hospital
- Stanislaus Alternate Destination
- Other

Q1.2 For all of the following questions where you are asked to provide a number, please type in only numbers and decimals, if relevant. E.G., type 5 instead of typing "five". Where you are asked to fill in data relevant to a specific type of patient, please leave the write-in space BLANK for any patients not included in your pilot, but type 0 if your site includes the patient type, but none were treated. During baseline data collection, "eligible" patients include those who would be eligible for your project based on the protocols at your site if the pilot were currently operational.

Demographics

Q2.1 The following questions largely define eligible patients as those "transported to an ED in the last month." For your pilot site, we understand that very few if any patients will be transported to an ED. Please answer the following questions for all eligible patients, even though they have not been transported to an ED.

Q2.2 Please provide the number of identified cases of TB in your geographic area in the last month. (Patients under age 18 should be included in this number.)

- All cases _____
- Drug-resistant _____

Q2.3 Please provide the number of identified cases TB in your geographic area in the last month who are receiving DOT. (Patients under age 18 should be included in this number.)

- All cases _____
- Drug-resistant _____

Q2.4 Please provide the average number of household members among all eligible patients in the last month. (All household members - children and adults - should be included)

Q2.6 Please provide the average patient age among all eligible patients transported to a partner ED in the last month. (No patients under age 18 are eligible for the pilot)

Q2.7 Please provide the average age of household members among all eligible patients in the last

month. (Household members may be under 18)

Q2.12 In the last month, how many eligible patients were male?

Q2.13 In the last month, how many of the eligible patients' household members were male?

Q2.18 In the last month, how many eligible patients were female?

Q2.19 In the last month, how many of the eligible patients' household members were female?

Q2.24 Please identify how many eligible patients of each ethnicity shown below were transported in the last month?1 = Hispanic2 = Non-Hispanic3 = Unknown

- Hispanic _____
- Non-Hispanic _____
- Unknown _____

Q2.25 Please identify how many eligible patients' household members were of each ethnicity shown below in the last month?1 = Hispanic2 = Non-Hispanic3 = Unknown

- Hispanic _____
- Non-Hispanic _____
- Unknown _____

Q2.36 Please identify how many eligible patients of each race/ethnicity shown below were transported in the last month?1 = White2 = Black3 = Native American / Eskimo / Aleut4 = Asian / Pacific Islander5 = Other6 = Unknown

- White _____
- Black _____
- Native American / Eskimo / Aleut _____
- Asian / Pacific Islander _____
- Other _____
- Unknown _____

Q2.37 Please identify how many eligible patients' household members were of each race/ethnicity shown below in the last month?1 = White2 = Black3 = Native American / Eskimo / Aleut4 = Asian / Pacific Islander5 = Other6 = Unknown

- White _____
- Black _____
- Native American / Eskimo / Aleut _____
- Asian / Pacific Islander _____
- Other _____
- Unknown _____

Q2.57 Please identify how many patients speaking the languages shown below were treated in the last month?

- English (ENG) _____
- Amharic (AMH) _____
- Arabic (ARA) _____
- Armenian (AMR) _____
- Cantonese - Yue Chinese (YUE) _____
- Chinese (CHI) _____
- Croatian (HRV) _____
- Farsi (PES) _____
- French (FRE) _____
- French Creole (CPF) _____
- German (GER) _____
- Greek (GRE) _____
- Gujarati (GUJ) _____
- Hebrew (HEB) _____
- Hindi (HIN) _____
- Hmong (HMN) _____
- Hungarian (HUN) _____
- Ilocano - Iloko (ILO) _____
- Indonesian (IND) _____
- Italian (ITA) _____
- Japanese (JPN) _____
- Korean (KOR) _____
- Lao (LAO) _____
- Mandarin (CMN) _____
- Mien - Iu Mien (IUM) _____
- Mon-Khmer (MKH) _____
- Navajo (NAV) _____
- Panjabi - Punjabi (PAN) _____
- Persian (PER) _____
- Polish (POL) _____
- Portuguese (POR) _____
- Russian (RUS) _____
- Sign Language (SGN) _____
- Samoan (SMO) _____
- Serbian (SRP) _____
- Spanish (SPA) _____
- Swahili (SWA) _____
- Tagalog (TGL) _____
- Telugu (TGL) _____
- Thai (THA) _____
- Tonga (TON) _____
- Ukrainian (UKR) _____
- Urdu (URD) _____
- Vietnamese (VIE) _____
- Yiddish (YID) _____

- Yoruba (YOR) _____
- Unknown (999) _____
- Other (Please write in language and number of patients) _____
- Mexteca _____

Q2.58 Please type in all of the zip codes, separated by commas, in which your provider agencies answered 911 calls by eligible patients in the last month. (For the test period, please type in all of the most common zip codes or most expected zip codes for your pilot site).

Q2.59 Please identify how many patients with each of following types of insurance coverage were treated in the last month?

- Private _____
- Medicare _____
- Medicaid _____
- Self-pay _____

EMS Utilization

Q3.1 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.2 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call for your ELIGIBLE population:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.3 How many patients did your partner provider agencies transport to all EDs in the last month?

Q3.4 How many patients did your partner provider agencies transport to partner EDs in the last month?

Q3.5 How many UNIQUE patients did your partner provider agencies transport to partner EDs in the last month?

Q3.6 How many eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.10 How many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.18 What was the AVERAGE length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.22 What was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.26 What was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.30 What was the total number of your transports that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.31 What was the total number of your transports of ELIGIBLE patients that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.35 What was the AVERAGE number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.36 What was the SHORTEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.37 What was the LONGEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.38 Please enter the number of transports of eligible patients to partner EDs that occurred in the last month in each of the following time frames? (Use the arrival time at ED to classify transports)

- Morning 9:01am-12:00pm _____
- Afternoon 12:01pm-5:00pm _____
- Evening 5:01pm-12:00am _____
- Night 12:01am-4:00am _____
- Early morning 4:01am-9:00am _____

Q3.39 How many DOT treatments were administered in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Q3.40 How many patients completed their DOT treatments in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Q3.41 How many daily symptom surveys were completed by patients receiving DOT treatments in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Q3.42 How many mal-absorption issues were identified by patients receiving DOT treatments in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Q3.43 What was the average time from onset to identification of mal-absorption issues among patients receiving DOT treatments in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Q3.44 What was the average number of treatment side-effects per patient (excluding mal-absorption issues) among patients receiving DOT treatments in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Q3.45 What was the number of new cases of TB identified among household members of patients receiving DOT treatments in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Q3.46 What was the number of TB cases per household among TB patients receiving DOT treatments in the last month?

- All facility-based cases _____
- Facility-based drug-resistant cases _____
- All non-facility-based cases _____
- Non-facility-based drug-resistant cases _____

Hospital Data

Q4.1 In the spaces below please enter the name of each of your partner EDs. After you enter the ED's name, you'll be asked to provide the number of minutes that each was closed to general traffic and were on diversion in the last month.

- Partner ED 1 _____
- Partner ED 2 _____
- Partner ED 3 _____
- Partner ED 4 _____
- Partner ED 5 _____
- Partner ED 6 _____
- Partner ED 7 _____
- Partner ED 8 _____
- Partner ED 9 _____
- Partner ED 10 _____

Q4.2 Please enter the number of minutes that ED 1 was closed to general traffic and was on diversion in the last month.

Q4.3 Please enter the number of minutes that ED 2 was closed to general traffic and was on diversion in the last month.

Q4.4 Please enter the number of minutes that ED 3 was closed to general traffic and was on diversion in the last month.

Q4.5 Please enter the number of minutes that ED 4 was closed to general traffic and was on diversion in the last month.

Q4.6 Please enter the number of minutes that ED 5 was closed to general traffic and was on diversion in the last month.

Q4.7 Please enter the number of minutes that ED 6 was closed to general traffic and was on diversion in the last month.

Q4.8 Please enter the number of minutes that ED 7 was closed to general traffic and was on diversion in the last month.

Q4.9 Please enter the number of minutes that ED 8 was closed to general traffic and was on diversion in the last month.

Q4.10 Please enter the number of minutes that ED 9 was closed to general traffic and was on diversion in the last month.

Q4.11 Please enter the number of minutes that ED 10 was closed to general traffic and was on diversion in the last month.

Q4.12 What was the average length of time in minutes from arrival at partner ED to disposition for all transported patients in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.13 What was the average length of time in minutes from arrival at partner ED to disposition for all ELIGIBLE transported patients? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.17 Among all eligible patients, please provide the numbers of each category of disposition.

- Admitted to hospital _____
- Transferred _____
- Discharged _____
- Expired _____
- Failure to complete care _____

Q4.33 Among transported eligible patients who were admitted, what was the average length of stay (in days) in the hospital in the last month?

Finance Data

Q5.1 If applicable to your EMS provider agencies, please provide the average cost of fire response readiness across your partner public provider agencies in the last month: fire response readiness = (salaries & benefits + maintenance + operations + vehicle & facility amortization) / number of EMS responses

- Average readiness cost _____
- Not applicable

Q5.2 Please provide the average cost of each transport across your partner public and private provider agencies to an ED in the last month: Cost of transport = (Crew wages & benefits + fleet amortization & maintenance) / number of EMS responses

Q5.3 Please provide the average charges for each transport to an ED in the last month.

Q5.4 Please provide the average charges for care for eligible patients transported to your partner EDs in the last month.

Q5.8 Please provide the average charges for inpatient care for eligible patients transported to your partner hospitals.

Q5.12 Please provide the average claims paid by health insurance plans/networks for ED visits by eligible patients transported to your partner EDs.

Q5.16 Please provide the average claims paid by health insurance plans/networks for inpatient stays by eligible patients transported to your partner EDs in the last month.

Q5.20 Please provide the average cost of salary & benefits for an EMT-P who would be a candidate for CP training.

Q6.1 Cost of the administration DOT treatment per patient when administered in home.

Q6.2 Charges for the administration DOT treatment per patient when administered in home.

CP Baseline Data Reporting Frequent 911 User

Q1.1 Please identify your site:

- UCLA Alternate Destination
- UCLA Post-hospital
- Orange County Alternate Destination
- Butte County Post-hospital
- Ventura Tuberculosis
- Ventura/SB Hospice
- Alameda Post-hospital
- Alameda Frequent 911
- San Bernardino Post-hospital
- Carlsbad Alternate Destination
- San Diego Frequent 911
- Medic Ambulance Post-hospital
- Stanislaus Alternate Destination
- Other

Q1.2 For all of the following questions where you are asked to provide a number, please type in only numbers and decimals, if relevant. E.G., type 5 instead of typing "five". Where you are asked to fill in data relevant to a specific type of patient, please leave the write-in space BLANK for any patients not included in your pilot, but type 0 if your site includes the patient type, but none were treated. During baseline data collection, "eligible" patients include those who would be eligible for your project based on the protocols at your site if the pilot were currently operational.

Demographics

Q2.6 Please provide the average patient age among all eligible patients transported to a partner ED in the last month. (No patients under age 18 are eligible for the pilot)

Q2.11 For each of the following types of eligible patients, please provide the average patient age among all eligible transports to a partner ED in the last month. (No patients under age 18 are eligible for the pilot)

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.12 In the last month, how many eligible patients were male?

Q2.17 For each of the following types of eligible patients transported in the last month, please provide the number of eligible patients who were male.

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.18 In the last month, how many eligible patients were female?

Q2.23 For each of the following types of eligible patients, please provide the number of eligible

patients who were female.

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.24 Please identify how many eligible patients of each ethnicity shown below were transported in the last month?1 = Hispanic2 = Non-Hispanic3 = Unknown

- Hispanic _____
- Non-Hispanic _____
- Unknown _____

Q2.29 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Unknown" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.33 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Hispanic" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.34 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Non-Hispanic" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.35 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Unknown" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.36 Please identify how many eligible patients of each race/ethnicity shown below were transported in the last month?1 = White2 = Black3 = Native American / Eskimo / Aleut4 = Asian / Pacific Islander5 = Other6 = Unknown

- White _____
- Black _____
- Native American / Eskimo / Aleut _____
- Asian / Pacific Islander _____
- Other _____
- Unknown _____

Q2.51 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "White" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.52 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Black" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.53 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Native American / Eskimo / Aleut" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.54 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Asian / Pacific Islander" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.55 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Other" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.56 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Unknown" in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.57 Please identify how many patients speaking the languages shown below were treated in the last month?

- English (ENG) _____
- Amharic (AMH) _____
- Arabic (ARA) _____
- Armenian (AMR) _____
- Cantonese - Yue Chinese (YUE) _____
- Chinese (CHI) _____
- Croatian (HRV) _____
- Farsi (PES) _____
- French (FRE) _____
- French Creole (CPF) _____
- German (GER) _____
- Greek (GRE) _____
- Gujarati (GUJ) _____
- Hebrew (HEB) _____
- Hindi (HIN) _____
- Hmong (HMN) _____
- Hungarian (HUN) _____
- Ilocano - Iloko (ILO) _____
- Indonesian (IND) _____
- Italian (ITA) _____
- Japanese (JPN) _____
- Korean (KOR) _____
- Lao (LAO) _____
- Mandarin (CMN) _____
- Mien - Iu Mien (IUM) _____
- Mon-Khmer (MKH) _____
- Navajo (NAV) _____
- Panjabi - Punjabi (PAN) _____
- Persian (PER) _____
- Polish (POL) _____
- Portuguese (POR) _____
- Russian (RUS) _____
- Sign Language (SGN) _____
- Samoan (SMO) _____
- Serbian (SRP) _____
- Spanish (SPA) _____
- Swahili (SWA) _____
- Tagalog (TGL) _____
- Telugu (TGL) _____
- Thai (THA) _____
- Tonga (TON) _____
- Ukrainian (UKR) _____
- Urdu (URD) _____
- Vietnamese (VIE) _____
- Yiddish (YID) _____

- Yoruba (YOR) _____
- Unknown (999) _____
- Other (Please write in language and number of patients) _____
- Mexteca _____

Q2.58 Please type in all of the zip codes, separated by commas, in which your provider agencies answered 911 calls by eligible patients in the last month. (For the test period, please type in all of the most common zip codes or most expected zip codes for your pilot site).

Q2.59 Please identify how many patients with each of following types of insurance coverage were treated in the last month?

- Private _____
- Medicare _____
- Medicaid _____
- Self-pay _____

Q2.68 For each type of patient below, please identify how many transported eligible patients' were covered by private insurance in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.69 For each type of patient below, please identify how many transported eligible patients' were covered by Medicare in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.70 For each type of patient below, please identify how many transported eligible patients' were covered by Medicaid in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.71 For each type of patient below, please identify how many transported eligible patients' were self-pay in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q2.72 Please provide the number of eligible patients enrolled in social service programs in the last month. (This is expected to be an estimate during the baseline period.)

Q2.73 Please provide the number of eligible patients in the last month who have a usual source of primary care. (This is expected to be an estimate during the baseline period.)

Q2.74 Please provide the number of eligible patients in the last month who have a usual source of mental health care. (This is expected to be an estimate during the baseline period.)

Q2.75 Please provide the number of eligible patients in the last month who have a care plan in place. (This is expected to be an estimate during the baseline period.)

Q2.76 Please provide the number of eligible patients in the last month who are in compliance with their individual care plan/post-discharge care plan. (This is expected to be an estimate during the baseline period.)

EMS Utilization

Q3.1 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.2 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call for your ELIGIBLE population:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.3 How many patients did your partner provider agencies transport to all EDs in the last month?

Q3.4 How many patients did your partner provider agencies transport to partner EDs in the last month?

Q3.5 How many UNIQUE patients did your partner provider agencies transport to partner EDs in the last month?

Q3.6 How many eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.10 How many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.13 For each type of patient below, how many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q3.14 What was the AVERAGE length of time in minutes from arrival on scene to arrival at the ED for transports of eligible patients to partner EDs in the last month?

Q3.17 For each type of patient below, what was the AVERAGE length of time in minutes from arrival on scene to arrival at the ED for transports of eligible patients to partner EDs in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q3.18 What was the AVERAGE length of time in minutes from arrival on scene to return to the

field for transports of eligible patients to partner EDs in the last month?

Q3.21 For each type of patient below, what was the AVERAGE length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q3.22 What was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.25 For each type of patient below, what was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q3.26 What was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.29 For each type of patient below, what was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q3.30 What was the total number of your transports that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.31 What was the total number of your transports of ELIGIBLE patients that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.34 For each type of eligible patient below, please provide the total number of your transports in the last month that spent more than 45 minutes at the hospital from arrival at ED until return to service?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q3.35 What was the AVERAGE number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.36 What was the SHORTEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.37 What was the LONGEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.38 Please enter the number of transports of eligible patients to partner EDs that occurred in

the last month in each of the following time frames? (Use the arrival time at ED to classify transports)

- Morning 9:01am-12:00pm _____
- Afternoon 12:01pm-5:00pm _____
- Evening 5:01pm-12:00am _____
- Night 12:01am-4:00am _____
- Early morning 4:01am-9:00am _____

Hospital Data

Q4.1 In the spaces below please enter the name of each of your partner EDs. After you enter the ED's name, you'll be asked to provide the number of minutes that each was closed to general traffic and were on diversion in the last month.

- Partner ED 1 _____
- Partner ED 2 _____
- Partner ED 3 _____
- Partner ED 4 _____
- Partner ED 5 _____
- Partner ED 6 _____
- Partner ED 7 _____
- Partner ED 8 _____
- Partner ED 9 _____
- Partner ED 10 _____

Q4.2 Please enter the number of minutes that ED 1 was closed to general traffic and was on diversion in the last month.

Q4.3 Please enter the number of minutes that ED 2 was closed to general traffic and was on diversion in the last month.

Q4.4 Please enter the number of minutes that ED 3 was closed to general traffic and was on diversion in the last month.

Q4.5 Please enter the number of minutes that ED 4 was closed to general traffic and was on diversion in the last month.

Q4.6 Please enter the number of minutes that ED 5 was closed to general traffic and was on diversion in the last month.

Q4.7 Please enter the number of minutes that ED 6 was closed to general traffic and was on diversion in the last month.

Q4.8 Please enter the number of minutes that ED 7 was closed to general traffic and was on diversion in the last month.

Q4.9 Please enter the number of minutes that ED 8 was closed to general traffic and was on diversion in the last month.

Q4.10 Please enter the number of minutes that ED 9 was closed to general traffic and was on diversion in the last month.

Q4.11 Please enter the number of minutes that ED 10 was closed to general traffic and was on diversion in the last month.

Q4.12 What was the average length of time in minutes from arrival at partner ED to disposition for all transported patients in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.13 What was the average length of time in minutes from arrival at partner ED to disposition for all ELIGIBLE transported patients? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.16 For each type of eligible patient below, please provide the average length of time in minutes from arrival at hospital to disposition in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q4.17 Among all eligible patients, please provide the numbers of each category of disposition.

- Admitted to hospital _____
- Transferred _____
- Discharged _____
- Expired _____
- Failure to complete care _____

Q4.28 For each type of eligible patient below, please provide the number of patients who were admitted to the hospital subsequent to transport in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q4.29 For each type of eligible patient below, please provide the number of patients who were transferred to another hospital subsequent to transport in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q4.30 For each type of eligible patient below, please provide the number of patients who were discharged subsequent to transport in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q4.31 For each type of eligible patient below, please provide the number of patients who expired subsequent to transport in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q4.32 For each type of eligible patient below, please provide the number of patients who failed to complete care subsequent to transport in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q4.33 Among transported eligible patients who were admitted, what was the average length of stay (in days) in the hospital in the last month?

Q4.36 For each type of transported eligible patient below, what was the average length of stay in the hospital among patients who were admitted in the last month?

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Finance Data

Q5.1 If applicable to your EMS provider agencies, please provide the average cost of fire response readiness across your partner public provider agencies in the last month: fire response readiness = (salaries & benefits + maintenance + operations + vehicle & facility amortization) / number of EMS responses

- Average readiness cost _____
- Not applicable

Q5.2 Please provide the average cost of each transport across your partner public and private provider agencies to an ED in the last month: Cost of transport = (Crew wages & benefits + fleet amortization & maintenance) / number of EMS responses

Q5.3 Please provide the average charges for each transport to an ED in the last month.

Q5.4 Please provide the average charges for care for eligible patients transported to your partner EDs in the last month.

Q5.7 For each type of transported eligible patient below, please provide the average charges for care in your partner EDs in the last month (exclude patients who were admitted to the hospital).

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q5.8 Please provide the average charges for inpatient care for eligible patients transported to your partner hospitals.

Q5.11 For each type of transported eligible patient below, please provide the average charges for inpatient care in partner hospitals in the last month.

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q5.12 Please provide the average claims paid by health insurance plans/networks for ED visits by eligible patients transported to your partner EDs.

Q5.15 For each type of transported eligible patient below, please provide the average claims paid by health insurance plans/networks for visits to your partner EDs in the last month.

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q5.16 Please provide the average claims paid by health insurance plans/networks for inpatient stays by eligible patients transported to your partner EDs in the last month.

Q5.19 For each type of transported eligible patient below, please provide the average claims paid by health insurance plans/networks for inpatient stays in your partner hospitals in the last month.

- Frequent user = calls 911 < 20 times per year _____
- Super user = calls 911 20-49 times per year _____
- Mega user = call 911 50+ times per year _____

Q5.20 Please provide the average cost of salary & benefits for an EMT-P who would be a candidate for CP training.

CP Baseline Data Reporting Alternate Destination

Q1.1 Please identify your site:

- UCLA Alternate Destination
- UCLA Post-hospital
- Orange County Alternate Destination
- Butte County Post-hospital
- Ventura Tuberculosis
- Ventura/SB Hospice
- Alameda Post-hospital
- Alameda Frequent 911
- San Bernardino Post-hospital
- Carlsbad Alternate Destination
- San Diego Frequent 911
- Medic Ambulance Post-hospital
- Stanislaus Alternate Destination
- Other

Q1.2 For all of the following questions where you are asked to provide a number, please type in only numbers and decimals, if relevant. E.G., type 5 instead of typing "five". Where you are asked to fill in data relevant to a specific type of patient, please leave the write-in space BLANK for any patients not included in your pilot, but type 0 if your site includes the patient type, but none were treated. During baseline data collection, "eligible" patients include those who would be eligible for your project based on the protocols at your site if the pilot were currently operational.

Demographics

Q2.6 Please provide the average patient age among all eligible patients transported to a partner ED in the last month. (No patients under age 18 are eligible for the pilot)

Q2.9 For each of the following types of eligible patients, please provide the average patient age among all eligible transports to a partner ED in the last month. (No patients under age 18 are eligible for the pilot)

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.12 In the last month, how many eligible patients were male?

Q2.15 For each of the following types of eligible patients transported in the last month, please provide the number of eligible patients who were male.

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.18 In the last month, how many eligible patients were female?

Q2.21 For each of the following types of eligible patients transported in the last month, please provide the number of eligible patients who were female.

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.24 Please identify how many eligible patients of each ethnicity shown below were transported in the last month? 1 = Hispanic 2 = Non-Hispanic 3 = Unknown

- Hispanic _____
- Non-Hispanic _____
- Unknown _____

Q2.27 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Hispanic" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.36 Please identify how many eligible patients of each race/ethnicity shown below were transported in the last month? 1 = White 2 = Black 3 = Native American / Eskimo / Aleut 4 = Asian / Pacific Islander 5 = Other 6 = Unknown

- White _____
- Black _____
- Native American / Eskimo / Aleut _____
- Asian / Pacific Islander _____
- Other _____
- Unknown _____

Q2.39 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "White" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.40 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Black" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.41 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Native American / Eskimo / Aleut" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.42 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Asian / Pacific Islander" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.43 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Other" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.44 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Unknown" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.57 Please identify how many patients speaking the languages shown below were treated in the last month?

- English (ENG) _____
- Amharic (AMH) _____
- Arabic (ARA) _____
- Armenian (AMR) _____
- Cantonese - Yue Chinese (YUE) _____
- Chinese (CHI) _____
- Croatian (HRV) _____
- Farsi (PES) _____
- French (FRE) _____
- French Creole (CPF) _____
- German (GER) _____
- Greek (GRE) _____
- Gujarati (GUJ) _____
- Hebrew (HEB) _____
- Hindi (HIN) _____
- Hmong (HMN) _____
- Hungarian (HUN) _____
- Ilocano - Iloko (ILO) _____
- Indonesian (IND) _____
- Italian (ITA) _____
- Japanese (JPN) _____
- Korean (KOR) _____
- Lao (LAO) _____
- Mandarin (CMN) _____
- Mien - Iu Mien (IUM) _____
- Mon-Khmer (MKH) _____
- Navajo (NAV) _____
- Panjabi - Punjabi (PAN) _____
- Persian (PER) _____
- Polish (POL) _____
- Portuguese (POR) _____
- Russian (RUS) _____
- Sign Language (SGN) _____
- Samoan (SMO) _____
- Serbian (SRP) _____
- Spanish (SPA) _____
- Swahili (SWA) _____

- Tagalog (TGL) _____
- Telugu (TGL) _____
- Thai (THA) _____
- Tonga (TON) _____
- Ukrainian (UKR) _____
- Urdu (URD) _____
- Vietnamese (VIE) _____
- Yiddish (YID) _____
- Yoruba (YOR) _____
- Unknown (999) _____
- Other (Please write in language and number of patients) _____
- Mexteca _____

Q2.58 Please type in all of the zip codes, separated by commas, in which your provider agencies answered 911 calls by eligible patients in the last month. (For the test period, please type in all of the most common zip codes or most expected zip codes for your pilot site).

Q2.59 Please identify how many patients with each of following types of insurance coverage were treated in the last month?

- Private _____
- Medicare _____
- Medicaid _____
- Self-pay _____

Q2.60 For each type of patient below, please identify how many transported eligible patients' were covered by private insurance in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.61 For each type of patient below, please identify how many transported eligible patients' were covered by Medicare in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.62 For each type of patient below, please identify how many transported eligible patients' were covered by Medicaid in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.63 For each type of patient below, please identify how many transported eligible patients' were self-pay in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

EMS Utilization

Q3.1 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.2 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call for your ELIGIBLE population:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.3 How many patients did your partner provider agencies transport to all EDs in the last month?

Q3.4 How many patients did your partner provider agencies transport to partner EDs in the last month?

Q3.5 How many UNIQUE patients did your partner provider agencies transport to partner EDs in the last month?

Q3.6 How many eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.7 For each type of patient below, how many eligible patients did your partner provider agencies transport to partner EDs in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q3.10 How many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.11 For each type of patient below, how many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q3.14 What was the AVERAGE length of time in minutes from arrival on scene to arrival at the ED for transports of eligible patients to partner EDs in the last month?

Q3.15 For each type of patient below, what was the AVERAGE length of time in minutes from arrival on scene to arrival at the ED for transports of eligible patients to partner EDs in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q3.18 What was the AVERAGE length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.19 For each type of patient below, what was the AVERAGE length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q3.22 What was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.23 For each type of patient below, what was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q3.26 What was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.27 For each type of patient below, what was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q3.30 What was the total number of your transports that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.31 What was the total number of your transports of ELIGIBLE patients that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.32 For each type of eligible patient below, please provide the total number of your transports in the last month that spent more than 45 minutes at the hospital from arrival at ED until return to service?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q3.35 What was the AVERAGE number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.36 What was the SHORTEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.37 What was the LONGEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.38 Please enter the number of transports of eligible patients to partner EDs that occurred in the last month in each of the following time frames? (Use the arrival time at ED to classify transports)

- Morning 9:01am-12:00pm _____
- Afternoon 12:01pm-5:00pm _____
- Evening 5:01pm-12:00am _____
- Night 12:01am-4:00am _____
- Early morning 4:01am-9:00am _____

Hospital Data

Q4.1 In the spaces below please enter the name of each of your partner EDs. After you enter the ED's name, you'll be asked to provide the number of minutes that each was closed to general traffic and were on diversion in the last month.

- Partner ED 1 _____
- Partner ED 2 _____
- Partner ED 3 _____
- Partner ED 4 _____
- Partner ED 5 _____
- Partner ED 6 _____
- Partner ED 7 _____
- Partner ED 8 _____
- Partner ED 9 _____
- Partner ED 10 _____

Q4.2 Please enter the number of minutes that ED 1 was closed to general traffic and was on diversion in the last month.

Q4.3 Please enter the number of minutes that ED 2 was closed to general traffic and was on diversion in the last month.

Q4.4 Please enter the number of minutes that ED 3 was closed to general traffic and was on diversion in the last month.

Q4.5 Please enter the number of minutes that ED 4 was closed to general traffic and was on diversion in the last month.

Q4.6 Please enter the number of minutes that ED 5 was closed to general traffic and was on diversion in the last month.

Q4.7 Please enter the number of minutes that ED 6 was closed to general traffic and was on diversion in the last month.

Q4.8 Please enter the number of minutes that ED 7 was closed to general traffic and was on diversion in the last month.

Q4.9 Please enter the number of minutes that ED 8 was closed to general traffic and was on diversion in the last month.

Q4.10 Please enter the number of minutes that ED 9 was closed to general traffic and was on

diversion in the last month.

Q4.11 Please enter the number of minutes that ED 10 was closed to general traffic and was on diversion in the last month.

Q4.12 What was the average length of time in minutes from arrival at partner ED to disposition for all transported patients in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.13 What was the average length of time in minutes from arrival at partner ED to disposition for all ELIGIBLE transported patients? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.14 For each type of eligible patient below, please provide the average length of time in minutes from arrival at hospital to disposition in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q4.17 Among all eligible patients, please provide the numbers of each category of disposition.

- Admitted to hospital _____
- Transferred _____
- Discharged _____
- Expired _____
- Failure to complete care _____

Q4.18 For each type of eligible patient below, please provide the number of patients who were admitted to the hospital subsequent to transport in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q4.19 For each type of eligible patient below, please provide the number of patients who were transferred to another hospital subsequent to transport in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q4.20 For each type of eligible patient below, please provide the number of patients who were discharged subsequent to transport in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q4.21 For each type of eligible patient below, please provide the number of patients who expired subsequent to transport in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q4.22 For each type of eligible patient below, please provide the number of patients who failed to complete care subsequent to transport in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q4.33 Among transported eligible patients who were admitted, what was the average length of stay (in days) in the hospital in the last month?

Q4.34 For each type of transported eligible patient below, what was the average length of stay in the hospital among patients who were admitted in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Finance Data

Q5.1 If applicable to your EMS provider agencies, please provide the average cost of fire response readiness across your partner public provider agencies in the last month: fire response readiness = (salaries & benefits + maintenance + operations + vehicle & facility amortization) / number of EMS responses

- Average readiness cost _____
- Not applicable

Q5.2 Please provide the average cost of each transport across your partner public and private provider agencies to an ED in the last month: Cost of transport = (Crew wages & benefits + fleet

amortization & maintenance) / number of EMS responses

Q5.3 Please provide the average charges for each transport to an ED in the last month.

Q5.4 Please provide the average charges for care for eligible patients transported to your partner EDs in the last month.

Q5.5 For each type of transported eligible patient below, please provide the average charges for care in your partner EDs in the last month (exclude patients who were admitted to the hospital).

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q5.8 Please provide the average charges for inpatient care for eligible patients transported to your partner hospitals.

Q5.9 For each type of transported eligible patient below, please provide the average charges for inpatient care in partner hospitals in the last month.

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q5.12 Please provide the average claims paid by health insurance plans/networks for ED visits by eligible patients transported to your partner EDs.

Q5.13 For each type of transported eligible patient below, please provide the average claims paid by health insurance plans/networks for visits to your partner EDs in the last month.

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q5.16 Please provide the average claims paid by health insurance plans/networks for inpatient stays by eligible patients transported to your partner EDs in the last month.

Q5.17 For each type of transported eligible patient below, please provide the average claims paid by health insurance plans/networks for inpatient stays in your partner hospitals in the last month.

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q5.20 Please provide the average cost of salary & benefits for an EMT-P who would be a candidate for CP training.

CP Baseline Data Reporting Post Discharge

Q1.1 Please identify your site:

- UCLA Alternate Destination
- UCLA Post-hospital
- Orange County Alternate Destination
- Butte County Post-hospital
- Ventura Tuberculosis
- Ventura/SB Hospice
- Alameda Post-hospital
- Alameda Frequent 911
- San Bernardino Post-hospital
- Carlsbad Alternate Destination
- San Diego Frequent 911
- Medic Ambulance Post-hospital
- Stanislaus Alternate Destination
- Other

Q1.2 For all of the following questions where you are asked to provide a number, please type in only numbers and decimals, if relevant. E.G., type 5 instead of typing "five". Where you are asked to fill in data relevant to a specific type of patient, please leave the write-in space BLANK for any patients not included in your pilot, but type 0 if your site includes the patient type, but none were treated. During baseline data collection, "eligible" patients include those who would be eligible for your project based on the protocols at your site if the pilot were currently operational.

Demographics

Q2.6 Please provide the average patient age among all eligible patients transported to a partner ED in the last month. (No patients under age 18 are eligible for the pilot)

Q2.10 For each of the following types of eligible patients, please provide the average patient age among all eligible transports to a partner ED in the last month. (No patients under age 18 are eligible for the pilot). For any patient types not included in your pilot site, please leave the number of patients BLANK. Please write a 0 if your includes the patient, but none were treated.

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.12 In the last month, how many eligible patients were male?

Q2.16 For each of the following types of eligible patients transported in the last month, please provide the number of eligible patients who were male.

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.18 In the last month, how many eligible patients were female?

Q2.22 For each of the following types of eligible patients, please provide the number of eligible patients who were female.

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.24 Please identify how many eligible patients of each ethnicity shown below were transported in the last month? 1 = Hispanic 2 = Non-Hispanic 3 = Unknown

- Hispanic _____
- Non-Hispanic _____
- Unknown _____

Q2.28 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Non-Hispanic" in the last month?

- Isolated closed extremity injuries _____
- Laceration with controlled bleeding _____
- Soft tissue injuries _____
- Minor traffic accidents _____
- Isolated fever or cough _____
- Behavioral health emergencies _____

Q2.30 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Hispanic" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.31 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Non-Hispanic" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.32 For each type of patient below, please identify how many transported eligible patients' ethnicity was marked "Unknown" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.36 Please identify how many eligible patients of each race/ethnicity shown below were transported in the last month? 1 = White 2 = Black 3 = Native American / Eskimo / Aleut 4 = Asian / Pacific Islander 5 = Other 6 = Unknown

- White _____
- Black _____
- Native American / Eskimo / Aleut _____
- Asian / Pacific Islander _____
- Other _____
- Unknown _____

Q2.45 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "White" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.46 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Black" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.47 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Native American / Eskimo / Aleut" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.48 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Asian / Pacific Islander" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.49 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Other" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.50 For each type of patient below, please identify how many transported eligible patients' race/ethnicity was marked "Unknown" in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.57 Please identify how many patients speaking the languages shown below were treated in the last month?

- English (ENG) _____
- Amharic (AMH) _____
- Arabic (ARA) _____
- Armenian (AMR) _____
- Cantonese - Yue Chinese (YUE) _____
- Chinese (CHI) _____
- Croatian (HRV) _____
- Farsi (PES) _____
- French (FRE) _____
- French Creole (CPF) _____
- German (GER) _____
- Greek (GRE) _____
- Gujarati (GUJ) _____
- Hebrew (HEB) _____
- Hindi (HIN) _____
- Hmong (HMN) _____
- Hungarian (HUN) _____
- Ilocano - Iloko (ILO) _____
- Indonesian (IND) _____
- Italian (ITA) _____
- Japanese (JPN) _____
- Korean (KOR) _____
- Lao (LAO) _____
- Mandarin (CMN) _____
- Mien - Iu Mien (IUM) _____
- Mon-Khmer (MKH) _____
- Navajo (NAV) _____
- Panjabi - Punjabi (PAN) _____
- Persian (PER) _____
- Polish (POL) _____
- Portuguese (POR) _____
- Russian (RUS) _____
- Sign Language (SGN) _____
- Samoan (SMO) _____
- Serbian (SRP) _____
- Spanish (SPA) _____
- Swahili (SWA) _____
- Tagalog (TGL) _____
- Telugu (TGL) _____
- Thai (THA) _____
- Tonga (TON) _____
- Ukrainian (UKR) _____
- Urdu (URD) _____
- Vietnamese (VIE) _____
- Yiddish (YID) _____

- Yoruba (YOR) _____
- Unknown (999) _____
- Other (Please write in language and number of patients) _____
- Mexteca _____

Q2.58 Please type in all of the zip codes, separated by commas, in which your provider agencies answered 911 calls by eligible patients in the last month. (For the test period, please type in all of the most common zip codes or most expected zip codes for your pilot site).

Q2.59 Please identify how many patients with each of following types of insurance coverage were treated in the last month?

- Private _____
- Medicare _____
- Medicaid _____
- Self-pay _____

Q2.64 For each type of patient below, please identify how many transported eligible patients' were covered by private insurance in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.65 For each type of patient below, please identify how many transported eligible patients' were covered by Medicare in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.66 For each type of patient below, please identify how many transported eligible patients' were covered by Medicaid in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.67 For each type of patient below, please identify how many transported eligible patients' were self-pay in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q2.72 Please provide the number of eligible patients enrolled in social service programs in the last month. (This is expected to be an estimate during the baseline period.)

Q2.73 Please provide the number of eligible patients in the last month who have a usual source of primary care. (This is expected to be an estimate during the baseline period.)

Q2.74 Please provide the number of eligible patients in the last month who have a usual source of mental health care. (This is expected to be an estimate during the baseline period.)

Q2.76 Please provide the number of eligible patients in the last month who are in compliance with their individual care plan/post-discharge care plan. (This is expected to be an estimate during the baseline period.)

EMS Utilization

Q3.1 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.2 Please identify how many of each type of vehicle your provider agency sends in response to a typical 911 call for your ELIGIBLE population:

- ALS Transport Vehicles _____
- BLS Transport Vehicles _____
- Fire Engines _____

Q3.3 How many patients did your partner provider agencies transport to all EDs in the last month?

Q3.4 How many patients did your partner provider agencies transport to partner EDs in the last month?

Q3.5 How many UNIQUE patients did your partner provider agencies transport to partner EDs in the last month?

Q3.6 How many eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.8 For each type of patient below, how many eligible patients did your partner provider agencies transport to partner EDs in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q3.10 How many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

Q3.12 For each type of patient below, how many UNIQUE eligible patients did your partner provider agencies transport to partner EDs in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q3.14 What was the AVERAGE length of time in minutes from arrival on scene to arrival at the ED for transports of eligible patients to partner EDs in the last month?

Q3.16 For each type of patient below, what was the AVERAGE length of time in minutes from arrival on scene to arrival at the ED for transports of eligible patients to partner EDs in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q3.18 What was the AVERAGE length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.20 For each type of patient below, what was the AVERAGE length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q3.22 What was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.24 For each type of patient below, what was the SHORTEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q3.26 What was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

Q3.28 For each type of patient below, what was the LONGEST length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q3.30 What was the total number of your transports that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.31 What was the total number of your transports of ELIGIBLE patients that spent more than 45 minutes at the hospital from arrival at partner ED until return to service?

Q3.33 For each type of eligible patient below, please provide the total number of your transports in the last month that spent more than 45 minutes at the hospital from arrival at ED until return to service?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q3.35 What was the AVERAGE number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.36 What was the SHORTEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.37 What was the LONGEST number of miles driven in transport of eligible patients to partner EDs in the last month?

Q3.38 Please enter the number of transports of eligible patients to partner EDs that occurred in the last month in each of the following time frames? (Use the arrival time at ED to classify transports)

- Morning 9:01am-12:00pm _____
- Afternoon 12:01pm-5:00pm _____
- Evening 5:01pm-12:00am _____
- Night 12:01am-4:00am _____
- Early morning 4:01am-9:00am _____

Hospital Data

Q4.1 In the spaces below please enter the name of each of your partner EDs. After you enter the ED's name, you'll be asked to provide the number of minutes that each was closed to general traffic and were on diversion in the last month.

- Partner ED 1 _____
- Partner ED 2 _____
- Partner ED 3 _____
- Partner ED 4 _____
- Partner ED 5 _____
- Partner ED 6 _____
- Partner ED 7 _____
- Partner ED 8 _____
- Partner ED 9 _____
- Partner ED 10 _____

Q4.2 Please enter the number of minutes that ED 1 was closed to general traffic and was on diversion in the last month.

Q4.3 Please enter the number of minutes that ED 2 was closed to general traffic and was on diversion in the last month.

Q4.4 Please enter the number of minutes that ED 3 was closed to general traffic and was on diversion in the last month.

Q4.5 Please enter the number of minutes that ED 4 was closed to general traffic and was on diversion in the last month.

Q4.6 Please enter the number of minutes that ED 5 was closed to general traffic and was on diversion in the last month.

Q4.7 Please enter the number of minutes that ED 6 was closed to general traffic and was on diversion in the last month.

Q4.8 Please enter the number of minutes that ED 7 was closed to general traffic and was on diversion in the last month.

Q4.9 Please enter the number of minutes that ED 8 was closed to general traffic and was on diversion in the last month.

Q4.10 Please enter the number of minutes that ED 9 was closed to general traffic and was on

diversion in the last month.

Q4.11 Please enter the number of minutes that ED 10 was closed to general traffic and was on diversion in the last month.

Q4.12 What was the average length of time in minutes from arrival at partner ED to disposition for all transported patients in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.13 What was the average length of time in minutes from arrival at partner ED to disposition for all ELIGIBLE transported patients? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

Q4.15 For each type of eligible patient below, please provide the average length of time in minutes from arrival at hospital to disposition in the last month? Categories of disposition include: •Admitted to hospital •Transferred •Discharged •Expired •Failed to complete care

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q4.17 Among all eligible patients, please provide the numbers of each category of disposition.

- Admitted to hospital _____
- Transferred _____
- Discharged _____
- Expired _____
- Failure to complete care _____

Q4.23 For each type of eligible patient below, please provide the number of patients who were admitted to the hospital subsequent to transport in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q4.24 For each type of eligible patient below, please provide the number of patients who were transferred to another hospital subsequent to transport in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q4.25 For each type of eligible patient below, please provide the number of patients who were discharged subsequent to transport in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q4.26 For each type of eligible patient below, please provide the number of patients who expired subsequent to transport in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q4.27 For each type of eligible patient below, please provide the number of patients who failed to complete care subsequent to transport in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q4.33 Among transported eligible patients who were admitted, what was the average length of stay (in days) in the hospital in the last month?

Q4.35 For each type of transported eligible patient below, what was the average length of stay in the hospital among patients who were admitted in the last month?

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Finance Data

Q5.1 If applicable to your EMS provider agencies, please provide the average cost of fire response readiness across your partner public provider agencies in the last month: fire response readiness = (salaries & benefits + maintenance + operations + vehicle & facility amortization) / number of EMS responses

- Average readiness cost _____
- Not applicable

Q5.2 Please provide the average cost of each transport across your partner public and private provider agencies to an ED in the last month: Cost of transport = (Crew wages & benefits + fleet

amortization & maintenance) / number of EMS responses

Q5.3 Please provide the average charges for each transport to an ED in the last month.

Q5.4 Please provide the average charges for care for eligible patients transported to your partner EDs in the last month.

Q5.6 For each type of transported eligible patient below, please provide the average charges for care in your partner EDs in the last month (exclude patients who were admitted to the hospital).

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q5.8 Please provide the average charges for inpatient care for eligible patients transported to your partner hospitals.

Q5.10 For each type of transported eligible patient below, please provide the average charges for inpatient care in partner hospitals in the last month.

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q5.12 Please provide the average claims paid by health insurance plans/networks for ED visits by eligible patients transported to your partner EDs.

Q5.14 For each type of transported eligible patient below, please provide the average claims paid by health insurance plans/networks for visits to your partner EDs in the last month.

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q5.16 Please provide the average claims paid by health insurance plans/networks for inpatient stays by eligible patients transported to your partner EDs in the last month.

Q5.18 For each type of transported eligible patient below, please provide the average claims paid by health insurance plans/networks for inpatient stays in your partner hospitals in the last month.

- CHF _____
- AMI _____
- COPD _____
- Pneumonia _____
- Sepsis _____
- Diabetes Melitus _____

Q5.20 Please provide the average cost of salary & benefits for an EMT-P who would be a candidate for CP training.

Appendix R

Concept Specific

Informed Consent Forms

Your Project Site Community Paramedicine

Appendix R

Patient Consent Form

I understand that this visit is part of a demonstration project intended to establish whether EMT-Paramedics in **Your Region** can increase access to the most appropriate level of health care for patients who do not need care in an emergency department. I understand that only specially trained Alternate Destination Paramedics will be able to participate in this study and the study is authorized by the California Office of Statewide Health Planning and Development.

As a participant in this demonstration project, I understand the following:

1. The specially trained Alternate Destination Paramedic can only provide services authorized under the demonstration project in addition to those services already authorized for EMT- Paramedics.
2. The specially trained Alternate Destination Paramedic can only provide services in locations authorized under the demonstration project in addition to those already authorized for EMT- Paramedics.
3. The specially trained Alternate Destination Paramedic can only provide transportation to locations authorized under the demonstration project in addition to those already authorized for EMT-Paramedics
4. A supervising health care professional is available for consultation at all times that the EMT- Paramedic is treating me or the person for whom I am consenting.
5. No warranty or guarantee has been made to me regarding any treatment or any procedure received.
6. Participation in this demonstration project does not constitute my assumption of risk.
7. I have the right to refuse to participate or decide to withdraw from this demonstration at any time without penalty.-
8. If I refuse to participate or decide to withdraw from this demonstration, transportation to the closest emergency department that is able to provide care at this time will be immediately provided in accordance with existing regulation of EMT-Paramedic practice.
9. My identity will not be disclosed without my separate consent, except as specifically required by law.

I have been given full opportunity to ask questions about this project, about the types of care that may be provided, about the location at which care will be provided, and about any risks involved. I voluntarily consent to and authorize treatment by the Community Paramedic(s). I certify that I have read this form and that I understand its contents.

Signature: _____

Date

Witness Signature: _____

Date

Your Project Site Community Paramedicine

Informed Consent

We are asking you to participate in a research study. Please take your time to read the information below and feel free to ask any questions before signing this document.

Title: **Insert Title** on Post Discharge Follow-up

Purpose:

California residents continue to struggle with an increasing demand for healthcare services and a decreasing supply of healthcare workers. This program will utilize Community Paramedics to help increase patient access to healthcare after they have been discharged from the hospital.

Research indicates that recently discharged patients may benefit from assistance, prior to regularly scheduled follow-up care. This study is being conducted to determine if follow-up care, provided by a Community Paramedic will foster a positive outcome for the patients included in the study.

Inclusion Criteria:

You are eligible for this study if you are an adult patient, recently discharged from **Insert facility name(s)** with the diagnosis of **Insert treatment diagnosis(es) included in your project**.

Procedures:

With your consent, a referral will be generated to the Community Paramedicine Program. A Community Paramedic from **Insert your agency name** will contact you to schedule an appointment to perform an in-home assessment as part of your follow-up treatment plan. During this visit, the Community Paramedic will provide education on your medical diagnosis, review your discharge instructions, medications and the importance of attending follow-up doctor appointments. In addition, the Community Paramedic will perform a home safety assessment to ensure a safe home environment for you to recover in. The Community Paramedic will provide feedback to your healthcare providers, which will improve the overall quality of your care, resulting in decreased need for visits to the emergency department and hospital readmissions.

Risks to Participation:

There are no foreseeable risks to you as a result of taking part in this pilot study. There are also no risks if you prefer not to participate.

Compensation:

There will be no compensation for participation. However, we anticipate an improvement in the quality of care that you receive, as well as your overall well-being as a result of your participation in the pilot project.

Benefits to Participants:

You may not directly benefit from participating in this study. This study might help you by improving your ability to manage your medical condition long term, decrease the frequency of hospitalization, improve your overall well-being, and improve the safety of your home. What we learn from this pilot study may help others with your same or similar medical condition. The information learned from this study will be shared with the project team, the state Emergency Medical Services Authority, and your health care provider. This sharing will assist the project team in developing programs to utilize Community Paramedics in other ways that may be beneficial to your community and you.

Alternatives to Participation:

Participation in this pilot study is voluntary, and you have the right to refuse to participate or decide to withdraw from this demonstration at any time without penalty.

Questions/Concerns:

Should you have any questions or concerns regarding this study, you may contact the principle investigator, **insert name** at the following phone number: **insert phone** or via email at **insert email**.

Confidentiality:

A screening tool will be completed for each participant and stored electronically in a database for two years, at which time it will be deleted. Your information will remain confidential and will only be reviewed by the members of the project team. All data is reported in aggregate and no identifying personal information will be released.

Patient initial ___

Patient Consent:

The pilot project and the procedures have been explained to me. I agree to participate in this project. My participation is voluntary and I do not have to sign this form if I do not want to be part of this project. I have received a copy of the California Experimental Subject Rights, and I will receive a copy of this consent form for my records.

Signature of Participant: _____

Date: _____

Signature of Person Obtaining Consent: _____

Date: _____

**AMR Ventura & Santa Barbara Hospice Support Community
Paramedicine Pilot Project
Patient Consent Form**

I understand that this visit is part of a demonstration project intended to establish whether EMT-Paramedics in Ventura & Santa Barbara can increase access to the most appropriate level of health care for patients who do not need care in an emergency department. I understand that only specially trained Hospice Paramedics will be able to participate in this study and the study is authorized by the California Office of Statewide Health Planning and Development.

As a participant in this demonstration project, I understand the following:

1. The specially trained Hospice Paramedic can only provide services authorized under the demonstration project in addition to those services already authorized for EMT- Paramedics.
2. The specially trained Hospice Paramedic can only provide services in locations authorized under the demonstration project in addition to those already authorized for EMT- Paramedics.
3. The specially trained Hospice Paramedic can only provide transportation to those locations authorized for EMT-Paramedics
4. A supervising health care professional is available for consultation at all times that the EMT- Paramedic is treating me or the person for whom I am consenting.
5. No warranty or guarantee has been made to me regarding any treatment or any procedure received.
6. Participation in this demonstration project does not constitute my assumption of risk.
7. I have the right to refuse to participate or decide to withdraw from this demonstration at any time without penalty.-
8. If I refuse to participate or decide to withdraw from this demonstration, transportation to the closest emergency department that is able to provide care at this time will be immediately provided in accordance with existing regulation of EMT-Paramedic practice.
9. My identity will not be disclosed without my separate consent, except as specifically required by law.

I have been given full opportunity to ask questions about this project, about the types of care that may be provided, about the location at which care will be provided, and about any risks involved. I voluntarily consent to and authorize treatment by the Community Paramedic(s). I certify that I have read this form and that I understand its contents.

Signature: _____ Date:

Witness Signature: _____ Date:

Insert your Site name Frequent 911 Caller Management
Community Paramedicine Pilot Project
Patient Consent Form

I understand that this visit is part of a demonstration project intended to establish whether EMT-Paramedics in **Your Region** can increase access to the most appropriate level of health care for patients who do not need care in an emergency department. I understand that only specially trained **Frequent 911 Caller Management Community Paramedics** will be able to participate in this study and the study is authorized by the California Office of Statewide Health Planning and Development.

As a participant in this demonstration project, I understand the following:

1. The specially trained Frequent 911 Caller Management Paramedic can only provide services authorized under the demonstration project in addition to those services already authorized for EMT- Paramedics.
2. The specially trained Frequent 911 Caller Management Paramedic can only provide services in locations authorized under the demonstration project in addition to those already authorized for EMT- Paramedics.
3. The specially trained Frequent 911 Caller Management Paramedic can only provide transportation to those locations authorized for EMT-Paramedics
4. A supervising health care professional is available for consultation at all times that the EMT- Paramedic is treating me or the person for whom I am consenting.
5. No warranty or guarantee has been made to me regarding any treatment or any procedure received.
6. Participation in this demonstration project does not constitute my assumption of risk.
7. I have the right to refuse to participate or decide to withdraw from this demonstration at any time without penalty.-
8. If I refuse to participate or decide to withdraw from this demonstration, transportation to the closest emergency department that is able to provide care at this time will be immediately provided in accordance with existing regulation of EMT-Paramedic practice.
9. My identity will not be disclosed without my separate consent, except as specifically required by law.

I have been given full opportunity to ask questions about this project, about the types of care that may be provided, about the location at which care will be provided, and about any risks involved. I voluntarily consent to and authorize treatment by the Community Paramedic(s). I certify that I have read this form and that I understand its contents.

Signature: _____ Date: _____

Witness Signature: _____ Date: _____

AMR Ventura Tuberculosis Community Paramedicine Pilot Project

Patient Consent Form

I understand that this visit is part of a demonstration project intended to establish whether EMT-Paramedics functioning as Community Paramedics can increase access to the most appropriate level of health care for patients who do not need care in an emergency department. The study is authorized by the California Office of Statewide Health Planning and Development.

As a participant in this demonstration project, I understand the following:

1. The Community Paramedic can only provide services authorized under the demonstration project in addition to those already authorized for EMT-Paramedics.
2. The Community Paramedic can only provide services in locations authorized under the demonstration project in addition to those already authorized for EMT-Paramedics.
3. The Community Paramedic can only provide transportation to locations authorized under the demonstration project in addition to those already authorized for EMT-Paramedics
4. A supervising health care professional is available for consultation at all times that the Community Paramedic is treating me or the person for whom I am consenting.
5. No warranty or guarantee has been made to me regarding any treatment or any procedure received.
6. Participation in this demonstration project does not constitute my assumption of risk.
7. I have the right to refuse to participate or decide to withdraw from this demonstration at any time without penalty.
8. If I to refuse to participate or decide to withdraw from this demonstration, I will not receive care from a Community Paramedic.
9. My identity will not be disclosed without my separate consent, except as specifically required by law.

I have been given full opportunity to ask questions about this project, about the types of care that may be provided, about the location at which care will be provided, and about any risks involved. I voluntarily consent to and authorize treatment by the Community Paramedic(s) during the duration of my Daily Observed Treatment for tuberculosis. I certify that I have read this form and that I understand its contents.

Signature

Witness Signature

Date

Date

APPENDIX S

Site Specific Proposals

California EMS Authority

Proposal for Alternate Transport Destinations for Communities in Los Angeles County

Updated and Revised May 9, 2014

- A. Title of Proposed Project Concept** – Alternate Transport Destinations (“*ALTrans*”) in Los Angeles County
- B. Identify the category(s) that best describe the project you propose to pilot:** Transport patients with specified conditions not needing emergency care to alternate, non-emergency department locations
- C. Brief description of proposed concept, project management and partners (include geographic area to be served)**

1. Description of Proposed Concept

ALTrans is a partnership between the fire departments of three communities in Los Angeles County – Glendale, Pasadena and Santa Monica, their hospital and clinic systems – Glendale Memorial Hospital, Glendale Adventist Medical Center, Huntington Memorial Hospital, Huntington Memorial Foundation and its Pasadena Community Urgent Care Center, Kaiser Permanente, Santa Monica-UCLA Medical Center and Orthopaedic Hospital, and UCLA Health System, a major academic institution – the UCLA Center for Prehospital Care at the David Geffen School of Medicine and the Los Angeles County EMS Agency.

ALTrans will use the normal response plans of these fire departments with specially trained paramedics to assess patients at the scene of a 9-1-1 request using a triage protocol approved by the Los Angeles County EMS Agency medical director. Paramedics will use this protocol to identify patients greater than 18 years of age who have minor injuries and illnesses including isolated closed extremity injuries, lacerations with controlled bleeding, soft tissue injuries, minor traffic accidents and isolated fever or cough. Patients who do not require medical care in a hospital emergency department (ED) will be offered transportation to an urgent care center approved by the Los Angeles County EMS Agency as an appropriate staffed and equipped medical facility for the patients presenting medical condition. The Los Angeles County EMS Agency has established a policy to govern urgent care center participation (see attachment A) which includes the approved protocol paramedics will use in the field.

2. Project Management

ALTrans is submitted by the UCLA Center for Prehospital Care on behalf of all the partners. The Center for Prehospital Care is a division of the UCLA Emergency Medicine Center at the David Geffen School of Medicine at UCLA. For the past 27 years, UCLA has been dedicated to making a local, national and international impact on the prehospital care system and the patients this system serves. UCLA operates one of the top performing Paramedic Programs in the nation and delivers primary and continuing education programs to Emergency Medical Technicians (EMTs), paramedics,

registered nurses, medical students, physicians as well as the lay public.¹ UCLA is actively engaged in research and quality improvement that contributes to the prehospital medicine knowledge base and is contracted to provide these vital services to one-third of the fire departments in Los Angeles County.

As one of the leading academic medical centers in the nation, UCLA will provide the project oversight, medical direction, data analysis and reporting, chair the Community Paramedicine Steering Committee and serve as the liaison with the Los Angeles County EMS Agency, fire departments, hospitals and community clinics. UCLA will collaborate with all stakeholders to ensure transparency, patient safety and continual awareness of all project activities and outcomes.

As part of the broader management structure for the project, each fire department will utilize its department's nurse educator, medical director and command structure to ensure the paramedics are properly trained, data are collected and that the protocol for *ALTrans* is followed. Urgent care centers will provide patient care data that will be used to determine patient outcomes and identify any patient who is subsequently transferred from the clinic or urgent care to a local ED. Hospitals will collaborate by identifying patients that may have met the protocol, but were transported to the ED and by providing comparative financial and patient care data enabling an analysis of cost savings generated by this project.

Should this project be approved and subsequently funded, UCLA will work with the UCLA Office of Contracts and Grants management to ensure sound accounting and financial management of funds and disbursements, and timely completion of required reporting.

3. Partners

The partners for this pilot program are the fire departments and health systems and clinics in Glendale, Pasadena and Santa Monica and the Los Angeles County EMS Agency. The following Memoranda of Understanding with the Glendale, Pasadena and Santa Monica fire departments are included in Attachment B. Letters of Support from the following hospitals, health systems and clinics are included in Attachment C:

- AmeriCare Ambulance Service
- Glendale Adventist Medical Center
- Glendale Fire Department
- Glendale Fire Fighters' Association
- Glendale Memorial Hospital
- Huntington Medical Foundation/Community Urgent Care Center
- Huntington Memorial Hospital
- Kaiser Permanente
- Pasadena Public Health Department
- UCLA Health System
- USC Verdugo Hills Hospital

Other partners in support of the project and interested in expansion opportunities should they become available and be approved by the Los Angeles County EMS Agency include, but are not limited to, the Alhambra Fire Department, Los Angeles City Fire Department, the Los Angeles County Fire Department and McCormick Ambulance Service.

The Community Paramedic Steering Committee for this project will be comprised of:

A citizen from one of the three communities	Kaiser Permanente Urgent Care Director	Santa Monica Fire Dept. Fire Chief
AmeriCare Ambulance Service Operations Manager	Kaiser Permanente Ambulance Transportation Director	Santa Monica Fire Dept. Medical Director
California Emergency Nurses Association	Los Angeles Ambulance Association	Santa Monica-UCLA Medical Center ED Director
California Community College System	Los Angeles County EMS Agency Medical Director	UCLA CPC Project Manager
Glendale Adventist Medical Center ED Director	Los Angeles County EMS Agency Community Paramedic Task Force Member	UCLA CPC Project Medical Director
Glendale Fire Dept. Fire Chief	Los Angeles County EMS Commission	Other interested members of the community
Glendale Fire Dept Medical Director	Los Angeles County EMS Agency Medical Advisory Council Committee Member	
Glendale Memorial Hospital ED Director	Pasadena Fire Dept. Fire Chief	
Hospital Association of Southern California	Pasadena Fire Dept. Medical Director	
Huntington Memorial Hospital ED Director	Pasadena Health Officer	
Huntington Medical Foundation/Community Urgent Care Center Medical Director		

See attachment D for the list of names and titles. This committee will report data and findings to the Los Angeles County EMS Agency Medical Advisory Council, Los Angeles County EMS Agency and the California EMS Authority.

D. Purpose and objectives

The *ALTrans* project will measure the impact of (i) training community paramedics, (ii) a patient on-scene assessment protocol, and (iii) implementing alternative transportation

destinations on (i) health outcomes, (ii) deployment of scarce/overtaxed 9-1-1 and emergency department resources, and (iii) healthcare costs. Objectives include:

1. Develop and implement a protocol to safely and accurately identify patients with minor injuries and illnesses for transport to destination other than an ED.
2. Ensure all participating paramedics complete the core training approved by the EMS Authority and the site-specific training approved by the Los Angeles County EMS Agency.
3. Develop and implement a comprehensive quality improvement program that includes a 100% audit of all patients meeting criteria regardless of their transportation destination.
4. Develop a data management plan that identifies all patients in the project, their chief complaint, transportation destination, disposition, satisfaction and estimated cost savings.
5. Report findings to the California EMS Authority and Los Angeles County EMS Agency.

E. Estimated Project Length (24 Months)

ALTrans will operate approximately 24 months as approved the California EMS Authority. Using 2012 fire department transport figures and studies reporting that 13.4% of all ED patients could be cared for in an urgent care center, *ALTrans* anticipates that approximately 3,600 patients will be identified for transport to a community clinic or urgent care center each year.²

Additionally, baseline data will be collected prior to the approval and implementation of the project starting April 1, 2014.

F. Background Information

1. Need for Project

Fire departments in Los Angeles County respond to over 540,000 9-1-1 calls each year, transporting over 400,000 of these patients to EDs who serve nearly 3 million patients annually.³ Studies report that as many as a third of these ED visits may be in appropriate or non-emergent and many of these patients could be cared for at an urgent care center.^{2,4} However, California Health and Safety Code (sections 1797.52 and 1797.218) require that patients under the care of a paramedic be transported to a hospital that has an emergency department.

Patients who could receive their care in an alternate location such as a community clinic or urgent care system are currently transported to hospital EDs and are part of the nearly 3 million patients served by the overburdened EDs in Los Angeles County.³ The transport of non-emergent patients to EDs results in overcrowding and contributes to the saturation of Los Angeles County EDs 10.6% of the time, preventing them from accepting new patients from the emergency medical services system who depend upon specialized emergency department medical care.³ Non-emergent visits also place a

strain on ED staff and resources, diverting them from the more critical patients as well as increasing work load leading to decreased staff and patient satisfaction.⁴

The cost of this ED care is significantly higher than medical care delivered at an urgent care center or community clinic and contributes to rising healthcare expenditures.^{2,5} It is estimated that 4.4 billion dollars could be saved each year if non-emergency patients were cared for in urgent care or retail clinics.²

The CDC estimates that 79.7% of adults visit EDs are due to the lack of access to other providers.⁶ By using available urgent care and clinic capacity and capabilities in the community, patients with minor injuries or illnesses could receive medical care equal to the quality of an ED, without burdening the ED and contributing to rising healthcare expenditures.⁵ The American College of Emergency Physicians and The National Association of EMS Physicians support the concept of transporting patients to alternate destinations that do not need advanced life support care or evaluation at an emergency department.⁷ *ALTrans* seeks to implement an alternate transportation project in communities in Los Angeles County.

2. Types and Number of Patients Likely to be Seen

In 2012, Glendale, Pasadena and Santa Monica Fire Departments collectively transported 27,002 patients to the EDs in their respective communities. A recent report by Weinick states that 13.4% of all ED patients could be cared for in an urgent care center.² By using a figure of 10-15% and applying it to the total patients transported by the partnering fire departments, it is estimated that 2,700-4,050 patients will be identified as having a minor injury or illness and eligible for transport to an urgent care center each year. Thus, using the protocol (see Attachment A), *ALTrans* expects that a total of 5,400-8,100 patients over the 24 month period will be eligible for transport to an urgent care center or community clinic.

3. Anticipated Number of Community Paramedics to be Trained

The Glendale, Pasadena and Santa Monica Fire Departments employs 71, 65, and 48 paramedics, respectively, who are licensed in the State of California. Each department member will receive the Alternate Transportation Destination training program (see attachment E). Additionally, EMTs working with the fire departments in a transportation capacity will also receive training. This includes AmeriCare Ambulance Service with Santa Monica Fire and civilian ambulance operators with Glendale and Pasadena Fire Departments. One to two paramedics from each department will participate in the Community Paramedic Core Training Program approved by the California EMS Authority and the site-specific training approved by the Los Angeles County EMS Agency. Ongoing quarterly quality improvement meetings will also be conducted with retraining conducted annually or more often if needed. All EMTs and Paramedics are currently employed and their future employment status will be maintained with their respective fire departments and ambulance companies.

It is difficult to project the number of CPs likely to be trained in the future until this project is complete. However, if the outcomes of *ALTrans* are successful, the expansion

of this type of program throughout Los Angeles County and the country would require many other paramedics to receive this specialized training.

4. Other Programs Serving as Models for this Project

In 2004, the Los Angeles City Fire Department in collaboration with the Centinela Hospital Medical Center and the Los Angeles County EMS Agency conducted a pilot program to transport patients with minor injuries and illnesses to the Centinela Hospital Airport Medical Clinic. This pilot was eventually discontinued at the request of the California EMS Authority. Despite this, the program still provides useful data including a protocol to inform the design of the *ALTrans* project.

UCLA CPC has also met with corporate personnel at American Medical Response (AMR) about their community paramedicine operations. UCLA CPC has met with Dr. Beason, the medical director of their MedStar affiliate in Texas and Dr. Racht, medical director of AMR who have provided useful insight and information on their alternate transportation project. They have stated their willingness to both collaborate and share best practices if *ALTrans* is approved.

G. Program Management

1. Operational Methodology

Utilizing the lessons learned from the Centinela Hospital Airport Clinic pilot project and information provided by MedStar in Texas, a protocol was developed to identify patients with minor illnesses and injuries who could be treated at an appropriately staffed clinic rather than an ED.

The protocol was reviewed by the medical directors of the partner fire departments, hospitals, urgent care centers and shared with the Los Angeles County EMS Agency medical director.

Fire departments will use their normal response patterns to identify patients who meet the protocol at the scene of 9-1-1 requests for services. Enrolled patients will be transported to designated urgent care centers for minor medical care.

A 100% audit will be conducted on each patient transported to an urgent care center. Any negative significant patient outcomes will be reported to the Patient Safety Monitoring Board, the Los Angeles County EMS Agency and the California EMS Authority Project Director within 48 hours. .

Listed below are the major milestones in the operations plan for this pilot project.

Project Milestone	Target Date
Policy, protocol and training program development	Complete
Data collection plan	Complete
Quality improvement plan	Complete

Baseline data collection	Apr 1, 2014 – Dec 31, 2014
Approval of the Institutional Review Board (implementation phase)	May 31, 2014
Training delivery	Aug 15, 2014 – Dec 31, 2014
Implementation of approved pilot program	Jan 1, 2015
Monthly data reports submitted to Patient Safety Monitoring Board, Los Angeles County EMS Agency and the California State EMS Authority for discussion and review.	Feb 15, 2015
Continuous Quality Improvement and Training	Jan 1, 2015 – Jan, 1 2017
Final reports and evaluation	Apr 1, 2017

2. Local Governance and Medical Control

This project has been reviewed and approved by the Los Angeles County EMS Agency medical director and the following stakeholders including the (i) each fire department's fire chief, (ii) each fire department's medical director, (iii) the UCLA Center for Prehospital Care medical director and project manager, (iv) the medical officer for the Glendale Adventist Medical Center, (v) the medical officer for the Glendale Memorial Hospital, (vi), (vii) the medical officer for Kaiser Permanente urgent care center, (viii) the medical officer for City of Pasadena urgent care center, (ix) the medical officer for the Huntington Memorial Hospital, (x) the medical officer for UCLA Health System, (xi) Pasadena Public Health Officer, (xii) Los Angeles County EMS Agency Community Paramedicine Taskforce, (xiii) the Community Paramedicine Steering Committee for this project and (xiv) the Patient Safety Monitoring Board.

3. Provisions for Protecting Patients' Safety

A member from each department will complete the core community paramedicine curriculum approved by the California EMS Authority. All department members will attend the site-specific training program approved by the Los Angeles County EMS Agency. Both training programs include modules on patient safety and privacy.

Urgent care centers have been approved by the Los Angeles County EMS Agency to accept patients meeting the protocol.

Fire departments will triage patients using the approved Los Angeles County EMS Agency Alternate Transport Destination protocol.

Departments will follow the quality improvement guidelines. Any significant negative patient outcomes will be reported to the Patient Safety Monitoring Committee, the Los Angeles County EMS Agency and the California EMS Authority within 48 hours.

UCLA has received Institutional Review Board (IRB) approval for the first baseline data collection phase of this project to ensure the safety and welfare of participants and their data (see attachment F). A second IRB application will be filed for the data collected during the implementation of the project.

Patient data will only be transmitted via secure electronic communications and all records maintained in a secure location and only available for data review by authorized investigators or data abstraction research associates.

The protection of patients will further be met through the testing of the protocol prior to implementation, use of electronic patient care records for quick identification of problems and generation of reports, regular quality improvement meetings, hands-on physician oversight and an active Community Paramedicine Steering Committee.

4. Anticipated Sources of Funding

UCLA has met with the UCLA Development Office who is very supportive of this important initiative and will facilitate the development of funds for *ALTrans*. Funding to support the *ALTrans* project will be sought from multiple sources including: (i) any funding streams and opportunities identified through California EMS Authority's upper level coordination activities, (ii) re-direction, using conservative estimates, of funds that insurance providers will save by reducing the number of patients transported to and treated at EDs, and (iii) by approaching local, regional, and national foundations that have an interest in supporting access to appropriate health care for at-risk populations, improving the education of medical personnel, health system and health policy reform, and improved health outcomes.

UCLA Health has provided funding in the amount of nearly \$200,000 to support this project. Additional funding continues to be sought.

5. Paramedic Eligibility

Paramedics with 4 years experience and in good standing with their department will be identified for the Community Paramedic Core training program. Other members of the department who have attended and successfully completed the site specific training program approved by the Los Angeles County EMS Agency (see attachment E).

6. Local CP Training

UCLA operates one of the top performing paramedic education programs in the nation and has sent an email to the California EMS Authority requesting the opportunity to participate in the design and development of the core Community Paramedicine curriculum.¹ UCLA has been selected to deliver the core paramedic curriculum for all the pilots in the state.

UCLA will develop a site-specific curriculum to ensure each paramedic fully understands the new alternate transportation protocol, purpose of the study, reporting requirements, quality improvement indicators and tracking, and patient safety and privacy issues. Paramedics will also participate in regular quality improvement meetings and annual retraining.

UCLA has extensive experience partnering with fire departments and EMS agencies to deliver primary and continuing education as well as quality improvement. With over 20 formal engagements with fire departments, UCLA looks forward to putting this understanding to use in *ALTrans*.

H. Evaluation, Data Collection and Dissemination of Results

1. Process Evaluation/Quality Improvement

- a. All paramedics in each department have been trained and demonstrate competency.
- b. Continuous and ongoing review of 100% of patients transported to an alternate destination will be conducted. This will include confirming that the protocol was appropriately followed, including those patients meeting the protocol and transported to the ED.
 - i. The providers' correct identification of the patient using the protocol. This shall also include patients that met the protocol parameters but were transported to an ED.
 - ii. Patient satisfaction determined by a satisfaction survey.
 - iii. The cost of medical care provided at the alternate destination compared to charges for the same condition when treated at the hospital ED.
 - iv. Patients requiring secondary transport from a clinic to an ED.
 - v. The length of time to receive care at the clinic and the urgency care center discharge diagnosis.
- c. Any incident that result in a significant negative patient outcome shall be reported to the Patient Safety Monitoring Board, the Los Angeles County EMS Agency Medical Director and the California EMS Authority Project Director within 48 hours.
- d. Quarterly quality improvement meetings involving CPs, EMTs and supervisory staff will be conducted to review quality indicators and patient outcomes.
- e. The Community Paramedicine Steering Committee will meet quarterly to review the quality indicators and pilot outcomes.
- f. Data will be presented and discussed at the Los Angeles County EMS Agency Community Paramedic Task Force and Los Angeles County EMS Agency Medical Advisory Council.

g. *ALTrans* will also observe all IRB mandated processes to ensure the welfare of the patients in this project.

2. Qualitative Evaluation

The qualitative evaluation will include patients, providers and stakeholders. Patients will be invited to complete a survey regarding the experience of their medical care. This information will be summarized and reviewed as part of the quality improvement process and shared with all stakeholders. Community Paramedics will participate in regular quality improvement meetings where data are reviewed and discussed. Stakeholders will meet regularly, review data and discuss the overall success of the program. Insights and experiences will guide the review of data and inform changes to the protocol and supporting processes.

3. Impact Evaluation & Utilization

The *ALTrans* project will measure the impact of (i) training community paramedics, (ii) utilizing an on-scene assessment protocol to (iii) implementing alternative transportation destinations on (i) health outcomes, (ii) deployment of scarce/overtaxed 9-1-1 and emergency department resources, and (iii) overall healthcare expenditures.

4. Estimate of Healthcare Cost Savings

ALTrans will compare the cost of medical care delivered by the urgent care/community clinics with the cost of care that would have been delivered had the patient been transported to an ED. The literature reports the cost of care in clinics is up to 80% less than EDs for common patient complaints.⁵ *ALTrans* will report its experience based on data from this project for Los Angeles County.

5. Data Collection

Paramedics and EMTs will capture patient data utilizing the department's electronic patient care record systems. The State of California has developed a data tracking tool that will be utilized to report data each month. UCLA has developed a tool and data tracking plan to guide each partner's data collection (see attachment G). Each fire department, hospital and urgent care center has identified a single person responsible for data reporting. UCLA will provide a reporting template for partners to complete and send to UCLA for compilation and reporting into the State of California EMS Authority's web-based data management system.

Quality indicators have been developed for monthly tracking and a 100% audit of performance will be conducted and reported. Urgent care centers will provide monthly reports on the patient wait time to be evaluated and the discharge diagnosis for patients transported under this project. Additionally, they will report on any patient transported to their clinic requiring subsequent transfer to an ED. Both urgent care centers and hospitals will provide data on the cost of care for the purposes of determining the cost savings generated by *ALTrans*. Patients will be invited to complete an online satisfaction survey developed by the California EMS Authority to report on their experience of care. All data will be reported and discussed in the quarterly quality improvement meetings to inform all partners and stakeholders.

6. Dissemination of Results

The results of *ALTrans* will be made in reports to the California EMS Authority and may be submitted as a study to a peer-reviewed journal for publication. After publication the results may also be submitted for presentation at a national EMS meeting (ie. EMS Today, National Association of EMS Educators, EMS World, National Association of EMS Physicians, or EMS Administrators). Results and best practices will be shared to help others adopt similar programs.

I. Contact Information

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J. References

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2. Weinick RM, Burns RM, Mehrotra A. Many Emergency Department Visits Could be Managed At Urgent Care Centers and Retail Clinics. *Health Affairs*, 29, no.9 (2010): 1630-1636.
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6. Gindi RM, Cohon RA, Kirzinger WK. Emergency Room Use Among Adults Aged 18-64: Early Release of Estimates from the National Health Interview Survey, January-June 2011. *Centers for Disease Control*. May 2012.
7. The American College of Emergency Physicians and the National Association of EMS Physicians. Alternate Ambulance Transportation and Destination Policy Statement. *Annals of Emergency Medicine*. 2008;52:594.

ATTACHMENT A

**Los Angeles County Department of Health Services
Alternate Transportation Policy & Protocol**

Subject: TRANSPORT OF 9-1-1 PATIENTS TO URGENT CARE CENTERS
PARTICIPATING IN ALTERNATE RECEIVING FACILITY PILOT

PURPOSE: To outline the criteria and provide guidance for transport of 9-1-1 basic life support patients to Urgent Care Centers (UCC) participating in the community paramedic alternate receiving facility pilot program (ALTrans)

AUTHORITY: Health and Safety Code, Division 5, Sections 1797.220 and 1798.101
Title 22, California Code of Regulations, Sections 100175
Office of Statewide Health Planning and Development (OSHPD)

PRINCIPLES:

1. Only patients meeting the triage criteria for transport to clinics shall be transported to the UCC participating in this program. Patients meeting conditions described in the Prehospital Care Policy Ref. No. 808, Base Hospital Contact and Transport Criteria, shall not be triaged to the urgent care centers
2. Patients that meet Specialty Care Center Criteria (EDAP, PMC, PTC, Trauma, STEMI, Stroke, etc.) shall not be transported to UCC
3. The pilot program may be terminated at any time by the EMS Agency
4. UCC requesting to withdraw from the pilot project shall provide the EMS Agency with a minimum of 30 days written notice prior notification. Withdraw from the program without 30 days prior notification requires mutual agreement between the EMS Agency and UCC.
5. Participation will be by the approval of OSHPD, Emergency Medical Service Authority and the EMS Agency

POLICY:

1. Hours of Operation must be approved by the EMS Agency. Any change to hours of operation will be preapproved by the EMS Agency
2. Triage Criteria: transport of 9-1-1 BLS patients to UCC shall only include those who are greater than or equal to 18 years of age with minor non-life-threatening injuries or illness, normal mental status and normal vital signs. Refer to Attachment I for examples of patients appropriate and inappropriate for urgent care center destinations

URGENT CARE CENTER RESPONSIBILITIES:

1. Minimum per shift clinic staffing will include one physician currently licensed to practice medicine in the state of California and one licensed health care provider. The physician and/or licensed health care provider must be current in either American Heart or American Red Cross cardiopulmonary resuscitation
2. Designate a physician for pilot project oversight
3. If utilizing mid-level providers (nurse practitioners and/or physician assistants), a physician must be on-site and readily available for consultation
4. Will accept all patients that are triaged by 9-1-1 provider agencies and determined to meet the criteria of transport to a urgent care center regardless of their ability to pay
5. Will provide emergency medical care to all patients within the clinic. Patients determined to require a higher level of care will be transported to the most accessible receiving hospital capable of providing definitive care
6. Provide the EMS agency with the urgent care's capability (i.e. radiology services, laboratory capabilities, etc.)
7. Maintain all appropriate licenses required for the operation of its facility
8. Will have policies and procedures in place, approved by the EMS Agency, outlining care and throughput of patients arriving by ambulance
9. Will maintain and provide access and adequate parking for ambulance vehicles
10. Will have set posted hours of operation and will communicate to the provider agencies on a predetermined time that the UCC will be able to accept the last patient for the day. The EMS Agency will be notified and will approve any changes in the hours of operation. Upon approval, the clinic will be responsible to notify the affected provider agencies
11. Will have a dedicated telephone number for the paramedics to call in order to provide a brief report of the patient(s) being transported to the UCC
12. Maintain a community referral list of services and facilities available to patients such as poison control, abuse referral, sexual assault victim referral, social services, etc.

13. Identify a representative of the facility to act as a liaison between the EMS Agency and the authorized 9-1-1 provider agencies
14. Agree to provide the EMS Agency with copies of records pertaining to the patients treated by prehospital care provider at the request of the EMS Agency. These reports may be used for audit, investigation, or statistical analysis
15. Agree to provide the EMS Agency with copies of all EMS Report Forms in addition to patient discharge diagnosis
16. Meet the data reporting requirements established by the State
17. Provide the EMS Agency with the urgent care's capability (i.e. radiology services, laboratory capabilities, etc.)
18. In the event that a patient requires further medical care and/or hospital admission, the clinic will agree to arrange for transfer of the patient to the most appropriate acute care facility to care for the patient's medical condition. This includes facilitating ambulance transportation utilizing a non-9-1-1 provider agency unless the patient's medical condition warrants such level of transfer
19. Notify the EMS Agency of patient transfers requiring 9-1-1 emergency ambulance transportation as soon as possible, but not to exceed 72 hours after such transport(s). Notification shall be made by use of The EMS Agency Situation Report located at: <http://ems.dhs.lacounty.gov/PrehospitalCare/SituationReport.pdf>
20. Agree to maintain appropriate insurance coverage for worker's compensation and general/professional liability (See Attachment II)
21. Maintain an on-site AED
22. Attend Los Angeles County Department of Health Services, EMS Agency Alternate Transport Community Advisory Committee Meetings
23. Ensure that a licensed health care provider is available to receive transfer of care report

PROVIDER AGENCY RESPONSIBILITIES:

1. Complete all state and local required training for participation in this program
2. Be familiar with the triage criteria for patients that are appropriate for urgent care destination

3. Telephone a brief report to the receiving urgent care center for those patients appropriate for urgent care destination
4. Provide the UCC with specific dispatch center contact information
5. Be cognizant of the UCC hours of operation and ensure that patients are not transported to the UCC on or after the agreed upon "last patient arrival time"
6. Do not transport patients to the urgent care center if they have notified the provider agency dispatch center that they are unable to accept patients
7. Obtain informed consent from each patient to be transported to the urgent care center
8. Shall assign a coordinator as liaison to the UCCs and for program oversight
9. Program coordinator shall attend the All Trans community advisory committee meetings
10. Ensure that transfer of care report is given to if licensed health care provider at the UCC

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Alternate Paramedic Transport Centers

Patients Suitable for Transportation to Approved Clinics

- Patients greater than 18 years of age
- Patient that have normal vital signs, without any signs of circulatory collapse (systolic BP > 90 mmHg)
- Suspected or obvious isolated closed extremity fractures with good distal PMS (pulse, motor and sensory).
- Lacerations with controlled bleeding, without loss of neuromotor function or significant blood loss.
- Extremity soft tissue injuries with good distal pulses, motor and sensory.
- Nausea and vomiting without abdominal pain
- Acute mild to moderate non-traumatic low back pain
- Minor traffic collision without chest or abdominal pain
- Slip or fall with no chest or abdominal pain
- Head Injuries that are full conscious and oriented and had no history of loss of consciousness
- Isolated fever or cough
- Paramedic feels comfortable that the patient is stable and would not need any care that would be above the abilities of the local clinic

Page 2

Patients that are NOT Suitable for Transportation to Approved Clinics

- Less than 18 years of age
- Any patient in custody
- Cardiac Arrest
- Chest pain or shortness of breath
- Any arrhythmias
- Suspected signs of stroke
- Abdominal or pelvic pain
- Any history of altered level of consciousness
- Any seizure activity
- Behavioral emergencies
- Patients that might be immunosuppressed
- Any trauma that could be consider trauma center criteria or guidelines
- Suspected hip, pelvis or femur fracture
- Severely angulated or open fractures
- Suspected dislocations
- Pregnancy or suspected pregnant patient
- Suspected drug or alcohol intoxication
- Any signs of circulatory collapse including a systolic BP < 90mmHg
- Paramedic feels uncomfortable that the patient is stable enough or that transport to a clinic could possibly cause a problem

INSURANCE COVERAGE REQUIREMENTS:

A. General Liability Insurance

Limits of not less than the following:

General aggregate:	\$2 million
Products/completed operations aggregate:	\$1 million
Personal and advertising injury:	\$1 million
Each occurrence:	\$1 million

B. Workers Compensation and Employers Liability:

Limits of not less than the following:

Each accident:	\$1 million
Disease-policy limit:	\$1 million
Disease-each employee:	\$1 million

C. Professional liability

Limits of not less than the following:

Per occurrence:	\$1 million
Aggregate:	\$3 million

ATTACHMENT B (Memoranda of Understanding)

Glendale Fire Department
Pasadena Fire Department
Santa Monica Fire Department

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (the "MOU") is entered into effective as of 9/19, 2013, ("Effective Date") by and between the Regents of the University of California, a California Constitutional corporation, on behalf of its Los Angeles Campus, UCLA Center for Prehospital Care ("UCLA") and the City of Glendale ("Fire Department") and sets forth the understanding between the parties regarding the development and implementation of a proposal relating to a Community Paramedicine Pilot Program ("Pilot Program").

RECITALS

A. The goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

B. The parties desire to participate in the submission of a proposal for the Pilot Program for approval by the California EMS Authority ("EMSA") and the California Office of Statewide Health Planning and Development ("OSHPD"), referred to as OSHPD's Health Workforce Pilot Projects ("HWPP").

C. The HWPP Application and each approved Pilot Program will be sponsored at the State level by the EMSA and implemented at the local level through collaboration and partnership with the Local EMS Agencies ("LEMSA"), EMS provider agencies, and appropriate health care partners.

D. UCLA and Fire Department desire to cooperate and collaborate in the submission of a proposal for a Pilot Program and with the implementation if approved, in which case the parties shall document their respective obligations in more detail in a Pilot Program Agreement.

The parties agree as follows:

1. RESPONSIBILITIES OF UCLA

UCLA shall perform the following responsibilities upon approval of the Pilot Program:

- 1.1 Obtain approval for the Pilot Program by the Los Angeles County EMS Agency.
- 1.2 Develop a protocol to identify patients for transport to alternate transportation destinations for the Pilot Program.
- 1.3 Develop a protocol to identify patients recently discharged from a hospital to prevent readmission.
- 1.4 Provide medical oversight and collaborate with the participating health systems in the fire departments area, the Los Angeles County Medical Director and the Fire Department Medical Director for the Pilot Program.

- 1.5 Develop a primary and continuing education program for Paramedics participating in the Pilot Program.
- 1.6 Develop a data management and quality improvement plan and data analysis and obtain agreement by the Fire Department.
- 1.7 Provide reports to the Los Angeles County EMS Agency, EMSA and OSHPD as requested or directed for the Pilot Program.
- 1.8 Collaborate as needed to develop a budget and seek funding for the Pilot Program.

2. RESPONSIBILITIES OF FIRE DEPARTMENT

Fire Department shall perform the following responsibilities upon approval of the Pilot Program:

- 2.1 Participate in the Steering Committee for the Pilot Program and participate in the Pilot Program as agreed upon.
- 2.2 Ensure that participating Fire Department members receive training, participate in the quality improvement process, and receive retraining as required.
- 2.3 Provide trained paramedics for the approved Pilot Program.
- 2.4 Utilize its quality improvement resources to track and report indicators as agreed upon in the data management plan.
- 2.5 Collaborate as needed to develop a budget and seek funding for the Pilot Program.

3. TERM

The term of this MOU shall be for three years from the Effective Date, or until a Pilot Program Agreement is agreed upon that supersedes this MOU. Either party may terminate participation in this MOU for good cause by giving the other party sixty days' written notice.

4. GENERAL

4.1 Relationship of the Parties. The relationship of the parties shall be that of independent contractors collaborating for purposes of the Pilot Program, and this MOU shall not make either party the agent or partner of the other or create any form of partnership or joint venture between the parties.

4.2 Definitive Agreement. If the Pilot Program is approved, the parties shall cooperate to enter into a Pilot Program Agreement, which shall set forth their respective obligations under the Pilot Program in more detail.

4.3 Assignment and Amendment. Any changes to this MOU must be agreed to in writing by authorized representatives of each party.

4.4 Notice. Any written notification required for this MOU shall be made to the following:

If to UCLA: Todd LeGassick, MPH
Executive Director
UCLA Center for Prehospital Care 10990 Wilshire Blvd.,
Suite 1450
Los Angeles, CA 90024

If to Fire Department:
Harold D. Scoggins
Fire Chief
Glendale Fire Department
421 Oak St.
Glendale, CA 91204

4.5 Counterparts. This MOU may be executed in any number or counterparts, each of which shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

4.6 Authority. Each party represents and warrants that it is free to enter into this MOU and to perform each of the terms and conditions of the MOU.

The parties have executed this MOU to be effective as of the Effective Date set forth above.

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA (UCLA)

FIRE DEPARTMENT

By: [Signature]
J. Thomas Rosenthal, MD

Its: Chief Medical Officer

Date: _____

By: [Signature]
Scott Ochoa, City Manager

Its: Assistant City Mgr.

Date: 9/13/13

APPROVED AS TO FORM
[Signature]
City Attorney
DATE 9/13/13

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (the "MOU") is entered into effective as of September 9, 2013, ("Effective Date") by and between the Regents of the University of California, a California Constitutional corporation, on behalf of its Los Angeles Campus, UCLA Center for Prehospital Care ("UCLA") and the Pasadena Fire Department and sets forth the understanding between the parties regarding the development and implementation of a proposal relating to a Community Paramedicine Pilot Program ("Pilot Program").

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- 2.3 Provide trained paramedics for the approved Pilot Program.
- 2.4 Utilize its quality improvement resources to track and report indicators as agreed upon in the data management plan.
- 2.5 Collaborate as needed to develop a budget and seek funding for the Pilot Program.

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Executive Director
UCLA Center for Prehospital Care 10990 Wilshire Blvd.,
Suite 1450
Los Angeles, CA 90024

If to Fire Department:
Calvin E. Wells, Fire Chief
Pasadena Fire Department
199 S. Los Robles, Suite 550
Pasadena, CA 91101

4.5 **Counterparts.** This MOU may be executed in any number of counterparts, each of which shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

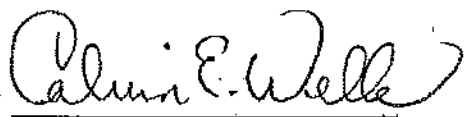
4.6 **Authority.** Each party represents and warrants that it is free to enter into this MOU and to perform each of the terms and conditions of the MOU.

The parties have executed this MOU to be effective as of the Effective Date set forth above.

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA (UCLA)

FIRE DEPARTMENT

By: 
J. Thomas Rosenthal, MD

By: 

Its: Chief Medical Officer

Its: FIRE CHIEF

Date: _____

Date: 9.9.13

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (the "MOU") is entered into effective as of 9/19, 2013, ("Effective Date") by and between the Regents of the University of California, a California Constitutional corporation, on behalf of its Los Angeles Campus, UCLA Center for Prehospital Care ("UCLA") and the City of Santa Monica ("the City") and sets forth the understanding between the parties regarding the development and implementation of a proposal relating to a Community Paramedicine Pilot Program ("Pilot Program").

RECITALS

A. The goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

B. The parties desire to participate in the submission of a proposal for the Pilot Program for approval by the California EMS Authority ("EMSA") and the California Office of Statewide Health Planning and Development ("OSHPD"), referred to as OSHPD's Health Workforce Pilot Projects ("HWPP").

C. The HWPP Application and each approved Pilot Program will be sponsored at the State level by the EMSA and implemented at the local level through collaboration and partnership with the Local EMS Agencies ("LEMSA"), EMS provider agencies, and appropriate health care partners.

D. UCLA and the City desire to cooperate and collaborate in the submission of a proposal for a Pilot Program and, if approved, with the implementation, in which case the parties shall cooperate to document their respective obligations in more detail in a Pilot Program Agreement.

The parties agree as follows:

I. RESPONSIBILITIES OF UCLA

UCLA shall perform the following responsibilities upon approval of the Pilot Program:

- 1.1 Obtain approval for the Pilot Program by the Los Angeles County EMS Agency.
- 1.2 Develop a protocol to identify patients for transport to alternate transportation destinations for the Pilot Program.
- 1.3 Provide medical oversight and collaborate with the Los Angeles County Medical Director and the Fire Department Medical Director for the Pilot Program.

- 1.4 Develop a primary and continuing education program for Paramedics participating in the Pilot Program.
- 1.5 Develop a data management and quality improvement plan and data analysis and obtain agreement by the Fire Department.
- 1.6 Provide reports to the Los Angeles County EMS Agency, EMSA and OSHPD as requested or directed for the Pilot Program.
- 1.7 Collaborate as needed to develop a budget and seek funding for the Pilot Program.

2. RESPONSIBILITIES OF THE CITY

The City shall perform the following responsibilities upon approval of the Pilot Program:

- 2.1 Participate in the Steering Committee for the Pilot Program and participate in the Pilot Program as agreed upon.
- 2.2 Ensure that participating members of the City's Fire Department members receive training, participate in the quality improvement process, and receive retraining as required.
- 2.3 Provide trained paramedics for the approved Pilot Program.
- 2.4 Utilize its quality improvement resources to track and report indicators as agreed upon in the data management plan.
- 2.5 Collaborate as needed to develop a budget and seek funding for the Pilot Program.

3. TERM

The term of this MOU shall be for three years from the Effective Date, or until a Pilot Program Agreement is agreed upon that supersedes this MOU. Either party may terminate participation in this MOU by giving the other party sixty days' written notice.

4. GENERAL

4.1 Relationship of the Parties. The relationship of the parties shall be that of independent contractors collaborating for purposes of the Pilot Program, and this MOU shall not make either party the agent or partner of the other or create any form of partnership or joint venture between the parties.

4.2 Definitive Agreement. If the Pilot Program is approved, the parties shall cooperate to enter into a Pilot Program Agreement, which shall set forth their respective obligations under the Pilot Program in more detail. The City shall in no way be obligated to participate in the Pilot Program unless and until the parties have entered into a Pilot Program Agreement.

4.3 Assignment and Amendment. Any changes to this MOU must be agreed to in writing by authorized representatives of each party.

4.4 Notice. Any written notification required for this MOU shall be made to the following:

If to UCLA: Todd LeGassick, MPH
Executive Director
UCLA Center for Prehospital Care 10990 Wilshire Blvd.,
Suite 1450
Los Angeles, CA 90024

If to the City:
City of Santa Monica
1685 Main Street
Santa Monica, California 90401
Attention: Rod Gould, City Manager

4.5 Counterparts. This MOU may be executed in any number or counterparts, each of which shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

4.6 Authority. Each party represents and warrants that it is free to enter into this MOU and to perform each of the terms and conditions of the MOU.

The parties have executed this MOU to be effective as of the Effective Date set forth above.

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA (UCLA)

CITY OF SANTA MONICA

By: 
J. Thomas Rosenthal, MD

By: 
Rod Gould

Its: Chief Medical Officer

Its: City Manager

Date: _____

Date: 9/20/13

ATTEST:

APPROVED AS TO FORM:

SARAH P. GORMAN
City Clerk


MARSHA JONES MOUTRIE
City Attorney

Attachment D

**Los Angeles County EMS Agency
Community Paramedicine Steering Committee Directory**

Name/Title	Email	Telephone
<u>Burbank Community:</u>		
Daniel Eisenberg, M.D., F.A.C.C. Foothill Cardiology Medical Group	cardfish@earthlink.net	818.848.6404
Tom Lenahan Fire Chief, Burbank Fire Department	tlenahan@burbankca.gov	818-238-3480
Kevin Traber, R.N., B.S.N. Director, Emergency & Cardiovascular Services Providence Saint Joseph Medical Center	Kevin.Traber@providence.org	818-847-4001
<u>Glendale Community:</u>		
Karen Brandt VP Ancillary Services, Glendale Adventist Medical Ctr	Karen.Brandt@ah.org	818-409-8290
Debra DuRoff, MPA FACHE Senior Director Business Development Dignity Health, Glendale Memorial Hospital & Health Center	debra.duroff@dignityhealth.org	818.507 4643 (o)
Angelica Loza-Gomez, M.D. Medical Director Verdugo Hills, USC Hospital Pre-Hospital Care Director	lozagome@usc.edu	
Arby Nahapetian, M.D. Chief Medical Officer	Arby.Nahapetian@ah.org	818-409-8026

Glendale Adventist Medical Center		
Ramella Markarian M.S., MHA Associate Vice President Business Development Glendale Adventist Medical Center for Rapid Care Glendale, Rapid Care Burbank, Verdugo Hills Urgent Care, and Glen Oaks Urgent Care	Ramella.markarian@ah.org	(818) 281-4594
Dr. Manual Momjian Medical Director Urgent 9 Urgent Care Center	mpmomjian@msn.com	
Edward Noll, M.D. Medical Director, Glendale Fire Department	EdNoll@aol.com	(818) 762-6553
Antonio Reyes, R.N., M.S.N., C.E.N. Manager, Emergency Services Glendale Memorial Hospital	Antonio.reyes@dignityhealth.org	818.502.2308
Vince Rifino Battalion Chief, Glendale Fire Department	vrifino@ci.glendale.ca.us	
Dr. Richard Foullon Adventist Health Physician Services Regional Medical Director Southern California Region 544 North Glendale Avenue Glendale, California 91206	Richard.Foullon@ah.org	1.818.241.4331 (Ext. 408)
Harold Scoggins Fire Chief, Glendale Fire Department	HScoggins@ci.glendale.ca.us	818-548-4829
<u>Pasadena Community:</u>		
Kevin Costa	kcosta@cityofpasadena.net	626-744-4745

Deputy Fire Chief, Pasadena Fire Department		
Calvin Dong SCAL Ambulance Operations Manager Kaiser Foundation Health Plan, Inc.	calvin.c.dong@kp.org	562-658-3942
Denise Houck, R.N. Nurse Manager, Pasadena Community Urgent Care	dhouck@huntingtonmedical.com	626-270-2425
Cary Manoogian, M.D. Physician Manager, Pasadena Community Urgent Care	cmanoogian@huntingtonmedical.com	626-270-2424
Manisha Rea, R.N. Chief Clinical Operations Officer Huntington Medical Foundation	mrea@huntingtonmedical.com	626-397-8333
Lisa R. Rodriguez Unit Manager (including maintaining building operations, security, EVS, parking structure, regional courier) Kaiser Permanente Pasadena Medical Offices	Lisa.R.Rodriguez@kp.org	(626) 583 -2250
Kim Rozanski, M.P.H. Director of Ambulatory Care Services Kaiser Permanente - Pasadena Medical Offices	Kim.M.Rozanski@nsmtp.kp.org	(626) 583-2262
Kathleen Sarreal, R.N., B.S.N. Ambulatory Care Assistant Dept Manager/Urgent Care Kaiser Permanente: Pasadena Medical Offices	Kathleen.A.Sarreal@kp.org	(626) 583 -2356
Benjamin Squire, M.D. Medical Director, Pasadena Fire Department	benjaminsquire@cep.com	909-865-9611
Jenny Van Slyke, R.N. Prehospital Care Coordinator, Huntington	jenny.vanslyke@huntingtonhospital.com	(626) 397-8482

Memorial Hospital Pasadena Fire Department Nurse Educator		
Eric Walsh, M.D., M.P.H Director of Public Health/Health Officer City of Pasadena	ewalsh@cityofpasadena.net	626-744-6166
<u>Santa Monica Community:</u>		
Scott Ferguson Fire Chief, Santa Monica Fire Department	Scott.Ferguson@SMGOV.NET	310.458.8661
Wally Ghurabi, M.D. Medical Director, UCLA Santa Monica Emergency Department Medical Director, Santa Monica Fire Department	wghurabi@mednet.ucla.edu	424-259-8241
Bernard J. Katz, M.D., M.B.A. Medical Director UCLA-Santa Monica Bay Physicians and UCLA Specialty Care Network	bjkatz@mednet.ucla.edu	310-417-5945
Vladimir Manuel UCLA Health System	vmanuel@mednet.ucla.edu	
Michael Scott Summers Owner, AmeriCare Ambulance Service	msummers@americare.org	(714) 448 -1045
<u>UCLA:</u>		
Baxter Larmon, Ph.D., MICP Director, UCLA Center for Prehospital Care Professor, David Geffen School of Medicine at UCLA	blarmon@mednet.ucla.edu	310.312.9305

Todd LeGassick, M.P.H. Executive Director, UCLA Center for Prehospital Care	tlegassick@mednet.ucla.edu	310.312.9303
Steven J. Rottman, M.D. Medical Director, UCLA Center for Prehospital Care Associate Professor of Emergency Medicine at the David Geffen School of Medicine at UCLA and the UCLA School of Public Health Medical Director, Burbank Fire Department	Rottman@ucla.edu	310-794-0595
<u>Los Angeles County EMS Agency:</u>		
Cathy Chidester, Director Los Angeles County EMS Agency	cchidester@dhs.lacounty.gov	562-347-1604
William Koenig, M.D. Medical Director, Los Angeles County EMS Agency	wkoenig@dhs.lacounty.gov	562-347-1600
Susan Mori, R.N., B.S.N. Quality Improvement, Los Angeles County EMS Agency	sumori@dhs.lacounty.gov	562-347-1609
Richard Tadeo Assistant Director, Los Angeles County EMS Agency	rtadeo@dhs.lacounty.gov	562-347-1610
John Telmos Los Angeles County EMS Agency	itelmos@dhs.lacounty.gov	562-347-1677
Gary Watson Los Angeles County EMS Agency	gwatson@dhs.lacounty.gov	

<u>Others Communities of Interest:</u>		
Sharifa Beria Senior Network Manager Provider Contracting Blue Shield of California	sharifa.beria@blueshieldca.com	818-228-2528
John Cordova, Deputy Sector Navigator/Health care California Community Colleges	John.cordova@canyons.edu	
James Featherstone Fire Chief, Los Angeles Fire Department	lafdfirechief@lacity.org	
Jaime Garcia, Vice President Hospital Association of Southern California	jgarcia@hasc.org	
Troy Hagen CEO, Care Ambulance	troyh@careambulance.net	
Jill Harmatz Director of Contracting Blue Shield of California	jill.harmatz@blueshieldca.com	(818) 228-2502
Todd Hee, M.D. Regional Medical Director for San Gabriel Valley Healthcare Partners Medical Group	thee@healthcarepartners.com	626-799-4194
Cathy Hoens, Vice President Provider Network Mgmt. and Strategy, HealthNet	Cathy.hoens@healthnet.com	
Pete Jankowski Fire Chief, La Verne Fire Department	pjankowski@lvpd.org	
Russ Kino, MD, Director of Emergency Services Providence Saint John's Health Center	Russ.kino@stjohns.org	(310) 829-5511

Robert Metzger Fire Chief, Redondo Beach Fire	Robert.metzger@redondo.org	
Ricky Olivarez CEO, Digital EMS	ricky@digitalemsinc.com	626-643-7706
Greg Reynar Assistant Chief, Los Angeles Fire Department	Gregory.reynar@lacity.org	
Sean Stokes Nurse Educator, Beverly Hills Fire Department	sstokes@beverlyhills.org	

Attachment E

Los Angeles County Community Paramedic Heart Failure Re-admission Curriculum

All paramedic participants in *COMPARE (Community Paramedic Effectiveness Strategies for Heart Failure)*, the Los Angeles County Community Paramedic Heart Failure pilot program, MUST have attended and successfully completed the State of California Community Paramedic Core Curriculum as a prerequisite.

At the conclusion of the *COMPARE* education program, the Community Paramedic shall be able to demonstrate competencies in:

1. Epidemiology

Competency:

The Community Paramedic will be able to articulate the epidemiologic factors associate with heart failure

1.1 Heart failure fact sheet United States

1.1.1 CDC

http://www.cdc.gov/dhdsdp/data_statistics/fact_sheets/fs_heart_failure.htm

1.2 Heart Failure mortality and morbidity

1.2.1 Quality of life impacts

1.2.2 Local and national medical and economic impacts

2. Demographics for Heart Failure

Competency:

The Community Paramedic will be able to articulate the demographics associate with heart failure

2.1 Risk factors

2.2 Co- contributors

3. Anatomy and Physiology related to Heart failure

Competency:

The Community Paramedic will be able to integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of the cardiology, respiratory and other organ systems associated with heart failure.

3.1 Cardiovascular system

- 3.1.1 Stroke volume
- 3.1.2 Cardiac Output
- 3.1.3 Frank Starlings law
- 3.1.4 Heart rate and cardiac output
- 3.1.5 Vasomotor system
- 3.1.6 Chemoreceptor sites
- 3.1.7 Perfusion and blood pressure
- 3.1.8 Right and left side heart blood flow

3.2 Respiratory system

- 3.2.1 Respiration
- 3.2.2 Respiration
- 3.2.3 Hypoxia
- 3.2.4 Carbonic Acid
- 3.2.5 Ventilation Considerations

3.3 Cells tissues and membranes

- 3.3.1 Osmosis
- 3.3.2 Diffusion
- 3.3.3 Effects on membranes

4. Pathophysiology of heart failure

Competency:

The Community Paramedic will be able to integrate a complex depth and comprehensive breadth of knowledge of the pathophysiology of the heart failure patient.

- 4.1 Atherosclerosis
- 4.2 Systemic Hypertension
- 4.2 Pulmonary Hypertension
- 4.3 Hepatic Hypertension
- 4.4 Right sided heart failure
- 4.5 Left sided Failure
- 4.6 MI /Angina /Post-cardiac arrest
- 4.7 Lung disease
- 4.8 Thyroid disease
- 4.9 Arrhythmias
- 4.10 Cardiogenic shock
- 4.11 Valvular disease

- 4.12 Cardiomyopathy
- 4.13 Pregnancy
- 4.15 Infection
- 4.16 Drug induced
- 4.17 Renal failure
- 4.18 Pericardial disease

5. Paramedic level history and physical Assessment of the heart failure

Competency:

The Community Paramedic will be able to demonstrate the ability to obtain a heart failure patient's history and physical exam to the level of a certified paramedic

1.1 History

- 1.1.1 General health
- 1.1.2 Acute history
- 1.1.3 Chronic history
- 1.1.4 Medication history
- 1.1.5 Orthopnea / PND
- 1.1.6 Weight gain or loss
- 1.1.7 Eating

1.2 Physical Exam

- 1.2.1 Signs of dyspnea
- 1.2.2 Blood pressure
- 1.2.3 Pulse
- 1.2.4 Respiratory rate
- 1.2.5 Skin signs
- 1.2.6 Temperature
- 1.2.7 Breath sounds
- 1.2.8 Distal pulses
- 1.2.9 Edema signs
- 1.2.10 Pulse oximetry
- 1.2.11 ECG monitoring
- 1.2.12 12 lead ECG

6. Advanced history and physical assessment of the heart failure patient

Competency:

The Community Paramedic will be able to demonstrated a history and physical exam using advanced assessment knowledge and skills

1.1 History

- 1.1.1 Outpatient prescriptions
- 1.1.2 Pill count
- 1.1.3 Fluid intake and output

1.2 Physical exam

- 1.2.1 Pulmonary auscultation
- 1.2.2 Lung percussion
- 1.2.3 Chest expansion
- 1.2.4 Tactile fremitus
- 1.2.5 Descent of diaphragm
- 1.2.6 Hepatomegaly
- 1.2.7 Jugular venous pressure/hepatojugular reflux
- 1.2.8 Pitting edema
- 1.2.9 Cardiac palpation: PMI and thrills
- 1.2.10 Heart sounds

7. In hospital Diagnostic assessments

Competency:

The Community Paramedic will be able to articulate what inpatient diagnostic procedures may be performed on HF patients and their rationale

7.1 Chest x-ray

7.2 Laboratory testing

- 7.2.1 Chemistries
- 7.2.2 Troponin
- 7.2.3 B-type brain natrietic peptide (BNP)
- 7.2.4 Thyroid hormone levels

7.3 Bedside Ultrasound

7.4 Echocardiography

7.5 Stress testing

7.6 Myocardial perfusion scanning

7.7 Holter monitoring

7.8 Cardiac MRI and CT scanning

7.9 Cardiac catheterization/coronary angiography

8. Inpatient treatments for HF patients (acute care)

Competency:

The community Paramedic will be able to demonstrate knowledge of the treatment of heart failure patients in the inpatient setting

- 8.1 Treat life-threatening conditions
- 8.2 Medications for management of recurrent HF
- 8.3 Medications for management of acute pulmonary edema
- 8.4 BiPAP
- 8.5 Management of concurrent medical conditions
 - 8.5.1 Hypertension
 - 8.5.2 Diabetes
 - 8.5.3 Thyroid disease
- 8.6 Pacemakers
- 8.7 Implantable cardioverter-defibrillators
- 8.8 Left ventricular assist device (LVAD)
- 8.9 Cardiac transplantation

9. Outpatient care for heart failure (chronic)

Competency:

The community Paramedic will be able to demonstrate knowledge of the treatment of heart failure patients in an outpatient setting including discharge instructions and recommended treatments

- 9.1 Medications
 - 9.1.1 Diuretics
 - 9.1.2 Angiotensin Converting Enzyme (ACE) inhibitors
 - 9.1.3 Aldosterone inhibitors
 - 9.1.4 Angiotensin receptor blockers (ARB)
 - 9.1.5 Beta blockers
 - 9.1.6 Isosorbide dinitrate
 - 9.1.7 Digoxin
- 9.2 Monitor fluid intake
- 9.3 Monitor Sodium intake
- 9.4 Monitor daily weight
- 9.5 Control hypertension
- 9.6 Control of comorbidities
 - 9.6.1 Diabetes
 - 9.6.2 Thyroid disease
 - 9.6.3 Smoking
 - 9.6.4 Weight reduction
- 9.7 Preventive health

9.7.1 Immunizations

9.7.2 Exercise

9.7.3 Close medical follow up

9.8 When to seek immediate help

10. Reading a medical record

Competency:

The Community Paramedic will demonstrate the ability to extrapolate information from a patient's hospital, clinic and physician office medical record.

10.1 Hospital medical Records

10.2 Clinic Records

10.3 Physician Office

10.4 SOAP Notes

10.5 Discharge instructions

11. Patient consent, pilot project subjects

Competency:

The Community Paramedic will demonstrate how to obtain a consent from patient designated as a potential subject in the *COMPARE* Pilot

11.1 Informed consent process

11.2 Criteria for entry into pilot

12. Medical assessment protocol for HF patients

Competency:

The Community Paramedic will demonstrate the knowledge and the skills necessary to perform the medical assessment protocol for HF patients in the *COMPARE* pilot

12.1 Protocol

12.2 Review any periodic updates

13. Referral triage guidelines (tipping points)

Competency:

The Community Paramedic will demonstrate the ability using the medical assessment protocol to refer patients as guided by the Pilot Referral guidelines.

13.1 Referrals

13.1.1 Call 911

13.1.2 Contact Cardiologist on call via the Nurse Navigator

13.1.3 Arrange transport to PMD

13.1.4 Arrange for re-visit or phone call

14. Documentation

Competency:

The Community Paramedic will demonstrate the ability document all appropriate medical information, as well as administrative logistics.

14.1 Completing the pilot electronic record

14.2 Transmitting the electronic prehospital care record (EPCR)

15. Logistics of the *COMPARE* Pilot and LA County Policies

Competency:

The Community Paramedic will be able to articulate the Fire Department, UCLA and Los Angeles County Health Care Agency policies and procedures regarding the HF Pilot.

15.1 Department Policies

15.2 UCLA Pilot Policies and procedures

15.3 LA County DHS policies

15.4 QI Meetings

15.5 Data and outcomes measurements

15.6 Major incident reporting

16. Review patient safety concerns

Competency:

The Community Paramedic will be able to articulate patient safety initiatives discussed regarding the patients assigned in the HF pilot.

16.1 HIPAA compliance

16.2 Patient follow-up

16.3 Major incident reporting

17. Discuss Medical Oversight/Quality Improvement

Competency:

The Community Paramedic will be able to articulate the importance of medical oversight and quality improvement as well as their roles in the QI initiatives.

- 17.1 Department Medical Director roles
- 17.2 Department Nurse Educator roles
- 17.3 UCLA PI roles
- 17.4 County of LA DHS roles
- 17.5 LA County CP advisory committee roles
- 17.6 LA County Medical Advisory roles
- 17.7 Monthly QI meetings
- 17.8 Major incident notifications
- 17.9 Policy Updates
- 17.10 Outcome measurements

18. Internship:

Competency:

The Community Paramedic will be able to demonstrate the ability to participate as a member of the inpatient, outpatient clinic, and physician office medical teams caring for acute and chronic HF patients.

- 18.1 Hospital
 - 18.1.2 Respiratory ICU
 - 18.1.2 Inpatient medicine
 - 18.1.3 Cardio Diagnostics lab
- 18.2 Pulmonary Clinic
- 18.3 Cardiologist Office
- 18.4 Patient seminars of Cardiac rehab

Attachment F

UCLA Data Collection Tool and Guide

Community Paramedic: CHF Baseline Data Collection Guide

Overview

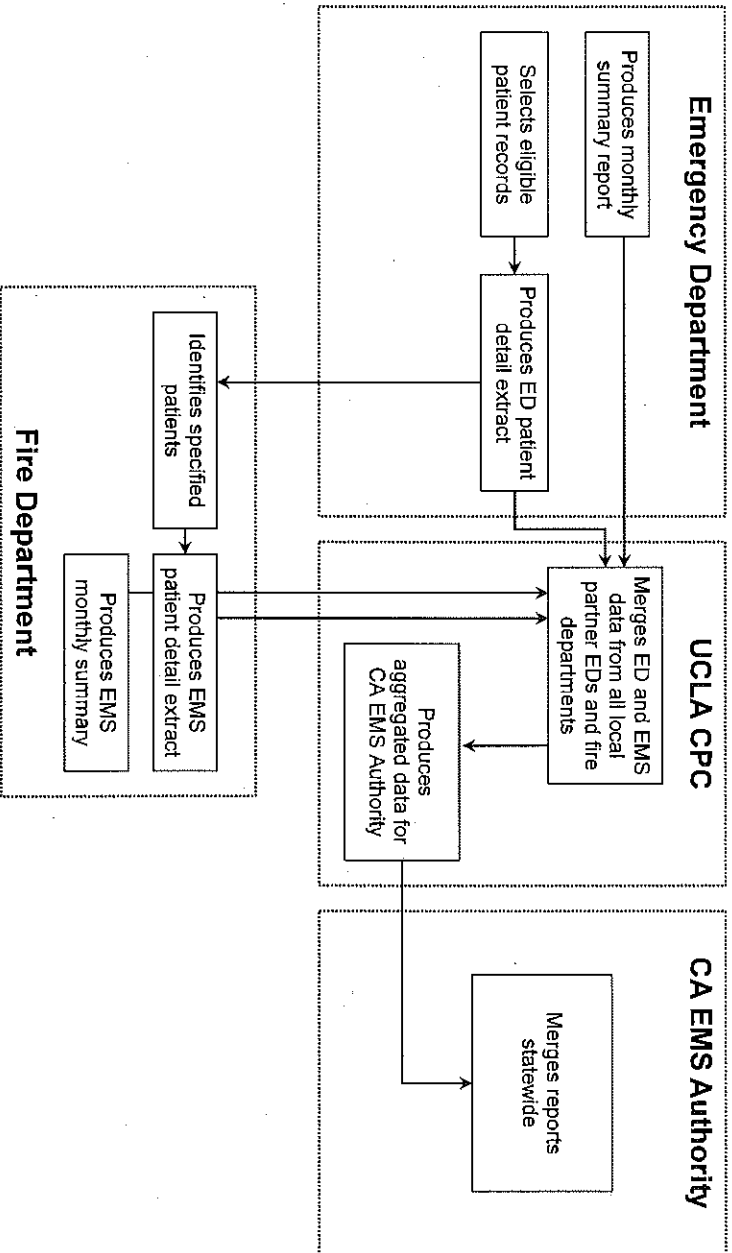
As part of the Community Paramedic project, the UCLA Center for Prehospital Care is collecting data monthly from each of our partner emergency departments and EMS response agencies. When all data for a month has been received from all partner EDs and EMS agencies, UCLA will aggregate it and report it to the California EMS Authority.

Data flow summary

The data for the CHF arm of the Community Paramedic project originates with partner emergency departments. After the end of each month, the following process occurs:

1. Emergency department queries its records for eligible patient visits that month.
2. ED prepares two data extracts, described in more detail below:
 - a. A summary of several overall ED statistics for the month.
 - b. For eligible patients, an extract consisting of one row per patient, with the ED data elements noted below.
3. ED sends both items to UCLA by the 5th day of the following month (i.e. April data is sent to UCLA by May 5th).
4. ED sends the patient data extract to fire department.
5. Fire department prepares two data extracts:
 - a. A summary of several overall FD statistics for the month
 - b. An extract containing one row per patient from the ED file, with the FD data elements noted below.
6. Fire department sends both items to UCLA by the 10th day of the following month (i.e. April data is sent to UCLA by May 10th).
7. UCLA merges the ED & FD data, and then aggregates it with the data from the other participating EDs and FDs locally.
8. UCLA reports the aggregated data to the California EMS Authority by the 15th of the following month. UCLA does not send individual patient data; all reporting is aggregate monthly totals across all the ED and EMS partners in our area.

Data flow diagram



Patient eligibility

The ED will provide the per-patient detail data for patients meeting the following eligibility criteria:

1. Transported to the ED by one of the participating partner fire departments.
2. Age 18 or greater.
3. Primary diagnosis of CHF.

Open questions

Shared identifier: Ideally, the partners would agree on a shared patient or visit identifier to enable cross-referencing the patient's record at the ED with the EMS responder's ePCR. This might be the ePCR sequence number, a medical record number, a patient financial account number, etc. (Social Security Number should not be used.) Without a shared identifier, the partners would need to investigate each ED patient record by hand to locate the matching EMS ePCR. A shared identifier could also eliminate any need to include patient names in the data, which would be preferred.

Finance data: It may be impractical to determine the individual costs, charges, and insurance reimbursements associated with each individual patient due to distributed billing by external practice groups etc. Thus the patient financial data reported (questions numbered 5.X) may need to be determined by estimating the costs, charges, and reimbursements for a standardized patient with the listed diagnosis.

Some individual fields have additional questions, as noted below.

Emergency department data extracts

Monthly summary: The state requests the following summary data each month of the study:

Field	For Q#s	Description/contents	Notes/questions
Time ED closed or on diversion EDClosedORDiversion	4.1	The amount of time, in minutes, the ED was closed to general traffic or on diversion in the month.	
Average time to disposition EDAveragerTimeToDispositionalAll	4.12	Average length of time, in minutes, from arrival at ED to disposition for all transported patients in the month?	This is for all patients transported to the ED, not just those meeting study criteria.
Charges & payments	5.X	As noted, the charges and insurance payments may be unavailable per-patient. If so, those would be reported as part of the monthly summary rather than computed from the patient detail records.	

Emergency department patient detail data: An Excel or similar delimited text file (e.g. CSV, tab-separated) with one row per patient, containing the following columns:

Field	For Q#s	Description/contents	Notes/questions
Patient Identifier EDPatientIdentifier		Unique identifier for this patient, or this ED visit by this patient.	Exact ID is TBD. May be a FIN number, Medical Record Number, EMS sequence number, etc. Either this or another identifier should be used to match this patient record to Fire Department/EMS responder's ePCR.
Transporting Agency EDTransportAgency		FD transporting patient to ED.	
Patient First Name EDPatientFirstName		First name	For matching ED patient to FD records. Unnecessary if a reliable shared patient identifier is available.
Patient Last Name EDPatientLastName		Last name	For matching ED patient to FD records. Unnecessary if a reliable shared patient identifier is available.
Patient Age EDPatientAge	2.6 2.10	Patient age, in years	
Patient Gender EDPatientGender	2.12 2.16 2.18 2.22	Patient gender: M or F	
Hispanic Ethnicity EDEthnicityHispanic	2.24 2.30 2.31 2.32	Is the patient of Hispanic ethnicity? 1 = Hispanic 2 = Non-Hispanic 3 = Unknown	
Patient Ethnicity EDPatientEthnicity	2.36 2.45 2.46 2.47 2.48 2.49 2.50	What is the patient's race/ethnicity? 1 = White 2 = Black 3 = Native American / Eskimo / Aleut 4 = Asian/Pacific Islander 5 = Other 6 = Unknown	
Primary Language Spoken EDPrimaryLanguage	2.57	What language does the patient primarily speak? See appendix for list of languages and codes.	

Field	For Q#s	Description/contents	Notes/questions
Insurance Type EDInsuranceType	2.59 2.64 2.65 2.66 2.67	What type of insurance coverage does the patient have? PR = Private MC = Medicare MA = Medicaid SP = Self-pay	
Post-Discharge Compliance Status EDPostDischargeCompliance	2.76	Is the patient in compliance with their post-discharge plan? Y or N	
ED Arrival date/time EDArrivalDateTime	4.13	Date/time the patient arrived at the ED.	
ED Disposition date/Time EDDispositionDate/Time	4.13	Date/time of disposition from the ED.	Will necessarily be an estimate for patients leaving without being seen.
ED Disposition EDDisposition	4.13 4.15 4.17 4.23 4.24 4.25 4.26 4.27	Disposition of the patient from the ED: AD = Admitted TR = Transferred to another hospital DI = Discharged EX = Expired FA = Failed to complete care (AMA or left without being seen)	

Additionally, the state requests the following financial information with regard to the specific eligible patient visits in each month. In the event this is not feasible, these items might instead be reported as estimates based on standardized patients.

ED Charges for Care EDEmergencyCharges	5.6	Dollar amount of charges for patient's care in the ED if patient was not admitted.	
Inpatient Charges for Care EDInpatientCharges	5.8 5.10	Dollar amount of charges for patient's inpatient care.	
ED Claims Paid EDEmergencyInsPaid	5.12 5.14	Dollar amount of claims paid for patient's treatment in the ED if patient was not admitted.	
Inpatient Claims Paid EDInpatientInsPaid	5.16 5.18	Dollar amount of claims paid for patient's inpatient treatment.	

Fire department data extracts
 Monthly summary: The state requests the following summary data each month of the study:

Field	For Q#s	Description/contents	Notes/questions
Total EMS Responses FDTotalEMSResponses	5.1 5.2	Total EMS responses for the month, of all types.	
Total ED Transports FDTotalEDTransports	3.3 5.3	Number of patients your agency transported to all EDs in the month.	Counts all complaints, not just suspected CHF.
Typical 911 ALS Transport Vehicles FDTypical911ALSVEhicles	3.1	Number of ALS transport vehicles your agency sends in response to a typical 911 call.	
Typical 911 BLS Transport Vehicles FDTypical911BLSVEhicles	3.1	Number of BLS transport vehicles your agency sends in response to a typical 911 call.	
Typical 911 Fire Engines FDTypical911FireEngines	3.1	Number of fire engines your agency sends in response to a typical 911 call.	
Eligible 911 ALS Transport Vehicles FDEligible911ALSVEhicles	3.2	Number of ALS transport vehicles your agency sends in response to a 911 call for a suspected CHF/cardiac patient.	
Eligible 911 BLS Transport Vehicles FDEligible911BLSVEhicles	3.2	Number of BLS transport vehicles your agency sends in response to a 911 call for a suspected CHF/cardiac patient.	
Eligible 911 Fire Engines FDEligible911FireEngines	3.2	Number of fire engines your agency sends in response to a 911 call for a suspected CHF/cardiac patient.	
Total Transports to Partner EDs FDPartnerEDTransports	3.4	Number of patients your agency transported to all participating EDs in the month.	Count each transport, even if a repeat transport of a single individual. I.e. if Joe Bruin was transported twice, he counts for 2 transports in this measure. Counts all complaints.
Unique Transports to Partner EDs FDPartnerEDUniqueTransports	3.5	Number of unique patients your agency transported to participating EDs.	If Joe Bruin was transported to a partner ED twice in the month, he is only counted as 1 in this measure. Counts all complaints.
Transports Waiting Over 45 Minutes FDTransportsWaitingOver45	3.30	Number of transports (of all patients) spending more than 45 minutes at the hospital before returning to service.	Counts all patients/complaints, not just eligible patients.
Total Readiness Cost FDTotalReadinessCost	5.1	Total salaries & benefits + maintenance + operations + vehicle & facility amortization	Used to calculate average readiness cost (total cost / number of EMS responses)

Field	For Q#s	Description/contents	Notes/questions
Transport cost EDTotalTransportCost	5.2	Cost of transports: crew wages & benefits + fleet amortization & maintenance)	Used to calculate average transport cost (total transport cost / number of EMS responses)
TransportCharges EDTotalTransportCharges	5.3	Total charges for transports to all EDs by your agency in the month.	Used to calculate average transport charges (total charges / number of transports)
Charges for Care EDChargesForCare	5.4	Charges for care for eligible patients transported to partner EDs in the month.	
Candidate Paramedic Salary EDCandidatePMSalary	5.20	Average cost of salary & benefits for an EMT-P who would be a candidate for CP training.	

Fire department patient detail data: An Excel or similar delimited text file (e.g. CSV, tab-separated) with one row per patient, containing the following columns:

Field	For Q#s	Description/contents	Notes/questions
Patient Identifier EDPatientIdentifier		Unique identifier for this patient, or this ED visit by this patient.	Exact ID is TBD. May be a FIN number, Medical Record Number, EMS sequence number, etc. Either this or another identifier should be used to match this patient record to Fire Department/EMS responder's ePCR.
Transporting Agency EDReceivingED		ED to which patient was transported.	
Patient First Name EDPatientFirstName	3.10 3.12	First name	For matching ED patient to FD records, and identifying unique patients (Qs 3.10 & 3.12). Unnecessary if a reliable shared patient identifier is available and the identifier is constant across multiple visits.
Patient Last Name EDPatientLastName	3.10 3.12	Last name	For matching ED patient to FD records, and identifying unique patients (Qs 3.10 & 3.12). Unnecessary if a reliable shared patient identifier is available and the identifier is constant across multiple visits.
Patient Age EDPatientAge	2.6 2.10 3.10 3.12	Patient age, in years	

Field	For Q#s	Description/contents	Notes/questions
Patient Gender EDPatientGender	2.12 2.16 2.18 2.22 3.10 3.12	Patient gender: M or F	
Patient ZIP Code EDPatientZIP	2.58	ZIP code for the patient.	ZIP code of location to which EMS responded.
On-Scene Time EDSceneArrivalTime	3.14 3.16	Date/time arrived on scene.	
Arrival Time at ED EDArrivalEDTime	3.14 3.16 3.38	Date/time patient arrived at ED.	
Return to Field EDReturnToField	3.18 3.20 3.22 3.24 3.26 3.28 3.30 3.31 3.33	Date/time EMS returned to the field (i.e. available) after transporting patient to ED.	Note: The EMS Authority questionnaire asks "What was the average length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?", and also asks for the shortest and longest times, and the number of transports spending more than 45 minutes at the ED. Ideally we would identify a field from the ePCR to provide this information, but we may need to look elsewhere.
Distance to ED EDDistanceToED	3.35 3.36 3.37	Miles driven transporting the patient to the ED.	

Appendix: Languages Spoken

English – ENG	Telugu – TGL
Amharic – AMH	Thai – THA
Arabic – ARA	Tonga – TON
Armenian – AMR	Ukrainian – UKR
Cantonese; Yue Chinese – YUE	Urdu – URD
Chinese – CHI	Vietnamese – VIE
Croatian – HRV	Yiddish – YID
Farsi – PES	Yoruba – YOR
French – FRE	Unknown – 999
French Creole – CPF	Other – OTH
German – GER	
Greek – GRE	
Gujarati – GUJ	
Hebrew – HEB	
Hindi – HIN	
Hmong – HMN	
Hungarian – HUN	
Ilocano; Iloko – ILO	
Indonesian – IND	
Italian – ITA	
Japanese – JPN	
Korean – KOR	
Lao – LAO	
Mandarin – CMN	
Mexteca – MEX	
Mien; Iu Mien – IUM	
Mon-Khmer – MKH	
Navajo – NAV	
Panjabi; Punjabi – PAN	
Persian – PER	
Polish – POL	
Portuguese – POR	
Russian – RUS	
Sign Language – SGN	
Samoan – SMO	
Serbian – SRP	
Spanish – SPA	
Swahili – SWA	
Tagalog – TGL	

Community Paramedic

Baseline data collection sample files

Notes:

Two data files are anticipated monthly from each partner emergency department and fire department. For simplicity they are shown as four tabs in this document.

EDSummary: Monthly summary statistics from emergency department; one row each month.

EDPatientDetail: One row per eligible patient visit in the month.

FDSummary: Monthly summary statistics from fire department; one row each month.

FDPatientDetail: One row per eligible patient transport in the month. "Eligible patient" for the FD means a patient listed in the ED's data file.

California EMS Authority
Proposal to Reduce Heart Failure Readmissions
Updated and Revised 5-8-14

A. Title of Proposed Project Concept: Community Paramedic Effectiveness Strategies for Heart Failure (COMPARE)

B. Category the best describes the proposed pilot project: Post hospital follow up - care for chronic conditions

C. Brief description of proposed concept, project management and partners (include geographic area to be served)

1. Description of Proposed Concept

This project involves participating hospitals, cardiologist and paramedics from the two adjacent cities of Burbank and Glendale. In Burbank, specially trained paramedics from the Burbank Fire Department (BFD) will conduct home visits to assess heart failure (HF) patients two to three days post discharge from Providence St. Joseph's Medical Center (PSJMC). Assessments will include patient-specific parameters determined by attending cardiologists (see attachment A), and serve as a bridge evaluation between hospital discharge and a scheduled follow up physician visit at approximately one week post discharge. Home visit findings will be electronically reported back to the cardiology group HF coordinator ("navigator"). Paramedics will determine whether patients are 1) within individualized clinical benchmarks and can await their follow up office visit, 2) demonstrating signs and symptoms suggesting the need for same-day physician consultation/intervention, or 3) showing signs of imminent decompensation requiring urgent transportation for medical intervention. Clinical assessment parameters will be developed collaboratively with UCLA Center for Prehospital Care faculty and cardiologists from the Foothill Cardiology Group of PSJMC.

In the City of Glendale, specially trained paramedics from the Glendale Fire Department (GFD) will conduct similar home assessment visits for HF patients in their community 2-3 days post discharge from Glendale Adventist hospital (AH), Glendale Memorial hospital (GMH) and USC Verdugo Hills (UVH).

2. Project Management

The UCLA Center for Prehospital Care (UCLA) is a division of the UCLA Emergency Medicine Center at the David Geffen School of Medicine at on the prehospital care system and the patients this system serves. For 27 years, UCLA has offered both primary and continuing

education programs for Emergency Medical Technicians, Paramedics, Medical Students, Registered Nurses, Physicians as well as the lay public. UCLA is also actively engaged in research and quality improvement to contribute to the fund of knowledge that examines prehospital medicine. As one of the leading academic medical centers in the nation, UCLA will provide the project oversight, medical direction, data analysis and reporting, chair the Community Paramedicine Steering Committee for this project, and serve as the liaison with the Los Angeles County EMS Agency, participating partners from Burbank (BFD, PSJMC, the Foothill Cardiology Group), and Glendale (GFD, GMH, AH, UVH and their respective cardiologists).

Should this project be approved and subsequently funded, UCLA will work with the UCLA Office of Contracts and Grants management to ensure sound accounting and financial management of funds and disbursements, and timely completion of required reporting.

3. Partners

The Community Paramedic Steering Committee will be comprised of the UCLA Project Manager, UCLA Project Medical Director, UCLA Project Data Analysis/Reporting personnel, Foothill Cardiology Project Medical Director, PSJMC Heart Failure Navigator, PSJMC Home Health Nursing Coordinator, BFD Paramedic Nurse Educator, BFD Fire Chief, GFD Fire Chief, GFD Paramedic Nurse Educator, heart failure coordinators for AH, GMH and UVH, and the Los Angeles County EMS Agency Medical Director.

Memoranda of Understanding with Burbank and Glendale fire departments are included in attachment B. Letters of Support from hospitals, health systems and fire departments can be found in attachment C. The County of Los Angeles EMS Agency has assembled a Community Paramedicine Steering Committee to guide the development and implementation of this project (see attachment D).

D. Purpose and Objectives

The purpose of this pilot project is to reduce the 30 day readmission rate of patients treated in a community hospital for HF by utilizing home assessments conducted by specially trained Community Paramedics.

Objectives will include:

1. Joint identification of specific training content by Foothill Cardiologists, GMH, AH and UVH cardiologists, and UCLA Emergency Medicine faculty, and the delivery of that training to selected, veteran BFD and GFD paramedics.
2. Identification of every HF patient prior to discharge from the participating hospitals, and formulation of clinical parameters and treatment guidelines to be assessed by paramedics at the time of the home visit, two to three days post-discharge.

3. Development of an electronic home assessment tool, customized for each patient, to be completed by paramedics at the home visit and transmitted to the respective HF Navigator at the respective participating hospitals conclusion of the visit.
4. Development of three categories of patient stability for assignment by paramedics at the home visit: a) stable to continue home regimen until scheduled follow up office visit; b) developing signs of worsening HF such as increasing weight, mild pulmonary rales, mildly increasing edema, decreasing pulse oximetry, or a change in cardiac rhythm from that at hospital discharge; c) findings suggesting instability such as orthopnea, dyspnea on exertion, diffuse pulmonary rales, profound edema, increasing jugular venous distension, compromised oxygenation on pulse oximetry, inability to maintain nutritional requirements or take medications.
5. Establish immediate communication capability between paramedics and an on-call cardiologist for patients in category 2 to provide physician consultation regarding modification of patient medications or to arrange for a same-day office/clinic visit.
6. Establish criteria for paramedics to activate 9-1-1 responses for patients in category 3, for transport to the closest appropriate receiving hospital.
7. Compare the number of HF patients who received community paramedic home visits who are readmitted to a hospital for any cause within 30 days of discharge, with the number of those readmitted who received standard post discharge follow-up procedures.
8. Compare the cost of readmissions (based on 2013 hospital charges/average length of stay *plus* CMS penalties per readmission) between the community paramedic home visit and standard post-discharge follow-up group.

E. Estimated project length

The estimated length of this project will be 24 months. Based on a review of 2012 data, we estimate that during the two-year study period there will be approximately 950 HF patients discharged from PSJMC, and 1800 from participating Glendale hospitals. Based on these estimates, half (1375) of these patients will be eligible for inclusion into the community paramedic home visit group, and the remaining 1375 will comprise the standard post-discharge follow-up group.

F. Background Information

1. Need for project

Although there have been a number of efforts to ensure the stability of recently discharged congestive heart failure (HF) patients, their compliance with treatment recommendations and follow up office visits with continuity physicians remains challenging. Nationally, all-cause readmissions of HF continue to approximate 25% within 30 days of hospital discharge, with 64% of readmissions for recurrent heart failure occurring within the first week and nearly ½ of those within the first three days.¹

Prior literature has failed to document conclusively that home visits conclusively reduced 30 day readmissions. In a 2011 review of the literature, Hansen, et. al. identified 43 studies that addressed strategies to reduce hospital readmissions in Medicare patients within 30 days post discharge. Eight studies were included in which nurses conducted home visits which focused on medication adherence, appropriate ambulatory follow-up, and symptom monitoring. Only four studies involved more than 400 patients. The authors concluded that, "we did not identify a discrete intervention or bundle of interventions that appears to reliably reduce re-hospitalization."²

A more recent report by Bradley, et. al. found that if hospitals implemented six strategies, the readmission rate for patients specifically with HF could be reduced by 2%. Yet none of these strategies included a home visit of any kind, let alone a visit by a community paramedic.³

In Burbank, Providence St. Joseph's Medical Center (PSJMC) is a major regional medical center in the San Fernando Valley in Los Angeles County with 484 annual HF discharges annually (2012 data). The hospital is based in the city of Burbank, and over 2/3 of discharged HF patients reside within approximately 6 miles of the facility. It's affiliated Foothill Cardiology Group coordinates the hospital's HF discharges through the HF Nurse Navigator program and, upon discharge, each HF patient goes home with a scheduled follow-up office visit at one week post discharge. In addition, the PSJMC Home Health Nursing program makes home visits for approximately 1/3 of the HF patients.

Of the 484 annual HF discharges, 77 (16%) were readmitted within 30 days to PSJMC for an exacerbation of HF for an average 6 day length of stay. The estimated cost to the hospital for these readmissions was \$738,400, or just under \$9600 per patient. When combined with the projected 2013 CMS readmission penalties of approximately \$166,000, the annual financial burden to PSJMC of these readmissions will approximate \$904,400.

Additionally, some of the 484 patients discharged from PSJMC undoubtedly were readmitted to other regional hospitals, and some were admitted for causes other than exacerbations of HF. In keeping closer to national averages for all-cause readmissions for HF patients, the estimated annual readmission rate for this patient population is likely to be considerably higher. Thus we expect the combined fiscal implications for all-cause HF readmissions in terms of total direct hospitalization costs and CMS penalties to PSJMC to be substantially greater than the estimates provided above. From a fiscal perspective, then, we postulate that the intervention by CPs as proposed here will have significant cost reductions in the care of post-discharge HF patients.

In Glendale, in 2012, 441 patients were admitted to Glendale Memorial hospital, including all insurance and payers; 77 were readmitted within 30 days. For the same period, 423 patients, including all payers, were admitted to Glendale Adventist hospital and 103 were

readmitted within 30 days. These combined figures total 864 HF patients with 180 readmissions, for a readmission rate of 21%. At present, HF readmission data are not available for the third participating hospital, USC Verdugo Hills hospital, but these would be included as this proposal moves forward. The inclusion of the City of Glendale into the *COMPARE* two-year pilot project has the possibility of adding approximately 1600 additional patients to the total 950 estimated HF patients from PSJMC, which would more than double the potential impact of this study.

Paramedics are trained and experienced in the assessment and stabilization of acutely ill patients. Their training curriculum includes intensive training on cardiovascular pathophysiology, with assessment skills that address critical signs and symptoms that reflect respiratory distress, circulatory compromise, and associated autonomic nervous system manifestations of hypoxemia and fluid overload. They are accustomed to making these assessments in the prehospital setting, and recognize when to initiate interventions and transportation for patients who are either decompensating or at risk for doing so. The paramedic's capacity to perform focused clinical assessments, coupled with the ability to perform EKG analysis, pulse oximetry, and initiation of urgent EMS response and transportation, add a unique asset to the care of recently discharged HF patients.

Thus, a community paramedic home visit as structured here has the theoretical potential to evaluate a new intervention that may have a positive impact not only on the quality of life of HF patients, but also on the overall health care expenditures for their care.

2. Types and numbers of patients likely to be seen

We project an estimate of approximately 950 HF patients will be discharged from PSJMC during the two-year study period. One half (475) will receive standard post-discharge follow-up calls either to the patient or caregiver/family member as currently practiced by the HF Navigator program. This program includes discharge planning and weekly follow-up calls that include questions about signs and symptoms, medication management, adherence to diet, fluid intake, daily activities, weight, a scheduled office visit at 1 week post-discharge, and involvement of home health. The program offered by the PSJMC Home Health Heart Failure Program consists of a series of eight nurse visits that include clinical assessments as well as intensive patient education about heart failure, medications, diet, fluid balance, activities, compliance, and prevention. Based on 2012 estimates, approximately 1/3 of patients received home health visits from the PSJMC Home Health program; it is unclear how many others received visits from other home health nursing agencies, or the content of those visits.

The remaining 475 patients will also receive this standard follow-up, but in addition will receive a CP home visit at two days post discharge, aimed at determining whether or not each patient is within clinical benchmarks established by the hospital discharge team. The focused evaluation by CPs provides clinically skilled ALS personnel endowed with specific supplemental training, who can assess whether or not a given HF patient is maintaining

physiological and EKG rhythm parameters, and who can establish a real-time communications pathway with a cardiologist in those situations where immediate intervention strategies are indicated.

Similarly, an estimated 1,800 HF patients will be discharged from the Glendale hospitals. Half of these patients would receive standard after care while the other half would receive a paramedic home visit.

3. Anticipated number of community paramedics to be trained:

In order to have a specially trained cadre of paramedics to conduct home visits, we will train approximately 12 certified, practicing paramedics with at least 4 years of experience who currently provide 9-1-1 responses as members of the Burbank and Glendale Fire Departments. While these select paramedics will have the additional training and will be practicing as CPs in this pilot program, their ongoing and future employment status will be maintained as 9-1-1 response firefighter-paramedics.

It is difficult to project the number of CPs likely to be trained in the future until this project is complete. However, if the outcomes of COMPARE are successful, the expansion of this type of program throughout Los Angeles County and the country would require many other paramedics to receive this specialized training. Our partners from the Providence and Adventist hospitals have expressed interest in expanding this CP program throughout their hospital networks in the region, with the aim to include CP home assessments for other high risk conditions such as chronic obstructive pulmonary disease.

4. Other programs in California or other states serving as models for this project

UCLA CPC has also met with corporate personnel at American Medical Response (AMR) about their community paramedicine operations. UCLA CPC has met with Dr. Beason, the medical director of their MedStar affiliate in Texas and Dr. Racht, medical director of AMR who have provided useful insight and information on their heart failure readmission project. They have stated their willingness to both collaborate and share best practices if COMPARE is approved.

G. Program Management

1. Operational Methodology

Using all PSJMC HF discharges as the target for efforts to reduce readmissions, this pilot project is based on 950 HF discharges over the 24 month study period. The power calculations for this study gave an 80% chance of detecting a 3% reduction in readmissions for all HF discharges at the .05 level of significance.

We propose to send specially trained CPs to the homes of HF patients two to three days post-discharge from PSJMC, GMA, AH and UVH hospitals, to conduct assessments based on both general and patient-specific clinical parameters established by their attending physicians. Specific assessment parameters will include but not be limited to: vital signs including pulse oximetry, weight, ECG, assessment of clinical signs of worsening HF (elevated neck veins, pulmonary rales, peripheral edema), compliance with prescribed medications (verifying that medications are available and have been taken in the prescribed doses and amounts), review of dietary recommendations and compliance (e.g. sodium intake, quantification of fluid intake), and general parameters that indicate safety at home and performance of activities of daily living (adequate food, condition of foods in refrigerator, safety conditions in high risk settings such as bathing facilities, unsafe ambulatory pathways, functioning telecommunications capability, access to transportation for medical follow-up, etc.).

Potential CPs will be identified, interviewed, selected and trained by UCLA CPC faculty, in accordance with the clinical parameters defined by the Foothill Cardiology, GMH and AH cardiologists. Once trained and duly certificated as CPs for this program, they will form a platoon of individuals who will be scheduled to make home visits in the morning hours on day 2 following hospital discharge. The benchmark clinical and treatment plan parameters for each scheduled home visit patient will be uploaded via secure website onto a designated tablet computer specifically for the use of this pilot project. CPs will collect the tablet computer from their respective hospitals and proceed to make their scheduled rounds. The findings of their assessments will be recorded on the tablet computer and sent to the HF Navigator at the respective participating hospitals.

We have identified three potential contingencies based on these assessments. 1) If the CPs find that the patient is meeting clinical and treatment benchmarks and can reaffirm their plans to attend their scheduled office visit, no further action is necessary aside from the electronic data submission to the HF Navigator. 2) If the CPs find that the patient is either unable to adhere to recommended treatments or is experiencing a deterioration in clinical condition, the electronic data will be submitted but an additional telephone call will be immediately placed to the HF Navigator for consultation with the on-call cardiologist who will either modify the treatment plan before the previously scheduled post-discharge outpatient clinic visit, or advise and arrange for a same-day office visit. 3) If the CPs find the patient to be outside of benchmarks such that the clinical parameters indicate the need for acute intervention (hypoxemia, unstable vital signs, abnormal cardiac rhythm or EKG), the recorded electronic data will be submitted to the HF Navigator, but a 9-1-1 call will be activated to initiate EMS ambulance response and transport to the closest appropriate receiving emergency department, while the CPs on-site administer supplemental oxygen and continue to monitor the patient's vital signs and EKG. Once stabilized, the HF Navigator will be notified of the transport.

Under this pilot project, when patients with HF are discharged from any participating hospital, they will be offered the opportunity to enroll in the *COMPARE* home visit program. As this intervention is additional to current, standard HF discharge practices, potential patients for the program will be presented with an Institutional Review Board (IRB) approved informed consent to enroll, as part of their discharge planning and instructions. Standard post-discharge aftercare will be the norm for patients being discharged on even calendared days, and the opportunity to voluntarily participate in the *COMPARE* pilot will be offered to those discharged on odd calendared days. Those who decline will continue to receive standard post-discharge aftercare.

The HF Navigator will attempt follow up with all patients at 30 days using primary and secondary telephone contacts provided at the time of hospital discharge, to assess if they were readmitted and if so, to which hospital and for what diagnosis.

Should the results of this pilot show that the CP intervention is successful, we anticipate training additional CPs in order to expand this program to other medical centers within the Providence and Adventist Health Systems in the region. The large numbers of enrolled patient from the combined Burbank and Glendale systems and Fire Departments has the potential to demonstrate significantly greater impact on patient outcomes and health care costs.

Project Milestone	Target Date
Protocol and training program development	Complete
Data collection plan	Complete
Quality improvement plan	Complete
Baseline data collection	Apr 1, 2014 – Dec 31, 2014
Approval of the Institutional Review Board	May 31, 2014
Training delivery	Aug 15, 2014 – Dec 31, 2014
Implementation of approved pilot program	Jan 1, 2015
Monthly data reports submitted to Patient Safety Monitoring Board, Los Angeles County EMS Agency and the California State EMS Authority for	Feb 15, 2015

discussion and review.	
Continuous Quality Improvement and Training	Jan 1, 2015 – Jan, 1 2017
Final reports and evaluation	Apr 1, 2017

2. Local Governance and Medical Control

This pilot project will be approved and governed by the Los Angeles County EMS Agency medical director. The process to ensure the appropriateness of this project will be shared among participants including PSJMC, Foothill Cardiology Group, the lead site-cardiologist from GMH, AH and UVH, the UCLA Center for Prehospital Care, the Burbank and Glendale Fire Departments, and a Patient Safety Monitoring Board. This Board will be comprised of the PI and Co PI from UCLA, the LEMSA Medical Director, and the HF Nurse Navigator from each participating hospital.

3. Provisions for protecting patient's safety

Each participating CP will be trained by faculty from the UCLA Center for Prehospital Care in partnership with a designated cardiologist from the Foothill Cardiology Group for BFD CPs, and from GMH and AH for GFD CPs. Each patient receiving a home visit will have clinical assessment data entered on an electronic prehospital care medical record, which will be transmitted to the appropriate HF Navigator nurse (PSJMC, GMH, AH, UVH) for review. Community paramedics will immediately make telephone contact with the HF Navigator for every patient exhibiting signs or symptoms that fall outside of individually established parameters. In addition, they will access, in real-time, the cardiologist on-call for this project for immediate recommendations regarding interventions (e.g. modification of medication, same day office visit, or 9-1-1 activation for hospital transport). CPs will dial 9-1-1 for any patient that appears to be in extremis at the time of a home visit.

We will obtain IRB approval for this pilot project from both UCLA and each participating hospital. Patients from both groups will be asked to provide their approval to participate in a patient satisfaction call-back survey at the end of week one following discharge. The IRB approval form for patients who enroll in the CP home visit program will also include permission to participate in that component of the project.

Departments will follow the quality improvement guidelines. Any significant negative patient outcomes will be reported to the Patient Safety Monitoring Committee, the Los Angeles County EMS Agency and the California EMS Authority within 48 hours.

Patient data will only be transmitted via secure electronic communications. All records will be maintained in a secure location by the HF Navigator at their respective participating hospitals, and will only be available for data review by authorized investigators/co-investigators or authorized data abstraction research associates.

4. Anticipated sources of funding

While it is both conceivable and preferable to have the entire COMPARE pilot project funded by a single entity, we recognize that there may be unique foundational support possibilities for Burbank and Glendale, each with its own municipal fire department and major private participating medical institutions.

The PSJ Foundation staff is engaged in the planning stages of this pilot project and have initiated preliminary contact with appropriate philanthropic agencies with which they have existing relationships. Providence has ongoing relationships with funders including:

Kresge Foundation
Ralph M. Parsons Foundation
UniHealth Foundation
Ahmanson Foundation
The Hannon Foundation
Entertainment Industries Foundation
Annenberg Foundation
Burbank Healthcare Foundation
Weingart Foundation
HealthNet
Doheny Foundation
Verizon Foundation

These foundations and others, as well as private funding sources would be the types of resources the PSJ Foundation would approach should this project be approved. In addition, contact also has been initiated with UCLA Foundation Relations.

Ongoing project information and updates are being provided to both organizations as this proposal continues preparation and during the submission and review process.

A similar funding strategy is being undertaken to support the participation of the Glendale health system in this pilot project.

5. Paramedic eligibility

Paramedics with 4 years experience and in good standing with their department will be identified for the Community Paramedic Core training program. All CPs must successfully complete the core training program and the HF site specific training program approved by the Los Angeles County EMS Agency (see attachment E).

6. Local CP Training:

UCLA operates one of the top performing paramedic education programs in the nation and has contacted the California EMS Authority stating our desire to participate in the design and development of the core Community Paramedicine curriculum. UCLA has been selected to deliver the core paramedic curriculum for all the pilots in the state.

UCLA will also develop a site-specific curriculum to ensure each paramedic fully understands the *COMPARE* protocol, purpose of the study, reporting requirements, and quality improvement indicators. Paramedics will also participate in periodic quality improvement meetings and annual retraining during the course of this pilot project.

H. Evaluation and Data Collection and Dissemination of results

1. Process Evaluation/Quality Improvement

- a. All CPs will have completed required core and site specific training and demonstrate competence.
- b. The quality improvement program will include the following data elements.
 - i. Number of CP home visits conducted
 - ii. Protocol compliance (ie. tipping points, see attached protocol)
 - iii. Visit outcome (ie. cardiology consult, physician visit, 9-1-1 activation)
 - iv. Re-admission
 - v. Patient satisfaction
 - vi. Cardiologist satisfaction
- c. Reviews of data from all patients receiving a CP home visit, as well as their follow-up office care or need for readmission would be conducted weekly via password-controlled access to a conference call, conducted by the HF Navigator for each participating hospital. These calls would provide clinical feedback to CPs on their assessments, provide ongoing evaluation of the program's effectiveness, provide a forum to identify operational challenges and solutions, and inform all participants of any needed modifications that might emerge during program implementation.
- d. Any incident resulting in a significant negative patient outcome shall be reported to the Patient Safety Monitoring Board, the Los Angeles County EMS Agency Medical Director and the California EMS Authority Project Director within 48 hours.
- e. Quarterly quality improvement meetings will include all partners and CPs reviewing all data.

2. Qualitative Evaluation.

- a. Stakeholders will meet regularly, review data and discuss the overall success of *COMPARE*. Insights and experiences will guide the review of data and inform changes to the assessment protocol, training program and supporting processes.
- b. The HF Navigators will obtain patient satisfaction scores for all patients in both the standard aftercare and CP home visit groups using a standardized inventory scale, during the routine follow up call at the end of the first week post-discharge.

3. Impact Evaluation & Utilization.

COMPARE will measure the impact of (i) training CPs, (ii) utilizing an assessment protocol, (iii) patient satisfaction, (iv) reduction in the number and causes for all HF readmissions, (v) overall healthcare expenditures and savings.

4. Estimate of health care cost savings.

Costs will be compared between the two groups to determine potential savings attributable to CP home visits in terms of direct charges for readmissions prevented, and any associated offsets of CMS-imposed penalties.

5. Data Collection

CPs will capture patient data utilizing the patient care record system. The State of California has developed a data tracking tool that will be utilized to report data each month. UCLA has developed a tool and data tracking plan to guide each partner's data collection (see attachment F).

Quality indicators have been developed for monthly tracking and a 100% audit of performance will be conducted and reported. Patients will be invited to complete an online satisfaction survey developed by the California EMS Authority to report on their experience of care. All data will be reported and discussed in the quarterly quality improvement meetings to inform all partners and stakeholders.

6. Dissemination.

Results of this pilot project will be shared with the Los Angeles County EMS Agency, the State of California EMS Authority and OSHPD. In addition, significant findings will be submitted for presentation at national conferences in the fields of EMS, Emergency Medicine (e.g. Society of Teachers of Emergency Medicine and American College of Emergency Medicine) and relevant primary and cardiology conferences. Finally, we will

prepare and submit manuscripts for consideration in the appropriate scientific literature.

I. Contact Information

Steven J. Rottman, MD, FACEP
Professor, Emergency Medicine and Community Health Sciences
David Geffen School of Medicine and UCLA Fielding School of Public Health
Medical Director, UCLA Center for Prehospital Care
924 Westwood Blvd.
Suite 300
Los Angeles CA 90024
310-794-0595 (phone)
310-794-0599 (Fax)
E-mail rottman@ucla.edu

REFERENCES

1. Dharmarajan K, Hsieh AF, et. al. Diagnoses and Timing of 30-Day Readmissions After Hospitalization for Heart Failure, Acute Myocardial Infarction, or Pneumonia. *JAMA* 2013;309(4):355-363
2. Hansen LO, Young RS, et. al. Interventions to Reduce 30-Day Rehospitalization: A Systematic Review. *Ann Intern Med.* 2011;155:520-528.
3. Bradley EH, Curry L, et. al. Hospital Strategies Associated With 30-Day Readmission Rates for Patients With Heart Failure. *Circ Cardiovasc Qual Outcomes.* 2013;06:444-450

Attachment A

Los Angeles County EMS Agency

COMPARE/HF Protocol

Goal:

Community Paramedic visit to CHF Patient within 24 hours maximum of 48 post hospital discharge

Community Paramedic Visit

History:

1. Patient General Health
 - a. Pre and Post Discharge
2. Present understanding of their medical condition and all associate signs and symptoms to be cautious of
3. Understand why Medications are to be taken
 - a. Include
 - i. Dose , each medication
 - ii. How often, each medication
 - iii. When did they start taking medications
 1. Include each medication
 - iv. Compare above to discharge note
4. Understands the importance of their diet
 - a. Importance of salt intake
 - b. Importance of fluid intake
 - c. Ask them to describe their diet since discharge
 - d. Estimate their daily fluid intake by matching how many of which size sample container they drink/day
5. Ask them about weight gain or weigh loss
 - a. Ask about urination
 - b. Ask about bowel movements
 - c. Ask about swelling in the feet or ankles
6. Any signs of orthopnea
 - a. Any Paroxysmal nocturnal dyspnea
 - b. Any increase in number of pillows patient uses for sleep
7. Ask about next physician appointment
 - a. Do they have a scheduled appointment ?

- i. Should be less than 7 days from discharge
- b. Confirm physician name
- c. Confirm contact information of physician
 - i. Office number
 - ii. Office address
- d. Ask them how they will get to physician appointment
 - i. Confirm transport

Physical Exam:

- 1. Medication
 - a. Do they have ALL prescribed medications
 - b. Pill Count backwards from discharge
- 2. Weight
 - a. Weight without shoes
 - b. Compare to discharge
- 3. Vital Signs
 - a. Blood Pressure
 - i. Check widen pulse pressure
 - ii. Compare to discharge
 - b. Pulse
 - i. Rate and regularity
 - ii. Compare to discharge
 - c. Respirations
 - i. Rate
 - ii. Volume
 - iii. Signs of accessory muscle use or dyspnea on movement
 - iv. Compare to discharge
 - d. Skin signs
 - i. Color
 - ii. Temperature
 - iii. Moisture
 - iv. Turgor
 - e. Lung sounds
 - i. All lung fields
 - ii. Including volume
 - iii. Compare to discharge
 - f. Signs of edema

- i. Pitting
 - ii. Unilateral, Bilateral
 - iii. Note the extent of swelling
 - iv. Compare to discharge
- g. Temperature
- h. Oxygen saturation/ pulse oximetry
 - i. Compare to discharge
 - ii. *ETCO2 if requested*
- i. Basic ECG, lead II
 - i. Compare to discharge
 - ii. *12 lead if requested*

History tipping points

- 1. General
 - a. Complaint of
 - i. Chest pain
 - ii. Shortness of breath
 - iii. Orthopnea
 - iv. Dyspnea on exertion
 - v. Dizziness
 - vi. Headache
 - vii. Significant reduction in activity
 - b. Medications
 - i. Does understand dosing
 - ii. Seeming to be non-compliant
 - c. Diet
 - i. Doesn't understand importance
 - ii. Poor regulation of salt or fluid intake
 - iii. Not compliant
 - d. Weight gain
 - i. Swelling to feet or ankles
 - e. Physician appoint
 - i. None scheduled
 - ii. More than 7 days post discharge
 - iii. Needs physician information
 - iv. No plan on transport to appointment

Physical Exam tipping points

1. Medications
 - a. Does not physically have all medications
 - b. Pill count is off
2. Weight
 - a. Gain of 3 lbs
3. Vital signs
 - a. Hypertension
 - b. Hypotension
 - c. Widened pulse pressure
 - d. Tachycardia
 - e. Bradycardia
 - f. Abnormal skin signs
 - g. Temperature > 100 degrees
4. Any signs of shortness of breath or chest pain
5. Abnormal lung sounds or volume
6. Increase signs of edema
7. Pulse oximetry 3 points below discharge
8. New arrhythmia

COMPARE Protocol

NO TIPPING POINT

- See PMD as scheduled
- Consider follow-up visit

TIPPING POINT

- If significant call 911
- Contact
 - COMPARE on –call physician for advise
- Consider follow-up visit

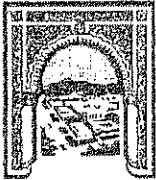
ATTACHMENT C (Letters of Support)

Alhambra Fire Department
AmeriCare Ambulance Service
Glendale Adventist Medical Center
Glendale Fire Department
Glendale Fire Fighters' Association
Glendale Memorial Hospital
Huntington Medical Foundation/Community Urgent Care Center
Huntington Memorial Hospital
Kaiser Permanente
Los Angeles Area Fire Chiefs Association
Los Angeles City Fire Department
Los Angeles County Fire Department
McCormick Ambulance Service
Pasadena Public Health Department
Santa Monica Fire Department
UCLA Health System
USC Verdugo Hills Hospital

City of Alhambra
Fire Department



Proudly Serving the
Community Since
1906



Gateway
to the
San Gabriel Valley

Bill Walker
Fire Chief

301
North First Street
Alhambra
California
91891-2495

FAX
626
457-8961

Administration
626
570-5190

Fire Prevention
626
570-5193

Hazardous
Materials
626
570-3234

September 20, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the Alhambra Fire Department to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, decreasing overall healthcare expenditures and improving the patients experience of care.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Programs further.

If you have any questions, please feel free to contact me at (626)570-5191 or by email at bwalker@alhambrafire.org.

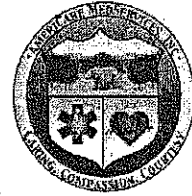
Sincerely,

Bill Walker
Fire Chief
Alhambra Fire Department



MERI ARE
AMBULANCE

1059 East Bedmar Street
Carson, California 90746
Office: (310) 835-9390
Fax: (310) 835-3926
Internet: americare.org



September 9, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

RE: Letter of Support for the Proposed Santa Monica Fire Department Alternate Transport Destination Pilot Program

Dear Dr. Larmon:

I am writing to express our full support of the Santa Monica Fire Department to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, decreasing overall healthcare expenditures and improving the patients experience of care.

AmeriCare Ambulance Service supports this project and understands that certain patients that meet the criteria for the Alternate Transport Destination Pilot Program, as approved by the Los Angeles County EMS Agency, will be transported to a participating clinic or urgent care center. AmeriCare Ambulance Service is the ambulance company contracted with Santa Monica Fire Department for patient transportation. We understand and support transporting these patients who have agreed to participate in the Pilot Program and have been determined not to require emergency medical care.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Program further.

If you have any questions, please feel free to contact me at (310) 835-9390 x135 or by email at msummers@americare.org.

Sincerely,

9/9/13

Mike Summers
President and Chief Executive Officer

*Glendale Adventist
Medical Center*



1509 Wilson Terrace
Glendale, CA 91206
Tel. 818-409-2000

September 12, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care.
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the Glendale Adventist Medical Center to develop and implement proposals for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Programs are to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, reducing preventable readmissions to hospitals, decreasing overall healthcare expenditures and improving the patients experience of care.

Glendale Adventist Medical Center is a leader in health care delivery in the greater Glendale community and operates 4 clinics and urgent care centers in the local area.

Glendale Adventist Medical Center supports this project and understands that certain patients that meet the criteria for the Alternate Transport Destination Pilot Program, as approved by the Los Angeles County EMS Agency, will be transported to a participating clinic or urgent care center. We understand that these patients will be those patients transported by Glendale Fire Department who have agreed to participate in the Pilot Program and have been determined not to require emergency medical care.

Glendale Adventist Medical Center is also in full support of the project to reduce heart failure readmissions to our hospital. We support the use of specially trained paramedics to conduct home visits to assess these patients after hospital discharge with specific parameters determined by attending cardiologists and approved by the Los Angeles County EMS Agency.

We look forward to the approval of the Pilot Programs by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Program further..

If you have any questions, please feel free to contact me at (818) 409-8301 or by email at kevin.roberts@ah.org.

Sincerely,

A handwritten signature in cursive script that reads "Kevin Roberts".

Kevin A. Roberts, RN, FACHE
President and CEO



HEALTHCARE at a Higher Level



CITY OF GLENDALE, CALIFORNIA
Glendale Fire Department

421 Oak Street
Glendale, California 91204-1298
(818) 548-4814 Fax (818) 547-1031
www.ci.glendale.ca.us

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

September 13, 2013

Dear Dr. Larmon:

I am writing to express my full support of the Glendale Fire Department to develop and implement proposals for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Programs are to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, reducing preventable readmissions to hospitals, decreasing overall healthcare expenditures and improving the patients experience of care.

The Glendale Fire Department is a leader in EMS delivery in the greater Glendale community.

The Glendale Fire Department supports this project and understands that certain patients that meet the criteria for the Alternate Transport Destination Pilot Program, as approved by the Los Angeles County EMS Agency, will be transported to a participating clinic or urgent care center. We understand that these patients will be those patients transported by the Glendale Fire Department who have agreed to participate in the Pilot Program and have been determined not to require emergency medical care.

The Glendale Fire Department is also in full support of the project to reduce heart failure readmissions to our hospital. We support the use of specially trained paramedics or EMT's to conduct home visits to assess these patients after hospital discharge with specific parameters determined by attending cardiologists and approved by the Los Angeles County EMS Agency.

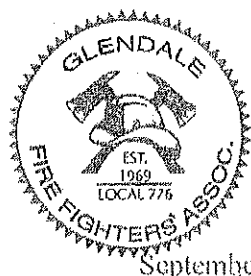
We look forward to the approval of the Pilot Programs by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Program further.

If you have any questions, please feel free to contact me at (818) 548-4814 or by email at hscoggins@ci.glendale.ca.us.

Sincerely,

Harold D. Scoggins
Fire Chief, Glendale Fire Department





Glendale Fire Fighters' Association

421 OAK STREET ° GLENDALE, CALIFORNIA 91204-1298 ° (818) 244-6918 FAX (818) 244-5323

September 13, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the Glendale Fire Department to develop and implement proposals for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Programs are to determine whether paramedics working in an expanded role in their community can improve health system integration, and/or fill identified health care needs.

The Glendale Firefighters Association, representing all sworn Firefighters, Paramedics, Engineers and Captains, supports this project and understands that certain patients that meet the criteria for the Alternate Transport Destination Pilot Program, as approved by the Los Angeles County EMS Agency, will be transported to a participating clinic or urgent care center. We understand that these patients will be those patients transported by the Glendale Fire Department who have agreed to participate in the Pilot Program and have been determined not to require emergency medical care.

The Glendale Firefighters Association is also in full support of the project to reduce heart failure readmissions to the hospital. We support the use of specially trained personnel to conduct home visits to assess these patients after hospital discharge with specific parameters determined by attending cardiologists and approved by the Los Angeles County EMS Agency.

We look forward to the approval of the Programs by the LA County EMS Agency, the California State EMS Authority, and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Program further.

If you have any questions, please feel free to contact me by email at estavros@ci.glendale.ca.us.

Sincerely,

Chris Stavros
President
Glendale Firefighters Association



**Glendale Memorial Hospital
and Health Center**

A Dignity Health Member

September 12, 2013

Administration
1420 South Central Ave
Glendale, CA 91204
direct 818.502.2201
fax 818.409.7688
glendalememorialhospital.org

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the Glendale Memorial Hospital & Health Center to develop and implement proposals for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Programs are to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, reducing preventable readmissions to hospitals, decreasing overall healthcare expenditures and improving the patients experience of care.

Glendale Memorial Hospital & Health Center is a leader in health care delivery in the greater Glendale community and recognizes the need to collaborate with the community clinics and urgent care centers in the local area.

Glendale Memorial Hospital & Health Center supports this project and understands that certain patients that meet the criteria for the Alternate Transport Destination Pilot Program, as approved by the Los Angeles County EMS Agency, will be transported to a participating clinic or urgent care center. We understand that these patients will be those patients transported by Glendale Fire Department who have agreed to participate in the Pilot Program and have been determined not to require emergency medical care.

Glendale Memorial Hospital & Health Center is also in full support of the project to reduce heart failure readmissions to our hospital. We support the use of specially trained paramedics to conduct home visits to assess these patients after hospital discharge with specific parameters determined by attending cardiologists and approved by the Los Angeles County EMS Agency.

We look forward to the approval of the Pilot Programs by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Program further.

If you have any questions, please feel free to contact me at (818) 502-2201 or by email at Jack.Ivie@dignityhealth.org.

Sincerely,

Jack Ivie
President

HUNTINGTON MEDICAL FOUNDATION

133 NORTH ALTADENA DRIVE
2ND FLOOR
PASADENA, CA 91107
(626) 397-8300
FAX (626) 397-8337

September 2, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the Huntington Medical Foundation (HMF) and its Pasadena Community Urgent Care Center to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

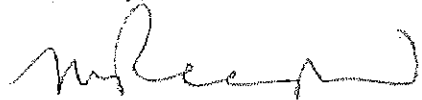
The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times by ambulances dropping patients off at them, decreasing overall healthcare expenditures and improving the patients' experience of care.

HMF desires to receive and treat certain patients transported by the Pasadena Fire Department that are categorized and approved by the Los Angeles County EMS Agency as requiring basic life support care in order to satisfy the need in the community. Our Urgent Care Center is fully equipped to manage patients at the BLS care level and already and routinely treats them when they report on their own to the center.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to formalizing our collective obligations in detail in a written agreement.

If you have any questions, please feel free to contact me at (626) 397-8333 or by email at mrea@huntingtonmedical.com.

Sincerely,



Manisha Rea, R.N.
Chief Clinical Operations Officer
Huntington Medical Foundation
133 N. Altadena Drive, 2nd Floor
Pasadena, CA 91107

 **Huntington Hospital**

Huntington Memorial Hospital
100 W. California Boulevard
P.O. Box 7013
Pasadena, California 91109-7013
(626) 397-3241

Jane Haderlein
*Senior Vice President
Development and Public Affairs*

August 27, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the Huntington Memorial Hospital and Medical Center to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, decreasing overall healthcare expenditures and improving the patients experience of care.

Huntington Memorial Hospital and Medical Center supports this project and understands that certain patients that meet the criteria for the Alternate Transport Destination Pilot Program, as approved by the Los Angeles County EMS Agency, will be transported to a participating clinic or urgent care center. We understand that these patients will be those patients transported by Pasadena Fire Department who have agreed to participate in the Pilot Program and have been determined not to require emergency medical care.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Program further..

If you have any questions, please feel free to contact me at (626) 397-3241 or by email at Jane.haderlein@huntingtonhospital.com

Sincerely,



Jane Haderlein
Senior Vice President, External Affairs and Philanthropy
Huntington Hospital

September 13, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express Kaiser Permanente's support in principle of the UCLA Center for Prehospital Care proposal to develop a community paramedicine pilot program. We understand that the goal of this pilot program is to establish whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County project is greatly needed in our community. We look forward to this pilot program helping to alleviate overcrowding in emergency departments, decrease wait times for ambulances transporting patients to emergency departments, decrease overall healthcare expenditures and improve the patients' general care experience.

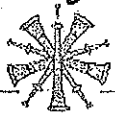
Kaiser participation in the pilot program within identified local communities (currently, Pasadena, and, Santa Monica, with the possible later addition of the Santa Clarita and Lancaster/Palmdale areas) would be limited to Kaiser members, and conditioned on the paramedics being properly trained to follow appropriate patient selection criteria for the Alternate Transport Destination program, as approved the Los Angeles County EMS Agency. We understand that the target patient population will be those patients transported by the fire department who have been appropriately determined not to require stabilizing emergency medical care and who have agreed to participate in the pilot program.

We share your optimism that the Pilot Program will be approved by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, Kaiser looks forward to memorializing our respective obligations in detail in a written agreement.

If you have any questions, please feel free to contact Calvin Dong at (562) 658-3942, or by email at calvin.c.dong@kp.org.

Sincerely,

Name *Patricia A. [Signature]*
Title *SVP Quality [Signature]*

Los Angeles Area
 *Fire Chiefs Association*

September 24, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

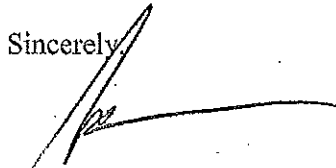
As President of the Los Angeles Area Fire Chiefs (LAAFCA), I am writing to express our Association's full support of the region's efforts to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County and Reducing Heart Failure Readmissions with Paramedic Home Visits are projects in great need in our community. We look forward to the Pilot Programs helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, reducing preventable readmissions, decreasing overall healthcare expenditures and improving the patients experience of care.

The members of LAAFCA look forward to the approval of the Pilot Programs by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Programs further.

If you have any questions, please feel free to contact me at (310) 458-8661 or by email at scott.ferguson@simgov.net.

Sincerely,



Scott Ferguson
President, Los Angeles Area Fire Chiefs Association

BOARD OF FIRE
COMMISSIONERS

STEVEN R. FAZIO

LETICIA GOMEZ
EXECUTIVE ASSISTANT II

CITY OF LOS ANGELES
CALIFORNIA



ERIC GARCETTI
MAYOR

FIRE DEPARTMENT

BRIAN L. CUMMINGS
FIRE CHIEF

200 NORTH MAIN STREET, RM 1800
LOS ANGELES, CA 90012

(213) 978-3800
FAX: (213) 978-3815

[HTTP://WWW.LAFD.ORG](http://www.lafd.org)

September 16, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

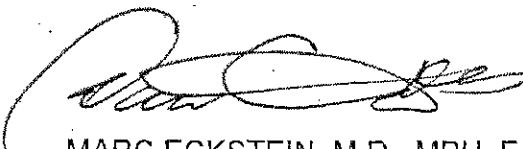
We are writing to express the full support of the Los Angeles Fire Department (LAFD) to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to participating in the Pilot Program to help alleviate overcrowding in emergency departments, decrease wait times for ambulances transporting patients to emergency departments, decrease overall healthcare expenditures, and improve the patients' experience of their prehospital care.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Programs further.

Very truly yours,

BRIAN CUMMINGS
Fire Chief



MARC ECKSTEIN, M.D., MPH, FACEP
Medical Director



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

September 20, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the Los Angeles County Fire Department to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, decreasing overall healthcare expenditures and improving the patients experience of care.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Programs further.

If you have any questions, please feel free to contact me at (323) 881-6180, or by email at Daryl.Osby@fire.lacounty.gov.

Very truly yours,


FIRE CHIEF DARYL L. OSBY

DLO:mr

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS	CALABASAS	DIAMOND BAR	HIDDEN HILLS	LA MIRADA	MALIBU	POMONA	SIGNAL HILL
ARTESIA	CARSON	DUARTE	HUNTINGTON PARK	LA PUENTE	MAYWOOD	RANCHO PALOS VERDES	SOUTH EL MONTE
AZUSA	CERRITOS	EL MONTE	INDUSTRY	LAKEWOOD	NORWALK	ROLLING HILLS	SOUTH GATE
BALDWIN PARK	CLAREMONT	GARDENA	INGLEWOOD	LANCASTER	PALMDALE	ROLLING HILLS ESTATES	TEMPLE CITY
BELL	COMMERCE	GLENORA	IRVINDALE	LAWNDALE	PALOS VERDES ESTATES	ROSEMEAD	WALNUT
BELL GARDENS	COVINA	HAWAIIAN GARDENS	LA CANADA FLINTRIDGE	LOMITA	PARAMOUNT	SAN DIMAS	WEST HOLLYWOOD
BELLFLOWER	CUADRY	HAWTHORNE	LA HABRA	LYNWOOD	PICO RIVERA	SANTA CLARITA	WESTLAKE VILLAGE
BRADBURY							WHITTIER



September 5, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the McCormick Ambulance Service to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County and Reducing Heart Failure Readmissions with Paramedic Home Visits are projects in great need in our community. We look forward to the Pilot Programs helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, reducing preventable readmissions, decreasing overall healthcare expenditures and improving the patients experience of care.

We look forward to the approval of the Pilot Programs by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Programs further.

If you have any questions, please feel free to contact me at (760) 525-2688 or by email at rick@mccormickambulance.com.

Sincerely,

Richard F. Roesch
President

15533 Chenshaw Blvd
Hawthorne CA 90250
310.219.1779 Ph
310.219.0773 Fax
www.westmedambulance.com



PUBLIC HEALTH DEPARTMENT

September 17, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the City of Pasadena Public Health office to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times by ambulances dropping patients off at them, decreasing overall healthcare expenditures and improving the patients experience of care.

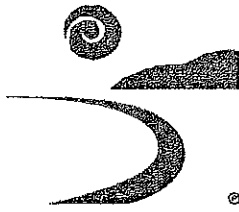
The City of Pasadena is in full support and assist the Pasadena Fire Department, UCLA and all partners in the effective design and implementation of an alternate transportation system for the citizens of our community.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to formalizing our collective obligations in detail in a written agreement.

If you have any questions, please feel free to contact me at (626) 744-6166 or by email at ewalsh@cityofpasadena.net

Sincerely,

Eric Walsh, MD, Dr.PH
Pasadena Public Health Department
Director of Public Health, Health Officer



Santa Monica Fire Department
333 Olympic Drive 2nd Floor
Santa Monica, CA 90401

Scott Ferguson
Fire Chief

City of
Santa Monica

September 24, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

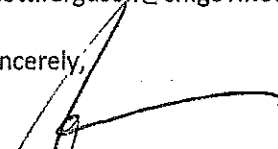
Please accept this notice as an indication of my full support of the Santa Monica Fire Department to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County and Reducing Heart Failure Readmissions with Paramedic Home Visits are projects in great need in our community. We look forward to the Pilot Programs helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, reducing preventable readmissions, decreasing overall healthcare expenditures and improving the patients experience of care.

Our members look forward to the approval of the Pilot Programs by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once endorsed, we look forward to potential opportunities to support the Pilot Programs further.

If you have any questions, please feel free to contact me at (310) 458-8661 or by email at scott.ferguson@smgov.net.

Sincerely,



Scott Ferguson
Fire Chief, Santa Monica



Hospital Administration
757 Westwood Plaza, Suite 1320
Los Angeles, CA 90095
Fax: (310) 267-3516

September 5th, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of UCLA Health to develop and implement a proposal for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Program is to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times by ambulances dropping patients off at them, decreasing overall healthcare expenditures and improving the patients experience of care.

UCLA Health desires to receive and treat certain patients transported by Santa Monica Fire Department that are categorized and approved by the Los Angeles County EMS Agency as requiring basic life support care in order to satisfy the need in the community.

We look forward to the approval of the Pilot Program by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to formalizing our collective obligations in detail in a written agreement.

If you have any questions, please feel free to contact me at (310) 267-8642 or by email at pkapur@mednet.ucla.edu.

Sincerely,

A handwritten signature in black ink that reads "Patricia A. Kapur MD". The signature is written in a cursive, flowing style.

Patricia A. Kapur, MD
Executive Vice President, UCLA Health

USC Verdugo Hills Hospital

Part of Keck Medicine of USC

ADMINISTRATION
Debbie Walsh
Chief Executive Officer

September 11, 2013

Dr. Baxter Larmon
Director, UCLA Center for Prehospital Care
Professor, David Geffen School of Medicine at UCLA
10990 Wilshire Blvd., Suite 1450
Los Angeles, CA 90024

Dear Dr. Larmon:

I am writing to express my full support of the USC Verdugo Hills Hospital to develop and implement proposals for the Community Paramedicine Pilot Program. We understand that the goal of the Pilot Programs are to determine whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

The Alternate Transport Destination in Los Angeles County is a project in great need in our community. We look forward to the Pilot Program helping to alleviate overcrowding in emergency departments, decreasing wait times for ambulances transporting patients to emergency departments, reducing preventable readmissions to hospitals, decreasing overall healthcare expenditures and improving the patients experience of care.

USC Verdugo Hills Hospital is a leader in health care delivery in the greater Glendale community and operates X clinics and urgent care centers in the local area.

USC Verdugo Hills Hospital supports this project and understands that certain patients that meet the criteria for the Alternate Transport Destination Pilot Program, as approved by the Los Angeles County EMS Agency, will be transported to a participating clinic or urgent care center. We understand that these patients will be those patients transported by [either Santa Monica, Glendale or Pasadena] Fire Department who have agreed to participate in the Pilot Program and have been determined not to require emergency medical care.

USC Verdugo Hills Hospital is also in full support of the project to reduce heart failure readmissions to our hospital. We support the use of specially trained paramedics to conduct home visits to assess these patients after hospital discharge with specific parameters determined by attending cardiologists and approved by the Los Angeles County EMS Agency.

University of Southern California
1812 Verdugo Boulevard, California 91208 • Tel: 818 952 2208 • Fax: 818 952 4649 • Debbie.Walsh@vbh.usc.edu

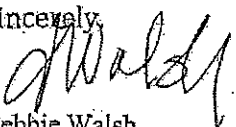


September 11, 2013
Page Two

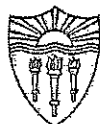
We look forward to the approval of the Pilot Programs by the Los Angeles County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, we look forward to potential opportunities to support the Pilot Program further..

If you have any questions, please feel free to contact me at 818-952-2208.

Sincerely,



Debbie Walsh
Chief Executive Officer



Attachment D

**Los Angeles County EMS Agency
Community Paramedicine Steering Committee Directory**

Name/Title	Email	Telephone
<u>Burbank Community:</u>		
Daniel Eisenberg, M.D., F.A.C.C. Foothill Cardiology Medical Group	cardfish@earthlink.net	818.848.6404
Tom Lenahan Fire Chief, Burbank Fire Department	tlenahan@burbankca.gov	818-238-3480
Kevin Traber, R.N., B.S.N. Director, Emergency & Cardiovascular Services Providence Saint Joseph Medical Center	Kevin.Traber@providence.org	818-847-4001
<u>Glendale Community:</u>		
Karen Brandt VP Ancillary Services, Glendale Adventist Medical Ctr	Karen.Brandt@ah.org	818-409-8290
Debra DuRoff, MPA FACHE Senior Director Business Development Dignity Health, Glendale Memorial Hospital & Health Center	debra.duroff@dignityhealth.org	818.507 4643 (o)
Angelica Loza-Gomez, M.D. Medical Director Verdugo Hills, USC Hospital Pre-Hospital Care Director	lozagome@usc.edu	
Arby Nahapetian, M.D. Chief Medical Officer	Arby.Nahapetian@ah.org	818-409-8026

Glendale Adventist Medical Center		
Ramella Markarian M.S., MHA Associate Vice President Business Development Glendale Adventist Medical Center for Rapid Care Glendale, Rapid Care Burbank, Verdugo Hills Urgent Care, and Glen Oaks Urgent Care	Ramella.markarian@ah.org	(818) 281-4594
Dr. Manual Momjian Medical Director Urgent 9 Urgent Care Center	mpmomjian@msn.com	
Edward Noll, M.D. Medical Director, Glendale Fire Department	EdNoll@aol.com	(818) 762-6553
Antonio Reyes, R.N., M.S.N., C.E.N. Manager, Emergency Services Glendale Memorial Hospital	Antonio.reyes@dignityhealth.org	818.502.2308
Vince Rifino Battalion Chief, Glendale Fire Department	vrifino@ci.glendale.ca.us	
Dr. Richard Foullon Adventist Health Physician Services Regional Medical Director Southern California Region 544 North Glendale Avenue Glendale, California 91206	Richard.Foullon@ah.org	1.818.241.4331 (Ext. 408)
Harold Scoggins Fire Chief, Glendale Fire Department	HScoggins@ci.glendale.ca.us	818-548-4829
<u>Pasadena Community:</u>		
Kevin Costa	kcosta@cityofpasadena.net	626-744-4745

Deputy Fire Chief, Pasadena Fire Department		
Calvin Dong SCAL Ambulance Operations Manager Kaiser Foundation Health Plan, Inc.	calvin.c.dong@kp.org	562-658-3942
Denise Houck, R.N. Nurse Manager, Pasadena Community Urgent Care	dhouck@huntingtonmedical.com	626-270-2425
Cary Manoogian, M.D. Physician Manager, Pasadena Community Urgent Care	cmanoogian@huntingtonmedical.com	626-270-2424
Manisha Rea, R.N. Chief Clinical Operations Officer Huntington Medical Foundation	mrea@huntingtonmedical.com	626-397-8333
Lisa R. Rodriguez Unit Manager (including maintaining building operations, security, EVS, parking structure, regional courier) Kaiser Permanente Pasadena Medical Offices	Lisa.R.Rodriguez@kp.org	(626) 583 -2250
Kim Rozanski, M.P.H. Director of Ambulatory Care Services Kaiser Permanente - Pasadena Medical Offices	Kim.M.Rozanski@nsmtm.kp.org	(626) 583-2262
Kathleen Sarreal, R.N., B.S.N. Ambulatory Care Assistant Dept Manager/Urgent Care Kaiser Permanente: Pasadena Medical Offices	Kathleen.A.Sarreal@kp.org	(626) 583 -2356
Benjamin Squire, M.D. Medical Director, Pasadena Fire Department	benjaminsquire@cep.com	909-865-9611
Jenny Van Slyke, R.N. Prehospital Care Coordinator, Huntington Memorial Hospital	jenny.vanslyke@huntingtonhospital.com	(626) 397-8482

Pasadena Fire Department Nurse Educator		
Eric Walsh, M.D., M.P.H. Director of Public Health/Health Officer City of Pasadena	ewalsh@cityofpasadena.net	626-744-6166
<u>Santa Monica Community:</u>		
Scott Ferguson Fire Chief, Santa Monica Fire Department	Scott.Ferguson@SMGOV.NET	310.458.8661
Wally Ghurabi, M.D. Medical Director, UCLA Santa Monica Emergency Department Medical Director, Santa Monica Fire Department	wghurabi@mednet.ucla.edu	424-259-8241
Bernard J. Katz, M.D., M.B.A. Medical Director UCLA-Santa Monica Bay Physicians and UCLA Specialty Care Network	bjkatz@mednet.ucla.edu	310-417-5945
Vladimir Manuel UCLA Health System	vmanuel@mednet.ucla.edu	
Michael Scott Summers Owner, AmeriCare Ambulance Service	msummers@americare.org	(714) 448 -1045
<u>UCLA:</u>		
Baxter Larmon, Ph.D., MICP Director, UCLA Center for Prehospital Care Professor, David Geffen School of Medicine at UCLA	blarmon@mednet.ucla.edu	310.312.9305
Todd LeGassick, M.P.H.	tlegassick@mednet.ucla.edu	310.312.9303

Executive Director, UCLA Center for Prehospital Care		
Steven J. Rottman, M.D. Medical Director, UCLA Center for Prehospital Care Associate Professor of Emergency Medicine at the David Geffen School of Medicine at UCLA and the UCLA School of Public Health Medical Director, Burbank Fire Department	Rottman@ucla.edu	310-794-0595
<u>Los Angeles County EMS Agency:</u>		
Cathy Chidester, Director Los Angeles County EMS Agency	cchidester@dhs.lacounty.gov	562-347-1604
William Koenig, M.D. Medical Director, Los Angeles County EMS Agency	wkoenig@dhs.lacounty.gov	562-347-1600
Susan Mori, R.N., B.S.N. Quality Improvement, Los Angeles County EMS Agency	sumori@dhs.lacounty.gov	562-347-1609
Richard Tadeo Assistant Director, Los Angeles County EMS Agency	rtadeo@dhs.lacounty.gov	562-347-1610
John Telmos Los Angeles County EMS Agency	jtelmos@dhs.lacounty.gov	562-347-1677
Gary Watson Los Angeles County EMS Agency	gwatson@dhs.lacounty.gov	
<u>Others Communities of Interest:</u>		
Sharifa Beria Senior Network Manager Provider Contracting	sharifa.beria@blueshieldca.com	818-228-2528

Blue Shield of California		
John Cordova, Deputy Sector Navigator/Health care California Community Colleges	John.cordova@canyons.edu	
James Featherstone Fire Chief, Los Angeles Fire Department	lafdfirechief@lacity.org	
Jaime Garcia, Vice President Hospital Association of Southern California	jgarcia@hasc.org	
Troy Hagen CEO, Care Ambulance	troyh@careambulance.net	
Jill Harmatz Director of Contracting Blue Shield of California	jill.harmatz@blueshieldca.com	(818) 228-2502
Todd Hee, M.D. Regional Medical Director for San Gabriel Valley Healthcare Partners Medical Group	thee@healthcarepartners.com	626-799-4194
Cathy Hoens, Vice President Provider Network Mgmt. and Strategy, HealthNet	Cathy.hoens@healthnet.com	
Pete Jankowski Fire Chief, La Verne Fire Department	pjankowski@lvpd.org	
Russ Kino, MD, Director of Emergency Services Providence Saint John's Health Center	Russ.kino@stjohns.org	(310) 829-5511
Robert Metzger Fire Chief, Redondo Beach Fire	Robert.metzger@redondo.org	
Ricky Olivarez	ricky@digitalemsinc.com	626-643-7706

CEO, Digital EMS		
Greg Reynar Assistant Chief, Los Angeles Fire Department	Gregory.reynar@lacity.org	
Sean Stokes Nurse Educator, Beverly Hills Fire Department	sstokes@beverlyhills.org	

Attachment E

Los Angeles County Alternate Destination Training Curriculum

1. Community Paramedic Pilot

Competency

The Alternative Transport Paramedic will be able to articulate the role of the community paramedic in the Health Care System and Los Angeles County.

Objectives

At the completion of the program the participant will be able to:

1.1: Define *Community Paramedic*.

- Definition of a Community Paramedic
- 1.1.2. Members of a distinct community
- 1.1.3. Navigates and establishes systems to better serve communities and clients
- 1.1.4. Trained as direct service providers
- 1.1.5. Mentors and empowers

1.2. Discuss the history and future of their role.

- 1.2.1. Rural and remote dilemma in the United States
- 1.2.2. 2004 Rural and Frontier EMS Agenda of the Future
- 1.2.3. Community Healthcare and Emergency Cooperative (CHEC)
- 1.2.4. International Roundtable on Community Paramedics (IRCP)
- 1.2.5 National Consensus Conference on Community Paramedicine Report (2012)

1.3. Identify the operational parameters of California Community Paramedic Pilot Project.

- 1.3.1. California Community Paramedic Pilot Project Handbook
- 1.3.2. Project Statutory and Regulatory Authority
- 1.3.3. Scope and Settings of Practice
- 1.3.3. Medical Direction
- 1.3.4. Standard Pilot Project Procedures

1.4 Discuss the roles and responsibilities of the community Partners in the Los Angeles County Community Paramedic Program

- 1.4.1. UCLA / CPC
- 1.4.2. State of California EMS Authority
- 1.4.3. Los Angeles EMS Agency
- 1.4.4. Santa Monica/ Glendale/ Pasadena Fire Departments
- 1.4.4 Local Emergency Departments
- 1.4.5 Local Clinics

1.5 Discuss why this program will be better for Patients and the health care community

2. Alternate Destination Facility

Competency

The Alternative Transport Paramedic will be able to articulate the location and requirements of local clinics in their area.

Objectives

At the completion of the program the participant will be able to:

- 2.1 Identify local designated clinics
- 2.2 Discuss hours of operation for each clinic
- 2.3 Identify designated parking for clinic
- 2.4 Discuss capabilities and limitations for clinics
- 2.5 Discuss Requirements
 - 2.5.1 LA County EMS Agency Policy for Alternate Transport Facilities
- 2.6 Discuss communications with designated clinics

3. Policy and Procedure

Competency

The Alternative Transport Paramedic will be able to determine if patients meet or are eliminated from the Alternative Transport Program.

Objectives

At the completion of the program the participant will be able to:

- 3.1 Discuss Los Angeles County DHS Alternative Transport Triage Criteria
 - 3.1.1 inclusion criteria
 - 3.1.2 exclusion criteria
- 3.2 Discuss Department Alternative Transport Procedures
- 3.3 Define Informed consent
- 3.4. Discuss patients rights not to consent

4. Focused Assessment and Documentation

Competency

The Alternative Transport Paramedic will be able to demonstrate the ability to assess, treat and triage using the Los Angeles County Alternative Transport Triage Policy appropriately.

Objectives

At the completion of the program the participant will be able to:

- 3.1 Review history taking skills

- 3.2. Review primary and secondary assessment
- 3.3 Review treatment for minor medical complaints
- 3.4 Review treatment for minor trauma complaints
- 3.5 Using simulated patients or case studies determine if patient can be transported to a clinic using the LA County Alternative Transport Policy
- 3.6. Discuss the required documentation on the EPCR for patients that meet triage criteria and are transported to an alternative clinic

5. Patient Safety

Competency

The Alternative Transport Paramedic will be able to determine if it is safe to transport a patient to an alternative transport clinic.

Objectives

At the completion of the program the participant will be able to:

- 5.1 Understand the ramifications for patients transport to the wrong facility
- 5.2 Discuss the possible outcomes of the Alternative Transport Program

6. Quality Improvement and Medical Oversight

Competency

The Alternative Transport Paramedic will be able to articulate the continuous quality improvement and medical oversight responsibilities of the Alternative Transport Program

Objectives

At the completion of the program the participant will be able to:

- 6.1 Discuss roles and responsibilities of
 - 6.1.1 State of California
 - 6.1.2 Los Angeles EMS Agency
 - 6.1.3 UCLA /CPC
 - 6.1.3 Department
 - Administration
 - Medical Director
 - Nurse educator
- 6.2 Discuss the data reporting to the State and local EMS Agency
- 6.3 Discuss bad outcomes
- 6.4 Discuss continuing education for the Alt Trans Program
- 6.5 Discuss how outcome information will be relayed to providers
- 6.6 A comprehensive written exam will be required by all providers.

Attachment F

UCLA Institutional Review Board Application (Baseline)

Attachment F

Institutional Review Board Approval for Baseline Data Collection Phase



University of California Los Angeles
11000 Kinross Avenue, Suite 211
Los Angeles, CA 90095-1694

<http://ohrpp.research.ucla.edu>
GC-IRB: (310) 825-7122
M-IRB: (310) 825-5344

APPROVAL NOTICE New Study

DATE:	4/24/2014
TO:	BAXTER LARMON EMERGENCY MEDICINE
FROM:	ALISON MOORE, MPH, MD Chair, SGIRB
RE:	IRB#14-000440 Data collection of patients that meet a criteria for transportation to a health care clinic, rather than to an Emergency Department Version: Protocol version date 3-18-14 draft #8

The UCLA Institutional Review Board (UCLA IRB) has approved the above-referenced study. UCLA's Federalwide Assurance (FWA) with Department of Health and Human Services is FWA00004642 (IRB00004474).

Submission and Review Information

Type of Review	Expedited Review
Approval Date	4/24/2014
Expiration Date of the Study	4/23/2017
Funding Source(s)	1) KAISER FOUNDATION HOSPITAL Grant PI: BAXTER LARMON Grant Title: Alternate Transport

Specific Conditions for Approval

-- The IRB has determined that this study meets the criteria for a 3 year extended approval. (For reference, please see the OHRPP guidance document "Extended Approval for Minimal Risk Research Not Subject to Federal Oversight" at http://ora.research.ucla.edu/OHRPP/Documents/Policy/4/Extended_Approval.pdf)

Regulatory Determinations

-- **HIPAA General Waiver** - The UCLA IRB waived the requirement for HIPAA Research Authorization for the use of UCLA associated medical records for research.

-- **Waiver of Informed Consent** - The UCLA IRB waived the requirement for informed consent under 45 CFR 46.116(d) for the entire study.

-- **Expedited Review Category(ies)** - The UCLA IRB determined that the research meets the requirements for expedited review per 45 CFR 46.110 category 5.

Important Note: Approval by the Institutional Review Board does not, in and of itself, constitute approval for the implementation of this research. Other UCLA clearances and approvals or other external agency or collaborating institutional approvals may be required before study activities are initiated. Research undertaken in conjunction with outside entities, such as drug or device companies, are typically contractual in nature and require an agreement between the University and the entity.

General Conditions of Approval

As indicated in the PI Assurances as part of the IRB requirements for approval, the PI has ultimate responsibility for the conduct of the study, the ethical performance of the project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the IRB.

The PI and study team will comply with all UCLA policies and procedures, as well as with all applicable Federal, State, and local laws regarding the protection of human subjects in research, including, but not limited to, the following:

- Ensuring that the personnel performing the project are qualified, appropriately trained, and will adhere to the provisions of the approved protocol,
- Implementing no changes in the approved protocol or consent process or documents without prior IRB approval (except in an emergency, if necessary to safeguard the well-being of human subjects and then notifying the IRB as soon as possible afterwards),
- Obtaining the legally effective informed consent from human subjects of their legally responsible representative, and using only the currently approved consent process and stamped consent documents, as appropriate, with human subjects,
- Reporting serious or unexpected adverse events as well as protocol violations or other incidents related to the protocol to the IRB according to the OHRPP reporting requirements.
- Assuring that adequate resources to protect research participants (i.e., personnel, funding, time, equipment and space) are in place before implementing the research project, and that the research will stop if adequate resources become unavailable.
- Arranging for a co-investigator to assume direct responsibility of the study if the PI will be unavailable to direct this research personally, for example, when on sabbatical leave or vacation or other absences. Either this person is named as co-investigator in this application, or advising IRB via webIRB in advance of such arrangements.

Attachment G

UCLA Data Collection Tool and Guide

Community Paramedic: Alternate Transportation Baseline Data Collection Guide

Overview

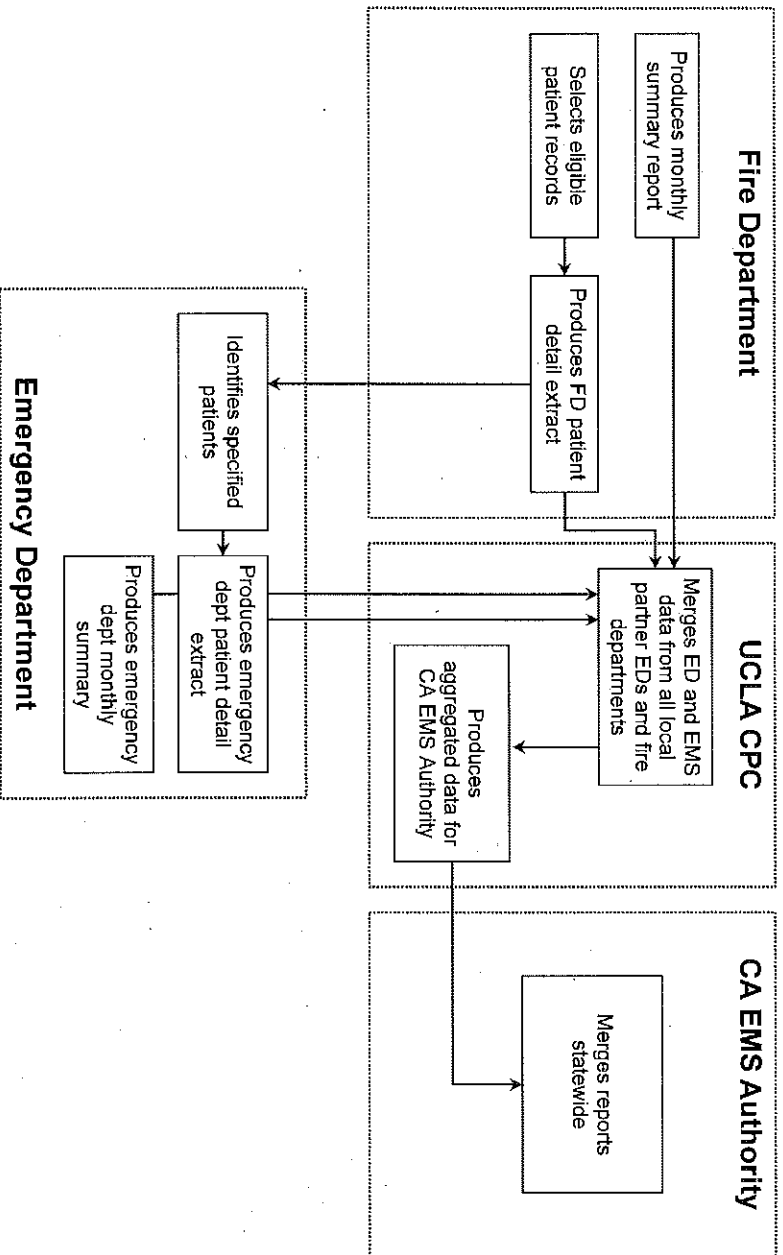
As part of the Community Paramedic project, the UCLA Center for Prehospital Care is collecting data monthly from each of our partner emergency departments and fire departments. When all data for a month has been received from all partner EDs and fire departments, UCLA will aggregate it and report it to the California EMS Authority.

Data flow summary

The data for the Alternate Transport arm of the Community Paramedic project originates with partner fire departments. After the end of each month, the following process occurs:

1. Fire department queries its records for eligible patient visits that month.
2. Fire department prepares two data extracts, described in more detail below:
 - a. A summary of several overall statistics for the month.
 - b. For eligible patients, an extract consisting of one row per patient, with the data elements noted below.
3. Fire department sends both items to UCLA by the 5th day of the following month (ie. April data is sent to UCLA by May 5th).
4. Fire department sends the patient data extract to emergency department.
5. Emergency department prepares two data extracts:
 - a. A summary of several overall statistics for the month
 - b. An extract containing one row per patient from the fire department file, with the data elements noted below.
6. Emergency department sends both items to UCLA by the 10th day of the following month (ie. April data is sent to UCLA by May 10th).
7. UCLA merges the FD & ED data, and then aggregates it with the data from the other participating EDs and FDs locally.
8. UCLA reports the aggregated data to the California EMS Authority by the 15th of the following month. UCLA does not send individual patient data; all reporting is aggregate monthly totals across all the ED and EMS partners in our area.

Data flow diagram



Patient eligibility

The Fire Department will provide the per-patient detail data for patients meeting the following eligibility criteria:

1. One of the following chief complaints or mechanisms of injury:
 - a. Complaints:
 - i. Isolated closed extremity injuries: Blunt extremity (BE)
 - ii. Laceration with controlled bleeding: Minor laceration (BL) or penetrating laceration (PL)
 - iii. Soft tissue injuries: Blunt head (BH) or blunt facial/mouth (BF) or blunt neck (BN) or blunt back (BB) or blunt chest (BC)
 - iv. Isolated fever or cough: Cough and congestion (CC) or fever (FE)

- b. Mechanisms of Injury:
 - i. Minor traffic accidents: Enclosed vehicle (EV) or motorcycle/moped (MM)
2. Transported to one of the participating partner emergency departments.
3. Age 18 or greater.
4. Not excluded by reason of:
 - a. Age <18 years
 - b. GCS <15
 - c. SBP <90
 - d. Any of these complaints listed in addition to those above: AP, AR, TE, AL, AE, OS, EH, CA, DO, CH, DY, FB, GI, LN, ND, OB, OD/PO, PS, RA, SE, SB, VA
 - e. Transport by or to any of these H, N, TC, PMC, SRC, EDAP
 - f. Any of these therapies administered: BB, BM, NA, RE, SI, TS, SU, AP, FB, IO, TH, VM, TC
 - g. Any special circumstances: BA, PC, AS, ET, DS

Open questions

Shared identifier: Ideally, the partners would agree on a shared patient or visit identifier to enable cross-referencing the patient's record at the ED with the fire department's ePCR. This might be the ePCR sequence number, a medical record number, a patient financial account number, etc. (Social Security Number should not be used.) Without a shared identifier, the partners would need to investigate each fire department patient record by hand to locate the matching emergency department record. A shared identifier could also eliminate any need to include patient names in the data, which would be preferred.

Finance data: It may be impractical to determine the individual costs, charges, and insurance reimbursements associated with each individual patient due to distributed billing by external practice groups etc. Thus the patient financial data reported (questions numbered 5.x) may need to be determined by estimating the costs, charges, and reimbursements for a standardized patient with the listed diagnosis.

Some individual fields have additional questions, as noted below.

Fire department data extracts

Monthly summary: The state requests the following summary data each month of the study:

Field	For Q#s	Description/contents	Notes/questions
Total EMS Responses EDTotalEMSResponses	5.1 5.2	Total EMS responses for the month, of all types.	
Total ED Transports EDTotalEDTransports	3.3 5.3	Number of patients your agency transported to all EDs in the month.	Counts all complaints, not just suspected CHF.
Typical 911 ALS Transport Vehicles EDTypical911ALSVehicles	3.1	Number of ALS transport vehicles your agency sends in response to a typical 911 call.	
Typical 911 BLS Transport Vehicles EDTypical911BLSVehicles	3.1	Number of BLS transport vehicles your agency sends in response to a typical 911 call.	
Typical 911 Fire Engines EDTypical911FireEngines	3.1	Number of fire engines your agency sends in response to a typical 911 call.	
Eligible 911 ALS Transport Vehicles FDEligible911ALSVehicles	3.2	Number of ALS transport vehicles your agency sends in response to a 911 call eligible for this study.	In other words, how many ALS vehicles you send for a patient expected to have one of the chief complaints or mechanisms of injury noted under "Patient eligibility" above.
Eligible 911 BLS Transport Vehicles FDEligible911BLSVehicles	3.2	Number of BLS transport vehicles your agency sends in response to a 911 call eligible for this study.	In other words, how many BLS vehicles you send for a patient expected to have one of the chief complaints or mechanisms of injury noted under "Patient eligibility" above.
Eligible 911 Fire Engines FDEligible911FireEngines	3.2	Number of fire engines your agency sends in response to a 911 call eligible for this study.	In other words, how many fire engines you send for a patient expected to have one of the chief complaints or mechanisms of injury noted under "Patient eligibility" above.
Total Transports to Partner EDs EDPartnerEDUniqueTransports	3.4	Number of patients your agency transported to all participating EDs in the month.	Count each transport, even if a repeat transport of a single individual. I.e. if Joe Bruin was transported twice, he counts for 2 transports in this measure. Counts all complaints.
Unique Transports to Partner EDs EDPartnerEDUniqueTransports	3.5	Number of unique patients your agency transported to participating EDs.	If Joe Bruin was transported to a partner ED twice in the month, he is only counted as 1 in this measure. Counts all complaints.
Transports Waiting Over 45 Minutes EDTransportsWaitingOver45	3.30	Number of transports (of all patients) spending more than 45 minutes at the hospital before returning to service.	Counts all patients/complaints, not just eligible patients.

Field	For Q#s	Description/contents	Notes/questions
Total Readiness Cost EDTotalReadinessCost	5.1	Total salaries & benefits + maintenance + operations + vehicle & facility amortization	Used to calculate average readiness cost (total cost / number of EMS responses)
Transport cost EDTotalTransportCost	5.2	Cost of transports: crew wages & benefits + fleet amortization & maintenance)	Used to calculate average transport cost (total transport cost / number of EMS responses)
TransportCharges EDTotalTransportCharges	5.3	Total charges for transports to all EDs by your agency in the month.	Used to calculate average transport charges (total charges / number of transports)
Charges for Care EDChargesForCare	5.4	Charges for care for eligible patients transported to partner EDs in the month.	
Candidate Paramedic Salary EDCandidatePMSalary	5.20	Average cost of salary & benefits for an EMT-P who would be a candidate for CP training.	

Fire department patient detail data: An Excel or similar delimited text file (e.g. CSV, tab-separated) with one row per patient, containing the following columns:

Field	For Q#s	Description/contents	Notes/questions
Patient Identifier EDPatientIdentifier	3.6 3.7 3.10 3.11	Unique identifier for this patient, or this ED visit by this patient.	Exact ID is TBD. May be a FIN number, Medical Record Number, EMS sequence number, etc. Either this or another identifier should be used to match this patient record to Fire Department/EMS responder's ePCR.
Receiving Emergency Department EDReceivingED		ED to which patient was transported.	
Patient First Name EDPatientFirstName	3.10 3.11	First name	For matching ED patient to FD records, and identifying unique patients (Qs 3.10 & 3.12). Unnecessary if a reliable shared patient identifier is available and the identifier is constant across multiple visits.
Patient Last Name EDPatientLastName	3.10 3.11	Last name	For matching ED patient to FD records, and identifying unique patients (Qs 3.10 & 3.12). Unnecessary if a reliable shared patient identifier is available and the identifier is constant across multiple visits.

Field	For Q#s	Description/contents	Notes/questions
Patient Age EDPatientAge	2.6 2.9 3.10 3.11	Patient age, in years	
Patient Gender EDPatientGender	2.12 2.15 2.18 2.21 3.10 3.11	Patient gender: M or F	
Chief Complaint EDChiefComplaint	2.9 + many	All complaints listed on ePCR, separated by commas.	
Mechanism of Injury EDMechanismOfInjury	2.9 + many		
Patient ZIP Code EDPatientZIP	2.58	ZIP code for the patient.	ZIP code of location to which EMS responded.
On-Scene Time EDSceneArrivalTime	3.14 3.15 3.18 3.19 3.22 3.23 3.26 3.27 3.30 3.31 3.32	Date/time arrived on scene.	
Arrival Time at ED EDArrivalEDTime	3.14 3.15 3.38	Date/time patient arrived at ED.	

Field	For Q#s	Description/contents	Notes/questions
Return to Field EDReturnToField	3.18 3.19 3.22 3.23 3.26 3.27 3.30 3.31 3.32	Date/time EMS returned to the field (i.e. available) after transporting patient to ED.	Note: The EMS Authority questionnaire asks "What was the average length of time in minutes from arrival on scene to return to the field for transports of eligible patients to partner EDs in the last month?"; and also asks for the shortest and longest times, and the number of transports spending more than 45 minutes at the ED. Ideally we would identify a field from the ePCR to provide this information, but we may need to look elsewhere.
Distance to ED FDDistanceToED	3.35 3.36 3.37	Miles driven transporting the patient to the ED.	

Emergency department data extracts

Monthly summary: The state requests the following summary data each month of the study:

Field	For Q#s	Description/contents	Notes/questions
Time ED closed or on diversion EDClosedOrDiversion	4.1	The amount of time, in minutes, the ED was closed to general traffic or on diversion in the month.	
Average time to disposition EDAverageTimeToDispositionAll	4.12	Average length of time, in minutes, from arrival at ED to disposition for all transported patients in the month?	This is for all patients transported to the ED, not just those meeting study criteria.
Charges & payments	5.x	As noted, the charges and insurance payments may be unavailable per-patient. If so, those would be reported as part of the monthly summary rather than computed from the patient detail records.	

Emergency department patient detail data: An Excel or similar delimited text file (e.g. CSV, tab-separated) with one row per patient, containing the following columns:

Field	For Q#s	Description/contents	Notes/questions
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Field	For #s	Description/contents	Notes/questions
Patient Identifier EDPatientIdentifier	3.10 3.11	Unique identifier for this patient, or this ED visit by this patient.	Exact ID is TBD. May be a FIN number, Medical Record Number, EMS sequence number, etc. Either this or another identifier should be used to match this patient record to Fire Department/EMS responder's ePCR.
Transporting Agency EDTransportAgency		FD transporting patient to ED.	
Patient First Name EDPatientFirstName		First name	For matching ED patient to FD records. Unnecessary if a reliable shared patient identifier is available.
Patient Last Name EDPatientLastName		Last name	For matching ED patient to FD records. Unnecessary if a reliable shared patient identifier is available.
Patient Age EDPatientAge	2.6 2.9 3.10 3.11	Patient age, in years	
Patient Gender EDPatientGender	2.12 2.15 2.18 2.21 3.10 3.11	Patient gender: M or F	
Hispanic Ethnicity EDEthnicityHispanic	2.24 2.27 2.28 2.29	Is the patient of Hispanic ethnicity? 1 = Hispanic 2 = Non-Hispanic 3 = Unknown	
Patient Ethnicity EDPatientEthnicity	2.36 2.39 2.40 2.41 2.42 2.43 2.44	What is the patient's race/ethnicity? 1 = White 2 = Black 3 = Native American / Eskimo / Aleut 4 = Asian/Pacific Islander 5 = Other 6 = Unknown	
Primary Language Spoken EDPrimaryLanguage	2.57	What language does the patient primarily speak? See appendix for list of languages and codes.	

Field	For Q#s	Description/contents	Notes/questions
Insurance Type EDInsuranceType	2.59 2.60 2.61 2.62 2.63	What type of insurance coverage does the patient have? PR = Private MC = Medicare MA = Medicaid SP = Self-pay	
ED Arrival date/time EDArrivalDateTime	4.13	Date/time the patient arrived at the ED.	
ED Disposition date/Time EDDispositionDateTime	4.13	Date/time of disposition from the ED.	Will necessarily be an estimate for patients leaving without being seen.
ED Disposition EDDisposition	4.13 4.14 4.17 4.18 4.19 4.20 4.21 4.22	Disposition of the patient from the ED: AD = Admitted TR = Transferred to another hospital DI = Discharged EX = Expired FA = Failed to complete care (AMA or left without being seen)	

Additionally, the state requests the following financial information with regard to the specific eligible patient visits in each month. In the event this is not feasible, these items might instead be reported as estimates based on standardized patients.

ED Charges for Care EDEmergencyCharges	5.5	Dollar amount of charges for patient's care in the ED <i>if patient was not admitted.</i>	
Inpatient Charges for Care EDIpatientCharges	5.8 5.9	Dollar amount of charges for patient's inpatient care.	
ED Claims Paid EDEmergencyInsPaid	5.12 5.13	Dollar amount of claims paid for patient's treatment in the ED <i>if patient was not admitted.</i>	
Inpatient Claims Paid EDIpatientInsPaid	5.16 5.17	Dollar amount of claims paid for patient's inpatient treatment.	

Appendix: Languages Spoken

- | | |
|------------------------------|------------------|
| English – ENG | Telugu – TGL |
| Amharic – AMH | Thai – THA |
| Arabic – ARA | Tonga – TON |
| Armenian – AMR | Ukrainian – UKR |
| Cantonese; Yue Chinese – YUE | Urdu – URD |
| Chinese – CHI | Vietnamese – VIE |
| Croatian – HRV | Yiddish – YID |
| Farsi – PES | Yoruba – YOR |
| French – FRE | Unknown – 999 |
| French Creole – CPF | Other – OTH |
| German – GER | |
| Greek – GRE | |
| Gujarati – GUJ | |
| Hebrew – HEB | |
| Hindi – HIN | |
| Hmong – HMN | |
| Hungarian – HUN | |
| Ilocano; Iloko – ILO | |
| Indonesian – IND | |
| Italian – ITA | |
| Japanese – JPN | |
| Korean – KOR | |
| Lao – LAO | |
| Mandarin – CMN | |
| Mexteca – MEX | |
| Mien; Iu Mien – IUM | |
| Mon-Khmer – MKH | |
| Navajo – NAV | |
| Panjabi; Punjabi – PAN | |
| Persian – PER | |
| Polish – POL | |
| Portuguese – POR | |
| Russian – RUS | |
| Sign Language – SGN | |
| Samoan – SMO | |
| Serbian – SRP | |
| Spanish – SPA | |
| Swahili – SWA | |
| Tagalog – TGL | |

**Community Paramedic:
Alternate Transport
Baseline data collection sample files**

Notes:

Two data files are anticipated monthly from each partner emergency department and fire department. For simplicity they are shown as four tabs in this document.

FDSummary: Monthly summary statistics from fire department; one row each month.

FDPatientDetail: One row per eligible patient transport in the month.

EDSummary: Monthly summary statistics from emergency department; one row each month.

EDPatientDetail: One row per eligible patient visit in the month.

"Eligible patient" for the emergency department means a patient listed in the fire department's data file.

Community Paramedic OSHPD Pilot Study

Transporting Orange County 911 Non- Emergency Patients to Alternative Destinations Through Public-Private Partnerships

Authored by: Catherine Ord

Revised and Resubmitted May 12, 2014

Abstract

Transporting all 911 patients to emergency departments contributes to the overcrowding problem of emergency departments. Therefore, the Orange County Fire Chief's Association submits on behalf of all Orange County EMS system partners a pilot study that utilizes community paramedics to triage and transport patients to alternative destinations. Orange County 911 system paramedics will undergo community paramedic training to perform an advanced level assessment, which guides the community paramedic to determine the patient's acuity status and potential for transportation to an alternative location. A patient of low acuity status that meets pre-determined criteria would be transported to an alternative destination such as urgent care clinics or mental health clinics.

In order for a patient to qualify for transportation to an alternative location, two methods of patient triage are utilized. The first method of triage is through the Emergency Dispatch Center (EDC). The EDC receives the 911 call and determines the acuity level of the call through either Medical Priority Dispatch or Criteria Based Dispatch and responds the appropriate resource. The responding community paramedic is the second level of screening patients to determine if the patient fits the established criteria for transportation to an alternative destination.

The goals and objectives of this pilot study test the feasibility to relieve overcrowding of emergency departments and improving patient care and efficiency by transporting patients to appropriate destinations. Adapting to the changing needs of the community is the primary goal of this project, which is right for the patient and the Orange County EMS system partners.

LETTER OF INTENT PROPOSAL

A. TITLE OF PROPOSED PROJECT CONCEPT

Orange County Alternate Destinations Pilot Project (OCADPP)

B. IDENTIFY THE CATEGORY(S) THAT BEST DESCRIBE THE PROJECT YOU PROPOSE TO PILOT

Transport patients with specified conditions not needing emergency care to alternate, non-emergency department locations.

C. BRIEF DESCRIPTION OF PROPOSED CONCEPT, PROJECT MANAGEMENT, AND PARTNERS (INCLUDE GEOPGRAPHIC AREA TO BE SERVED)

1. Description of Project Concept

The Orange County Fire Chiefs Association (OCFCA) is submitting this proposal on behalf of the EMS system partners in Orange County. OCFCA proposes a regional approach to the Community Paramedic (CP) pilot project, which will involve the cities of Fountain Valley, Huntington Beach, and Newport Beach. The project concept focuses on the disposition and transport decision of 9-1-1 patients with specified low acuity conditions by paramedics working in an expanded role of Alternate Destination Paramedic (AD Paramedic) to urgent care clinics (UCCs) rather than hospital emergency departments (EDs). The field management of eligible study patients will be based on the pilot project protocols, which outline the inclusion and exclusion criteria for transport to UCCs. All participating UCCs must be approved by the local EMS agency, Orange County EMS Agency (OCEMS), and must adhere to the UCC guidelines established for the pilot study. Concurrent to this project, OCFCA and OCEMS has asked the UGI Center for Disaster Medical Sciences (CDMS) to conduct an independent evaluation of this pilot project.

2. Project Partners and Stakeholders

Partnerships are essential to the success of this project and must be established with key healthcare system stakeholders, both private and public. It is recognized that system coordination and collaboration will be required across the full spectrum of prehospital care.

Figure 2 lists the partners and stakeholders that have made a commitment to participate in the project. Letters of support are attached (**Appendix A**), with the exception of the Orange Coast Chapter of Emergency Nurses Association (OCENA). Although OCENA has not provided a letter of support at this time, an OCENA representative actively participates on the Steering Committee.

Other key stakeholders not appearing on the list, such as the Hospital Association of Southern California (HASC), labor associations, and the Paramedic educational institution in the area were involved in discussions during the early planning phase of the pilot project. While these groups are not actively participating in the pilot project, they

Orange County EMS System Partners

have been invited to attend Steering Committee meetings and will otherwise be given project updates during the regularly scheduled county meetings where their organizations are represented.

FIGURE 2 -PROJECT PARTNERS AND STAKEHOLDERS

ORGANIZATION	PARTICIPATING MEMBERS	SYSTEM ROLE
Local EMS Agency: Health Care Agency - Orange County EMS Agency (OCEMS)	<ul style="list-style-type: none"> ▪ Medical Director, or designee • EMS Administrator, or designee • EMS Data System (OC-MEDS) Program Manager 	<ul style="list-style-type: none"> • Local EMS agency • Provides medical and quality assurance oversight • Approves field protocols and policies/procedures
University of California, Irvine Center for Disaster Medical Sciences (CDMS)	<ul style="list-style-type: none"> • Director of CDMS • Director of Research • Director of Operational Medicine 	<ul style="list-style-type: none"> • Research Center • Primary Investigator & Co-Investigators •
Orange County Fire Chiefs Association (OCFCA)	<ul style="list-style-type: none"> • Fountain Valley Fire Department • Huntington Beach Fire Department' • Newport Beach Fire Department' 	<ul style="list-style-type: none"> • Provides 911 ALS & BLS responses services for their jurisdiction and neighboring cities with automatic aid agreements • Departments with an (') also provide emergency ambulance transoort services
Ambulance Association of Orange County	<ul style="list-style-type: none"> • Care Ambulance Service 	<ul style="list-style-type: none"> • Contracted by Fountain Valley to provide emergency ambulance transport services
Covenant Hsaith Network	<ul style="list-style-type: none"> • Hoag Hospital Newport Emergency Department • Hoag Hospital Irvine Emergency Department • 	<ul style="list-style-type: none"> • Hospital Network • Owns hospitals with EDs designated by OCEMS as Emergency Receiving Centers • Owns or affiliates with UCCs
Kaiser Permanente	<ul style="list-style-type: none"> • Kaiser Permanente Irvine Emergency Department • Kaiser Permanente Urgent Care 	<ul style="list-style-type: none"> • Hospital Network • Owns hospitals with EDs designated by OCEMS as Emergency Receiving Centers • Owns UCCs
MemorialCare Health System	<ul style="list-style-type: none"> • Orange Coast Memorial Emergency Department • • Prompt Care Urgent Care 	<ul style="list-style-type: none"> • Hospital Network • Owns hospitals with EDs designated by OCEMS as Emergency Receiving Centers • Owns UCCs
Coastal Family Medicine	<ul style="list-style-type: none"> • Hoag Urgent Care Newport Beach • Family Care Center Fountain Valley 	<ul style="list-style-type: none"> • Independently owned UCCs • Affiliated with Hoag and MemorialCare Hospital <u>Networks</u>
Emergency Nurses Association	<ul style="list-style-type: none"> • Orange Coast Chapter 	<ul style="list-style-type: none"> • Advocacv Group

3. Project Management

Project management is vital to meeting project goals and objectives. A Project Workgroup, Project Manager, and Steering Committee manage the efforts of this project through its lifecycle.

The Project Workgroup is responsible for planning, executing the project, and producing deliverables outlined by the project plan. Workgroup members shall consist of a core group of representatives from the participating system partners/stakeholders.

The Project Manager will be responsible for ensuring that the Project Workgroup completes the project by the time frame imposed. The Project Manager will develop the project plan in collaboration with the Project Workgroup and under the direction of the Steering Committee.

The Steering Committee is responsible for project oversight and control, and should consist of management representatives from the participating system partners/stakeholders. They shall approve project deliverables, scope changes, and policy decisions; and provide direction, guidance and conflict resolution as needed.

4. Geographic Area to be Served

The study population will be derived from the 9-1-1 EMS catchment areas of three cities in Orange County: Fountain Valley, Huntington Beach and Newport Beach. It will include individuals that call 9-1-1 because they are requesting emergency medical aid. These cities were selected because they are in close proximity to each other, have the capability of transporting to the same partner hospital EDs and UCCs without significant impact to their cities' standards of coverage, contract with the same 9-1-1 communication center, Metro Cities Fire Authority (MetroNet), and have the infrastructure to support the project objectives. All three fire departments provide 9-1-1 Advanced Life Support (ALS) and Basic Life Support (BLS) response services. In addition, Huntington Beach and Newport Beach Fire Departments provide emergency ambulance transportation services, whereas Fountain Valley Fire Department contracts the service to a private ambulance company, Care Ambulance Service. The Orange County Emergency Medical Services agency (OCEMS) is the local emergency medical services agency for the county.

D. PURPOSE AND OBJECTIVES

The purpose of this pilot project is to determine the safety and effectiveness of enabling approved AD Paramedics to make disposition and transport decisions of 9-1-1 patients with specified low acuity conditions to UCCs rather than hospital EDs.

The objectives of the OCADPP include:

1. Ensure approved AD Paramedics achieve competency in the role and responsibilities of an AD Paramedic prior to the project implementation date and maintain competency during the course of the evaluation period.
2. Ensure that patients considered for study enrollment receive the following:
 - Appropriate field management, including triage and transport to the most appropriate facility.
 - Opportunity to consent or decline consent for enrollment in the study.
 - Opportunity to accept or decline transport to an UCC.

3. Ensure that all UCCs are capable of meeting the guidelines established for the purposes of the pilot project and are approved by OCEMS.
4. Evaluate patient and healthcare system satisfaction with extended assessment by AD Paramedics and alternate destination transport and treatment.
5. Determine effect on public safety readiness resulting from extended assessment and alternate destination transport.
6. Determine differences in healthcare costs for alternate (UCC) vs. traditional (ED) transport for 9-1-1 patients with specified low acuity conditions.

E. ESTIMATED PROJECT LENGTH

The anticipated implementation date for the OCADPP is January 1, 2015. The pilot project will be complete when either of the following two criteria is met:

- 1) Twenty-four months from the initiation of the pilot project on January 1, 2015, or
- 2) Enrollment of greater than 200 total patients, including greater than 100 patients transported to UCCs.

F. BACKGROUND INFORMATION

Need for Project

Introduction to the Problem

Problem Statement: Existing EMS legislation in California explicitly limits the paramedic scope of practice in regards to the set of skills and activities performed and the locations in which those skills and activities may be performed. These limitations require the paramedic to transport all 911 patients, including those with non-emergency conditions, to the ED of an acute care hospital, which contributes to the issues of ED crowding and decreased access to the appropriate level of care. Patients with behavioral health disorders and no other obvious medical conditions are included in the subset of 911 patients with non-emergency conditions.

There are many factors contributing to the crowding of EDs. According to the Centers for Disease Control and Prevention, hospital ED visits in the United States increased more than 32% from 1999 through 2009. In California, wait times averaged 4 hours and 34 minutes in 2009, which was 27 minutes longer than the national average. Longer ED wait times are associated with urban areas, when compared to nonurban areas, and also in EDs that go on ambulance diversion or board patients waiting for admission to the hospital.^{1,2}

Also adding to the problem of crowding and boarding of patients, is the dependence of patients with behavioral health disorders on hospital EDs with no corresponding resources to manage their health care needs. Currently, 30 of California's 58 counties lack inpatient psychiatric beds. In a survey conducted, 123 ED directors responded from 42 of the 58 California counties resulting in the following report: average time for a psychiatric evaluation to be completed in the ED, from time of referral to completed evaluation, was just under 6 hours; and average time for appropriate placement, from time the decision was made to admit to placement into an inpatient psychiatric bed or transfer to the appropriate level of care, was 10 hours. The lack of inpatient psychiatric beds was the most common reason reported for prolonged ED stays.³

Over the past several years, studies have demonstrated that crowding in the ED compromises the quality of patient care; leads to patient dissatisfaction due to the long waits, often resulting in patients walking out before being evaluated; and decreases the community trust in the ED's capability of managing emergency and non-emergency patients in a safe and timely manner.⁴ The latter issue extends beyond the public's perspective to include those of EMS provider agencies. For more than a decade, ED crowding has significantly impacted the availability of EMS first responders to provide timely response in their operational areas.^{5,6} Prolonged "wall times", the time spent waiting to off-load the patient and transfer care to ED staff, result in the shifting of liability and costs of caring for 911 patients in hospital EDs to EMS provider agencies.

In 2008, a report on California ED utilization published the following findings: 1) higher rates of ED visits resulted in hospital admissions when compared to national rates; 2) ED visits were highest for Medi-Cal and Medicare patients, 47 per 100 population and 41 per 100 population respectively, followed by uninsured patients at 31 per 100 population and insured patients at 17 per 100 population; 3) more Medi-Cal patients, particularly children, appear to visit EDs for treatment of non-urgent or avoidable conditions than do the uninsured or privately insured patients; 4) only 3 in 10 Medicare patients (over age 65) were considered to have potentially avoidable visits; and 5) in ages 18-64, the highest percentage of ED visits were for non-urgent or avoidable conditions, which included 48% of Medi-Cal patients, 46% of uninsured, and 42% of insured.⁷

In light of the problem statement and the background information provided, the following conclusions can be drawn:

- The impact of ED crowding on the quality of care, patient satisfaction, and the availability of EMS resources to respond to 911 calls creates a gap in the healthcare needs of the community.
- Improving the flow of patients in the EDs by re-directing the 911, non-urgent patients to UCCs or MHCs should help to decompress the EDs allowing them to focus on the more critical patients requiring hospital admission.
- Paramedics, an existing healthcare resource, can be trained in the expanded role of a Community Paramedic to bridge the gap between the demand for services and the workforce availability.
- The transport of 911 patients to urgent care clinics by Community Paramedics would require changes in licensing laws or the undertaking of pilot projects pursuant to the Office of Statewide Planning and Development's Health Workforce Pilot Projects Program.
- A high percentage of 911 patients likely to meet the criteria for transport to UCCs or MHCs will have Medi-Cal, Medicare, or be uninsured. The existing EMS payment structure for patients with health care coverage revolves around transports to hospital EDs, making reimbursement during this project nearly impossible through the usual channels.

Types and Number of Patients to be Seen

Historical data collected from the three study cities over a six-month period (October 2014 – March 2014) estimated a total of 829 adult (18 years or older) patients meeting the four low acuity, primary impression criteria for the pilot project. Of those total patients, various filters were applied to refine the likely number of study candidates to be transported to UCCs rather hospital EDs to 118, or approximately 14% of the total. Based on this estimation, meeting the goals for number of patients enrolled in the study and transported to the UCC should be attainable within the pilot period.

The four categories of lower acuity, primary impressions used as inclusion criteria include:

isolated closed extremity injury, laceration with controlled bleeding, soft tissue injury/infection, and isolated fever or cough.

Total Number of Community Paramedics to be Trained

Each of the fire departments will train eligible paramedics in the expanded role of AD Paramedic. More specifically, a total of up to twenty-seven (27) paramedics will complete the site specific curriculum for the Alternate Destination Pilot: up to six (6) for Fountain Valley, twelve (12) for Huntington Beach, and nine (9) from Newport Beach.

Employment Opportunities

If the State EMS Authority's (EMSA's) Community Paramedicine (CP) Pilot Project is successful in affecting the change in legislation that allows for this expanded role of the current licensed paramedic, there will be a higher step for paramedics to aspire to achieve. In the event that the laws do not change to support this new provider level, all trained AD Paramedics participating in this pilot project will remain employed as paramedics by their respective fire departments.

All paramedics selected to participate in the Alternate Destinations Pilot training will be required to sign trainee agreements which specifies their understanding that there is no assurance of employment or utilization of Community Paramedics/Alternate Destination Paramedics beyond the scope of the pilot.

Other Programs in California Serving as Models for this Project

There are currently no other programs operating in Orange County, or California that serve as a model for this project other than those involved in the EMSA CP Pilot Project.

G. PROGRAM MANAGEMENT

Operational Methodology

The evaluation of the OCADPP will be in three phases:

- Phase I - Focuses on the collection of baseline data and reporting: Starts April 2014
- Phase II - Focuses on the training of AD Paramedics: August to November 2014
- Phase III - Focuses on AD Paramedic intervention period: Starts January 2015

Phase I - Baseline Data Collection

The three city fire departments participating in the pilot project started collecting baseline data in April 2014. Prior to the start date, fire department EMTs and Paramedics were provided on-line training on the procedure for collecting the baseline data. The electronic prehospital care report (ePCR) software was configured such that the entry of any patient with one of the four specified primary impressions triggered validation rules for the customized AD Pilot section on the OC-MEDS ePCR run form. In addition to the standard documentation required on ePCRs, the EMTs and Paramedics were instructed to complete the AD Pilot section of the ePCR run form that contains the pilot-specific questions.

OC-MEDS refers to the Orange County Medical Emergency Data system, a web-based, electronic data management system capable of tracking near-real time prehospital care events from the time 9-1-1 is called through to the discharge of the patient from the ERC. This system has interoperable capabilities that allow authorized access to ePCR data by participating EMS provider agencies, ERCs, base hospitals, and OCEMS once the field user posts it to the cloud-based database. OC-MEDS is owned, operated, and maintained by OCEMS. The data entered by participating EMS provider agencies is proprietary to that agency.

The workflow during Phase I is outlined below:

PROTOCOL WORKFLOW DURING BASELINE PHASE OF PILOT

- A. Dispatch receives 9-1-1 call from calling party and dispatches responding unit per established jurisdictional protocols.
- B. Responding unit arrives on scene, contacts patient, and determines the chief complaint. If patient complaint is one of the 4 specified primary impressions, the responding unit will complete the OC-MEDS ePCR including the patient-specific and pilot-specific data in the AD Pilot section on the ePCR run form.
- C. Proceed with field management and transport according to existing policies and standing orders.

Phase II - AD Paramedic Training

During Phase II, AD Paramedics will be trained using the site-specific local curriculum for the OCADPP. The standardized curriculum, *Alternate Destination Support Paramedic Curriculum Framework, Version 1.1 121172013*,⁵ was augmented to include objectives that meet the local needs of the pilot project. The site-specific local curriculum was developed by a core panel of Local Steering Committee members and then approved by the larger committee. Methods of instruction include assigned pre-requisite reading and pre-test, lecture, scenario-based simulation, and role-playing. The curriculum will be delivered in approximately 10 hours over 2 days. Performance on written examinations and

instructors' observation of performance on skills practicum will be used to evaluate competency of AD Paramedic trainees and the quality of training. Instruction will be conducted at local training centers in the cities of Huntington Beach and Newport Beach.

Appendix D - Orange County Alternate Destination Support Paramedic Curriculum

Phase III-AD Paramedic Intervention

Phase III of the pilot project will be implemented in January 2015. During the AD Paramedic intervention phase, trained AD Paramedics will begin making disposition and transport decision for 9-1-1 patients with specified low acuity conditions. The workflow during Phase III is outlined below:

PROTOCOL WORKFLOW DURING INTERVENTION PHASE OF PILOT

- A. Dispatch receives 9-1-1 call from calling party and dispatches responding units per established jurisdictional protocols.
- B. Responding unit arrives on scene, contacts patient, and determines the chief complaint. If patient complaint is one of the 4 specified primary impressions, the responding unit will complete the OC-MEDS ePCR including the patient-specific and pilot-specific data on the AD Pilot section of the run form.
- C. If AD Paramedic is present on the responding unit, *and* patient complaint is among the specified 4 primary impressions, AD Paramedic assesses patient and determines whether patient is eligible for potential transfer to an alternate destination UCC (ADUC) approved by OCEMS rather than to an Emergency Receiving Center (ERC). If patient is eligible for ADUC transport, the AD Paramedic offers patient enrollment in study of alternate destination transport utilizing a standardized script.
 - a. If patient consents to enrollment and signs electronic consent, contact information is obtained from patient. Patient is offered transport to ADUC rather than an ERC.
 - i. If patient agrees to be transported to ADUC and completes consent forms, the appropriate ADUC is determined based on location and patient preference (if applicable). Operating hours of the ADUC are verified. If confirmed as open for business, the patient is transported to the ADUC.
 - 1) 9-1-1 first responder escorts the patient to ADUC and delivers transfer of care report to designated staff at ADUC.
 - 2) ePCR is completed and posted to the OC-MEDS cloud-based database to be made accessible to the ADUC.
 - ii. If patient declines transport to ADUC, transport to ERC according to existing standing orders.
 - iii. If patient refuses transport by ambulance, have patient sign an electronic patient refusal/against medical advice (AMA) form. Follow patient refusal procedures according to existing OCEMS policy.

The OCADPP Protocol Guidance document (Appendix B) approved by OCEMS provides more details for Phases I and III including the patient inclusion and exclusion criteria for transporting 9-1-1 patients with specified low acuity conditions to an ADUC rather than an ERC, the levels of documentation/data collection expected by all system partners, quality assurance and performance improvement measures to be used when evaluating field performance of AD Paramedics, and the workflow for the management of issues, concerns, and unusual occurrences.

All participating ADUCs must be approved by OCEMS, and must adhere to the UCC guidelines established for the pilot study (Appendix C).

Paramedic Eligibility

Eligibility requirements to be trained as an AD Paramedic include a minimum of 2 years' experience as a paramedic practicing within the Orange County EMS system is required; 4 years' experience and an A.A. degree or higher are desirable. Candidates will be selected through an interview process with final approval by the OCEMS Medical Director. Qualified paramedics must be in good standing. All paramedics selected to participate in the Alternate Destinations Pilot training will be required to sign a trainee agreement.

Local Governance and Medical Control

Dr. Samuel Stratton, OCEMS Medical Director has designated Dr. Shira Schlesinger, University of California-Irvine (UCI) Center for Disaster Medical Sciences (CDMS), as the principal investigator for the OCADPP. Dr. Stratton will hold primary responsibility for local medical control related to the project.

Provisions for Protecting Patient's Safety

The following safety metrics have been proposed as thresholds to trigger temporary or permanent suspension of the pilot program. As these metrics are proposed on IRB applications for UC Irvine and the OC Healthcare Agency, they may be altered by feedback from IRB or by consensus of OCEMS Designees/Local Pilot Evaluators:

- Total QI issues: 15%
- Protocol Deviations: 10%
- Patient satisfaction complaints: 15%
- Inappropriate triage disposition decisions: 8% (per report from UCC)
- Need for secondary transfer to ED: 4%
- Patient safety concerns of any nature: 2%
- Adverse event which results in delayed diagnosis of time critical condition (for example, transporting a "fever" patient who is actually septic to an UCC, resulting in significant delay to initiation of care and poor outcome for patient): <1%

Any excess of these thresholds will result in temporary suspension of the study/program while the issue is addressed, and may result in cancellation of the program.

The following quality metrics will be used to evaluate the field performance of AD Paramedics during the evaluation period:

- a. Number of 9-1-1 ambulance transports during study period
- b. Number of patients meeting presentation/complaint criteria during study period
- c. Number of hours during which AD Paramedics were available for dispatch during the study period
- d. Number of 9-1-1 contacts made by AD Paramedic-staffed response units during AD Paramedic shifts over the study period
- e. Number of 9-1-1 contacts made by AD Paramedic-staffed response units to patients meeting presentation/complaint criteria during study period

A Patient Safety/QA Committee will perform patient safety reviews of 100% of the cases in which an AD Paramedic provides care. This committee is responsible for reviewing the evaluation reports provided by the OCEMS Designee/Local Pilot Evaluators and the QA/QI issues report provided by the AD Paramedic Supervisor. Based on these reports and the pilot objectives, the committee in collaboration with the OCEMS Medical Director, shall analyze the data, identify trends, assess for root causes, and determine the most appropriate plan for improvement or course of action, which may include but is not limited to:

- a. Evaluate and adjust protocols and objectives as appropriate.
- b. Develop individual and/or general education plans.
- c. Recommend suspension and/or termination of pilot project if deemed to be endangering patient/community safety.

The committee shall report their findings to the Local Steering Committee on a regular basis for the duration of the pilot period.

Anticipated Sources of Funding

Sources of funding to offset the costs of the pilot project include in-kind contributions, grants, identified cost savings, or partnerships with other local agencies. At this time, grant funding has been offered by one of the partner hospital networks.

H. EVALUATION AND DATA COLLECTION

OCEMS Designee/Local Pilot Evaluators are responsible for the evaluation of the OCADPP based on the pilot objectives and the data collected. During the baseline and AD Paramedic intervention phases, the OCEMS Designee/ Local Pilot Evaluators will design and schedule monthly reports to be sent to the State Pilot Evaluation team, the Patient Safety/QA Committee and OCEMS Medical Director. Findings will be reported to the Local Steering Committee on a regular basis for the duration of the evaluation period. The reports will include data elements accumulated from the following:

- a. Queried prehospital care data for patients entered with the specified primary impressions from the OC-MEDS cloud database
- b. Queried patient outcome data from OC-MEDS ImageTrend Patient Registry data entered by ADUCs and partner ERCs for the pilot.
- c. Aggregate transport costs, charges, and claims data from the EMS provider billing companies.

- d. Aggregated charges/claims paid data from ADUCs and/or ERCs.
- e. For the Pilot Period, patient satisfaction and outcomes surveys conducted 1 week after study enrollment.

Furthermore, after IRB approval is granted, de-identified records with increased detail will be transferred to UCI for further in-depth evaluation.

OCEMS Designee/Local Pilot Evaluators will deliver a list of incident numbers and service dates belonging to eligible or enrolled patients to designated staff at the ADUCs and partner ERCs on a monthly basis as a request for patient QA follow-up data.

OCEMS Designee/Local Pilot Evaluators will be responsible for obtaining data use agreements with 9-1-1 first responding agencies, ADUCs, partner ERCs, OCEMS, and UCI CDMS for more comprehensive evaluation of the pilot program study data.

All pilot records of patient contacts will be maintained by OCEMS for 2 years.

I. CONTACT INFORMATION

CONTACT PERSON Catherine Ord	NAME OF AGENCY Newport Beach Fire Department
ADDRESS 100 Civic Center Drive Newport Beach, CA 92660	TELEPHONE (949) 644-3384
EMAIL cord@nbfd.net	FAX NUMBER (949) 723-3584

REFERENCES

1. Unknown title. *Orange Coast Daily Pilot* February 7, 1982: Unknown page number. Print.
2. Miller, Ken. "RE: Update on revised CP Pilot Proposal." Message to author. 8 May 2014. Email.
3. Carla Schneider, personal communication, September 16, 2013.
4. Patti Lash, personal communication, September 16, 2013.
5. Meyer, Lou. Lou Meyer to Pilot Site Project Managers, Rancho Cordova, CA, January 9, 2014. In letter, *Alternate Destination Support Paramedic Curriculum Framework* (Version 1.1 1211712013).



Center for Disaster Medical Sciences

EXECUTIVE LEADERSHIP

Kristi L. Koenig, MD FACEP FIFEM
 Director
 Director, Public Health Preparedness
 Professor of Emergency Medicine
 Director, International EMS and
 Disaster Medical Sciences Fellowship

Carl H. Schultz, MD FACEP
 Director of Research
 Director, EMS and Disaster Medical Sciences Fellowship
 Professor of Emergency Medicine
 Medical Director and Chief of Clinical Services
 Director, Disaster Medical Services

Darlene Bradley, PhD RN CNS FAEN
 Director of Operations
 Director of Emergency and Trauma Services

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 Associate Director, EMS Base Hospital

Christopher Eric McCoy, MD MPH
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 Medical Director, EMS Base Hospital

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 Assistant Medical Director of Orange County EMS

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 Medical Director Health Disaster Management-
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 Adjunct Professor, Community Health Sciences, UCLA
 Clinical Professor of Medicine at Harbor-UCLA

SENIOR POLICY ADVISORS

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Frederick M Burkle, Jr, MD, MPH, DTM, FAAP, FACEP
 Senior Fellow, Harvard Humanitarian Initiative,
 Harvard School of Public Health
 Senior International Public Policy Scholar,
 Woodrow Wilson International Center for Scholars

April 22, 2014

Mr. Lou Meyer
 Project Manager
 Community Paramedicine
 California Emergency Medical Services Authority
 10901 Gold Center Drive Suite 400
 Rancho Cordova, California 95670

Dear Mr. Meyer:

The UCI Center for Disaster Medical Sciences (CDMS) herein expresses their relationship with the Orange County Fire Chiefs Association (OCFCA), the Orange County EMS Agency (OCEMS) and the cities and hospital partners of Newport Beach, Huntington Beach, and Fountain Valley in the design and evaluation of the Orange County Alternative Destinations Pilot Project.

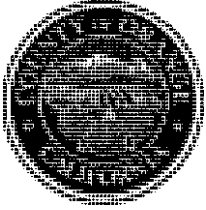
Dr. Shira A. Schlesinger, MD, MPH, will be the CDMS official liaison and representative to the project. As we have agreed with Dr. Stratton, OCEMS Medical Director, and the project directors, Dr. Schlesinger is serving as part of the project's Core Committee in the role of study Principal Investigator. In this role, Dr. Schlesinger has accepted lead responsibility for study design with the context of the project, advisement of the project committee on the investigative elements of the project, and data analysis for both the baseline and implementation periods of the study. Drs. Carl Schultz, Kristi L. Koenig, and Kenneth Miller are additional members of the CDMS who are also Co-Investigators in the study.

The UCI CDMS feel that our participation in this study in the roles of advising on data collection, and performing analysis of this data, will be integral to providing an independent evaluation of the safety and feasibility of training experienced Paramedics in making Alternative Destination disposition decisions and will further the heretofore meager body of research regarding Community Paramedicine and Mobile Integrated Health in California and the United States.

Sincerely,

Kristi L. Koenig

Kristi L. Koenig, MD, FACEP, FIFEM
 Director, Center for Disaster Medical Sciences
 Professor of Emergency Medicine
 Director of Public Health Preparedness
 Director, International Disaster Medical Sciences Fellowship
 University of California, Irvine



**COUNTY OF ORANGE
HEALTH CARE AGENCY**

**HEALTH DISASTER MANAGEMENT
EMERGENCY MEDICAL SERVICES**

SAM J. STRATTON, MD, MPH
MEDICAL DIRECTOR
405 W FIFTH STREET, ST 301A
SANTA ANA, CALIFORNIA 92701

TELEPHONE: 714- 834-2824
FAX: 714- 834-3125

sstratton@ochca.com

May 2, 2014

Kristi L. Koenig, MD, FACEP, FIFEM
Director, Center for Disaster Medical Sciences
University of California, Irvine
101 The City Drive, Route 128-01
Orange, California

**SUBJECT: DELEGATION OF PRINCIPAL INVESTIGATOR ROLE FOR THE
2014-2015 ORANGE COUNTY FIRE CHIEFS ASSOCIATION
COMMUNITY PARAMEDIC PROJECT**

Dear Dr. Koenig:

This letter is to follow-up to your letter dated April 22, 2014, regarding the agreement of the UCI Center for Disaster Medical Sciences and the Orange County Fire Chiefs Association for Dr. Shira Schlesinger to serve as Principal Investigator (PI) for the Orange County Community Paramedic Pilot Project.

Be advised that it is agreed that the role of PI is delegated to Dr. Schlesinger with the following responsibilities for the Community Paramedic Pilot Project:

1. Coordination of study methodology with the local investigative group and that of the California EMS Authority.
2. Validity of study data submitted to the California EMS Authority and local study data analysis and interpretation.
3. Preparation of study manuscripts and scientific reports.
4. Advisement of the local and applicable state committee(s) on the scientific investigative aspects of the project.
5. Institutional Review Board approval for any manuscripts based on local project research subjects that are submitted for consideration of publication.

Orange County Community Paramedic Project PI
May 2, 2014

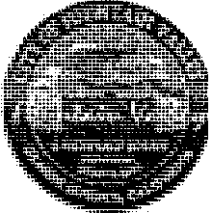
Page 2

I appreciate having the UC Center for Disaster Medical Sciences participate in this project in this meaningful way. For any questions or comments, I am available at 7.14.834.2824 or sstratton@ochca.com.

Sam J. Stratton, MD, MPH
Orange County EMS Medical Director

CC: OCEMS Program Administrator
California EMS Authority Community Paramedicine Project Manager

SJS/#2027
!



CITY OF FOUNTAIN VALLEY FIRE DEPARTMENT

(714) 593 4436 **Office**
(714) 5934508 **Fax**;

10200 Slater Avenue, Fountain Valley, **CA** 92708

October 21, 2013

Mr. Lou Meyer, Project Manager
Community Paramedicine - Mobile Integrated Health
Emergency Medical Services Authority
Lou.meyer@emsg.ca.gov

Dear Mr. Meyer:

As an integral member of the Orange County EMS System and the Orange County Fire Chiefs' Association (OCFCA), the Fountain Valley Fire Department (FVFD) supports the community Paramedic concept and proposal submitted by the OCFCA. Fountain Valley Fire Department is very interested in the potential opportunity to participate in this important pilot program.

If FVFD is included in the pilot program, our intent is that six of our paramedics participate in the Community Paramedic OSHPD training once our Letter of Intent is approved.

I understand that the scope of the pilot study is refined to using specific urgent care centers for Mn-emergent patients and a limit of 100 patients (+-). This limited number of patients will provide excellent information for statistical analysis and limit the fiscal impact to our city.

I appreciate your consideration and support of the OCEMS Partners Community Paramedicine Letter of Intent.

Sincerely,

-"

Interim Fire Chief

APPENDIX A



CITY OF HUNTINGTON BEACH

2000 Main Street
California 92648

Phone: (714) 536-5411
www.huntingtonbeachca.gov

FIRJ; DEPARTMENT

Patrick McIntosh
Fire Chief

October 18, 2013

Mr. Lou Meyer, Project Manager
Community Paramedicine - Mobile Integrated Health
Emergency Medical Services Authority
Jou.meyer@emsa.ca.gov

Dear Mr. Meyer:

As an integral member of the Orange County EMS System and the Orange County Fire Chiefs' Association (OCFCA), the Huntington Beach Fire Department (HBFD) supports the Community Paramedic concept and proposal submitted by the OCFCA. We are also very interested in the potential opportunity to participate in this important pilot program.

If HBFD is included in the pilot program, we look forward to twelve of our paramedics being trained by OSHPD once our Letter of Intent is approved.

My understanding is that the scope of the project is limited to using sub-acute medical receiving centers for non-emergent patients and a limit of 100 patients (+/-) .50. This limited number of patients will provide excellent information for statistical analysis and also limit the fiscal impact on our city.

I appreciate your consideration and support of the OC's EMS Partners' Community Paramedicine Letter of Intent.

Sincerely,

Patrick McIntosh
Fire Chief

"Smoke Detectors Save Lives"

APPENDIX A



NEWPORT BEACH FIRE DEPARTMENT

P.O. Box 1768, 100 CIVIC CENTER DRIVE \ NEWPORT BEACH, CA 92658-9915

PHONE: (949) 644.3104 WE: www.nbfd.net

SCOTT L. POSTER
Fire Chief

October 18, 2013

Mr. Lou Meyer
Project Manager
Community Paramedicine- Mobile Integrated Health
Emergency Medical Services Authority
lou.meyer@emsa.ca.gov

Dear Mr. Meyer:

The Newport Beach Fire Department is committed to exploring alternatives to traditional fire service but; instead emergency medical service. As an integral member of the OC EMS Partners and the Orange County Fire Chiefs Association (OCFCA), we not only support the Community Paramedic concept and proposal submitted by the OCFCA, but we are committed to participate in this important pilot program.

I look forward to up to nine of our paramedics to be trained by OSHPD once our Letter of Intent is approved.

The Department understands the scope of the project is limited to using sub-acute medical receiving centers for non-emergent patients and a limit of 100 patients (+/-) 50. This limited number of patients **will** provide excellent information for statistical analysis and also limit the fiscal impact on the Department.

I appreciate your consideration and support of the OC EMS Partners' Community Paramedicine Letter of Intent.

Sincerely,


Scott L. Poster
Fire Chief

SLP:cg

CARE.

AMBULANCE SERVICE. INC.

October 21, 2013

Tony Coppolino, Battalion Chief
Fountain Valley Fire Department
10200 Slater Ave.
Fountain Valley, CA 92708

Dear Chief Coppolino;

Care Ambulance Service is committed to enhancing the delivery of Emergency Medical Services (EMS) and to the concept of Community Paramedicine.

Hospital Emergency Department overcrowding is a significant issue in Orange County due to the reductions in hospitals that provide emergency department services and an increasing population using ED services.

The United States Census Bureau estimates the population of Orange County to be 3,055,745, making it the third most populous county in California and larger than 20 individual U.S. states. Today there are 24 acute care hospitals in Orange County licensed as Paramedic Receiving Centers.

Contrast that with the situation in 1980, when the population of Orange County was estimated at just 1,931,570, with 33 acute care hospitals providing ED services. Since the creation of the California Mobile Health Care Services act, 33 years ago, we have seen Orange County's population increase by over 1,124,175 residents.

Clearly Orange County's ED use is increasing while our capacity to handle that patient load is decreasing. When you factor the expected additional ED visits from our aging nation's baby boomers, it is evident that traditional ED methods are not sustainable for the future,

The ability to safely triage and transport EMS patients to alternative destinations is an important issue to be studied. With the permission of the City of Fountain Valley, Care Ambulance welcomes the opportunity to participate in your pilot study.

Bill Weston - Director of Operations

x _ _ _ -

"\C.....



"Family Owned and Operated since 1969"

1517 W. Bradish Court, Orange, California 92668 Phone (714) 268-3669 Fax (714) 268-3669 www.careambulances.net



October 16, 2013

Orange County Fire Chiefs
cto Chief Scott Poster
PO Box 1768
Newport Beach, CA. 92658-8915

Re: Community Paramedics Proposal

Dear Chief Poster:

This is a letter of support of the Orange County Fire Chiefs Association pilot study proposal to start a Community Paramedic Program in Orange County, California.

Covenant Health Network and Hoag Health oversee six emergency departments and a trauma center in Orange County. Since emergency care is the most expensive care in the health care system, a study that would use community paramedics to triage and transport patients to alternative destinations based upon acuity would be helpful to not only our emergency departments but to Orange County as a whole.

We believe that the Orange County Fire Chiefs Proposal for a Community Paramedic Program can possibly relieve overcrowding of emergency departments as well as improve patient care while increasing efficiency by transporting patients to appropriate destinations. We believe that this collaboration will inspire further integration amongst health care providers and work to secure the much-needed patient continuity of care.

Thank you for your efforts to improve Orange County and its ever changing community needs.

Sincerely,

Richard A.

Richard A. Fable, MD
President & CEO, Covenant Health Network
EVP, Southern California Region, St. Joseph Health

Richard A. Fable, MD, MPH
PRESIDENT & CEO, COVENANT HEALTH NETWORK
EVP, SOUTHERN CALIFORNIA REGION, ST. JOSEPH HEALTH

3345 Michelson Drive, Suite 100 • Irvine, CA 92612
T: (949) 381-4019 • F: (949) 381-4001
Richard.A.Fable@stjoe.org

www.stjoe.org

October 14, 2013

Orange County Fire Chiefs
c/o Chief Scott Poster
P.O. Box 1768
Newport Beach, CA. 92658-8915

Dear Chief Poster:

As a follow-up to our discussion a few weeks ago, I am excited about the potential changes in how we globally care for individuals in the community that the Affordable Care Act is driving. Our Kaiser Permanente team looks forward to a dialogue with you and our healthcare colleagues in the community to explore options for a different model of partnering and collaboration to relieve overcrowding of emergency departments while improving patient care and transportation efficiency.

Sincerely,

Nancy E Gin, M.D.
Area Medical Director

Am. Inland Medical Center
3450 East Lincoln Parkway
Anaheim, California 92806
(714) 644-4103

Fullina Medical Center
6640 Alton Parkway
Irvine, California 92618
(949) 932-5551

mdng/126-13:vf

October 15, 2013

Chief Scott Poster
Orange County Fire Chiefs
P.O. Box 1768
Newport Beach, CA 92658-8916

Dear Chief Poster:

Orange Coast Memorial Medical Center supports The Pilot Study: Transporting Orange County 911 Non-Emergency Patients to Alternative Destinations through Public-Private Partnerships.

This project utilizes community paramedics to triage and transport patients to alternative destinations.

Sincerely,

J11 - "Jcft -

Lynn Aeq ater, RN, MSN, NEA-BC
Exec!!itive Director
Cardiovascular/Pulmonary/ED Services

,1¹ MEMORIAL CARE'
"1111" MEDICAL FOUNDATION

January 31, 2014

Chief Scott Poster
Orange County Fire Chiefs
P.O. Box 1768
Newport Beach, CA 92658-8915

Dear Chief Poster:

MemorialCare Medical Foundation supports The Pilot Study: Transporting Orange County 911 Non-Emergency Patients to Alternative Destinations through Public - Private Partnerships.

This project utilizes community paramedics to triage and transport patients to alternative destinations.

Sincerely,



Mark Schafer, M.D.
Chief Executive Officer

APPENDIX A

November 26, 2013

Catherine Ord, EMS Section Chief

Newport Beach Fire Department

PO Box 1758

Newport Beach, California, 92660

Dear Catherine,

Coastal Family Medicine (DBA Family Care Centers) supports the Office of State Wide Planning and Development's Pilot Study; Transporting Orange County 911 Non-Emergency Patients to Alternative Destinations Through Public-Private Partnerships.

Our organization is committed to relieving overcrowding in the emergency department and improving patient care by treating patients with a lower acuity status.

Our Urgent Care Centers locations:

1190 Baker Street Costa Mesa, 92626

500 Superior Avenue, Newport Beach ,92663

18255 Brookhurst Avenue, Fountain Valley, 92708

4950 Barranca Parkway, Irvine, 92604

Sincerely,

Joan Baughey, MSN, FNP -C

Clinical Administrator

Urgent Care

Coastal Family Medicine

ORANGE COUNTY ALTERNATE DESTINATION PILOT PROJECT - PROTOCOL GUIDANCE

I. AUTHORITY:

California Code of Regulations, Title 22, Division 9, Chapter 4; Division 7, Chapter 6; California Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52, Chapter 3, Section 1797.114, and Chapter 4, Section 1797.218; Division 107, Part 3, Chapter 3, Article 1 Sections 128125-128195 and 92001-92702

11. PURPOSE:

To provide guidance on the Orange County Alternate Destination Pilot Project (OCADPP) approved under the California State EMS Authority (EMSA) Community Paramedicine (CP) Pilot Project and to outline the criteria for the transport of 9-1-1 patients to an approved Alternate Destination Urgent Care Center (ADUC).

The objectives of the OCADPP include:

1. Ensure approved Alternate Destination Paramedic Trainees (ADPTs) achieve competency in the role and responsibilities of an ADPT prior to the project implementation date and maintain competency during the course of the evaluation period.
2. Ensure that patients considered for study enrollment receive the following:
 - Appropriate field management, including triage and transport to the most appropriate facility.
 - Opportunity to consent or decline consent for enrollment in the study.
 - Opportunity to accept or decline transport to an ADUC.
3. Ensure that all ADUCs are capable of meeting the guidelines established for the purposes of the pilot project and are approved by Orange County Emergency Medical Services (OCEMS).
4. Evaluate patient and healthcare system satisfaction with extended assessment by ADPTs and alternate destination transport and treatment.
5. Determine effect on public safety readiness resulting from extended assessment and alternate destination transport.
6. Determine differences in healthcare costs for alternate (ADUC) vs. traditional (ERC) transport for 9-1-1 patients with specified low acuity conditions.

111. DEFINITIONS:

Community Paramedicine is an evolving concept where paramedic resources are trained to function in an expanded role to address local healthcare needs; also known as "mobile integrated healthcare". In California, there is no existing legislation that authorizes the practice of this provider level outside of a pilot project approved by the Office of Statewide Healthcare Planning and Development (OSHPD) under the Health Workforce Pilot Projects Program. The EMSA CP Pilot Project has been accepted and approved by OSHPD.

ORANGE COUNTY ALTERNATE DESTINATION PILOT PROJECT - PROTOCOL GUIDANCE

Transported patient means a patient transported by BLS or ALS ambulance.

Alternate Destinations Paramedic Trainee (ADPT) means a paramedic "trainee" who has successfully completed EMSA approved training for Orange County Alternate Destination Paramedics. Minimum qualifications of an ADPT shall include: Orange County Paramedic accreditation, 2 years experience of paramedic practice within the Orange County EMS system (4 years experience highly desirable), and employment as a paramedic with Fountain Valley, Huntington Beach, or Newport Beach Fire Department.

Alternate Destinations Urgent Care Center (ADUC) means an Urgent Care Center (UCC) meeting OCEMS guidelines to receive patients under the OCADPP and approved by OCEMS (Attachment A - OCEMS Guidelines for Urgent Care Centers).

Partner Emergency Receiving Centers (ERCs) refers to the ERCs that are participating in the OCADPP, which include Hoag Hospitals in Newport Beach and Irvine, Kaiser Permanente – Irvine, and Orange Coast Memorial.

"Consented" means a patient who has signed an informed consent for enrollment in the OCADPP.

OC-MEDS refers to the Orange County Medical Emergency Data system, a web-based, electronic data management system capable of tracking near-real time prehospital care events from the time 9-1-1 is called through to the discharge of the patient from the ERC. This system has interoperable capabilities that allow authorized access to ePCR data by participating EMS provider agencies, ERCs, base hospitals, and OCEMS once the field user posts it to the cloud. OC-MEDS is owned, operated, and maintained by OCEMS. The data entered by participating EMS provider agencies is proprietary to that agency.

IV. IMPLEMENTATION AND DURATION:

The anticipated implementation date for the ADPT intervention phase of the OCADPP is January 1, 2015. The pilot project will be complete when either of the following two criteria is met:

1. Twenty-four months from the initiation of the pilot project on January 1, 2015, or
2. Enrollment of greater than 200 total patients, including greater than 100 patients transported to UCCs.

V. NEED FOR PROPOSED PROJECT:

Back in April 1982 when the 9-1-1 system first got its start in Orange County, the intent of leaders was to address the emergency needs of victims with life-threatening emergencies. In reality, however, the definition of an emergency from the perspective of a layperson is subjective and may be skewed from a narrow frame of reference. From

ORANGE COUNTY ALTERNATE DESTINATION PILOT PROJECT - PROTOCOL GUIDANCE

data analyzed for the three study cities, approximately 17% of the 9-1-1 calls represented low acuity complaints considered to be non-emergencies that could be handled at UCCs rather than EDs. The percentage is likely to be in the low range since this sample included medical conditions that only met the specific criteria for this pilot study. After polling a partner ED and comparing the costs of a sprained ankle with an UCC affiliated with the same hospital network, the difference in costs was approximately \$1000 or 23% higher at the ED. After 30 years of experience with the 9-1-1 system, individuals with non-emergencies will continue to use the system. Perhaps it is time the system adjusted to accommodate these non-emergencies, to get patients to the right level of care from the onset.

Existing EMS legislation in California explicitly limits the paramedic scope of practice in regards to the set of skills and activities performed and the locations in which those skills and activities may be performed. These limitations require the paramedic to transport all 9-1-1 patients, including those with low acuity conditions, to the ED of an acute care hospital, which contributes to decreased access to the appropriate level of care, excessive healthcare costs, and the issues of ED crowding. Alternate Destination Paramedics can bridge the gap by directing the appropriate 9-1-1 patients with lower acuity conditions to appropriate facilities such as UCCs. OSHPD's HWPP provides legal authority for pilot projects such as the OCADPP to temporarily *waive* licensing laws, so the safety and effectiveness of ADPTs in making transport decisions for patients with specific low acuity conditions to approved ADUCs can be evaluated. This closely monitored process allows for the necessary data to be collected and analyzed which will serve as the basis for recommending changes to existing statutes and regulations. Since all EMS first responders in Orange County consist of EMTs and Paramedics, authorizing an expanded role such as the ADP does not risk supplanting any other healthcare resources.

VI. MEDICAL CONTROL AND PROJECT MONITORING:

Dr. Samuel Stratton, OCEMS Medical Director has designated Dr. Shira Schlesinger, University of California-Irvine (UCI) Center for Disaster Medical Sciences (CDMS), as the principal investigator for the OCADPP. Dr. Stratton will hold primary responsibility for local medical control related to the project.

VII. LOCAL STEERING COMMITTEE:

A. The responsibilities of the local Steering Committee include:

1. Work in collaboration with the EMSA CP Project Manager, Independent Evaluator and State CP Advisory Committee as necessary throughout the duration of the pilot project.
2. Ensure appropriate medical control and oversight necessary to ensure patient safety and quality assurance (QA)/quality improvement (QI) through the following methods:

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- a. Development of ADPT selection criteria and approval of selected ADPT candidates.
- b. Development of the site specific AD training curriculum, including written and skills competency testing.
- c. Development of OCADPP policies, procedures, and protocols.
- d. Development and monitoring of an OCADPP QNQL plan.
- e. Development, monitoring, and review of OCADPP.

B. The local Steering Committee will consist of the following members:

- OCADPP Project Manager
- OCADPP Alternate Project Manager
- OCADPP Principal Investigator
- OCEMS Medical Director Designee
- OCEMS Administrator Designee
- OCEMS Physician Specialist
- OCEMS Orange County-Medical Emergency Data System (OC-MEDS) Data Manager
- Fire Chiefs and EMS Managers from participating fire departments
- Representative from partner hospital networks, ERCs, and UCCs
- Representative from local advocacy groups

VIII. PATIENT INCLUSION AND EXCLUSION CRITERIA:

Patients may be considered eligible for ADUC transport based on the following inclusion and exclusion criteria:

A. Patients with one of the following primary impressions will be eligible for ADUC transport:

1. Isolated closed extremity injuries
2. Laceration with controlled bleeding
3. Soft tissue injuries
4. Isolated fever or cough

B. Patients meeting any of the following criteria will not be eligible for ADUC transport:

1. Age less than 18 years
2. Abnormal vital signs, defined as: Heart rate >110 or <50, Respiratory Rate >20 or <10, SBP <100
3. Additional or secondary impressions that are not within the list above
4. Mechanism of injury that otherwise meets designated trauma center criteria (OCEMS 310.30-Attachment B)
5. Mechanism of injury resultant of assault or other criminal activity
6. Patient unable to provide consent due to dementia, advanced mental illness, altered mental status, intoxication, or language barrier

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C. For the specified primary impressions, patients meeting any of the following criteria will not be eligible for ADUC transport:

1. Closed extremity injury with significant angulation and/or deformity at the site of injury
2. Possible fracture and/or dislocation above the knee
3. Possible fracture and/or dislocation with overlying laceration
4. Closed extremity injury with evidence of neurovascular dysfunction, including pulseless extremity, or loss of motor or sensory function
5. Complex facial laceration or laceration to neck, axilla, or groin
6. Laceration with exposed bone, tendon, or unable to move distal joints
7. Soft tissue infection and/or injury with muscle tenderness or skin blisters near area of infection
8. Multiple possible skin infections or area of cellulitis greater than 5% of total body surface area
9. Isolated fever or cough with SP02 less than 93% on room air
10. Isolated fever or cough with history of dialysis, congestive heart failure, clotting disorder, cancer on chemotherapy, or organ transplant

IX. PROCEDURES:

- A. Only 9-1-1 first responders employed or contracted by the cities of Fountain Valley, Huntington Beach, and Newport Beach are participating in the OCADPP.
- B. Only approved ADPTs may determine that a patient meets eligibility criteria.
- C. Patients meeting eligibility criteria for transport to an ADUC may be consented for enrollment in the pilot program.
- D. Only approved ADPTs may consent an eligible patient for enrollment in the pilot program.
- E. Eligible patients who have been consented for enrollment may be offered transport to an ADUC rather than an Emergency Receiving Center (ERC).
- F. Patients who are not eligible for ADUC transport by inclusion and exclusion criteria above, who are not consented for inclusion in the pilot program, or who decline transport to an ADUC, will be treated and transported per existing protocols (OCEMS P/P: 600.00, 230.00, 330.65; OCEMS Treatment Guidelines 1-40: Attachments C-F).
- G. The 9-1-1 first responder escorting the patient to an ADUC will provide a verbal transfer of care report to the designated receiving facility staff and complete an electronic prehospital care report (ePCR).

X. PROTOCOL WORKFLOW DURING BASELINE PHASE OF PILOT:

- A. Dispatch receives 911 call from calling party and dispatches responding unit per established jurisdictional protocols.

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- B. Responding unit arrives on scene, contacts patient, and determines the chief complaint. If patient complaint is one of the 4 specified primary impressions, the responding unit will complete the OC-MEDS electronic prehospital care report (ePCR) including the patient-specific and pilot-specific data in the Alternate Destinations Pilot Supplemental Questions section (ADP section) on the ePCR run form. Refer to Attachment G – Screen shot of ADP section.
- C. Proceed with field management and transport according to existing policies and standing orders.

XI. PROTOCOL WORKFLOW DURING ADPT INTERVENTION PHASE OF PILOT:

- A. Dispatch receives 9-1-1 call from calling party and dispatches responding units per established jurisdictional protocols.
- B. Responding unit arrives on scene, contacts patient, and determines the chief complaint. If patient complaint is one of the 4 specified primary impressions, the responding unit will complete the OC-MEDS ePCR including the patient-specific and pilot-specific data on the ADP section of the run form.
- C. If ADPT is present on the responding unit, **and** patient complaint is among the specified 4 primary impressions, ADPT assesses patient and determines whether patient is eligible for potential transfer to an ADUC rather than to an ERC. If patient is eligible for ADUC transport, the ADPT offers patient enrollment in study of alternate destination transport utilizing a standardized script.
 - a. If patient consents to enrollment and signs electronic consent, contact information is obtained from patient. Patient is offered transport to ADUC rather than an ERC.
 - i. If patient agrees to be transported to ADUC and completes consent forms, the appropriate ADUC is determined based on location and patient preference (if applicable). Operating hours of the ADUC are verified. If confirmed as open for business, the patient is transported to the ADUC.
 - 1) 9-1-1 first responder escorts the patient to ADUC and delivers transfer of care report to designated staff at ADUC.
 - 2) ePCR is completed and posted to the OC-MEDS cloud-based database to be made accessible to the ADUC.
 - ii. If patient declines transport to ADUC, transport to ERC according to existing standing orders.
 - iii. If patient refuses transport by ambulance, have patient sign an electronic patient refusal/against medical advice (AMA) form. Follow patient refusal procedures according to existing OCEMS policy.

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XII. DOCUMENTATION/DATA COLLECTION/TRANSFER OF DATA DURING BASELINE AND ADPT INTERVENTION PHASES:

A. 9-1-1 First Responders

1. 9-1-1 first responders (ADPTs, Paramedics, or EMTs) for the three study cities shall document all patient-associated and pilot specific data for any patient with one of the 4 specified primary impressions into the OC-MEDS ePCR during the baseline and ADPT intervention data collection phases of the pilot project. The primary impression data elements in OCMEDS have been modified so that primary impressions correspond to the 4 primary impressions eligible for the pilot evaluation. By the implementation date of the baseline phase, the ePCR software will be configured such that the entry of any patient with one of the specified primary impressions will trigger validation rules for the customized ADP section on the OC-MEDS ePCR run form that contains the pilot-specific questions.
2. Once the ePCR has been completed, it should be posted to the OC-MEDS cloud-based database so that it will be accessible to the ADUCs, ERCs, and OCEMS designees.
3. Authorized service administrators for the 9-1-1 first responder agencies have access to all OC-MEDS ePCR data that were initiated by their field providers. OC-MEDS ePCR data are proprietary to the agencies of origin.

B. Receiving Facilities (ADUCs or ERCs)

1. Designated staff at ADUCs and ERCs will be authorized to access ePCRs for patients transported to their facilities from the OC-MEDS dashboard. The dashboard is a component of the OC-MEDS software, which provides an online method for receiving facilities to access copies of ePCRs that have been completed and posted by 9-1-1 first responders.
2. ADUCs will not be participating in the data collection until the ADPT intervention phase of the pilot. Only partner ERCs will be participating in the data collection during the baseline and intervention phases of the pilot.
3. Designated staff at ADUCs and partner ERCs will be contacted monthly by OCEMS designees with a list of incident numbers and service dates belonging to eligible or enrolled patients that were transported to their facilities. Receiving centers will enter data relating to eligible patient outcomes (including length of stay, ED disposition, and diagnosis codes) into the on-line OC-MEDS ImageTrend Patient Registry. Charges and claims paid associated with the relevant visit will be estimated for all eligible patients and returned to OCEMS designee in aggregate for the preceding month, stratified by Primary Impression (e.g. Average charges for all ED visits by Eligible patients with isolated extremity injuries seen at partner hospital #1 was \$1050 for the month of May 2014).

C. OCEMS Designees/Local Pilot Evaluators

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1. During the baseline and ADPT intervention phases, the OCEMS Designee/ Local Pilot Evaluators will design and schedule monthly reports to be sent to the State Pilot Evaluation team. The reports will include data elements accumulated from the following:
 - a. Queried prehospital care data for patients entered with the specified primary impressions from the OC-MEDS cloud database
 - b. Queried patient outcome data from OC-MEDS ImageTrend Patient Registry data entered by ADUCs and partner ERCs for the pilot.
 - c. Aggregate transport costs, charges, and claims data from the EMS provider billing companies.
 - d. Aggregated charges/claims paid data from ADUCs and/or ERCs.
 - e. For the Pilot Period, patient satisfaction and outcomes surveys conducted 1 week after study enrollment.
2. During the baseline and ADPT intervention phases, OCEMS Designee/Local Pilot Evaluators will review and analyze OC-MEDS data on a monthly basis. Furthermore, after IRB approval is granted, de-identified records with increased detail will be transferred to UCI for further in-depth evaluation.
3. OCEMS Designee/Local Pilot Evaluators will deliver a list of incident numbers and service dates belonging to eligible or enrolled patients to designated staff at the ADUCs and partner ERCs on a monthly basis as a request for patient QA follow-up data.
4. OCEMS Designee/Local Pilot Evaluators are responsible for the evaluation of the OCADPP based on the objectives listed in section II of this guidance document and the data collected.
5. OCEMS Designee/Local Pilot Evaluators will provide scheduled evaluation reports (see Attachment H – Evaluation Timeline) to be reviewed by the OCADPP's Patient Safety/Quality Assurance (QA) Committee and OCEMS Medical Director. Findings will be reported to the Local Steering Committee on a regular basis for the duration of the evaluation period.
7. All pilot records of patient contacts will be maintained by OCEMS for 2 years.
8. OCEMS Designee/Local Pilot Evaluators will be responsible for obtaining data use agreements with 9-1-1 first responding agencies, ADUCs, partner ERCs, OCEMS, and UCI CDMS for more comprehensive evaluation of the pilot program study data.

D. Patient Safety Issues

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If issues concerning patient safety are identified at any level of the data collection or data transfer process, they should be brought to the attention of the Patient Safety/QA Committee and OCEMS Medical Director through the proper chain of command (Refer to section XIII.C.).

E. Pilot Project Data Elements

For all patients eligible for transport during the evaluation period, the following data will be collected from patient records on monthly basis:

- Primary Impression(s)
- Dispatch level
- ED to which the patients were transported (or other disposition)
- Insurance type (Private, Medicaid, Medicare, Uninsured, Other, Unknown).
- Age
- Gender
- Ethnicity
- Race
- Primary language
- Time metrics for EMS care – dispatch time, time on scene, patient contact time, left scene time, time at destination, patient transfer of care time, back in service time
- Initial patient vital signs
- Turn-around interval for ambulance (from dispatch to time returning to service)
- Time on Scene interval (from arrival at patient to commencement of transport)
- Patient Care interval (from arrival at patient to transfer of care to ERC/ADUC personnel)
- Transport Interval (from scene departure to arrival at ERC/ADUC)
- Trainee involved in care (name/code)
- Trainee assessment of patient appropriateness for ADUC (Y/N)
- Was patient offered study enrollment?
- Cost of EMS response/transport (calculated)
- Charges billed for EMS response/transport
- Claims paid for EMS response/transport
- Length of ERC/ADUC stay
- ERC/ADUC disposition (Discharged, Admitted, Secondary Transfer to ERC, Left Before Treatment Complete/Eloped)
- ICD-9/ICD-10 codes from ERC/ADUC chart
- Charges billed for ERC/ADUC visit
- Claims Paid for ERC/ADUC visit
- Patient satisfaction scores (Liker! scale questions: in development)
- Number of primary/specialty care contacts in 7 days after enrollment
- Number of Urgent Care visits in 7 days after enrollment
- Number of ERC visits in 7 days after enrollment
- Reason for visit on each ERC visit
- Was patient hospitalized in 7 days after EMS contact? If so, duration of inpatient stay?

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XIII. QUALITY ASSURANCE AND PERFORMANCE IMPROVEMENT:

A. Pilot Project Quality Metrics

1. The following safety metrics have been proposed as thresholds to trigger temporary or permanent suspension of the pilot program. As these metrics are proposed on IRB applications for UC Irvine and the OC Healthcare Agency, they may be altered by feedback from IRS or by consensus of UCI/OCEMS investigators:

- Total QI issues: 15%
- Protocol Deviations: 10%
- Patient satisfaction complaints: 15%
- Inappropriate triage disposition decisions: 8% (per report from UCC)
- Need for secondary transfer to ED: 4%
- Patient safety concerns of any nature: 2%
- Adverse event which results in delayed diagnosis of time critical condition (for example, transporting a "fever" patient who is actually septic to an UCC, resulting in significant delay to initiation of care and poor outcome for patient): <1%

Any excess of these thresholds will result in temporary suspension of the study/program while the issue is addressed, and may result in cancellation of the program.

2. The following quality metrics will be used to evaluate the field performance of ADPTs during the evaluation period:

- a. Number of 9-1-1 ambulance transports during study period
- b. Number of patients meeting presentation/complaint criteria during study period
- c. Number of hours during which ADPTs were available for dispatch during the study period
- d. Number of 9-1-1 contacts made by ADPT-staffed response units during ADPT shifts over the study period
- e. Number of 9-1-1 contacts made by ADPT-staffed response units to patients meeting presentation/complaint criteria during study period

3. Scheduled evaluation reports prepared by the local pilot evaluators will be reviewed by the Patient Safety/QA Committee and OCEMS Medical Director. Findings will be reported to the Local Steering Committee on a regular basis for the duration of the evaluation period.

B. Patient Safety/QA Committee

1. The Patient Safety/QA Committee will perform patient safety reviews of 100% of the cases in which care is provided by an ADPT,

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2. The Patient Safety/QA Committee is responsible for reviewing the evaluation reports provided by the local pilot evaluators and the QA/QI issues report provided by the ADPT Supervisor.
3. Based on these reports and the pilot objectives, the committee in collaboration with the OCEMS Medical Director, shall analyze the data, identify trends, assess for root causes, and determine the most appropriate plan for improvement or course of action, which may include but is not limited to:
 - a. Evaluate and adjust protocols and objectives as appropriate.
 - b. Develop individual and/or general education plans.
 - c. Recommend suspension and/or termination of pilot project if deemed to be endangering patient/community safety.
4. Committee will consist of:
 - a. Project Manager or designee
 - b. Medical Director or designee
 - c. OCEMS Administrator or designee
 - d. Principal Investigator
 - e. Fire Department EMS Manager
 - f. ADPT Supervisor

C. Management of Concerns, Complaints, or Patient Safety Issues

1. Any system partner identifying concerns, complaints, or patient safety issues involving 9-1-1 ALS or BLS first responders should notify the ADPT Supervisor.
2. ADPT Supervisor will notify the designated fire department representative and the Medical Director within 5-7 days of the notification of the occurrence.
3. Designated fire department representative and/or Medical Director will initiate follow-up with involved ADPT within 5-7 of the notification of the occurrence.
4. Any patient safety issues or unusual occurrences resulting in harm or potential harm to patients shall be reported to the local project manager, EMSA project manager, and Medical Director within 24 hours. Medical Director will conduct an in-depth review and report findings to the Patient Safety/QA Committee. All patient safety issues will be reported to the local Steering Committee on a regular basis for the duration of the evaluation period.
5. ADPT Supervisor is responsible for tracking all occurrences and actions taken; prepares monthly report to be reviewed by the Patient Safety/QA Committee and the Medical Director. Findings will be reported to the local Steering Committee on a regular basis for the duration of the evaluation period.

(Attachment I - Management of QA/QI Issues Algorithm)

I. AUTHORITY:

California Code of Regulations, Title 22, Division 9, Chapter 4; Division 7, Chapter 6; California Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52, Chapter 3, Section 1797.114, and Chapter 4, Section 1797.218; Division 107, Part 3, Chapter 3, Article 1 Sections 128125-128195 and 92001-92702

11. PURPOSE:

To provide guidelines for urgent care centers (UCCs) to be approved by Orange County Emergency Medical Services (OCEMS) to participate in the Orange County Alternate Destination Pilot Project (OCADPP).

111. DEFINITIONS:

OC-MEDS refers to the Orange County Medical Emergency Data system, a web-based, electronic data management system capable of tracking near-real time prehospital care events from the time 9-1-1 is called through to the discharge of the patient from the Emergency Receiving Center (ERG). This system has interoperable capabilities that allow authorized access to electronic prehospital care report data by participating EMS provider agencies, ERCs, base hospitals, and OCEMS once the field user posts it to the cloud. OC-MEDS is owned, operated, and maintained by OCEMS. The data entered by participating EMS provider agencies is proprietary to that agency.

IV. PARTICIPATION:

A. Initial Approval

UCCs must submit a request to OCEMS to participate in the OCADPP and evidence of compliance to all the guidelines in this document.

B. Site Visit

1. OCEMS and the Local Project Steering Committee will review the submitted material, perform a site visit, and meet with appropriate UCC staff. Following the review, OCEMS will provide its approval decision for participation. The authorization for participation will extend through the duration of the pilot project.
2. The site visit may include:
 - a. Visual inspection of ambulance access and path of travel to treatment area in order to ensure safety and privacy
 - b. Review of triage policies and procedures
 - c. Review of emergency equipment
 - d. Review of staffing matrices and staff competency

C. Change in Ownership/Change in Executive or Management Staff

OCEMS shall be notified, in writing, at least 30 days prior to the effective date of any changes in the UCC ownership. Change in ownership may require re-approval by OCEMS. Personnel changes in executive or management staff shall be communicated in writing to OCEMS within 10 days.

D. Denial/Suspension/Revocation of Approval by OCEMS

OCEMS may deny, suspend, or revoke the approval for UCC participation for failure to comply with any applicable OCEMS guidelines, state and/or federal laws.

V. MEDICAL PERSONNEL/STAFFING:

A. Medical Director

The medical director or designee shall be responsible for:

1. Implementation of established policies and procedures.
2. Providing for qualified staffing of providers (Physician, Nurse Practitioner or Physician Assistant)

B. Physician

At least one physician must be immediately available during hours of operation. Availability to the NP or PA may be by phone.

C. Physician Assistants (PA) and Nurse Practitioners CNP)

Scope of practice for PAs and NPs must be clearly delineated and must be consistent with state regulations.

D. Support Staff

Medical Assistants, Nursing Assistants, Licensed Vocation Nurses, or Registered Nurses must have current BLS provider certification.

VI. ANCILLARY SERVICES:

UCCs shall have the capability of providing these services:

- A. Respiratory therapy treatments
- B. Plain x-rays
- C. Point-of-care simple laboratory testing for blood and urine

VII. EMERGENCY EQUIPMENT:

Equipment for basic life support, including an automated external defibrillator (AED), shall be available.

VIII. SYSTEM COORDINATION AND COMMUNICATION:

- A. Clearly established policies and procedures for activating the 9-1-1 system in case of emergency.
- B. Clearly established policies and procedures to affect a non-emergency secondary transfer.
- C. Provision of a dedicated telephone line for field notification of arriving patients.
- D. Computer with internet capability for accessing OC-MEDS' Dashboard and Patient Registry.

IX. DATA COLLECTION/RECORDS:

UCCs shall:

- A. Identify OC-MEDS liaison and alternate who shall be responsible for:
 - 1. Providing ongoing education for UCC staff on use of OC-MEDS dashboard.
 - 2. Acting as a liaison between the UCC, Local Project Steering Committee, and OCEMS for the administration of OC-MEDS.
- B. Designate a staff person responsible for providing data on study patients using the OC-MEDS Patient Registry. Data entered by UCC will not be re-released to other entities except as authorized or required by law.
- C. Provide notification to OCEMS of any study patient requiring a 9-1-1 inter-facility transport to an acute care emergency department.

X. COMMUNITY RESOURCES:

UCCs shall maintain a list of referral services and facilities. The following resource listing, including address and telephone number, shall be available within the UCC.

- A. Specialty Services
 - 1. Burn centers
 - 2. Re-implantation centers
- B. OCEMS designated Emergency Receiving Centers
- C. Services
 - 1. Poison control
 - 2. Elder/Domestic abuse referral
 - 3. Sexual assault victim referral
- C. County Co

Implementation Date: 01-01-2014

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1. OCEMS - business and after hours, website
 2. Public health services
 3. Epidemiology



TRAUMA TRIAGE



I. AUTHORITY:

Health & Safety Code, Division 2.5, Sections 1797.258, 1798, 1798.160-1798.169, and 1798.2; California Code of Regulations, Title 22, Division 9, Chpt 7.

II. POLICY:

This policy identifies the types of injuries and situations that require transport of trauma victims to an Orange County EMS (OCEMS) designated Paramedic Trauma Receiving Center (PRTC).

III. DEFINITION of a TRAUMA VICTIM:

A trauma victim is someone who has a blunt or penetrating injury with the presence of any of the following:

A. Abnormal Vital Signs:

- Glasgow Coma Score (GCS) less than 14 (in the presence of head injury)
- RESPIRATION:
AdulVAdolescenV Children¹: less than 12 per minute OR greater than 30 per minute
- SYSTOLIC BLOOD PRESSURE:
AdulVAdolescent: less than 90
Children¹: less than 80

Note#1 A child is defined as less than age 13 years-old

B. Injuries:

- Penetrating or open injury of the head
- Depressed skull fracture
- Blunt head injury with loss of consciousness greater than 5 minutes
- Penetrating injury to the neck, chest, abdomen, back, or groin
- Penetrating injury to extremity above elbow or knee
- Extremity with poor circulation or without a pulse
- Paralysis or numbness of arm or leg (or suspicion of spinal cord injury)
- Flail chest
- Seat belt bruising or abrasion of neck, chest or abdomen
- Abdominal injury, blunt, with tenderness of 2 or more quadrants
- Fracture of two or more long-bones {femur, humerus}
- Pelvic pain or deformity on palpation (positive barrel hoop exam of pelvis)
- Amputation above the wrist or ankle
- Crushed, degloved, or mangled extremity (excluding only fingers or toes)

C. Mechanism of Injury

- Falls
 - o AdulVAdolescent: greater than 15 feet (one story is equal to 10 feet)²
 - o Children¹: greater than 10 feet or 2-3 times the height of the child¹
- High-Risk Auto Crash
 - o Passenger space intrusion greater than 12 inches where an occupant (who would be defined as a trauma victim) is sitting or any occupant in a passenger seat when there is greater than 18 inches intrusion at any site within the passenger space.²
 - o Ejection (partial or complete) from automobile.
 - o Person who is in same passenger compartment in which a trauma death has **occurred.**
 - o Vehicle telemetry data consistent with high risk of injury

Approved:

(I h:i.A APPENDIX B-ATTACHMENT B

Implementation Date: 3/28/2011



TRAUMA TRIAGE



- Auto vs. Pedestrian / Bicyclist who is thrown any distance, run-over, or with significant (greater than 20 mph²) impact
- Motorcycle Crash greater than 20 mph', including "laying bike down"

Note # 2. Heights, speeds and distances are best estimates

D. Special Situations:

Patients with significant injury and any of the following may benefit from specialized trauma services; contact Base Hospital for destination decision regarding those with injury and:

- Burns
- Victim of Explosion
- Age greater than 55 years or less than 13 years
- Anticoagulation³ and Bleeding Disorders
- End-stage Renal Disease on Dialysis
- Pregnancy greater than 20 weeks
- EMS provider judgment that transport to a PTRC w/ benefit the injury victim

Note #3. Aspirin, Coumadin, Plavix®, Lovenox®, or states is taking a "blood thinner"

VI. DESTINATION DECISIONS:

Base hospital contact is required for all patients described in this policy. Trauma victim destination is determined by the base hospital.

V. TRAUMATIC RESPIRATORY AND CARDIOPULMONARY ARREST:

At the discretion of the BH physician, trauma patients presenting with any of the following and for who resuscitation and transport is pursued should be triaged as follows:

- Unmanageable airway Triage to closest PRC
- Traumatic cardiopulmonary arrest Triage to PTRC

Cross-references: OCEMS Ref # 240.10, 390.40, 620.00, 620.07, 620.11, 620.13, 620.14, 635.10, 670.10, and 900.00; OCEMS Treatment Guidelines # T-05, T-10, T-15, and T-20

Approved:

APPENDIX B - ATTACHMENT B

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Implementation Date: 3/28/2011



I. AUTHORITY:

California Health and Safety Code, Division 2, Chapter 2, Article 1, Section 1255.1; Division 2.5, Chapter 2, Sections 1797.67 and 1797.88, and Chapter 6, Article 3, Section 1798.170. California Code of Regulations, Title 22, Division 9, Chapter 7, Section 100243.

II. APPLICATION:

This policy defines the requirements that an acute care hospital must meet to be designated as an Orange County Emergency Receiving Center (ERG).

III. DESIGNATION:

A Initial Designation

1. Hospitals applying for initial designation as an ERG must submit a request to Orange County Emergency Medical Services (OCEMS) and evidence of compliance to all criteria in this policy.
2. OCEMS will review the submitted material, perform a site visit, and meet with appropriate hospital personnel. Following review, OCEMS will provide its designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement of designation of up to three (3) years as an ERG.
3. An approved ERG will have a written agreement as described in Section X of this policy and pay the established Health Care Agency fee.

B. Continuing Designation

1. OCEMS shall review each designated ERC's compliance to criteria at least every three years, or more often if deemed necessary by the OCEMS Medical Director. ERCs will be required to submit specified written materials to demonstrate evidence of compliance to criteria. A site visit may be performed at the discretion of OCEMS.
2. OCEMS shall provide its designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for continuing designation of up to three years.

C. Change in Ownership / Change in Executive or Management Staff

OCEMS shall be notified, in writing, at least 30 days prior to the effective date of any changes in hospital ownership. Change in hospita' ownership may require redesignation by OCEMS. Personnel changes in chief executive staff, emergency department (ED) management (i.e., ED physician group, nurse manager) shall be communicated in writing to OCEMS within 10 days.

D. Denial / Suspension / Revocation of Designation by OCEMS

1. OCEMS may deny, suspend, or revoke the designation of an ERG for failure to comply with any applicable OCEMS policy and procedure, state and/or federal laws.
2. The process for an Investigative Review Panel and/or appeal of suspension of revocation shall adhere to OCEMS Policy and Procedure #640.00 and #645.00.

Approved:

OCEMS P/P: 600.00
Implementation Date: 04/01/2013



E. Cancellation of Designation / Reduction or Elimination of Services by ERC

1. Designation may be canceled by the ERC upon 30 days written notice to OCEMS.
2. Hospitals considering a reduction or elimination of emergency services must notify the California Department of Public Health and the Orange County Health Care Agency/EMS a minimum of 90 days prior to the planned reduction or elimination of services.

IV. HOSPITAL LICENSING and ACCREDITATION:

- A. Hospital shall possess a current California Department of Public Health permit for basic or comprehensive emergency service.
- B. Hospital shall maintain accreditation by an accreditation organization approved by the Centers for Medicare and Medicaid Services (CMS).
- C. Hospital shall notify OCEMS verbally and in writing any time the hospital is not in compliance with any applicable federal and/or state laws, and/or OCEMS policies, indicating the reason(s), date(s) and time(s) for non-compliance and corrective actions that are being taken. OCEMS shall determine whether the hospital may continue to receive 9-1-1 patients during the period that corrective actions are underway.

V. COMMUNITY RESOURCES:

- A. Hospital shall maintain a list of referral services and facilities as per state licensing requirements.
- B. The following resource listing (available through OCEMS), including address and telephone number, shall be available within the ED:
 1. Specialty Centers
 - a. OCEMS designated trauma receiving centers
 - b. OCEMS designated cardiovascular receiving centers
 - c. OCEMS designated stroke-neurology receiving centers
 - d. OCEMS designated comprehensive children's emergency receiving centers
 2. Emergency Receiving Centers and Base Hospitals
 - a. OCEMS designated emergency receiving centers
 - b. OCEMS designated comprehensive children's emergency receiving centers
 - c. OCEMS designated base hospitals
 3. Specialty Services
 - a. Burn centers
 - b. Hyperbaric chamber
 - c. Reimplantation centers

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- d. Neonatal intensive care unit
- e. Pediatric intensive care unit

4. Services

- a. Ambulance transport service (for basic life support, interfacility transport paramedic and critical care transport)
- b. SIDS services
- c. Poison control
- d. Organ transplant center / tissue bank
- e. Child / elder / domestic abuse referral
- f. Sexual assault victim referral
- g. Psychiatric referral services (e.g., Evaluation and Treatment Services /ETS)
- h. HIV referral services

5. County Contacts

- a. OCEMS
 - During business hours
 - **After business hours**
 - Website
- b. Orange County Communications
- c. Health Care Agency, Public Health Services /Epidemiology

6. Other Resources

- a. Current / updated copy of OCEMS Policy and Procedure Manual.
- b. Current / updated copy of OCEMS ALS and BLS standing orders, clinical procedures and base guidelines.
- c. ALS and BLS provider agencies' designated officer contact information for disease **exposure**.

VI. MEDICAL PERSONNEL /STAFFING:

A Medical Director, Emergency Department

- 1. The medical director shall be a physician:
 - a. Certified by the American Board of Emergency Medicine (ABEM), American Osteopathic Board of Emergency Medicine (AOBEM) or the equivalent as determined by the OCEMS Medical Director.
- 2. The medical director or his/her designee shall be responsible for:

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- a. Implementation of established policies and procedures.
- b. Providing qualified physician staffing for emergency medical services 24 hours/ day, 7 days/week.
- c. Responsibility of providing overall direction of activities of the PA or NP in the Emergency Department.

B. ED Physician Staffing

At least one physician must be on duty 24 hours/day and all physicians must be:

1. A member of the emergency department staff with defined privileges.
2. Trained and experienced in emergency medicine, as evidenced by:
 - a. Board Certification by the American Board of Emergency Medicine (ABEM), American Osteopathic Board of Emergency Medicine (AOBEM) or the equivalent as determined by the OCEMS Medical Director; or
 - b. Successful completion of an ABEM, ACGEM or AOA accredited Emergency Medicine residency within the past three years.
3. Non-ABEM/AOBEM physicians
 - a. Board certified or board eligible in Family Practice, Internal Medicine, or General Surgery, and
 - Maintain an average of 80 hours per month active emergency department practice, and
 - Maintain current ACLS certification and PALS or APLS certification.

Note: Changes in physician staffing that impact ERC criteria need to be concurrently reported to OCEMS.

C. Physician Assistants (PA) and Nurse Practitioners (NP) Staffing

1. Maintain current ACLS and PALS or APLS certification.
2. PAs and NPs scope of practice must be clearly delineated and must be consistent with state regulations.
3. Credentialing procedures for PAs and NPs in the emergency department must meet the requirements of the local, state and federal jurisdiction.

D. On-Call Physician Specialists

1. Medical staff bylaws shall describe the obligations of on-call physician specialists, to include availability and acceptance of patients presenting in an emergency medical condition, regardless of their ability to pay.
2. Hospital shall maintain a daily roster of the following physician specialists who must be on-call at all times and available to come into the hospital:
 - a. Internal Medicine / Family / General Practice

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- b. Cardiologist
- c. General Surgeon
- d. Anesthesiologist
- e. Pediatrician
- f. Orthopedic Surgeon
- g. Obstetrician* /Gynecologist

* Non-OB centers would only be required to have a gynecologist.

- 3. The following physician specialists may either be on-call as noted above, or the hospital may have a transfer arrangement with a hospital having an on-call physician in that specialty:
 - a. Surgeon with vascular surgery privileges
 - b. Plastic Surgeon
 - c. Otolaryngologist
 - d. Cardiothoracic Surgeon
 - e. Urologic Surgeon
 - f. Ophthalmologist
 - g. Oral Surgeon

E. ED Nursing Service

- 1. A minimum of two Registered Nurses shall be on duty at all times in the Emergency Department and shall be qualified by training and experience in adult and pediatric emergency care with sole assignment to the emergency department.
- 2. Certification
 - a. All ED nursing staff shall maintain current BLS provider certification.
 - b. All RNs shall maintain current ACLS provider certification.
 Note: A grace period of four months for a newly hired RN is acceptable when at least one RN on duty in the ED is ACLS certified
 - c. All RN's shall maintain current Pediatric Advanced Life Support (PALS) or Emergency Nurse Pediatric Course (ENPC) certification or other approved pediatric resuscitation competency.
 Note: A grace period of four months for a newly hired RN is acceptable when at least one RN on duty in the ED is PALS/ENPC certified

F. Ancillary Services

In addition to requirements delineated in Title 22, hospitals shall maintain these emergency services and care capabilities 24 hours/day, 7 days/week for:

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1. In-house radiological services, including technician, with availability of plain x-rays and computerized tomography; and radiologist on-call.
2. In-house availability of respiratory therapist.
3. Clinical laboratory services with a comprehensive blood bank or access to a community central blood bank with capability to provide autologous and designated donor blood transfusions; and must have adequate storage facilities and immediate availability of blood and blood products.
 - a. Clinical laboratory services should include a clinical laboratory technologist in-house and promptly available.

Vii. EQUIPMENT:

In addition to requirements delineated in Title 22, hospitals shall have immediately available equipment and supplies necessary for adult and pediatric life support. Sufficient size-specific equipment to adequately care for pediatric patients shall be available (e.g., An OCEMS approved length based resuscitation tape, pediatric crash cart, pediatric emergency medications and supplies consistent with the most current evidence based recommendations).

Viii. SYSTEM COORDINATION and COMMUNICATION:

- A. A designated emergency department staff physician and alternate responsible for:
 1. Coordination of ERC hospital activities with the base hospital (BH), regional emergency advisory committee (REAC), and OCEMS.
 2. Representation at a minimum of four (4) REAC meetings per year by the ED medical director, nurse manager, or designee.
 3. Documentation of notification and education of the emergency department staff on matters discussed at each REAC and in the OCEMS newsletters.
 4. Notification of the assigned base hospital prehospital care coordinator/physician medical director and/or OCEMS of concerns or identified problems in the EMS system and delivery of care by EMS personnel.

B. Emergency Medical Communications Network

The Emergency Medical Communications Network utilizes OCEMS recognized communication systems to support system coordination of ambulance transported patients and includes, but is not limited to:

- a. Hospital Emergency Administrative Radio (H.E.A.R.)
- b. A web based communication application for hospital status, required assessments and messages, and MCI coordination
- c. Dedicated telephone land-line
- d. 800 MHz Radio Systems
- e. Orange County Medical Electronic Data System (OC-MEDS)

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1. Advance notification to all BHs / on the web based communication application whenever the ERC is on bypass in an approved category and unable to provide standard emergency services and care; notification to the BHs by the ERC as soon as the situation has returned to normal. (REFERENCE: OCEMS p/p #310.96)
 2. Coordination of casualty and medical resource management through the emergency medical communications network during a Mass Casualty Incident (MCI) or other regional emergency.
 3. Annual emergency medical communications network in-service for all personnel responsible for emergency medical communications network operations.
 4. Response to unannounced emergency medical communications network tests conducted by the emergency medical communications network Central Point. (REFERENCE: OCEMS P/P #853.00).
- C. Dedicated telephone land-line in the ED for receipt of patient report from field EMS care providers.
- D. A process to limit the ERC's total annual emergency department diversion hours to a maximum of six (6.0) percent.

IX. DATA COLLECTION /RECORDS:

Hospital shall:

- A. Identify a OC-MEDS Liaison and alternative responsible for:
 1. Providing initial and continuing education to hospital staff on the Orange County Emergency Medical Data System (OC-MEDS).
 2. Providing administrative support for hospital access to OC-MEDS.
 3. Act as the liaison between the hospital and OCEMS for the administration of OC-MEDS.
 4. Provide patient outcome data, when requested, to OCEMS, base hospitals and provider agencies for patients transported to the ERC/CCERC for evaluation and treatment.

Note: This information will not be re-released to other entities except as authorized or required by law.
 5. Notifying OCEMS of all ambulance interfacility transfers from the emergency department within 24 hours using the approved notification form.
- B. Maintain ability to access Electronic Prehospital Care Reports (ePCR) via the OC-MEDS Hospital Dashboard.
- C. Maintain an emergency department patient log containing at least the following patient information for all ambulance patients seen (including DOA): name, date, EMS incident number, time and means of arrival, age, sex, medical record number, nature of complaint, and time of departure.
- D. Provide insurance/billing/incident information on patients transported to the ERC to prehospital provider agency providing transportation.
- E. Complete the Hospital Data Discharge Summary (HODS) for all ambulance transported patients to the facility and submit within 45 days after the close of the current month. (REFERENCE: OCEMS P/P #391.10).

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F. Participate in data collection and evaluation studies conducted by OCEMS.

X. HOSPITAL POLICIES/AGREEMENTS:

The hospital will have a written agreement with OCEMS indicating the concurrence of hospital administration and medical staff to meet the requirements for ERC program participation as specified in this policy.

The hospital shall have formal policies which address the following:

- A Tracking, storing, and cleaning/decontamination of re-usable equipment and supplies used by prehospital personnel for patient care.
- B. A communicable disease exposure policy for evaluation and treatment (including emergency chemoprophylaxis when indicated) of emergency medical services personnel following reported / known exposures, with timely notification to the EMS provider's Designated Officer and Orange County Public Health. (REFERENCE: OCEMS p/p #330.96)
- C. A written hospital-wide response plan which addresses the steps to be followed and the appropriate hospital administrative staff to be notified when high patient volume within the ED necessitates temporary diversion of additional incoming ambulance-transported patients.
(REFERENCE: OCEMS P/P #310.96)
- D. A comprehensive external and internal facility disaster response plan which addresses the following:
 - 1. Decontamination.
 - 2. Personal protective equipment for hospital staff.
 - 3. Exercise of the hospital's disaster plan at least annually.
 - 4. Annual participation in the countywide / hospital net Mass Casualty Exercise.
 - 5. Annual participation in the statewide disaster exercises.
 - 6. Activation of the Hospital Disaster Support Communication System (HDSCS).
 - 7. Hospital evacuation and notification of OCEMS for assistance with facilitating resource management.
- E. An institutional response for the evaluation and care of specific patient groups, to include:
 - 1. Pediatric patients, including critically ill pediatric patients.
 - 2. Patients with acute myocardial infarction.
 - 3. Patients with stroke or stroke symptoms.
 - 4. Patients identified as trauma victims.

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LIST OF EMERGENCY RECEIVING CENTERS

HOSPITAL

1. Anaheim Regional Medical Center
2. Chapman Medical Center
3. Children's Hospital Orange County (Pediatric Patients)
4. Coastal Communities Hospital
5. Fountain Valley Regional Hospital
6. Garden Grove Hospital and Medical Center
7. Hoag Hospital - Irvine
8. Hoag Memorial Hospital Presbyterian
9. Huntington Beach Hospital
10. Kaiser Permanente Medical Center - Anaheim
11. Kaiser Permanente Medical Center - Irvine
12. La Palma Intercommunity Hospital
13. Los Alamitos Medical Center
14. Mission Hospital Regional Medical Center
15. Mission Hospital - Laguna Beach
16. Orange Coast Memorial Medical Center
17. Placentia-Linda Hospital
18. Saddleback Memorial Medical Center - Laguna Hills
19. Saddleback Memorial Medical Center - San Clemente
20. Saint Joseph Hospital
21. Saint Jude Medical Center
22. UCI Medical Center
23. West Anaheim Medical Center
24. Western Medical Center/Anaheim
25. Western Medical Center/Santa Ana

Approved:

P/P: 230.00
Implementation: April 1, 2013



I. AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.220, 1798.

II. APPLICATION:

This policy defines criteria and establishes guidelines to be followed when a patient refuses prehospital emergency medical evaluation, treatment and/or transport.

III. DEFINITIONS:

"Competent" means the patient has the capacity to understand the circumstances surrounding his/her illness or impairment, and the risks associated with refusing treatment or transport. The patient is alert and his/her judgment is not significantly impaired by illness and/or injury.

"Emancipated minor" means an individual under the age of 18 years who is married, on active duty in the military, 15 years or older living separate and apart from his/her parent(s), or 14 years or older and emancipated by declaration of Superior Court.

"Patient not requiring transport" or "release at scene" means a patient who, after a complete assessment by an emergency medical technician (EMT), does not appear to have a medical problem which requires the immediate treatment and/or transportation capabilities of the EMS system.

"Patient refusing care against medical advice (AMA)" means a competent patient who is determined by an EMT or base hospital (BH) to have a medical problem which requires the immediate treatment and/or transportation capabilities of the EMS system, and who has been advised of his/her condition and the known and unknown risks and/or possible complications of refusing medical care, and who still declines medical care.

"5150" means a patient who is held against his/her will for evaluation under the authority of Welfare & Institutions Code 5150 because the patient is a danger to him/herself, a danger to others, and/or is gravely disabled, e.g., unable to care for self. This written order may be placed by a law enforcement officer, County mental health worker, or an emergency physician certified by the County Mental Health Department to place an individual on a 5150 hold.

IV. GUIDELINES:

In the prehospital setting of the sick and injured patient, these guidelines may be interpreted and applied broadly. EMTs should err on the side of providing patient care, even if the patient is later found to have the capacity to refuse care. Patients likely to have a serious medical problem should be evaluated more carefully for their decision making capacity.

- A. A competent adult or an emancipated minor has the right to determine the course of his/her own medical care and shall be allowed to make decisions affecting his/her medical care, including the refusal of care.

Italicized Text Identifies Quotations from an Authority Outside the Orange County EMS.

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PATIENT REFUSAL OF PREHOSPITAL CARE AND / OR TRANSPORT AGAINST MEDICAL ADVICE (AMA)



- B. Spouses or relatives, unless they are a legal representative, cannot necessarily consent to the refusal of care for their spouse or relative. They may provide insight into what an incapacitated relative would desire, and are most often used as surrogates for decision-making when patients are incompetent, but these decisions frequently must be made in the hospital. Patients less than 18 years old must have a parent or legal representative present to refuse evaluation, medical care, and/or transport, unless they are an emancipated minor. The parent must be competent to make this decision. If the parent's decision seems to grossly endanger the child, or the parent does not appear to be competent, BH contact should be made.
- C. The EMT must evaluate and document the patient's ability to comprehend and whether his/her ability to do so is impaired by the medical condition.
 - 1. The EMT should assess the patient with particular attention to: 1) The patient's complaint or the reason for the call, 2) any important circumstances surrounding the call for assistance, 3) significant patient medical history, and 4) complete physical assessment including vital signs and mental status. This should include evaluation for signs of drug and/or alcohol use/intoxication; physical or mental conditions affecting judgment such as injury, developmental disability, or mental illness. Examples of conditions affecting the patient's decision making capacity are significantly altered level of consciousness or blood pressure, hypoxia, severe pain, etc.
 - 2. The EMT should establish to the best of his/her ability what treatment the patient requires, the potential risks/consequences of the patient's refusal of care, and should communicate to the patient the benefits and risks of the proposed medical care/ transport. The EMT should make a determination regarding the patient's decision-making capacity, ascertain that the patient understands the risks/consequences of refusing medical attention, why the patient is refusing care, and present to the patient alternatives for obtaining care/transport or modification of services offered, and attempt to overcome the patient's objections, if reasonable. Any evaluation, including BH contact, should be more detailed for conditions the EMT believes are potentially serious.
- D. Patients who have attempted suicide, verbalized suicidal intent, or when other factors lead the EMT to suspect suicidal intent, should be regarded as not competent.
- E. The BH should be contacted for patients meeting BH contact criteria. If the patient refuses treatment and/or transport and there is some question on the part of field personnel as to the capacity of the patient, BH consultation should be obtained prior to leaving the scene.
- F. Release at Scene

A patient who meets the criteria for release at the scene may be released by an EMT. However, the patient should be advised, if applicable, to seek alternative medical care. If the patient requires additional medical advice, the BH should be involved.

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- G. When a patient exhibits signs of being a danger to him/herself or others, or is gravely disabled and cannot simply be treated and/or transported, the EMT should notify the proper authorities to obtain a 5150, and remain with the patient until authorities have made such a determination. Patients on a 5150 hold cannot be released at the scene.
- H. If the BH and/or EMT determine(s) that the patient is not competent to refuse evaluation or transport, the following alternatives exist:
 - 1. The patient should be transported to an appropriate facility under implied consent. In this case, a 5150 hold is not necessary.
 - 2. If the BH determines it is necessary to transport the patient against his/her will and the patient resists or the EMT believes the patient will resist, the EMT shall call for police assistance in transporting the patient. The police may consider the placement of a 5150 hold on the patient, but this is not required for transport.

NOTE: At no time are field personnel to put themselves in danger by attempting to transport or treat a patient who refuses. At all times, good judgment should be used and appropriate assistance obtained.

V. DOCUMENTATION:

A prehospital care report (PCR) and a patient release form must be completed for each incident of patient refusal of emergency medical evaluation, care and/or transportation.

The EMT should ensure documentation includes patient history and assessment, a description of the patient which clearly indicates his/her decision-making capacity, why the patient is refusing care, a statement that the patient understands the risks/consequences of refusing medical attention, any alternatives presented to the patient, and BH contact (if performed).

After advising the patient and witness(es) regarding the adverse consequences of refusing medical care, obtain the signature of the patient and one witness on the patient release form. Preferably the witness should be a member of the patient's family if available at the scene.

If the patient is a minor, the parent or legal guardian should sign the patient release form.

If the patient refuses to sign the patient release form, that fact should be documented on the form. The release should include the run number assigned by the BH (if contacted), and the signature of the field personnel and witnesses.

A PCR for a patient refusing care shall be reviewed by the provider agency in accordance with their quality improvement plan. The patient release form and the PCR must be sent to the base hospital.

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BASE HOSPITAL CONTACT:

Base Hospital contact is encouraged and appropriate at any time an OCEMS accredited paramedic determines there is a benefit or need to do so.

Base Hospital (BHI) Contact Criteria:

Base Hospital contact is required for the following:

- Patients with unstable vital signs for whom there is not an applicable Standing Order. Unstable vital signs are defined as:

	Adult/Adolescent	<u>Newborn through 12 years</u>
Pulse (bpm)	<50 or >130	<60 or >200
Respirations (resp/min)	<12 or >26	<12 or >50
Systolic blood pressure (mm Hg)	<90	<80

- All persons identified in Standing Orders (SO) as requiring base contact. Base contact must be enacted prior to the initiation of transport when required by SO.
- Persons transported by paramedics as per P/P #670.10, Interhospital Emergency Patient Transfer Guidelines. Final destination is determined by the Base Hospital Physician.
- Patients for whom a 12-lead ECG is performed who request to sign out AMA for transport.
- Children with ALTE symptoms for whom caretaker requests to sign out AMA for ALS or BLS transport.
- Mass Casualty Incidents (MCI) for receiving ERC/PTRC destination.
- Cardiovascular Receiving Center (CVRC) patients to determine destination for an open cardiac catheterization laboratory.
- Patients who meet Trauma and Stroke-Neurology Center criteria.
- Burn and Replant Criteria patients to determine which center is available for receiving acute cases.
- Automatic Internal Defibrillator "firing" or defibrillating two or more times in less than fifteen minutes.
- Triage decisions in which Base Hospital contact may assist field personnel, such as ALS level refusal of care when there is a question of patient mental capacity.

ALS STANDING ORDERS (SO): (Applies to ALS provider agencies approved to use Standing Orders)

- SO are field medical orders for specific medical conditions. SO may be used by on-duty OCEMS accredited paramedics while working for an SO approved ALS provider agency.
- Base Hospital contact should be made when indicated in a specific SO. At times, patients may require care not specified in SO or care beyond that given using SO; when treatment is needed beyond that provided by a SO, BHI contact should be established for further on-line medical direction and orders.
- When BH contact is made; further medical orders come from the BH. If base contact is discontinued after making contact, the appropriate SO may be initiated or resumed as necessary with no further BH contact.

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- If a SO does not require BH contact for an ALS level call, the paramedic may escort a patient to the appropriate ERC without contacting a BH.

PROCEDURES PRIOR TO BASE HOSPITAL CONTACT: (Applies to ALS Provider Agencies that are not approved to use Standing Orders)

- Procedures Prior to Base Contact (appendix ff I-40(A1) and I-40(A2)) are protocols that allow paramedics who are not operating on SO to initiate time-critical procedures prior to BH contact.

TRANSPORT:

- Persons who have stable vital signs or who do not meet Trauma, Burn, Cardiovascular or Stroke-Neurology Receiving Center criteria may request and be transported to their preferred receiving center.
- When a receiving center is known to be on ReddiNet emergency department diversion status, neither BLS nor ALS cases are to be transported to that facility until the facility is off diversion.

-7 Persons who meet Trauma, Burn, Cardiovascular, or Stroke-Neurology Center triage criteria should be ALS transported to an appropriate specialty center as determined by BH contact.

- Persons meeting Cardiovascular or Stroke-Neurology Receiving Center triage criteria with stable vital signs and who are mentally competent may sign AMA to be transported to their preferred hospital (if not diverting patients) which may or may not be a CVRC or SNRC.

- An OCEMS Base Hospital has final authority to determine transport destination to an OCEMS ERC (including determination to route a patient to a ERC or specialty center that has declared it is on diversion).

Special Circumstances:

- eX.ii! assault victims must be transported to the most accessible open ERC based on OCEMS triage criteria. If a sexual assault victim has injuries that meet Trauma Triage Criteria, BH Contact should be made to determine if transport to a PTRC is indicated.
- Legally detained persons requesting or in need of medical care will be managed by appropriate OCEMS policies and guidelines. "Medical Clearance" or medical screening requires a complete emergency department or jail intake center medical evaluation and is not a field procedure. Detained persons who are mentally competent may refuse medical care and sign AMA per P/P #330.65.
- PrggQ2nt women in th. 2" or 3" trimester (greater than 20 weeks) with signs or symptoms of labor will be ALS escorted to an appropriate ERC.
- Hospice patients that are being transported from a health facility (Inter-facility transport) to their hospice site should continue to be transported to the hospice site if they become unstable.

Approved:



APPENDIX B-ATTACHMENT F

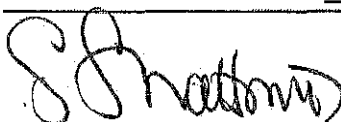
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- First responding 911-BLS units may transport unstable medical cases to the nearest ERC if the estimated time for ALS arrival exceeds 911-BLS transport time to the ERC. First responders may expedite immediate transport of an infant/small child near-drowning victim to the most accessible ERC.
- Any patient who meets Base Hospital Contact Criteria described above must be referred to an ALS responder (either 911 or IFT-ALS) when encountered by a non-911 BLS provider team.

ALS ESCORT:

- Paramedic escort, with on-going assessment of medical condition, to an appropriate OCEMS facility is required for persons with unstable vital signs (see above) or as specified by an applicable SO.
- Paramedic escort is required when an ALS medication or procedure has been provided under SO (except for special circumstances defined for MCIs).
- Paramedic escort is required for Cardiovascular, Stroke-Neurology, and Trauma triaged specialty patients.
- Any female of childbearing age (including adolescents) with vaginal bleeding and abdominal pain who has an irregular, or has missed a period should be considered as high-risk and escorted ALS.
 - 7 Certain symptoms increase the risk of ectopic pregnancy. Use extra caution if the woman has any of the following:
 - Orthostatic hypotension
 - Vomiting
 - Receiving fertility treatment

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OC-MEDS ePCR Run Form

Alternate Destination Pilot Supplemental Questions Section

This patient has been flagged as a potential candidate for the "Alternate Destination" Pilot.

Please answer each of the following supplemental questions below.

AD Pilot: Race

AD Pilot: Primary Language

AD Pilot: Ethnicity

Answer "red boxed" questions below.

Closed Extremity Injury

AD Pilot: Significant angulation/deformity at site of injury?

Laceration with Controlled Bleeding (bleeding control with no more than direct pressure)

AD Pilot: Complex facial laceration or laceration to neck/axilla/groin?

AD Pilot: Possible fracture/dislocation above knee?

AD Pilot: Laceration with exposed bone/tendon, or unable to move distal joints?

AD Pilot: Possible fracture/dislocation with overlying laceration?

AD Pilot: Pulseless extremity, or unable to move/feel limb beyond injury?

Soft Tissue Injury/Infection

Isolated Fever or Cough

AD Pilot: Muscle tenderness or skin blisters near area of infection?

AD Pilot: SpO2 less than 93% on room

AD Pilot: Multiple possible skin infections or area of cellulitis greater than 5% body surface area?

AD Pilot: History of dialysis, heart failure, clotting disorder, or cancer on chemotherapy or organ transplant?

Please answer the "Method of Payment" supplemental question below.

AD Pilot: Method of Payment

ORANGE COUNTY **ALTERNATE DESTINATIONS PILOT PROJECT**

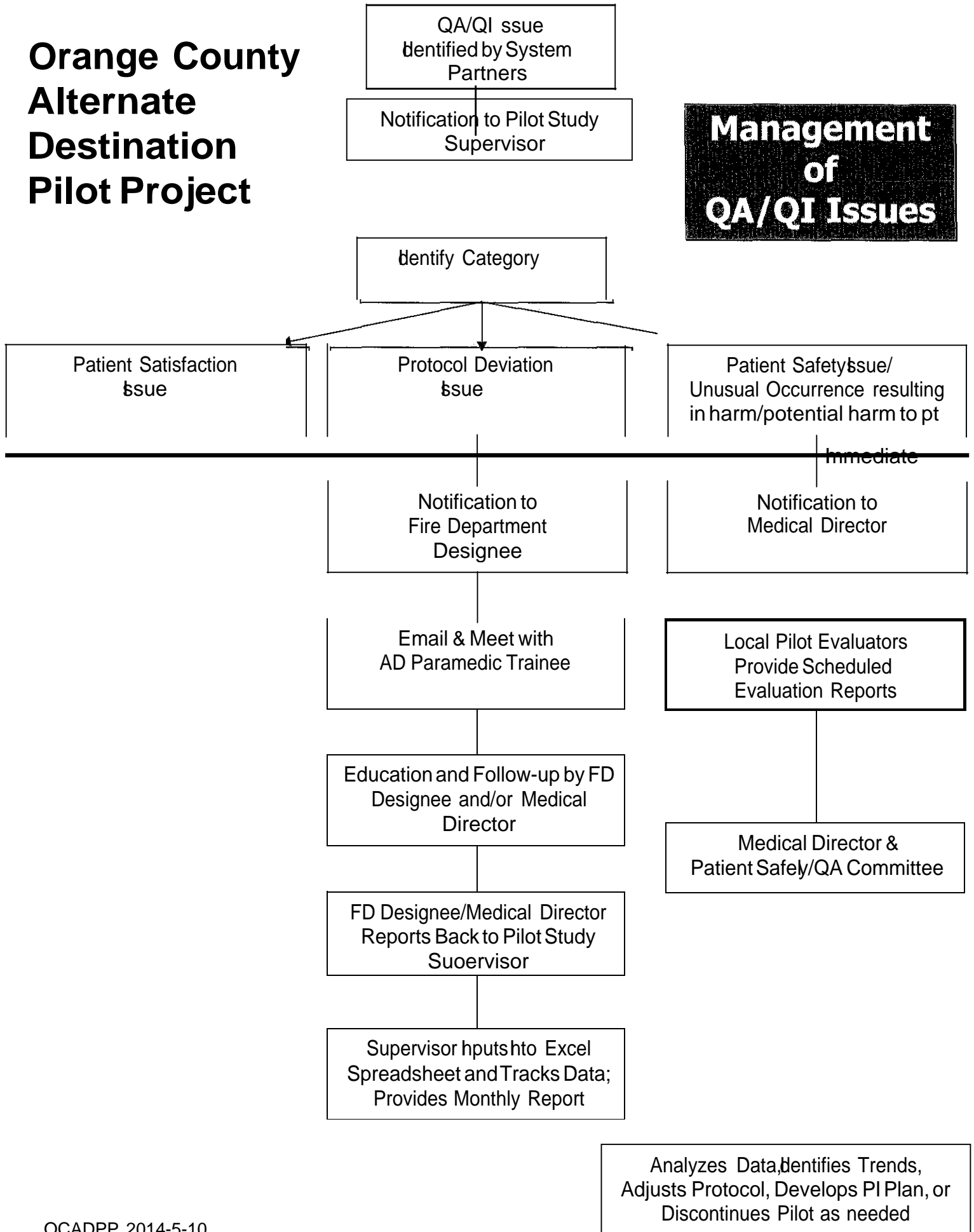
Evaluation Timeline

1. Completion of months 3, 9, 15, and 21 report
 - a. Summary of transports delivered over previous 3 months (i.e. number of patients assessed, enrolled, and transported to ADUCs and/or partner ERCs).
 - b. Cumulative summary from time 0 of these same numbers.
 - c. Any issues that have arisen **in** the 3 month period and how these have been addressed.
 - d. Data oversight and safety report.
2. Completion of months 6 and 18 reports to include (4 pages, brief summary):
 - a. Summary of transports delivered over previous 6 months (i.e. number patients assessed, enrolled, and transported to ADUCs and/or partner **ERCs**).
 - b. Cumulative summary from time 0 of these same numbers.
 - c. Any issues that have arisen in the 3 month period and how these have been addressed.
 - d. Updated time statistics for time on scene, transport time, and total turn-around time.
 - e. Presentation of any adverse events for patients enrolled **in** study, as well as discussion of whether adverse event could be considered attributable to study enrollment.
3. Completion of months 12 and 24 report
 - a. Summary of Transports delivered over previous 12 months (i.e. number patients assessed, enrolled, and transported to ADUCs and/or partner ERCs).
 - b. Cumulative summary from time 0 of these same numbers.
 - c. Any issues that have arisen in the 3 month period and how these have been addressed.
 - d. Updated time statistics for time on scene, transport time, and total turn-around time.

- e. Presentation of any adverse events for patients enrolled in study, as well as discussion of whether adverse event could be considered attributable to study enrollment.
 - f. Analysis of cost data collected thus far in study.
4. Final Report, at completion of study
- a. Cumulative summary of patients seen in study period, patients enrolled, assessed and transported with demographic comparison.
 - b. Disposition of patients enrolled in study
 - c. Relative costs of patient care for patient transported to ADUC by ADPTs and/or transported to partner ERCs by non-ADPTs
 - d. Patient satisfaction data

Orange County Alternate Destination Pilot Project

Management of QA/QI Issues



Quality Assurance Category Definitions and Examples

Patient Safety Issue - Any concern or issue resulting in harm or potential harm to the patient.

Examples of include but not limited to: perceived mis-triage of acute patient to ADUC, delay in transport of acute patient.

***If injury occurs as a result of any of the categories notification to the Medical Director with 24 hours is required.**

Patient Satisfaction Issue - Anytime the patient states a dissatisfaction of services provided anywhere along the continuum of care.

Examples of this include but not limited to: complaints of the wait at ADUC or ERC, complaints of the triage decision of the medics, complaints of line of questioning during field triage.

Protocol Deviation Issue - Any time the pilot study protocol is not followed or put in question by any system partner along the continuum of care.

Examples include but are not limited to: Under triaging of potential study candidate, ADUC accepts patient that does not qualify for study.

*Requires notification to medical director within 5-7 days

System Partners include: 9-1-1 ALS and BLS first responders, ADPTs, Fire Department Administrator staff, Patients, ADUC staff, ERC staff, local Steering Committee members, Pilot Study working group members, OCEMS staff

**ORANGE COUNTY ALTERNATE DESTINATION PILOT PROJECT -
OCEMS GUIDELINES FOR URGENT CARE CENTERS**

I. AUTHORITY:

California Code of Regulations, Title 22, Division 9, Chapter 4; Division 7, Chapter 6; California Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52, Chapter 3, Section 1797.114, and Chapter 4, Section 1797.218; Division 107, Part 3, Chapter 3, Article 1 Sections 128125-128195 and 92001-92702

II. PURPOSE:

To provide guidelines for urgent care centers (UCCs) to be approved by Orange County Emergency Medical Services (OCEMS) to participate in the Orange County Alternate Destination Pilot Project (OCADPP).

III. DEFINITIONS:

OC-MEDS refers to the Orange County Medical Emergency Data system, a web-based, electronic data management system capable of tracking near-real time prehospital care events from the time 9-1-1 is called through to the discharge of the patient from the Emergency Receiving Center (ERG). This system has interoperable capabilities that allow authorized access to electronic prehospital care report data by participating EMS provider agencies, ERCs, base hospitals, and OCEMS once the field user posts it to the cloud. OC-MEDS is owned, operated, and maintained by OCEMS. The data entered by participating EMS provider agencies is proprietary to that agency.

IV. PARTICIPATION:

A. Initial Approval

UCCs must submit a request to OCEMS to participate in the OCADPP and evidence of compliance to all the guidelines in this document.

B. Site Visit

1. OCEMS and the Local Project Steering Committee will review the submitted material, perform a site visit, and meet with appropriate UCC staff. Following the review, OCEMS will provide its approval decision for participation. The authorization for participation will extend through the duration of the pilot project.
2. The site visit may include:
 - a. Visual inspection of ambulance access and path of travel to treatment area in order to ensure safety and privacy
 - b. Review of triage policies and procedures
 - c. Review of emergency equipment
 - d. Review of staffing matrices and staff competency

C. Change in Ownership/Change in Executive or Management Staff

**ORANGE COUNTY ALTERNATE DESTINATION PILOT PROJECT –
OCEMS GUIDELINES FOR URGENT CARE CENTERS**

OCEMS shall be notified, in writing, at least 30 days prior to the effective date of any changes in the UCC ownership. Change in ownership may require re-approval by OCEMS. Personnel changes in executive or management staff shall be communicated in writing to OCEMS within 10 days.

D. Denial/Suspension/Revocation of Approval by OCEMS

OCEMS may deny, suspend, or revoke the approval for UCC participation for failure to comply with any applicable OCEMS guidelines, state and/or federal laws.

V. MEDICAL PERSONNEL/STAFFING:

A. Medical Director

The medical director or designee shall be responsible for:

1. Implementation of established policies and procedures.
2. Providing for qualified staffing of providers (Physician, Nurse Practitioner or Physician Assistant)

B. Physician

At least one physician must be immediately available during hours of operation. Availability to the NP or PA may be by phone.

C. Physician Assistants (PA) and Nurse Practitioners (NP)

Scope of practice for PAs and NPs must be clearly delineated and must be consistent with state regulations.

D. Support Staff

Medical Assistants, Nursing Assistants, Licensed Vocation Nurses, or Registered Nurses must have current BLS provider certification.

VI. ANCILLARY SERVICES:

UCCs shall have the capability of providing these services:

- A. Respiratory therapy treatments
- B. Plain x-rays
- C. Point-of-care simple laboratory testing for blood and urine

VII. EMERGENCY EQUIPMENT:

Equipment for basic life support, including an automated external defibrillator (AED), shall be available.

**ORANGE COUNTY ALTERNATE DESTINATION PILOT PROJECT -
OCEMS GUIDELINES FOR URGENT CARE CENTERS**

VIII. SYSTEM COORDINATION AND COMMUNICATION:

- A. Clearly established policies and procedures for activating the 9-1-1 system in case of emergency.
- B. Clearly established policies and procedures to affect a non-emergency secondary transfer.
- C. Provision of a dedicated telephone line for field notification of arriving patients.
- D. Computer with internet capability for accessing OC-MEDS' Dashboard and Patient Registry.

IX. DATA COLLECTION/RECORDS:

UCCs shall:

- A. Identify OC-MEDS liaison and alternate who shall be responsible for:
 - 1. Providing ongoing education for UCC staff on use of OC-MEDS dashboard.
 - 2. Acting as a liaison between the UCC, Local Project Steering Committee, and OCEMS for the administration of OC-MEDS.
- B. Designate a staff person responsible for providing data on study patients using the OC-MEDS Patient Registry. Data entered by UCC will not be re-released to other entities except as authorized or required by law.
- C. Provide notification to OCEMS of any study patient requiring a 9-1-1 inter-facility transport to an emergency department or for inpatient admission.

X. COMMUNITY RESOURCES:

UCCs shall maintain a list of referral services and facilities. The following resource listing, including address and telephone number, shall be available within the UCC.

- A. Specialty Services
 - 1. Burn centers
 - 2. Re-implantation centers
- B. OCEMS designated Emergency Receiving Centers
- C. Services
 - 1. Poison control
 - 2. Elder/Domestic abuse referral
 - 3. Sexual assault victim referral
- D. County Contacts

**ORANGE COUNTY ALTERNATE DESTINATION PILOT PROJECT -
OCEMS GUIDELINES FOR URGENT CARE CENTERS**

1. OCEMS - business and after hours, website
2. Public health services
3. Epidemiology

- 1.2. The paramedic will be able to discuss the Orange County (OC) Community Paramedicine pilot project and the associated requirements. (15 min)
 - 1.2.1 Identify lead agency, project manager, community partners, and other involved stakeholders
 - 1.2.2. Goals of Orange County Community Paramedicine pilot project
 - 1.2.3. Significance of conducting concurrent research with the intent of being published by peer reviewed journals
 - 1.2.4. Purpose of IRB approval and additional requirements needed for this process
 - 1.2.5. Paramedic eligibility
 - 1.2.6. Community Paramedicine Curricula: Full Community Paramedicine core curriculum, local curriculum, and Alternate Destination only curriculum

- 1.3. The paramedic will be able to differentiate between state and local governance and medical control and discuss the requirements for local medical oversight in regards to the OC Community Paramedicine pilot project. (10 min)
 - 1.3.1. Role of EMS Authority
 - 1.3.2. Role of Local EMS Agency and LEMSA Medical Director (or designee)
 - 1.3.3. Role of Project Medical Director (Principal Investigator)
 - 1.3.4. Role of Alternate Destination Paramedic Supervisor
 - 1.3.5. Offline medical direction, both prospective and retrospective
 - 1.3.6. Online medical direction, as it applies to the OC pilot program
 - 1.3.7. 100% retrospective review of patients

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

2 Overall Study Design of the OC Pilot Project

Goal (Total: 45 min)

2. The paramedic will understand the overall description and design of the OC pilot project.

Objectives and Summary

- 2.1 The paramedic will be able to discuss the operational methodology of the OC pilot project. (15 min)
- 2.1.1. Deployment of Alternate Destination Paramedics
 - 2.1.2. Flowchart of field interaction from dispatch to disposition of patient
 - 2.1.3. Define criteria for eligible, enrolled, and transported patients and use of OCMEDs alternate destination pilot study ePCR tab
 - 2.1.4. Proposed sample size
 - 2.1.5. Pilot study evaluation period
- 2.2. The paramedic will be able to discuss the policies and procedures and protocols for the OC pilot project. (30 min)
- 2.2.1. Policies and procedures
 - 2.2.2. Medical protocols
 - 2.2.3. Inclusion and exclusion criteria

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

3 Assessing Patients for Inclusion in OC Pilot Project

Goal (Total: 1 hr 15 min)

3. The paramedic will understand how to assess and identify patients for inclusion in the pilot project and make alternate destination decisions.

Objectives and Summary

- 3.1. The paramedic will understand how to perform a focused history and physical assessment of a patient in order to determine appropriate entry into the alternate destination portion of the study. (60min)
- 3.1.1. Detailed history taking for the patient population
 - 3.1.2. Detailed physical assessment for the patient population
 - 3.1.3. Patient eligibility and study inclusion criteria
 - 3.1.4. Patient exclusion criteria
- 3.2. The paramedic will be able to describe the available urgent care clinics. (15 min)
- 3.2.1. Capabilities of the urgent care clinics
 - 3.2.2. Limitations of the urgent care clinics

- 3.2.3. Special requirements for use of the urgent care clinics
- 3.2.4. Restrictions of the urgent care clinics, including hours of operation
- 3.2.5. Communication and advance notification

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

4 Alternate Destination Processes

Goal (Total: 2 hr 40 min)

4. The paramedic will understand the additional processes required to implement alternate destination procedures successfully.

Objectives and Summary

- 4.1. The paramedic will utilize appropriate methods for interacting sensitively, effectively, and professionally with persons from diverse cultural, socio-economic, educational, racial, ethical and professional backgrounds, and persons of all ages and lifestyle preferences. (40 min)
 - 4.1.1. Definition of culture and how it impacts health
 - 4.1.2. Risks of stereotyping
 - 4.1.3. How to develop and utilize cultural competence and awareness as a paramedic
 - 4.1.4. Culturally competent communication strategies when interacting with patients, family, friends, healthcare partners, and healthcare colleagues
- 4.2. The paramedic will be able to describe and discuss the various types of healthcare insurance plans or methods of payment. (60 min)
 - 4.2.1. Affordable Health Care Act
 - 4.2.2. Medicare
 - 4.2.3. Medicaid/Medi-Cal
 - 4.2.4. PPO
 - 4.2.5. HMO
 - 4.2.6. Uninsured
 - 4.2.7. Private pay
- 4.3. The paramedic will understand how to provide information that allows

- the patient to make informed consent. (2 hrs)
 - 4.3.1. Definition of informed consent
 - 4.3.2. Components necessary to achieve informed consent
 - 4.3.3. Ineligibility for informed consent (i.e. mental status, age, communication barriers)
 - 4.3.4. Declined consent
 - 4.3.5. Review of study consent
 - 4.3.6. Consent documentation
- 4.4. The paramedic will be able to discuss the required documentation for the alternate destination pilot project. (60 min)
- 4.4.1. Policies and procedures
 - 4.4.2. Data collection
- 4.5. The paramedic will understand how patient safety and quality improvement are measured in the pilot project. (20 min)
- 4.5.1. Patient safety outliers, including remediation or project removal
 - 4.5.2. Outcome measurements
 - 4.5.3. Patient satisfaction surveys
 - 4.5.4. Provider education and satisfaction surveys
 - 4.5.6 QA Process and workflow
 -

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

5 Scenario-Based Simulations Skills Lab

Goal (Total: 2 hr 30 min)

5. During scenario-based simulations, the paramedic will demonstrate the acquisition of advanced knowledge and skills to communicate effectively with, medically assess, correctly document and make the appropriate disposition for 911 patients meeting the eligibility criteria for the pilot project.

Objectives and Summary

- 5.1. The paramedic will be able to perform a focused history and physical assessment of a patient in order to determine appropriate entry in to the pilot project.

- 5.1.1. Detailed history taking
 - 5.1.2. Detailed physical assessment
 - 5.1.3. Inclusion and exclusion criteria
- 5.2. The paramedic will be able to communicate effectively while: offering enrollment into the study, obtaining an informed consent, consent is being declined, offering transport to an urgent care clinic, determining the appropriate disposition of patients, and providing a transfer of care report to the urgent care clinic or ED.
- 5.2.1. Culturally competent communication strategies when interacting with patients, family, friends, healthcare partners, and healthcare colleagues
 - 5.2.2. Components necessary to achieve informed consent
 - 5.2.3. Valid informed consent
 - 5.2.4. Declined consent
 - 5.2.5. Study policies, procedures, and medical protocol
 - 5.2.6. Urgent care clinic capabilities, limitations, restrictions, and operating hours
 - 5.2.7. Types of healthcare insurance plans or methods of payment
- 5.3. The paramedic will be able to complete all of the required documentation for the OC pilot project in the appropriate manner.
- 5.3.1. Patient assessment, interventions, and disposition
 - 5.3.2. Consent documentation
 - 5.3.3. AMA documentation
- Competency demonstrated by passing a written exam, taken individually with 80% or higher.

5 Competency Testing

Goal

5. The paramedic will demonstrate competency prior to implementing the alternate destination pilot project.

Objectives and Summary

- 5.1. The paramedic will successfully complete competency testing.
- 5.1.1. Knowledge of the alternate destination project
 - 5.1.2. Knowledge of policies, procedures, and protocols
 - 5.1.3. Knowledge of documentation requirements and standards

- 5.1.4. Knowledge of how to perform a detailed history and focused physical exam of 911 patients meeting the eligibility criteria
- 5.1.5. Skill in making appropriate patient disposition decisions for eligible patients
- 5.1.6. Skill in obtaining an informed consent
- 5.1.7. Skill in communicating effectively during interaction with patients, family, and healthcare partners or colleagues

There will be a final written test covering all the modules.

Individually, each paramedic will go through a series of simulations and correctly decide if the patient meets the protocol for alternate destination demonstrating knowledge in policies, procedures, and protocols.

Competency demonstrated by passing skills testing and written exam, taken individually with 80% or higher.

Prerequisite reading:

1. *"Community Paramedicine: A Promising Model for Integrating Emergency and Primary Care,*
2. *Finding a New Seat at the Healthcare Table: Will the emerging concept of mobile integrated healthcare practice transform EMS?*
3. *Innovation Opportunities for Emergency Medical Services, A Draft White Paper from NHTSA (DOT) and Office of the Assistant Secretary for Preparedness and Response (HHS).*

Each student will login in to target solutions to access articles and post test. Will bring to first day of class.

Students will be provided with binders consisting of:

- 1) Lecture PowerPoints
- 2) Curriculum
- 3) Reference materials- articles listed above

Proposed Class Schedule

10 1/2 hrs session over 2 days

Consists of 8 hrs didactic and 2 1/2 hrs clinical simulation lab

Evaluation of Competency

Written test - 1hr

Skills test – 30 min



BUTTE COUNTY EMS

COMMUNITY PARAMEDIC
PILOT PROJECT PROPOSAL

MAY 2014

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PILOT PROJECT OVERVIEW

Pilot Project Overview

TITLE OF PROJECT

Butte County EMS Mobile Integrated Health Care Community Paramedic Program.

SCOPE OF PRACTICE CATEGORIES

The Butte County EMS Mobile Integrated Health Care Community Paramedic Program will assess the safety and value of modifying the Paramedic Scope of Practice to achieve the following objectives:

- Post hospital or emergency department follow up – Provide follow-up assistance for patients with a hospital discharge diagnosis of Acute Myocardial Infarction (AMI) or Heart Failure (HF).
- Care for chronic conditions – Reinforce primary care provider (PCP) instructions for patients with HF.

DESCRIPTION OF PROPOSED CONCEPT

The program is designed to improve patients' healthcare experience while reducing hospital readmissions. The program's goal will be to improve and facilitate timely primary care access and to prevent simple medical problems from becoming serious or life-threatening emergencies. Patients with a discharge diagnosis of AMI and/or HF will be asked to participate in the pilot project prior to hospital discharge. Patients who agree to participate and have a signed informed consent on file will receive a follow-up telephone call from the Community Paramedic within 48 hours of discharge to obtain a status report on their current medical condition. Community Paramedic personnel will follow a telephone script and stop light algorithm, approved by the local program medical directors, to determine if an in-person Community Paramedic follow-up visit and/or a primary care provider contact/referral is necessary. A basic summary of these determinations includes:

- Green: Patient is doing fine, has all of their necessary medications and support. In this case, another follow-up call by the Community Paramedic may be scheduled in a few days.
- Yellow: The patient may have some questions, concerns or issues that need to be addressed. An in-person visit by the Community Paramedic may be arranged if issues cannot be resolved over the telephone.
- Red: The patient has issues that require an urgent in-person visit by the Community Paramedic, and/or may require an ambulance for assistance and transportation.

PILOT PROJECT OVERVIEW

PROJECT PARTNERS

Initial efforts will focus on patients discharged from Enloe Medical Center. The expectation is that the program will expand to other local hospitals in Butte County after the initial implementation phase. It is anticipated that other partners for this effort will include:

- Butte Home Health
- Chico Cardiology Rehabilitation
- North State Cardiology
- Chico Heart Medical Center
- Enloe Rehabilitation Hospital
- Home and Healthcare Management
- Adult Day Health Care
- Sunplus Home Health Services
- Interim Homestyle Services
- Arrhythmia Center of Nor Cal
- River Side Healthcare
- Ampla Health

GEOGRAPHICAL AREA TO BE SERVED

Butte County

ESTIMATED PROJECT LENGTH

2 Years

BACKGROUND INFORMATION

In 2012, Enloe Medical Center had 429 patients admitted to the hospital with a discharge diagnosis of AMI. Of those, 34 returned and were admitted back into the hospital in less than 30 days (with any diagnosis). The average stay of readmission is 5.7 days at an average cost of \$5,000 per day. Also in 2012, there were 46 patients with a diagnosis of HF that were readmitted in less than 30 days of discharge. The average stay for those readmits was 5.4 days at an average cost of \$5,000.

PILOT PROJECT OVERVIEW

We believe that the Community Paramedic can reduce this number by 20%; resulting in a savings of \$442,000. This will be accomplished by ensuring that the patient has early intervention by the healthcare system. This will facilitate an understanding of discharge plans and coordination of follow up care for the patient. The Community Paramedic may coordinate transportation needs and ensure that medications have been obtained and are being taken as prescribed. The Community Paramedic would also make necessary referrals when an intervention by a licensed healthcare provider could prevent an exacerbation of a condition. The Community Paramedic may also make in-person visits when a more in-depth assessment is determined to be necessary.

NEED FOR PROJECT

This Community Paramedic Pilot Project is meant to fill an identified need in Butte County for post hospital and emergency department follow-up of patients with a specific discharge diagnosis with the intent of reducing hospital readmissions and is not meant to supersede or replace any health programs that are already available in the community. Those eligible for home health visits are not currently seen for a minimum of 72 hours post hospital discharge. This program will fill that gap, not replace, home health coverage. This project has the support of all of the healthcare providers listed in this proposal.

ANTICIPATED NUMBER OF COMMUNITY PARAMEDICS

It is anticipated that 10 Butte County EMS Community Paramedics will be initially trained as part of this pilot project.

EMPLOYMENT OPPORTUNITIES FOR COMMUNITY PARAMEDICS

This Community Paramedic Pilot Project will serve the Butte County area. The lessons learned from this pilot project will quickly extend to neighboring communities and numerous job opportunities will be created for skilled, empathic paramedics once the value of the concept is verified.

PROGRAM MANAGEMENT

Program Management

OPERATIONAL METHODOLOGY

The basis of the proposed methodology is to minimize the expense of AMI and HF patient readmission through the analysis of discharge summaries, discharge instructions and medical records. Patients that were discharged with a diagnosis of AMI or HF will be followed by the Community Paramedic within 48 hours. The patient will be contacted to see how they are doing, if they have any needs, understand their discharge instruction, or if an in-person visit by a Community Paramedic is necessary to solve any problems to prevent readmission.

Telephone calls and follow-ups will be logged and monitored. If repeated contacts are made, they will be noted. If an in-person visit and assessment is needed, it will be logged and the interventions noted. If a patient is not readmitted within thirty days, it will be logged. If an intervention was made and the patient was not readmitted, it will be logged and the intervention noted. If an intervention was made and the patient was readmitted in less than 30 days with a diagnosis other than AMI or HF, it will be logged and the intervention noted. If the patient was readmitted with a diagnosis of AMI or HF, it will be logged and the intervention noted.

At the end of the thirty day cycle for each patient, the actions of the Community Paramedic will be reviewed for that patient and the results will be logged.

PROJECT LEADERSHIP AND LOCAL ADVISORY COMMITTEE

The project leadership and local advisory committees will work in collaboration with the EMSA Community Paramedic Project Manager, Independent Evaluator, and State Community Paramedic Advisory Committee as necessary throughout the duration of the pilot project. Project leadership and local advisory committee members are described below:

- Troy Falck, MD, Medical Director, S-SV EMS Agency
- Vickie Pinette, Regional Executive Director, S-SV EMS Agency
- Vincent Balardi, MD, ED Medical Director, Enloe Medical Center
- Jeff Thomas, MD, Hospitalist, Chair, Pharmacy and Therapeutics
- Mike Wiltermood, CEO, Enloe Medical Center
- Marty Marshall, Managing Director, Butte County EMS
- Byron Parsons, Managing Director, Butte County EMS

PROGRAM MANAGEMENT

- Corkey Rey, MD, Medical Director, Butte County EMS
- Neal Cline, RN, Community Paramedic Program Manager, Butte County EMS
- John Poland, Paramedic, Quality Improvement & Education Coordinator, S-SV EMS Agency
- Belinda Schafer, RN, Paramedic, Allied Health – EMS Department Chair, Paramedic Program Director, Butte Community College
- Other committee members as deemed necessary

PROVISIONS FOR PROTECTING PATIENTS' SAFETY

Current effective prehospital safeguards will be adopted, and additional efforts will be introduced to assure that this pilot program is safe. We understand that AMI and HF patients constitute a vulnerable subset of the population, and that our procedures must assure that Community Paramedic decisions remain exclusively focused on the safety and welfare of the patient. Specifically, we intend to ensure patient safety through the following methods:

- Selection of superior prehospital personnel to receive community paramedic training and be utilized in this role.
- Thorough training to ensure adequate knowledge and competencies of all Community Paramedic personnel.
- Robust medical control through the establishment of appropriate Community Paramedic Program policies and protocols and 24/7/365 availability of base hospital physician consultation (see base hospital and communication failure policy addendums – Appendix C).
- Tracking and timely investigation of all clinical patient care concerns/complaints.
- Frequent and consistent review and reporting of community paramedicine program data.

INFORMED CONSENT

Informed consent will be obtained from all patients prior to their participation in this pilot project. In addition, a separate informed consent will be obtained prior to each in-person patient encounter by the Community Paramedic. Informed consent forms approved by OSHPD and EMSA will be utilized for this purpose.

ANTICIPATED SOURCES OF FUNDING

Funding for this pilot project will be provided by Enloe Medical Center and Butte County EMS.

PROGRAM MANAGEMENT

PARAMEDIC ELIGIBILITY

Paramedics will meet the requirements set forth in the CA EMSA Letter of Intent. In addition, they will undergo routine screening and background checks as employees of Butte County EMS. Qualified candidates must be in good standing and must have demonstrated the humanistic and professional skills required to perform this job, which include:

- Four years active paramedic in the local EMS system.
- Minimum of an AA degree or equivalent.
- No significant clinical, operational, or patient complaint issues on file.
- Integrity—the presence of congruence between one’s stated values and actual behavior.
- Compassion—the recognition of another’s suffering coupled with a desire to relieve it.
- Altruism—the ability to place the needs and interests of others ahead of one’s own.
- Respect—a regard for the autonomy and values of others.
- Empathy—the ability to place oneself in another’s situation.
- Service—the willingness to share talent, time & resources beyond that which is required.
- Intelligence—the capacity for reasoning and understanding.
- Versatility—the ability to embrace a variety of subjects, fields or skills.

The Butte County EMS Community Paramedic Job Description is located in Appendix A

LOCAL COMMUNITY PARAMEDIC TRAINING

Butte County EMS will collaborate with the regional Community Paramedic training center to develop and implement the required Community Paramedic training. The local training course curriculum is indicated in Appendix B.

POLICIES AND PROTOCOLS

Pilot project policies and protocols will be developed by the local advisory committee and ultimately be approved by the Local EMS Agency (LEMSA) Medical Director. The proposed pilot project policies and protocols are located in Appendix C.

PROGRAM MANAGEMENT

EVALUATION AND DATA COLLECTION

- Process Evaluation:
 1. Patients with a discharge diagnosis of AMI or HF will be monitored for thirty days after discharge.
 2. Patients will be contacted by the Butte County EMS Community Paramedic in less than 48 hours and those contacts will be documented. If further contacts are made with the patient, they will also be documented.
 3. The number and types of intervention will be cross-referenced with the names of admitted patients in the medical records to see if any of the contacted patients had been readmitted. For those patients that were contacted and readmitted, the contact documentation will be evaluated to see if an improvement can be made going forward.
 4. A monthly report will be generated to calculate the percent decrease, if any, in readmission to show effectiveness of the program. A calculation will be made using average length of stay and average cost of their stay to extrapolate potential savings.

- Qualitative Evaluation:
 1. Patient survey on how they felt about CP providing care:
 - Patient comments or concerns.
 - Did the patient feel that adequate care was provided?
 2. Evaluate length of stay if readmitted for the same diagnosis and new treatments provided.

- Impact Evaluation and Utilization:

The data will be reviewed to determine if the Community Paramedic and interventions prevent or minimize readmission to this select population. The interventions will be evaluated for most effective and best utilized.

- Dissemination of Results:
 1. A regular report (monthly or quarterly as required/appropriate) will be provided to the local Community Paramedic Project Advisory Committee, Independent Evaluator, the State Community Paramedic Advisory Committee through the EMSA Project Manager, and other entities as deemed appropriate.

PROGRAM MANAGEMENT

2. Objectives to be included for evaluation Include:
 - Increased access to care
 - Improved efficiency of healthcare delivery
 - Decreased hospital readmissions
 - Decrease in low acuity ambulance transports
 - Decrease in low acuity emergency department visits
 - Cost savings from reduced readmissions
 - Healthcare service utilization patterns
 - Patient satisfaction
 - Other data elements as deemed appropriate

QUALITY ASSURANCE AND IMPROVEMENT

Butte County EMS is required to conduct Quality Assurance and Quality Improvement (QA/QI) reviews as part of their Paramedic Provider Contract with the Sierra – Sacramento Valley Emergency Medical Services Agency (LEMSA). The Community Paramedic (CP) Pilot QA/QI plan will integrate into the existing EMS QA/QI plan, with program-specific enhancements and heightened monitoring.

In addition to normal review of care coordination activities, Butte County EMS will review one hundred percent of all incidents involving Community Paramedic patient encounters. These encounters will be identified through mandatory reports completed by the Community Paramedic, as well as a secondary records log review by the project manager. Butte County EMS will review incidents associated with an:

- Medical appropriateness
- Situational appropriateness
- Time appropriateness
- Compliance with protocols
- Unusual circumstances
- Adequacy of policy/protocol
- Outcome
- Safety issues
- Non-emergency contacts requiring the CP to request emergency assistance
- System trends involving CPs

PROGRAM MANAGEMENT

The Butte County EMS QA/QI team will handle Community Paramedic incidents under the following process:

- Project manager or other entity refers incident to QA/QI.
- Incident is referred to the designated Community Paramedic QA personnel (RN and/or physician).
- QA personnel determines appropriateness, compliance, safety.
- Feedback provided to respective Community Paramedic.
- The paramedic, project manager or QA personnel will investigate the outcome, depending upon which individual is most appropriate for the situation.
- Review between QA/QI, project manager, paramedic and medical director.
- Report to S-SV EMS Agency (LEMSA) or EMSA, if needed.
- Feedback and education to Community Paramedic and other personnel as deemed appropriate.
- Record retention as indicated by EMSA.

CONTACT INFORMATION

- Butte County EMS Community Paramedicine Program Manager:

Neal Cline, RN, JD, CFRN
Sr. Flight Nurse, Enloe FlightCare
STEMI Manager, Prehospital Liaison
Enloe Medical Center
Assistant Chief Quality and Education
Butte County EMS
530-332-7933

- Sierra – Sacramento Valley EMS Agency:

John Poland. Paramedic
QI & Education Coordinator
916-625-1719
John.poland@ssvems.com

APPENDIX A – JOB DESCRIPTION

Appendix A - Butte County EMS Community Paramedic Job Description

Department: Emergency Medical Services

Reports To: Program Manager

FLSA Status: Non-Exempt

Community Paramedics: 10

Community Paramedic Supervisor: 1

GENERAL STATEMENT OF DUTIES: Provides primary care and/or advanced life support, including medical evaluation, treatment and stabilization of the critically ill and injured with the goal of reducing morbidity. Supports existing health services; provides integrated health services in partnership with other health professionals; extends access to health services delivery in underserved and general populations, including primary care, public health, disease management, prevention and wellness, mental health, and performs other duties as required.

PRIMARY JOB RESPONSIBILITIES:

- Performs all Primary Job Responsibilities listed for Paramedic;
- Examines, screens, treats and coordinates health services for patients;
- Conducts post-hospital release follow-up care including, but not limited to, monitoring medication, dressing changes, and checking vital signs;
- Observes, records, and reports to physician, patient's conditions and reactions to drugs, treatments, and significant incidents;
- Conducts patient education, including diabetes prevention/treatment, hypertension, Congestive Heart Failure (CHF), Chronic Obstructive Pulmonary Disease (COPD), falls assessment, injury evaluation, geriatric frailty visits, and nutrition;
- Administers patient care consistent with department protocols and physician orders;
- Coordinates appointments and follow-up with physicians and hospitals when needed;
- Develops and completes appropriate reports and templates for the Community Paramedic Program; and
- Attends meetings as requested and available.

ADDITIONAL EXAMPLES OF WORK PERFORMED:

- Cleans and maintains (minor maintenance) vehicles;
- Maintains records of vehicles, supplies, training and daily work; and
- Performs other related duties as assigned.

APPENDIX A – JOB DESCRIPTION

JOB SPECIFICATIONS:

- All Paramedic job specifications apply;
- California licensed paramedic with at least four years' experience;
- Successful completion of the Community Paramedic class and clinical portion;
- Continuous improvement and clinical rotations as assigned or requested to maintain proficiency in areas of focus for the program;
- Current certifications in Basic Life Support (BLS), Cardio Pulmonary Resuscitation (CPR), Pediatric Advanced Life Support (PALS), and Advanced Cardiac Life Support (ACLS);
- Ability to communicate orally with a wide range of individuals;
- Ability to read and interpret documents such as protocols, physician orders, safety rules, operating and maintenance instructions procedure manuals;
- Ability to accurately write routine reports and correspondence;
- Computer proficiency required including knowledge of Microsoft Office Suite;
- Ability to add, subtract, multiply, and divide all units of measure, using whole numbers, common fractions, and decimals;
- Ability to interpret electrocardiogram (EKG) charts;
- Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form;
- Ability to solve practical problems and deal with a variety of variables in situations where only limited standardization and resources exist; and
- Ability to practice sound decision-making skills.

OTHER REQUIREMENTS:

- Must maintain a high degree of academic and practical knowledge in emergency paramedicine, and must attend sufficient continuing education classes, courses and seminars both on and off duty to maintain annual paramedic certification, as required.
- Must possess and maintain a valid California driver's license.

DISCLAIMER:

To perform this job successfully, an individual must be able to perform the primary job responsibilities satisfactorily with or without reasonable accommodation. The above statements are intended to describe the general nature and level of work being assigned to this job. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of individuals in the job. This job description is not an employment agreement and/or an expressed or implied employment contract. Management has the exclusive right to alter this job description at any time without notice.

APPENDIX B – LOCAL CP TRAINING

Appendix B – Community Paramedic Local Training

The Community Paramedic local curriculum will include an estimated 90 hours of local didactic training and clinical rotation through various hospital and clinical settings which will be supervised by the partnering physicians:

- Local Didactic Training (8 hours)
- Orientation to Meditech and Chart Max (6 Hours)
- ED physician shadowing (24 Hours)
- Hospitalist shadowing (16 Hours)
- Cardiologist Shadowing (4 Hours)
- Discharge planning and Cardiac Rehab Shadowing (8 hours)
- Clinical Review (24 hours)

Goal

The Community Paramedic will demonstrate competence to provide the clinical care of the identified population through local didactic training, skills testing and clinical experience. The student will attend an estimated 90 hours of local training to achieve competence. The community Paramedic (CP) candidates will be teamed with hospitalist physicians, emergency physicians, cardiologist, Mid-level practitioners and nurses at Enloe Medical Center to complete the clinical rotation objectives outlined.

Objectives & Summary

1. The student will understand his or her role in the pilot program and be able to demonstrate knowledge of the following:
 - a. Introduction to leadership
 - b. Local pilot project advisory committee
 - c. Current scope
 - d. Projected state scope
 - e. Pilot project parameters
 - f. Patient informed consent requirements
 - g. Pilot project QA/QI processes
 - h. Local Community Paramedic roles and responsibilities
 - i. Approved local pilot project policies, protocols and procedures

APPENDIX B – LOCAL CP TRAINING

2. Demonstrate in skills labs and scenarios how to manage patients that will be encountered in the prehospital setting, utilizing standard pilot project procedures.
 - a. Detailed Assessment including recent and post discharge history.
3. Demonstrate in skills labs and scenarios how to manage patients with common, chronic conditions that will be encountered in the community, utilizing standard pilot project procedures.
 - a. Post Discharge Acute Myocardial Infarction
 - b. Heart Failure
4. Demonstrate in skills labs and scenarios how to manage patients within various situations that will be encountered in the community, utilizing standard pilot project procedures.
 - a. Medication Reconciliation
 - b. Social Service Resource Needs
 - c. Home Safety/Fall Prevention
 - d. Caregiver Problems
 - e. Welfare Check
 - f. Assessment of Nutrition, Hydration, and Weight
 - g. Transportation Issues
5. Demonstrate in skills labs and scenarios how to provide education to patients that will be encountered in the community, utilizing standard pilot project procedures.
 - a. Discharge Follow-up and Instructions
 - b. Acute MI
 - c. Heart Failure
6. Demonstrate in skills labs and scenarios how to document and communicate care to patients utilizing ePCR capability and other methods of communication with healthcare partners, utilizing standard pilot project procedures.
 - a. Complete Data Entry
 - b. Pilot Project Forms
 - c. Communication with Physicians

APPENDIX B – LOCAL CP TRAINING

- d. Communication with Hospitals and Health Facilities
- e. Health Information Exchange
- f. ePCR and Local Documentation Software

7. The Community Paramedic will demonstrate competency in following procedures through supervised experience with patients in a Hospital and Clinic setting. The minimum number of procedures are included in the following table and shall be documented by clinical preceptors for each identified skill.

Community Paramedic Clinical Procedures – ED and Hospitalist Clinical Rotation	
Procedures	Minimum Number Performed
Blood Pressure Checks	2
Medical Equipment	
Otoscope	10
Home Medication	
Compliance	7
Reconciliation	7
Patient Documentation	
SOAP Notes	5
Chart Review	15
History & Physical	20
Assessment	20
Results From Tests /Diagnostic Tools	15
Identifying Red Flags	5
Identifying Further Testing Needs	5
Chronic Illness Management	
Acute MI	5
Heart Failure	5
Provide Patient Education	5
Management of Patients	Optional

APPENDIX C – CP POLICY/PROTOCOL

Appendix C – Community Paramedic Policy/Protocol

SIERRA-SACRAMENTO VALLEY EMS AGENCY PROGRAM POLICY

REFERENCE NO. 1108

SUBJECT: COMMUNITY PARAMEDICINE PILOT PROJECT

1 **PURPOSE:**
2

3 To provide a mechanism for short term post hospital discharge follow up, treatment
4 and referral of patients with a diagnosis of Acute Myocardial Infarction (AMI) or
5 Heart Failure (HF) by appropriately trained, approved and monitored Butte County
6 EMS (BCEMS) Community Paramedic (CP) personnel as part of the California State
7 EMS Authority Community Paramedicine Pilot Project.
8

9 The objective of the BCEMS CP Pilot Project is to demonstrate that CPs, under the
10 direction and supervision of appropriate physician medical control, can safely and
11 effectively provide patient-centered care that improves health care efficiency and
12 integration of health system resources resulting in reductions to emergency
13 department visits and hospital readmissions. CP personnel will be utilized to fill an
14 identified short term healthcare gap between hospital discharge and primary care
15 follow up which is currently not available on a consistent basis in the Butte County
16 community.
17

18 The goals of the BCEMS Community Paramedicine Pilot Project include:
19

20 A. Ensure that AMI and HF patients receive the following:
21

- 22 1. Understanding of their hospital discharge instructions.
- 23 2. Medications have been obtained and are being taken as prescribed.
- 24 3. Coordination of necessary follow up care.
- 25 4. Coordination of necessary/appropriate transportation.
- 26 27

28 B. Allow CP personnel to make post hospital discharge home visits when necessary.
29

30 C. Allow CP personnel to make necessary referrals when an intervention by a
31 licensed healthcare provider could prevent an exacerbation of a medical
32 condition.
33
34
35

36 **AUTHORITY:**
37

38 California Code of Regulations, Title 22, Division 9, Chapter 4.
39

Effective Date:

Date last Reviewed/Revised: 05/09/14

Next Review Date:

Page 1 of 2

Approved:

S-SV EMS Medical Director

S-SV EMS Regional Executive Director

SUBJECT: COMMUNITY PARAMEDICINE PILOT PROJECT

1 California Code of Regulations, Title 22, Division 7, Chapter 6.

2
3 Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4,
4 Section 1797.218.

5
6 Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with
7 Section 128125, the Health Workforce Pilot Projects Program.

8
9 California Office of Statewide Health Planning and Development (OSHPD) Health
10 Workforce Pilot Projects Program (HWPP) – Program Approval #173.

11
12 **IMPLEMENTATION & DURATION:**

13
14 The anticipated Community Paramedicine Pilot Project implementation date is
15 January 1, 2015 with an expected duration of up to 24 months. HWPP projects may
16 be extended one year at a time if the OSHPD Director determines that continuation of
17 the project will contribute substantially to the availability of high-quality services in
18 the state or region.

19
20 **MEDICAL CONTROL & PROJECT MONITORING:**

21
22 The BCEMS and Enloe Medical Center Medical Directors will provide day to day
23 medical control and monitoring of the BCEMS pilot project and work collaboratively
24 with the S-SV EMS Agency Medical Director to provide appropriate overall pilot
25 project medical control and oversight.

26
27 The S-SV EMS Agency Medical Director will act as the principal investigator for the
28 BCEMS Community Paramedicine Pilot Project and has primary responsibility for
29 medical control related to this project.

30
31 **LOCAL ADVISORY COMMITTEE:**

32
33 A. A local BCEMS Community Paramedicine Pilot Project Advisory Committee will
34 be established and maintained for the duration of the pilot project.

35
36 B. The responsibilities of the BCEMS Community Paramedicine Advisory
37 Committee include:

38
39 1. Work in collaboration with the EMSA Community Paramedicine Project
40 Manager, Independent Evaluator and State Community Paramedicine
41 Advisory Committee as necessary throughout the duration of the pilot project.

42
43 2. Provide appropriate medical control and oversight necessary to ensure patient
44 safety and quality improvement through the following methods:

45
46 a. Development of CP candidate selection criteria and approval of selected
47 CP candidates.

SUBJECT: COMMUNITY PARAMEDICINE PILOT PROJECT

- b. Development of the BCEMS site specific CP training curriculum, including skills testing and clinical experience.
- c. Development of BCEMS Community Paramedicine Pilot Project policies, procedures and protocols.
- d. Development and monitoring of the BCEMS Community Paramedicine Pilot Project QI Plan.
- e. Development, monitoring and review of the BCEMS Community Paramedicine Pilot Project data metrics.

C. The BCEMS Community Paramedicine Pilot Project Advisory Committee will consist of the following members:

- 1. BCEMS Community Paramedicine Pilot Project Manager.
- 2. BCEMS Administrator and Medical Director.
- 3. Enloe Medical Center Administrator (or designee) and Medical Director.
- 4. BCEMS & Enloe Medical Center Quality Management and registrar/data analyst personnel.
- 5. S-SV EMS Agency Administrator (or designee) and Medical Director.
- 6. Other appropriate members as deemed necessary.

PATIENT INCLUSION CRITERIA:

Patients must meet the following criteria for inclusion in the BCEMS Community Paramedicine Pilot Project:

- A. Pending discharge home from Enloe Medical Center.
- B. Discharge diagnosis of AMI or HF.
- C. Agree to participate in the pilot project and complete/sign an OSHPD/HWPP required pilot project informed consent form. Informed consent must be obtained by the CP from the patient at each encounter.

PROCEDURE:

- A. Patients who meet the inclusion criteria will be contacted by an Enloe Medical Center Cardiac Rehabilitation Registered Nurse (RN) prior to hospital discharge to explain the purpose and benefits of the Community Paramedicine Pilot Project and to obtain required initial informed consent for pilot project participation. This informed consent will only apply to the initial CP telephone contact process described below. Additional patient encounters by CP personnel will require a

SUBJECT: COMMUNITY PARAMEDICINE PILOT PROJECT

1 separate informed consent for each encounter. Patients may withdraw consent or
2 choose to no longer participate in the pilot project at any time.

3
4 B. Patients who agree to participate in the pilot project will be contacted by BCEMS
5 CP personnel via telephone within 72-96 hours following hospital discharge. A
6 standard script approved by the BCEMS, Enloe Medical Center and S-SV EMS
7 Agency Medical Director's will be utilized by the CP for the initial patient
8 telephone contact.

9
10 C. The CP will utilize an algorithm approved by the BCEMS, Enloe Medical Center
11 and S-SV EMS Agency Medical Director's to assess the patient and will take the
12 following actions based on their assessment and the identified patient needs:

13
14 1. Ensure that the patient has a clear understanding of their hospital discharge
15 instructions. If the patients understanding of their hospital discharge
16 instructions is unclear, the CP will take one or more of the following actions:

- 17
18 a. Perform an in person visit to allow for further assessment.
19 b. Contact the Cardiac Rehabilitation Nurse for clarification and direction.
20 c. Contact or refer the patient to their primary care provider (PCP) for
21 clarification or direction.

22
23 2. Assist the patient with scheduling or referral to their PCP.

24
25 3. Assess the need for transportation. If necessary, assist the patient in arranging
26 transportation via taxi, non-medical transport, or referral to case management.

27
28 4. Ensure that the patient has obtained and is taking their medications as
29 prescribed. The CP will attempt to resolve any minor identified medication
30 issues with the patient. If the CP identifies any medication issues that they are
31 unable to resolve over the telephone, the CP will take one or more of the
32 following actions:

- 33
34 a. Perform an in person visit to allow for further assessment.
35 b. Referral to case management.
36 c. Contact or refer the patient to their PCP for clarification or direction.

37
38 5. Ensure the patient has the stoplight algorithm assessment tool provided upon
39 hospital discharge (addendums 1108-B & 1108-C) and review the algorithm
40 with the patient to determine their current medical status. The CP will take
41 the following appropriate action based upon the patients reported status:

- 42
43 a. Patient reports "green zone": No further action is needed.
44 b. Patient reports "yellow zone": CP in-person visit is scheduled and
45 completed.
46 c. Patient reports "red zone": Standard EMS response is sent to patients'
47 location for further assessment, treatment and/or transport as appropriate.

SUBJECT: COMMUNITY PARAMEDICINE PILOT PROJECT

DOCUMENTATION:

A. Every attempted or actual patient encounter related to the Community Paramedicine Pilot Project will be documented in the following manner:

1. Pilot project staff will maintain a log of all patients who meet items A and B of the 'Patient Inclusion Criteria' listed in this policy who choose not to participate in the pilot project. This log will include the following minimum information:
 - a. Patient name and medical record number.
 - b. Patient hospital discharge diagnosis.
 - c. Patient hospital discharge date.
2. Pilot project staff will maintain a log of all patients who initially consent to enroll in the pilot project and who subsequently choose to no longer participate in the pilot project. This log will include the following minimum information:
 - a. Patient name and medical record number.
 - b. Patient hospital discharge diagnosis.
 - c. Patient hospital discharge date.
 - d. Date the patient choose to no longer participate in the pilot project.
 - e. Summary of pilot project related CP patient encounters.
 - f. Reason the patient choose to no longer participate in the pilot project if specifically related to a complaint or issue with the pilot project.
3. The CP shall complete a report of each attempted or actual telephone patient encounter with each pilot project enrolled patient. This report will be imported into the patients' electronic medical record and will include the following minimum information:
 - a. Patient name and medical record number.
 - b. Patient hospital discharge diagnosis.
 - c. Patient hospital discharge date.
 - d. Date and time of attempted patient telephone contact including if the CP was successful in reaching and talking to the patient.
 - e. The reason why patient telephone contact was unsuccessful, if applicable, and when a follow-up call will be attempted if necessary.
 - f. Patients' current medical status based upon the approved algorithm and CP questioning.
 - g. Patient questions or concerns related to their hospital discharge instructions?
 - h. Has the patient obtained their prescribed medications and are they being taken as instructed?
 - i. Does the patient have any concerns related to their medications (availability, cost, side effects, etc.)?

SUBJECT: COMMUNITY PARAMEDICINE PILOT PROJECT

- 1 j. Has the patient scheduled a post hospital discharge follow up appointment
- 2 with their PCP?
- 3 k. Does the patient have adequate transportation for necessary follow up with
- 4 their PCP?
- 5 l. Any identified need for and specific type of patient follow up determined
- 6 necessary by the CP (PCP consultation or referral, CP patient in-person
- 7 visit/assessment, etc.)
- 8
- 9 4. The CP shall complete a specialty designed Electronic Patient Care Report
- 10 (ePCR) utilizing the BCEMS Zoll ePCR system for each in person patient
- 11 encounter. This report will be imported into the patients' electronic medical
- 12 record and will include normal patient demographic information in addition to
- 13 appropriate patient assessment, treatment and consultation/referral
- 14 information.
- 15
- 16 5. Each in-person patient encounter by a CP will have an additional follow-up
- 17 contact by a CP within 48 hours. The method of this additional follow-up
- 18 contact will be determined on a case by case basis in a manner appropriate for
- 19 the individual patient (email, text, telephone, in-person, etc.). Any additional
- 20 follow-up patient encounters by a CP will also be appropriately documented.
- 21
- 22 B. All pilot project documentation related to CP patient encounters (telephone and in
- 23 person) will be reviewed by pilot project QI personnel on a 100% retrospective
- 24 basis.
- 25

QUALITY ASSURANCE & PERFORMANCE IMPROVEMNT (QAPI):

- 26
- 27
- 28 A. The scope of the BCEMS QAPI Program is comprehensive and addresses both
- 29 the quality and safety of clinical care and quality services. The QAPI Program
- 30 Core Values include the following:
- 31
- 32 1. Safety First
- 33
- 34 2. Act With Integrity
- 35
- 36 3. Encourage Innovation & Forward Thinking
- 37
- 38 4. Value Relationships
- 39
- 40 5. Show Respect
- 41
- 42 6. Be Responsive
- 43
- 44 7. Act With Fairness & Consistency
- 45
- 46
- 47

SUBJECT: COMMUNITY PARAMEDICINE PILOT PROJECT

1 B. The following data will be tracked by the BCEMS Pilot Project Manager/Quality
2 Management personnel and reported to/evaluated by the BCEMS Advisory
3 Committee on a regular basis for the duration of the pilot study:
4

5 1. Pilot project metrics:
6

- 7 a. Number of patients contacted by a CP.
8 b. Percentage of patients readmitted within 30 days following a CP telephone
9 contact.
10 c. Reported patient stoplight zone status on initial telephone contact.
11 d. Number and types of CP interventions and referrals.
12 e. Number of CP home visits.
13

14 2. Presumptive CP patient impression vs field intervention.
15

16 3. CP compliance with protocols, procedures and timelines.
17

18 4. Destination determination/treatment plan appropriateness.
19

20 C. The Patient Safety/Quality Assurance Review Committee will perform patient
21 safety reviews of 100% of cases in which care is provided by a CPs.
22

23 D. Any unusual occurrences related to the pilot project will be reported to the
24 BCEMS & EMSA Project Managers within 24 hours of occurrence for in-depth
25 review by the project Medical Director.
26

27 **CROSS REFERENCES:**
28

29 Community Paramedicine Pilot Project Policy Addendums
30

31 OSHPD/HWPP/EMSA Approved Patient Consent Form, Reference No. 1108-A
32

33 HF Action Plan Stoplight Algorithm, Reference No. 1108-B
34

35 Warning Signals for Heart Attack Stoplight Algorithm, Reference No. 1108-C
36

37 S-SV EMS Agency Policy Manual
38

39 Base/Modified Base/Receiving Hospital Contact, Reference No. 812
40

41 Communication Failure, Reference No. 890
42

43 Chest Pain or Suspected Symptoms of Cardiac Origin, Reference No. C-8
44

45 Acute Respiratory Distress, Reference No. R-3
46

47 General Medical Treatment, Reference No. M-6

OSHPD/HWPP/EMSA Approved Patient Consent Form,
Reference No. 1108-A

Placeholder for approved Patient Consent Form

HEART FAILURE ACTION PLAN



EVERY DAY	Every day: <ul style="list-style-type: none"> • Weigh each morning after using the bathroom and before you eat, drink or get dressed. • Record the weight on your log. • Take your medicine as ordered. • Check for swelling in your feet, ankles, legs and stomach. • Eat low salt food. • Balance activity and rest periods. 		
	WHICH HEART FAILURE ZONE ARE YOU TODAY?		
	Green	Yellow	Red
GREEN ZONE	ALL CLEAR <u>This zone is your goal</u> Your symptoms are under control You have: <ul style="list-style-type: none"> • No shortness of breath • No weight gain more than 2 pounds (it may vary 1 or 2 pounds some days) • No swelling of your feet, ankles, legs or stomach • No chest pain 		
YELLOW ZONE	CAUTION <u>This zone is a warning</u> Call your doctor's office if: <ul style="list-style-type: none"> • You have a weight gain of 2 pounds or more 2 days in a row OR a weight gain of 5 pounds or more in 7 days. • More shortness of breath • More swelling of feet, ankles, legs or stomach • Feeling more tired, no energy • Dry, hacking cough • Dizziness • Feeling uneasy, you know something is not right • It is harder for you to breathe when lying down. You are needing to sleep sitting up in a chair. 		
RED ZONE	EMERGENCY Call your doctor for instructions if you have any of the following or call 911: <ul style="list-style-type: none"> • Struggling to breathe, unrelieved shortness of breath while sitting still. • Have chest pain • Have confusion or can't think clearly 		

My provider: _____ Phone Number: _____

WARNING SIGNALS FOR HEART ATTACK



HOW CAN I HELP AVOID A HEART ATTACK?	<p>HOW CAN I HELP AVOID A HEART ATTACK?</p> <ul style="list-style-type: none"> • Avoid second hand smoke and if you smoke, STOP. • Treat high blood pressure if you have it. • Eat foods low in saturated fat, trans fat, cholesterol and salt. • Keep your weight under control. • Control your blood sugar if you have diabetes. • Be physically active. 		
	<p>WHICH ZONE ARE YOU TODAY?</p>		
	Green	Yellow	Red
GREEN ZONE	<p>ALL CLEAR <u>This zone is your goal</u></p> <ul style="list-style-type: none"> • Feeling normal • Breathing easily • Performing normal daily activities as before 		
YELLOW ZONE	<p>CAUTION <u>This zone is a warning</u></p> <p>Call your doctor if you have:</p> <ul style="list-style-type: none"> • New symptoms of discomfort, pain, burning, tightness, or pressure in the chest, back, neck, throat, or jaw that lasts for only a few minutes • Symptoms that come on with activity or exercise and go away with rest • Symptoms that are increasing in frequency, duration, or severity • A feeling that your heart is racing or pounding • An on-going feeling of being unusually weak or very tired • Unexplained feelings of dizziness or fainting 		
RED ZONE	<p>EMERGENCY</p> <p>Call 911 or go to the hospital if you have symptoms of a possible heart attack</p> <ul style="list-style-type: none"> • Discomfort, pain, burning, tightness, or pressure in the chest, back, neck, throat, jaw, or stomach that lasts for more that a few minutes (more than 15 minutes) or that goes away and comes back repeatedly • Unusual shortness of breath with or without chest discomfort • Breaking out in a cold sweat, nausea, or lightheadedness 		

My provider: _____ Phone Number: _____

**SIERRA-SACRAMENTO VALLEY EMS AGENCY
PROGRAM POLICY**

REFERENCE NO. 812

SUBJECT: BASE/MODIFIED BASE/RECEIVING HOSPITAL CONTACT

PURPOSE:

To provide for delineation of the circumstances in which prehospital personnel shall make base/modified base/receiving hospital contact for medical control and/or patient notification purposes.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.220, 1798, 1798.2, 1798.102

California Code of Regulations, Title 22, Division 9, Chapters 2, 3 and 4

POLICY:

- A. Prehospital personnel shall make appropriate hospital contact in a timely manner according to the requirements contained in this policy.
- B. Base/modified base hospital contact is required by EMS personnel to perform any procedure(s) and/or administer any medications(s) that are identified in S-SV EMS Agency policy/protocol as 'Base/Modified Base Hospital Physician Order Only'. In the event of communication failure those procedures/medications shall not be performed/administered.
- C. When requesting to speak directly to a base/modified base hospital physician, EMS personnel shall advise the hospital staff member who initially answers the telephone or radio of the reason for the request (AMA approval, destination consultation, medication or procedure approval, treatment consultation, etc.).

PROCEDURE:

- A. Contact with the base/modified base hospital that is in closest proximity to the incident shall be made for any of the following circumstances:
 - 1. For authorization to administer medications and/or perform field procedures that are delineated in S-SV EMS policies and protocols as "Base/Modified Base Hospital Physician Order Only."

Effective Date: 12/01/2013
Next Review Date: 07/2016
Approved:

Date last Reviewed/Revised: 07/13
Page 1 of 3

SIGNATURE ON FILE
S-SV EMS Medical Director

SIGNATURE ON FILE
S-SV EMS Regional Executive Director

SUBJECT: BASE/MODIFIED BASE/RECEIVING HOSPITAL CONTACT

2. For any of the following classes of patients refusing assessment, treatment and/or transportation:
 - a. Released at Scene (RAS) patients meeting the following criteria:
 - Previously Released at Scene (RAS) within the previous 24 hours
 - Children 3 years of age or under
 - Patients age 4 - 17 years old without a responsible adult signature
 - b. All patients refusing assessment, treatment and/or transportation Against Medical Advice (AMA).
3. For destination consultation on the following types of patients:
 - a. Trauma patients who meet the following criteria as defined in S-SV EMS 'Trauma Triage Criteria' policy (Reference No. 860).
 - Anatomic and/or Physiologic criteria when the time closest trauma center is a Level III Trauma Center (Note: contact shall be made with that Level III Trauma Center for these patients)
 - 'Mechanism of Injury Criteria' only, with or without meeting any of the 'Special Considerations Criteria'.
 - 'Special Considerations Criteria' only when prehospital personnel determine that transport to a trauma center may be in the best interest of the patient.
 - b. When there is initiation of an ALS/LALS protocol and transport to a facility other than the most accessible is being considered

EXCEPTION:

The following types of patients meeting criteria for transport directly to a designated specialty care facility:

- STEMI patients identified with a 12 Lead EKG

If a STEMI patient identified with a 12 Lead EKG is within the authorized catchment area of a designated STEMI receiving center, contact shall be made directly with the designated STEMI receiving center.

- Stroke patients

If a patient is identified as meeting stroke symptom criteria and the patient is within the authorized catchment area of a designated stroke receiving center, contact shall be made directly with the stroke receiving center.

SUBJECT: BASE/MODIFIED BASE/RECEIVING HOSPITAL CONTACT

- Trauma patients

If a patient meets Anatomic and/or Physiologic Trauma Triage Criteria, contact shall be made with the appropriate designated trauma center.

Note – These exceptions do not apply to patients that require transport to the closest facility (i.e. – unable to establish an airway, CPR in progress)

4. For any patient who, in the opinion of the EMS field provider, requires the additional input or judgment of the base/modified base hospital for appropriate management.
- B. Prehospital personnel shall make contact directly with the destination facility, in a timely manner, for any patient who does not meet the above criteria or when base/modified base contact is made and the patient is authorized/directed to be transported to a facility other than the base/modified base hospital initially contacted.

CROSS REFERENCES:

Policy and Procedure Manual

Patient Destination, Reference No. 505

Hospitals Capabilities, Reference No. 505-A

Cardiovascular “STEMI” Receiving Centers, Reference No. 506

Stroke System Triage and Patient Destination, Reference No. 507

Trauma Triage Criteria, Reference No. 860

Communication Failure, Reference No. 890

Chest Pain or Suspected Symptoms of Cardiac Origin, Reference No. C-8

Suspected CVA/Stroke, Reference No. N-3

SIERRA-SACRAMENTO VALLEY EMS AGENCY PROGRAM POLICY

REFERENCE NO. 890

SUBJECT: COMMUNICATION FAILURE

PURPOSE

To define the specific conditions under which a paramedic or Advanced EMT may utilize Advanced Life Support (ALS) medications and procedures for patient care in the event of communication failure.

AUTHORITY

California Health and Safety Code, Division 2.5, Sections 1797.84, 1797.185, 1797.220, 1798, 1798.100, 1798.102

California Code of Regulations, Title 22, Division 9

POLICY

In the event that a paramedic or Advanced EMT at the scene of an emergency attempts direct voice contact with a base/modified base hospital but cannot establish or maintain that contact:

- A. The paramedic or Advanced EMT may initiate necessary ALS procedures specified in approved S-SV EMS Agency policies and protocols.
- B. Procedures and/or medications listed as **“Base/Modified Base Hospital Order Only”** may still be performed in the event of communication failure if warranted by the patient condition.
- C. The following procedures and/or medications listed as **“Base/Modified Base Hospital Physician Order Only”** shall not be performed/administered in the event of a communication failure and without a direct order from a base/modified base hospital physician:
 1. Terminating resuscitative efforts utilizing the BLS termination of resuscitation criteria if no ROSC in an adult pulseless arrest patient (Reference No. C-1)
 2. Administration of activated charcoal (Reference No. M-5)
 3. Activation and utilization of the Nerve Agent Treatment Protocol (Reference No. E-8)

Effective Date: 12/01/2013
Next Review Date: 10/2016
Approved:

Date last Reviewed/Revised: 10/13
Page 1 of 2

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S-SV EMS Regional Executive Director

SUBJECT: COMMUNICATION FAILURE

PROCEDURE

In each instance where ALS procedures are initiated or attempted under the conditions specified for communication failure, the paramedic or Advanced EMT shall:

- A. Attempt to establish base/modified base hospital contact by telephone and/or radio throughout the call as circumstances permit.
- B. Immediately upon voice contact, provide a verbal report to the base/modified base hospital physician or MICN.
- C. Document the existence and reason for the communication failure in the PCR.

CROSS REFERENCES:

Policy and Procedure Manual

Modified Base Hospital, Reference No. 305

Base/Modified Base/Receiving Hospital Contact, Reference No. 812

Violent Patient Restraint Mechanisms, Reference No. 852

Pulseless Arrest, Reference No. C-1

Ingestions and Overdoses, Reference No. M-5

Nerve Agent Treatment, Reference No. E-8

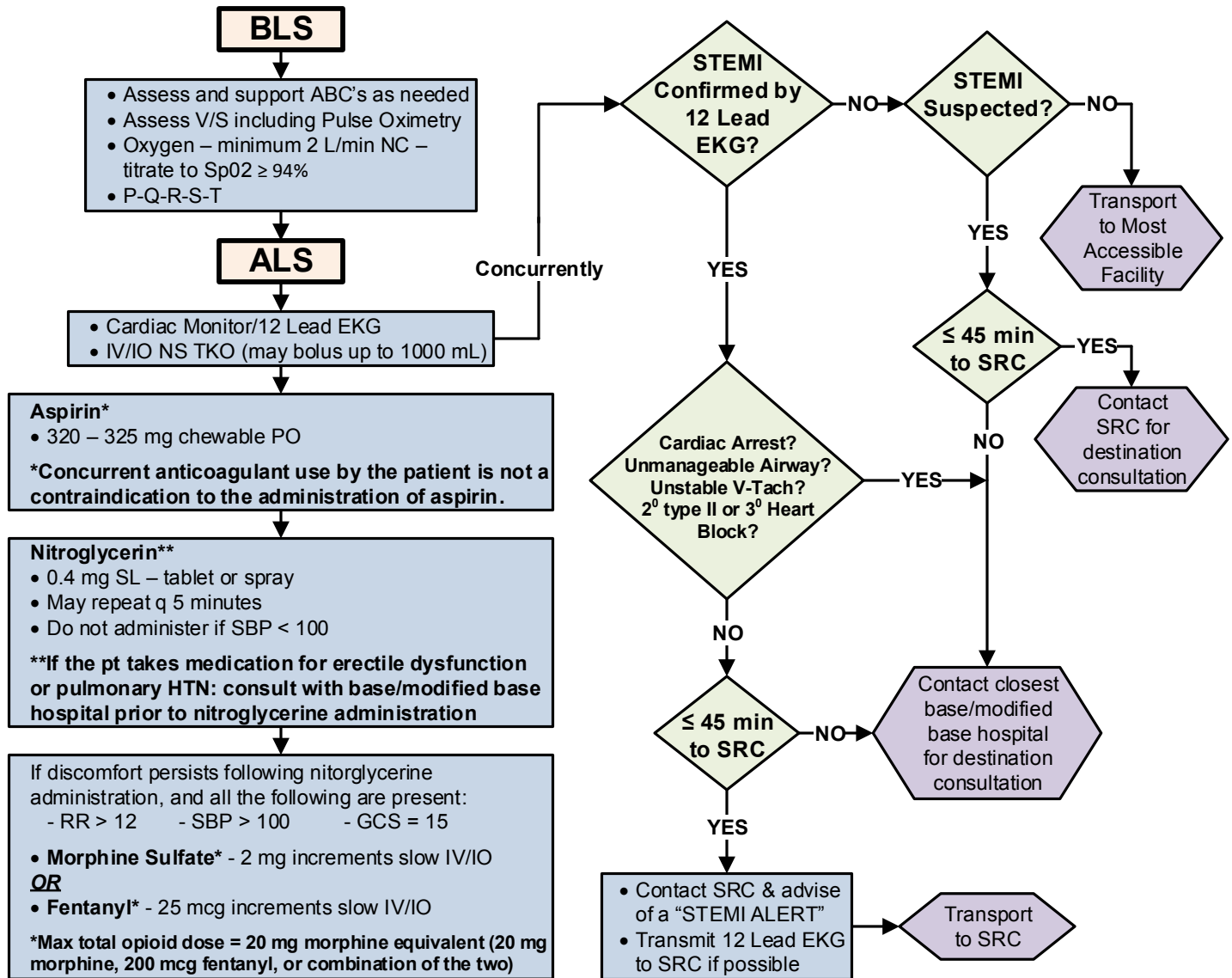


**SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY**

**CARDIOVASCULAR
REFERENCE NO. C-8**

SUBJECT: CHEST PAIN OR SUSPECTED SYMPTOMS OF CARDIAC ORIGIN

- The initial 12 Lead should be performed prior to medication administration
- Treatment, 12 Lead EKG application/interpretation and transport destination decision should occur concurrently
- All 12 Lead EKG's performed shall include a minimum of the patient's last name and first initial that is input into the monitor and printed on the EKG strip. The patient name shall be entered prior to EKG transmission if applicable.
- All patients with a 12 Lead EKG that shows a computer read out consistent with an acute ST elevation MI (i.e. ***Acute MI Suspected***) shall be transported directly to the closest designated STEMI Receiving Center (SRC) if the transport time to that SRC is ≤ 45 minutes. Contact with the closest base/modified base hospital for destination consultation shall be made for any STEMI patient who is outside the SRC 45 minute transport time catchment area or for any suspected STEMI patient without 12 Lead EKG computer read out confirmation.



Effective Date: 09/01/2013
Next Review Date: 09/2016
Approved by:

Date last Reviewed/Revised: 09/13
Page 1 of 1

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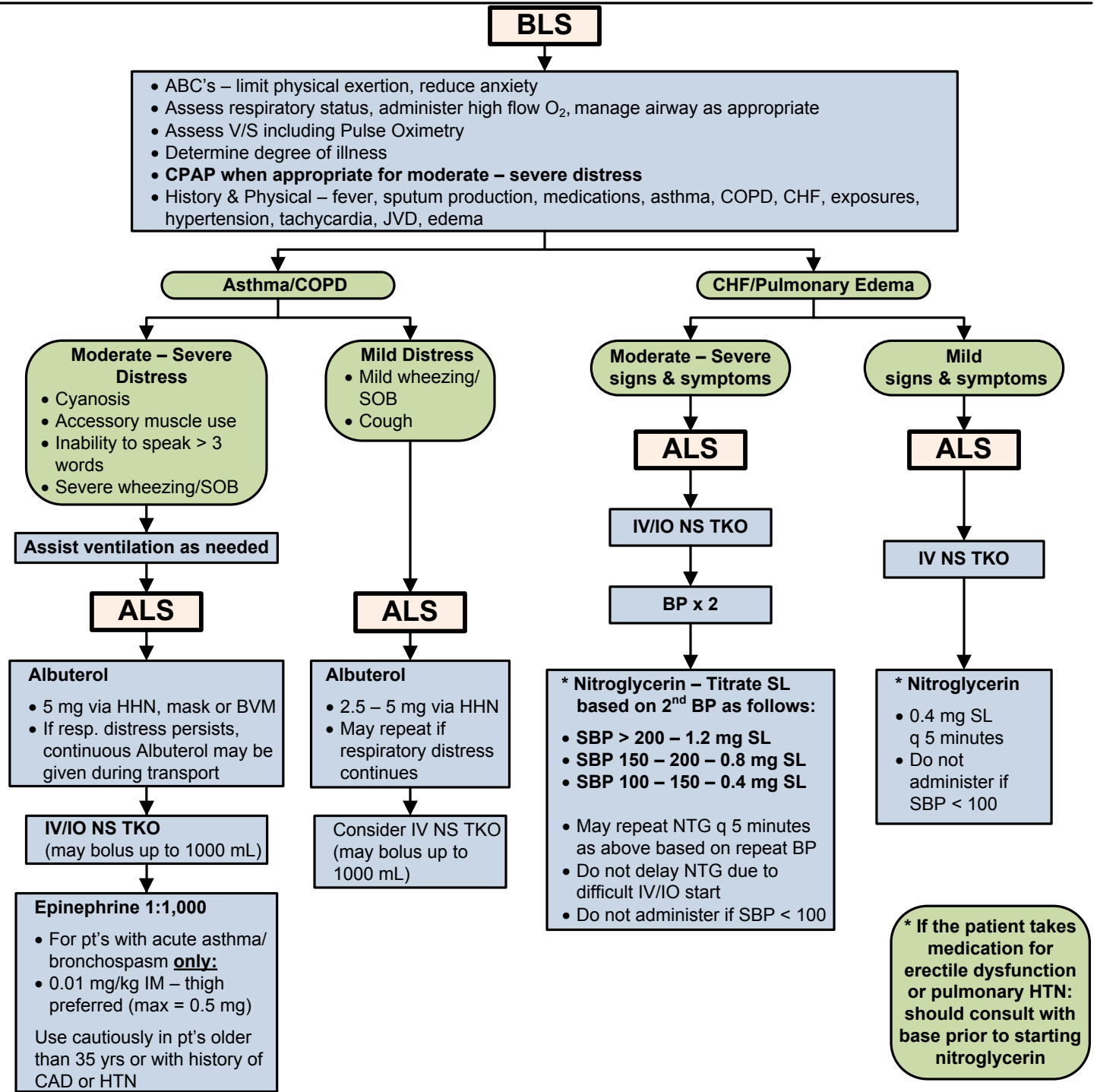
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**SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY**

**RESPIRATORY
REFERENCE NO. R-3**

SUBJECT: ACUTE RESPIRATORY DISTRESS



Effective Date: 06/01/2013
Next Review Date: 10/2015
Approved by:

Date last Reviewed/Revised: 03/13
Page 1 of 1

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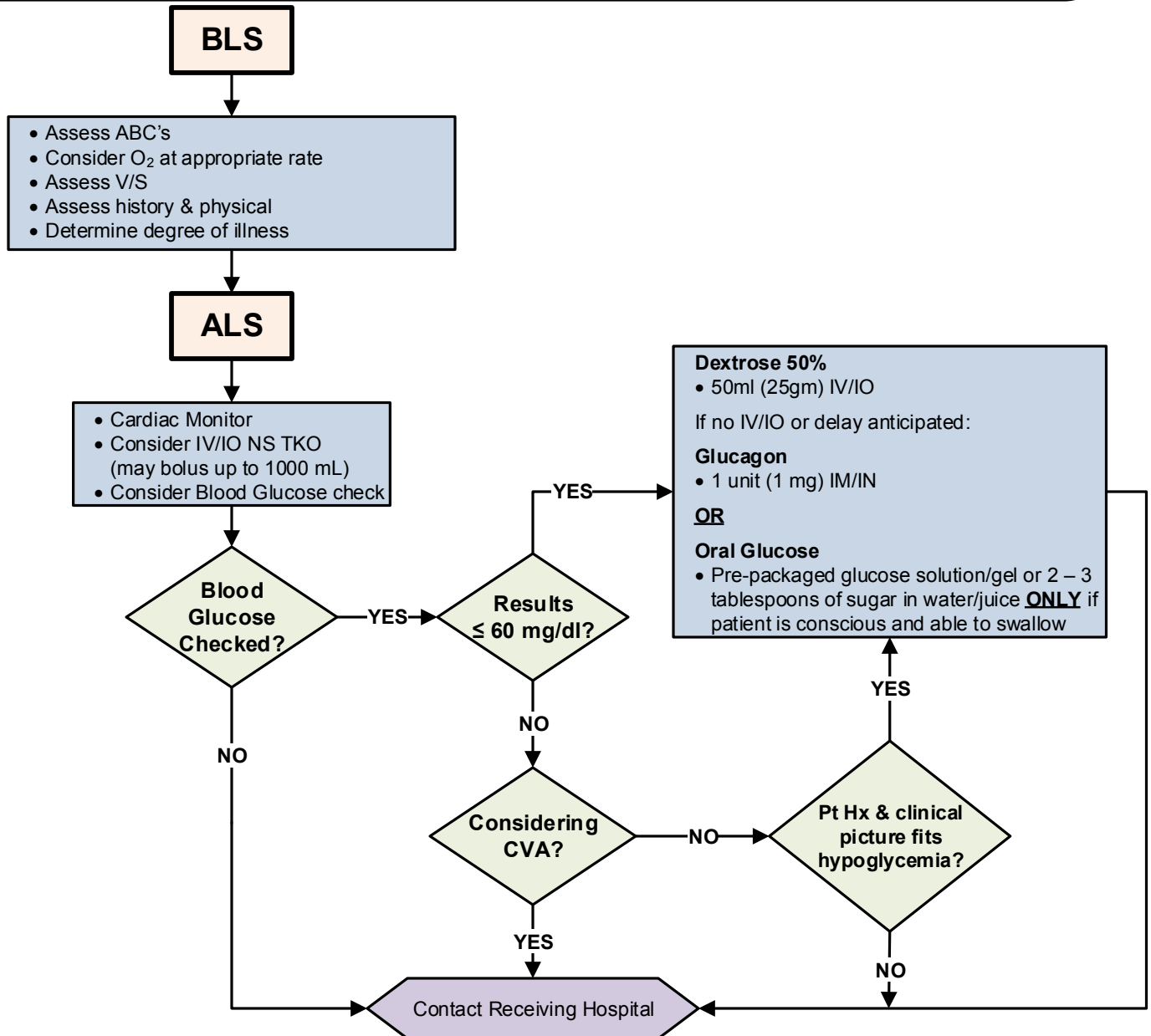
**SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY**

**MEDICAL
REFERENCE NO. M-6**

SUBJECT: GENERAL MEDICAL TREATMENT

• Considerations:

- Consider Trauma
- GI Bleeding
- Near Syncope
- Recently Altered
- Sepsis
- Abdominal Pain
- Any current or recent alteration in Primary Survey



Effective Date: 06/01/2013
Next Review Date: 07/2014
Approved by:

Date last Reviewed/Revised: 04/13
Page 1 of 1

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S-SV EMS Regional Executive Director



Ventura County

Paramedic Directly Observed Treatment for Tuberculosis

Project Number CP005

**A Proposal to: The California Emergency Medical Services
Authority**

**From: Ventura County EMS Agency, The Ventura County Health
Care Agency Tuberculosis Specialty Clinic, and AMR Ventura
County**

May 13, 2014

Contact Information

Mike Taigman
Mike.taigman@amr.net
510-593-5730
616 Fitch Ave.
Moorpark, CA 93020

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Title of the Project

Paramedic Directly Observed Treatment for Tuberculosis: Project Number CP005

Scope of Practice Categories

Assess, treat, and refer

Care for chronic conditions

Brief description of propose concept

In California a new case of tuberculosis (TB) is diagnosed every 4 hours, a Californian dies with TB every other day, and a child under five is diagnosed with TB every week. Currently, specially trained paramedics deliver TB (TB) medications to patients throughout Ventura County as part of the Directly Observed Treatment (DOT) program. This function does not require a licensed healthcare provider. Paramedics can extend traditional hours and days of service to 24/365. The proposed project would allow Community Paramedics to expand their service to: 1) administer TB medications, 2) assess patients for disease progression or medication reaction, and 3) treat medication reactions with diphenhramine, ondansetron or other medications. We anticipate this program will increase compliance, increase patient satisfaction, reduce duration and increase effectiveness of treatment while reducing the costs of care.

The purpose of this project is to improve the treatment for people with TB by providing support for the Ventura County Public Health Department's TB Specialty Clinic and the patients they serve.

The objectives are:

- Improve patient compliance with Directly Observed Treatment (DOT).
- Decrease the length of time a patient is in treatment by providing DOT seven days a week as opposed to the current five days a week.
- Increase the percentage of patients who complete the full course of treatment for TB.
- Maintain or improve patient satisfaction with their treatment.
- Decrease cost by dispensing medication and avoiding the cost of bubble packing them.
- Identify and treat side-effects and mal-absorption issues early.

- Decrease patient suffering by treating itching or nausea with appropriate medication.
- Supplement the Health Department's Clinical team by co-responding to exposure sites and assisting with blood draws.

Estimated project length

The project is estimated to require a bit more than two years from notification of approval (October 2013) until completion. It's anticipated to complete December 2015.

Background Information

Need for Project

They used to call it consumption, Pott's disease or the White Plague. Tuberculosis (TB) is one of the oldest diseases known to man, first described by Hippocrates in 460 BC who called it phthisis. The European TB epidemic starting in the 17th century lasted for nearly two hundred years during that time it was responsible for 1 in 4 deaths in England and France. A contagious disease cause most commonly by the bacteria *Mycobacterium tuberculosis*, TB is spread when a person with active TB coughs, sneezes, talks, sings, etc. and releases infectious particles into the air. People who share the same air can breath in TB and become infected. Most people with latent TB are not infectious and are not suffering from disease, however they are at risk for having their infection progress to TB disease when their immune system is weakened by conditions like HIV, diabetes, chemotherapy treatment, smoking, aging, or certain medications. There are over 2,400,000 people in California with latent TB.

According to the California Tuberculosis Controllers Association 20% of the active TB cases in the U.S. are in California. A new case of tuberculosis (TB) is diagnosed every 4 hours in our state, a Californian dies with TB every other day, and a child under five is diagnosed with TB every week.

According to the Controlling Tuberculosis in the United States report issued November 4, 2005 with recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America the Institute of Medicine has published a detailed plan for the elimination of TB in the United States. A study published by the Institute of Medicine in 2000 concluded that TB could ultimately be eliminated but that at the present rate of decline, elimination would take greater than 70 years. The report described the cyclical nature of the U.S. response to TB and warned against allowing another "cycle of neglect" to occur, similar to that which caused the 1985-1992 resurgence.

According to the Curry International Tuberculosis Center at UCSF in the U.S. funding for TB care is robust when there is an outbreak. Then as the response to

the outbreak gains control of the disease and the number of patients start to decline finding disappears at a rate greater than the decline of the disease. When the next outbreak occurs the dwindled capacity of local health departments are inadequate to respond which results in a larger outbreak and then funding follows. One of the macro goals of this pilot project is to explore the possibility that a well trained EMS partner could provide the urgent capacity to help contain outbreaks to better support the goal of disease elimination and to prevent another “cycle of neglect.”

The Controlling Tuberculosis in the United States report describes the challenges to progress toward TB elimination. The five most important challenges to successful control of TB in the United States are:

1. Prevalence of TB among foreign-born persons residing in the United States.
2. Delays in detecting and reporting cases of pulmonary TB.
3. Deficiencies in protecting contacts of persons with infectious TB and in preventing and responding to TB outbreaks.
4. Persistence of a substantial population of persons living in the United States with latent TB infection (LTBI)
5. Maintaining clinical and public health expertise in an era of declining TB incidence.

Their recommendations for addressing some of these concerns are incorporated into this project proposal.

To address delays in detection: According to the Curry Center staff many of the new cases of infectious TB are diagnosed in the emergency department. Our prediction is that the more EMS providers know about TB the better able they will be to alert emergency medicine nurses and physicians about patients they transport to hospitals that might have infectious TB.

To address deficiencies in protecting the contacts of persons with infectious TB and in responding to TB outbreaks: EMS providers can greatly expand the staff available to most health departments to respond quickly and comprehensively to a reported outbreak. For example a recent contact investigation at a school in Ventura required the TB clinic nurses to draw blood and provide education to over 350 students. Having a team of paramedics join them would have allowed them to cut the time required to do the work by 80% decreasing the chances that someone would slip through the cracks and miss their evaluation.

To address the challenge of maintaining clinical and public health expertise: As expertise is concentrated in the minds of fewer and fewer nurses and physicians having a team of capable clinical providers support them in delivering Directly Observed Therapy (DOT) should improve the effectiveness of the limited resources. DOT is the standard of care for patients with TB disease. Failure to complete therapy reliably contributes to the development of drug resistant strains of TB, multi-drug resistant strains, and death.

Treatment

TB is treated with a combination of the 10 drugs currently approved by the FDA for treating TB. The drugs are usually taken for 6 to 9 months or longer. It is essential to finish the course of medication as prescribed. Treatment completion is determined by the number of doses ingested over a given period of time. Failure to complete the medication regimen increases the chance that the bacteria that are still alive will become resistant to the drugs. TB that is resistant to drugs is much harder to treat.

DOT is a component of case management that helps to ensure that patients adhere to therapy. During a DOT the healthcare professional directly observes the patient taking and swallowing each dose of their medication. After the medication has been taken the patient is asked a series of questions designed to identify side-effects and mal-absorption issues. At the end of each DOT the patient and healthcare professional sign the form to document the treatment. The number of DOT's is tracked for each patient to ensure adherence to and completion of the program.

According to the World Health Organization, DOT is the heart of the Stop TB Strategy. DOT is considered the standard of care worldwide, as well as by the California Department of Public Health and the California TB Controllers Association.

Project Background

Barry Fisher then Chief Deputy Director of the Ventura County Healthcare Agency suggested this project. He was concerned that the variable patient load and geographic distribution of TB patients in Ventura County challenged his department's resources. He was also interested in the possibility of providing DOT outside of normal TB clinic hours and support for contact investigations.

Currently the majority of DOTs in Ventura County are provided by Community Health Workers (CHW) supported by public health nurses. DOTs are provided 8 am to 5 pm weekdays. An analysis of current patients found that some patients live a long distance from the TB clinic making it time consuming for the CHW to drive daily from the clinic in Oxnard to Simi Valley, Santa Paula, and Ojai. Several of the patients with TB in Ventura would be better served having their

DOT in the evening so as to minimize the impact of side effects on their lifestyle. The physician TB Controller for Ventura County and the two TB public health nurses are excited about the possibility of having paramedics with a higher level of clinical acumen help manage some of their more brittle/complicated patients, help more effectively manage uncomfortable side effects of TB medications and assist with contact investigations.

In the fall of 2012 Paramedic Field Supervisors from Gold Coast Ambulance began providing DOT to a small number of patients under the supervision of the Ventura County TB Specialty Clinic's supervision. The medications are bubble packed and are owned by the patient. After each DOT the patient and the Paramedic Field Supervisor complete a questionnaire about side effects. The TB nurse is contacted with any issues and with regular updates on patient status.

Types and number of patients likely to be served

10-15 patients annually

Employment opportunities for community paramedics

The paramedics selected to participate in this program are all full time Paramedic Field Supervisors. They will continue in their role as Field Supervisors and Community Paramedics throughout this project and will continue to be employed as Paramedic Field Supervisors after the completion of the project.

Other programs serving as models for this project

This is the first program that we know of in the United States. Paramedics were included as part of the National TB Control Program in Pakistan in 2007.

Program Management

Leadership and Local Advisory Committee

The project leadership and oversight committee meets monthly. They have created the curricula, written the protocols, provided training, and provide quality oversight for the project.

- Mike Taigman, General Manager AMR Ventura/Gold Coast Ambulance
Project Manager
- Angelo Salvucci M.D., Medical Director, Ventura County EMS Agency
- Robert M. Levin M.D., Health Officer/Medical Director Ventura County
Public Health
- Uldinr Castel M.D. Tuberculosis Controller Ventura County Health Care
Agency Tuberculosis Specialty Clinic
- Patti Sheldon, Public Health Clinics Manager, Ventura County Health Care
Agency Tuberculosis Specialty Clinic
- Eva Reeder R.N TB Nurse, Ventura County Health Care Agency
Tuberculosis Specialty Clinic
- Chad Panke, Clinical/Education Services Manager, AMR Ventura
County/Gold Coast Ambulance
- Mike Stillwagon, Community Health Services Manager, AMR Ventura
County/Gold Coast Ambulance
- Jeff Shultz, Paramedic Supervisor, Gold Coast Ambulance
- Jaime Villa, Paramedic Supervisor, Gold Coast Ambulance

Operational Methodology

This pilot project is collaboration between Ventura County EMS Agency, AMR Ventura, Gold Coast Ambulance, the Ventura County Healthcare Agency, and the Ventura County Public Health Department's TB Specialty Clinic.

This pilot project will involve training 6 Paramedic Supervisors from AMR Ventura, 3 Paramedic Supervisors from Gold Coast, for a total of 9 Community Paramedics. These Community Paramedics will also receive training in TB, the provision of social service support, and medical Spanish.

The Community Paramedics trained to participate in this program currently serve as Paramedic Field Supervisors and will continue in that capacity during this project. Their continued employment is not dependent on the results of or sustainability of this project.

Project Steps

Since the majority of these patients do not have English as a primary language, the Community Paramedics will be equipped with ELSA Real Time Translation system to ensure and document effective communication through a medically certified translator.

The project will be limited to Ventura County. On average there are 30-50 patients being treated by the Ventura County Public Health Department's TB Specialty Clinic and we anticipate that this project will provide daily DOT for 5-10 of them.

Operational Logistics

- 1) The Ventura County TB Specialty Clinic will enroll appropriate non-facility based adult patients in this program. Patient intake, diagnosis, and treatment plan development will all be handled by the TB Specialty Clinic staff, not Community Paramedics. Inclusion criteria are adults (18 year old or older), living in Ventura County, with pulmonary or extra-pulmonary tuberculosis disease. Exclusion criteria are patients under 18 years old.
- 2) During the initial part of treatment patient visits and DOT will be done by the County TB nurse and the Community Paramedic.
- 3) Once the TB nurse is comfortable with the patient's progress and the Community Paramedic's ability to deliver care the DOT process will be turned over to the Community Paramedic.

- 4) DOT will be provided daily by Community Paramedics with telephone support from the TB nurse. A symptom survey will be completed and signed by patient and the Community Paramedic after each DOT. Patient complaints of side effects may be treated by the Community Paramedic in consultation with the TB nurse.
- 5) Patient satisfaction with the program will be assessed at the end of the first, fourth, and last month of their treatment. TB Specialty Clinic staff's satisfaction with the program will also be assessed throughout the project.

The paramedic scope and site of practice change proposed for this project is to authorize these Community Paramedics to dispense DOT TB medications to patients under the supervision of the Ventura County physician TB Officer. Additionally the protocols would allow on-site assessment of patients for symptomatic treatment of TB medication side effects in consultation with the County TB physician.

Protocols

Direct Observed Therapy DOT

- Language interpretation using ELISA...done in patient's native language.
- Dispense meds into container before making patient, based on physician's orders.
- Complete side effect, symptom, DOT questioner with patient.
 - Itching or rash
 - Fatigue
 - Nausea/vomiting
 - Fever
 - Dark Urine (red/orange ok if on Rifampin)
 - Yellowing of skin/eyes
 - Blurred vision
 - Pain in hands/feet
 - Any other unusual symptoms
- Provide them with their medications and watch them take them.
- Patient, initial the Weekly DOT Medication Record.
- Community Paramedic initial the Weekly DOT Medication Record and complete progress notes.
- On Friday or if the patient is traveling provide them with a daily dose of medications for each day they will not be DOTed.
- Notify Public Health TB Nurse if any of the following:
 - New side effects, symptoms
 - Client reports already taken medications

- Client not available for DOT
- Client feels too ill or complains of medication reaction

Documentation

Documentation of DOTs is currently paper based, however it is anticipated that the TB Specialty Clinic will be implementing an electronic medical record this summer and our project will be managed using that record.

Provisions for protecting patient safety

Patient safety will be addressed prospectively with clear protocols designed by the physician TB Controller and the EMS Medical Director, concurrently by real time communications between the TB Specialty Clinic nursing team and our Community Paramedics and retrospectively by 100% case review for protocol compliance and unintended consequences. The project manager, our clinical manager, the TB Specialty Clinic public health nurse, and our EMS Medical Director will perform the case review monthly.

Anticipated sources of funding

American Medical Response Ventura County and Gold Coast Ambulance will provide funding for this program. Once the project is complete we will work with the TB Specialty Clinic on the potential of sharing some of the reimbursement for DOT that comes from insured patients.

Paramedic Eligibility

Eligible paramedics have at least four years of full time paramedic experience in Ventura County.

The process used to select candidates for this project began with a system overview and a consideration of talent, experience, training logistics, impact of the integration of new work, and financial impact. We chose to use the existing Paramedic Supervisors from AMR Ventura and Gold Coast Ambulance because they are some of the most capable and experienced paramedics in the system, with some reconfiguration of current work the system allows them to complete the training, and care for these patients with minimal disruption to the rest of the EMS system. The primary financial impact is training costs, once the training is complete the ongoing cost for the project should be minimal.

The nine candidates are all current full time Paramedic Field Supervisors:

AMR Ventura		Years in EMS	Years as a Paramedic	Years as a Supervisor
	Ambrose Stevens	10	8	4
	Rob Rolf	28	27	5
	Jim Hall	26	21	5
	Mike Sanders	20	16	14
	Dan Kost	13	10	4
	Chris Gaskins	15	11	3
Gold Coast Ambulance				
	Jeff Shultz	11	8	6
	Justin Johnson	11	7	1.5
	Jaime Villa	8	4	1

Local CP Training

The local portion of the Community Paramedic education program focused on tuberculosis will be provided by the staff from the Ventura County Public Health Department's TB Specialty Clinic. (Appendix C)

Data Collection and Analysis

Both quantitative and qualitative data will be collected and analyzed for this project. The Oversight Committee has established and refine qualitative and quantitative key performance indicators. Initial data will include:

- The number of patients admitted to the project
- The percentage of daily DOT treatments completed per patient.
- Limited patient demographic data including age, gender, ethnicity, other diagnosis.
- Patient satisfaction
- TB Specialty Clinic staff satisfaction
- Cost of the program per patient
- Financial benefit of the program.

- Qualitative interview with Community Paramedic
- Results of this project will be made available to the Oversight Committee, each of the participating Community Paramedics, each of the participating organizations, and the State EMS Agency. A final report will be produced for publication in professional journals.

Quality Management

American Medical Response-Ventura is required to conduct Quality Assurance and Quality Improvement (QA/QI) reviews as part of the Paramedic Provider Contract with Ventura County Emergency Medical Services Agency. The Community Paramedic (CP) Pilot QA/QI plan will integrate into the existing EMS QA/QI plan, with program-specific enhancements and heightened monitoring.

In addition to normal review of care coordination activities, AMR and Ventura EMS will review one hundred percent of all incidents involving use of an expanded scope of practice item. These incidents will be identified through mandatory reports by community paramedics, as well as a secondary records log review by the project manager. EMS will review incidents associated with an expanded scope protocol for:

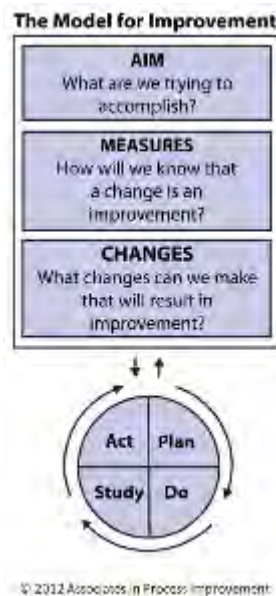
- medical appropriateness
- situational appropriateness
- time appropriateness
- compliance with protocols
- unusual circumstances
- adequacy of protocol
- outcome
- safety issues
- non-emergency contacts requiring the CP to request emergency assistance
- system trends involving CPs
- system trends involving 9-1-1 field responders

The EMS QA/QI team will handle expanded scope incidents under the following process:

1. Project manager refers incident to QA/QI
2. QA/QI staff assign a QA number to the incident
3. Incident is referred to the designated Community Paramedic QA Nurse Specialist
4. The QA Nurse Specialist determines appropriateness, compliance, safety
5. Feedback to respective community paramedic
6. The paramedic, project manager or QA nurse will investigate the outcome, depending upon which individual is most appropriate for the situation.

7. Review between QA/QI, project manager, paramedic and medical director
8. Report to LEMSA or EMSA, if needed
9. Feedback and education to CPs and 9-1-1 responders
10. Record retention as indicated by EMSA

This project blends in with our evolving county Quality Management system framework whereby 100% of the time, energy, and attention of the system is placed on performance improvement projects following the Institute for Healthcare Improvement's Model For Improvement.



This TB project is chartered as an improvement project using this framework.
 Institute for Healthcare Improvement's Model for Improvement

What are we trying to accomplish? Project AIM

- This projects aim is improved care, compliance, and service for patients in Ventura County with TB and improved capacity for the health department to manage variation in patient count and respond to contact investigations.

How will we know that change is an improvement?

- A higher percentage of patients will complete their course of treatment on time.
- The patients, physician TB Controller, and public health TB nurses will have increased satisfaction with the DOT process.
- Contact Investigations will be completed faster and more thoroughly.

- The program will be more cost effective with the reduction in need to bubble pack medications.
- Decreased cost by decreasing drive time for delivery of DOT.

What changes can we make that will result in improvement?

- Train paramedic supervisors that work for Gold Coast and AMR Ventura to become Community Paramedics with a specialty in TB management.
- Work with the Ventura County TB Specialty Clinic to identify which patients might benefit from community paramedic delivered DOT due to geographic distance from the clinic, need for DOT outside normal clinic hours and/or on weekends, patient complexity.
- Have community paramedics provide DOT under the direction and supervision of the physician TB controller and the public health TB nurses.
- Provide DOT medications as dispensed rather than bubble packed which costs \$10 per medication per month.
- Have community paramedics identify side effects, mal absorption issues, and other complications and consult with TB nurse or physician real time. Provide treatment, referral, or transport for patients as appropriate in consultation with the TB team.
- Have community paramedics provide updates on patient status for each patient daily to public health TB nurses. More often for complex patients as needed.
- Have community paramedics respond to and support the public health TB team with contact investigations including helping to identify possible exposures, drawing blood for interferon-gamma release assays or IGRAs, placing and reading TB skin tests, and providing other support as needed.

The objectives are:

- Improve patient compliance with Directly Observed Treatment (DOT).
- Decrease the length of time a patient is in treatment by providing DOT on holidays and clinic closure days at hours convenient for the patient, as opposed to the current five days a week, excluding holidays, 8:30 a.m.- 5:00 p.m.
- Increase the percentage of patients who complete the full course of treatment for TB.
- Improve patient satisfaction with their treatment.
- Decrease cost by administering medication and avoiding the cost of

- bubble packing them.
- Identify and treat side-effects and mal-absorption issues early, with consultation with physician as needed.
 - Decrease patient suffering by treating itching or nausea with appropriate medication.
 - Supplement the Health Department's clinical team by co-responding to TB exposure sites and assisting with blood draws.

Appendix A

County Letter of Support



Ventura County Public Health

A Division of the Ventura County Health Care Agency

RIGOBERTO VARGAS, MPH
Director

EMERGENCY MEDICAL SERVICES

2220 E. Gonzales Road, Suite 130, Oxnard, CA 93036-0619

Phone: 805-981-5301

Fax: 805-981-5300

www.vchca.org/ph/ems

STEVEN L. CARROLL, EMT-P
EMS Administrator

ANGELO SALVUCCI, M.D., F.A.C.E.P.
Medical Director

September 30, 2013

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Health
Emergency Medical Services Authority
10901 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670

Dear Mr. Meyer,

The Ventura County EMS Agency is one of the collaborators on the attached Paramedic Directly Observed Treatment for TB Program.

Sincerely,

Steven Carroll
EMS Administrator

Angelo Salvucci, MD
Medical Director

Appendix B Policies

- 1) The Ventura County TB Specialty Clinic will enroll appropriate non-facility based adult patients in this program. Patient intake, diagnosis, and treatment plan development will all be handled by the TB Specialty Clinic staff, not Community Paramedics. Inclusion criteria are adults (18 year old or older), living in Ventura County, with pulmonary or extra-pulmonary tuberculosis disease. Exclusion criteria are patients under 18 years old.
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- 3) Once the TB nurse is comfortable with the patient's progress and the Community Paramedic's ability to deliver care the DOT process will be turned over to the Community Paramedic.
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- 5) Patient satisfaction with the program will be assessed at the end of the first, fourth, and last month of their treatment. TB Specialty Clinic staff's satisfaction with the program will also be assessed throughout the project.

Appendix C Local Training Curricula

Community Paramedicine TB Project

Supplemental Curricula

1. History of Tuberculosis (TB)

Goal: Understand the scope and magnitude of TB across the world and over the ages.

1. Egyptians
2. Hippocrates
3. Epidemics
4. TB in the US
5. Dr. Robert Koch
6. Sanitaria
7. Streptomycin
8. Development of drug resistance
9. Isoniazid (INH)
10. Systemic Surveillance of TB

2. Epidemiology

Goal: Understand the effect of TB on the health and economy of the world today.

1. World Health Organization Statistics
2. United States impact
3. California
4. Ventura County
5. Catalysts for the resurgence of TB
 - i. Poverty
 - ii. Injectable drug use
 - iii. Homelessness
 - iv. Foreign-born persons
 - v. Immuno-compromised particularly those with HIV/AIDS
 - vi. Failure to complete TB drug treatment

3. Etiology

Goal: Understand the cause and contributors to TB.

1. Mycobacterium tuberculosis
2. M. bovis
3. M. africanum
4. M. microti
5. Additional species belonging to the complex
6. Cell walls of M. TB
7. Acid-fast stained sputum smear

4. Methods of Transmission and Risk Factors

Goal: Understand the dynamics of TB transmission and the risk factors that increase likelihood of transmission

1. Droplet inhalation and path to the blood stream
2. Process of becoming infected
3. Active TB
4. Latent TB
5. Reactivation TB
6. High Risk Groups
 - i. Elderly
 - ii. IV drug users
 - iii. Chronically Ill
7. Reasons for increased susceptibility in high risk groups
 - i. Decline in pulmonary mucociliary transport
 - ii. Ineffective cough reflex
 - iii. Altered immune system
 - iv. Reduced cell-mediated immunity
8. Debunked theories of spread
9. Inhalation of aerosolized droplet nuclei carrying live M. tuberculosis bacillus
 - i. Droplet origination
 - ii. Cavitary lung lesions
 - iii. Time from exposure to infection
10. Special issues of HIV/AIDS patients
11. Ethnic impact of TB
12. Children and TB

5. Stages and Types of TB

Goal: Understand the stages of TB and the treatment issues related to each.

1. Primary Infection
 - i. Droplet inhalation
 - ii. Granuloma
 - iii. Ghon lesion
 - iv. Ranke or primary complex

- v. TB travel through lymph nodes into the bloodstream
- vi. Oxygen-Dense sites
 - 1. Kidneys
 - 2. Vertebral bodies
 - 3. Epiphyses of long bones
 - 4. Miliary TB and CNS involvement/meningitis
- vii. Pleural effusion

2. Latent/Asymptomatic Pulmonary Infection

- i. Immune process works well
- ii. Lifetime
- iii. Skin-Test positive

3. Secondary or Reactivation TB

- i. Immune system breakdown

4. Variations in immune response

- i. Uncommon presentations

6. Pulmonary Tuberculosis

Goal: Understand the spectrum of pulmonary TB including diagnosis and screening.

1. Signs and Symptoms

- i. Subtle and easy to miss
- ii. Picked up on routine chest x-ray
- iii. Fever
- iv. Malaise
- v. Cough
- vi. Anorexia
- vii. Weight Loss
- viii. Chest Pain
- ix. Dyspnea

2. Diagnosis

- i. Chest X-Ray
- ii. CT scan, MRI, PET
- iii. Laboratory findings
- iv.

3. Screening

- i. High Risk Groups and people who come into contact with them
 - 1. HIV
 - 2. Close contact with active TB
 - 3. Weak immunity

- a. Renal failure
 - b. Diabetes
 - c. Prolonged steroid use
 - d. Immunosuppressive therapy
 - e. Malnutrition
 - f. Gastrectomy
4. IV drug users
 5. Residents and employees of long term care facilities, prisons, mental institutions, homeless shelters, or toehr group homes
 6. EMS and Fire Fighters
 7. People spending time in countries with lots of TB
 8. Foreign born people with high prevalence of TB
 9. Uncontrolled Diabetes
 10. Immigrant farm worker with no access to healthcare
4. TB Skin Testing
 - i. Aplitest test
 - ii. Sclavo Test
 - iii. Mono-Vacc Test
 - iv. Mantoux
 1. Proper administration of the test
 2. Examination of the intradermal injection site
 - v. Limitations of the test for diagnosis of active TB
 5. TB Blood Tests (interferon-gamma release assays ir IGRAs)
 - i. QuantiFERON ®-TB Gold In-Tube test (QFT-GIT)
 - ii. T-SPOT ®.TB test (T-Spot)
 - iii. Blood Draw and handling process
 6. Sputum Smear and Culture
 - i. Procuring sputum specimens
 1. Importance of making sure patient understands the instructions....teach back
 2. Optimal time for collection early morning and NPO for 8 hours
 3. Rinse mouth but no tooth brushing
 4. Not saliva but a lung sample from a deep cough
 5. Induction procedure
 - ii. Clinician safety during procurement
 - iii. DNA Probe and NAA and MTD-2 tests
 - iv. DNA fingerprinting or genotyping
 7. Extra-pulmonary Tuberculosis

Goal: Understand the manifestations of TB in other parts of the body besides the lungs.

1. TB of the central nervous system
 - i. Signs/Symptoms and Treatment
2. Renal TB
 - i. Signs/Symptoms and Treatment
3. Tuberculosis Peritonitis
 - i. Signs/Symptoms and Treatment
4. Tuberculosis Pericarditis
 - i. Signs/Symptoms and Treatment
5. Tuberculosis Lymphadenitis
 - i. Signs/Symptoms and Treatment
6. TB of the bones and joints
 - i. Signs/Symptoms and Treatment
7. Gastrointestinal TB
 - i. Signs/Symptoms and Treatment
8. Hepatic TB
 - i. Signs/Symptoms and Treatment
9. Miliary TB
 - i. Signs/Symptoms and Treatment

8. Treatment

Goal: Understand the treatment regimen for TB including medications and their indications, contraindications, side effects, etc.

1. Basics of TB Treatment
2. Multi Drug Resistant TB
3. XDR-TB
4. Drugs for Adults including dosing, contraindications, side effects, adverse reactions, and toxic reactions
 1. Isoniazid
 2. Rifampin
 3. Rifabutin
 4. Rifapentine
 5. Ethambutol
 6. Pyrazinamide
 7. Streptomycin
 8. Ethionamide
 9. Para-aminosalicylic acid
 10. Kanamycin
 11. Cycloserine
 12. Capreomycin
5. Drugs for Pediatric including dosing, contraindications, side effects, adverse reactions, and toxic reactions

1. Isoniazid
 2. Rifabutin
 3. Rafapentine
 4. Rifampin
 5. Streptomycin
 6. Ethambutol
 7. Pyrazinamide
 8. Ethionamide
 9. Para-aminosalicylic acid
 10. Cycloserine
 11. Kanamycin
 12. Capreomycin
6. PRN Medications
1. Benadryl
 2. Zofran
 3. Phenergan
 4. Immodium
 5. Cough Syrup
 6. Tylenol
 7. Ibuprofen
 8. PO Prednisone
 9. Pepcid
 10. Topical ointments
 11. Benadryl Cream
 12. OTC Steroid Cream
7. Common Side Effects
1. No appetite
 2. Nausea
 3. Vomiting
 4. Yellowish skin or eyes
 5. Fever for 3 or more days
 6. Abdominal pain
 7. Tingling in the fingers or toes
 8. Pain in the lower chest or heartburn
 9. Feeling itchy
 10. Skin Rash
 11. Easy Bruising
 12. Bleeding from gums
 13. Nose bleeds
 14. Urine dark or brown in color
 15. Aching joints
 16. Dizziness
 17. Tingling or numbness around the mouth
 18. Blurred or changed vision
 19. Ringing in the ears
 20. Hearing loss

- 21. Orang tinged urine, saliva, tears
- 22. Sensitive to the sun
- 23. Potential decrease in the effectiveness of birth control pills
- 24. Withdrawal symptoms for people on methadone
- 2. Two Phases of Drug Treatment
 - 1. Knockdown
 - 2. Maintenance Therapy
- 3. Sputum Smear during therapy
 - 1. Conversion to smear-negative
- 4. Surgical Treatment

9. MDR-TB

Goal: Understand the special issues and treatment plans associated with multi drug resistant TB.

- 1. Primary and Secondary resistance
- 2. Drug regimens for specific patterns of resistance
 - a. Resistant to Isoniazid: Rifampin, pyrazinamide, and ethambutol for 6 months
 - b. Resistant to Isoniazid and Rifampin: Fluoroquinolone, ethambutol, pyrazinamide, and injectable agent for 18-24 months
 - c. Resistant to Isoniazid, Rifampin and ethambutol or pyrazinamide: A fluoroquinolone (and ethambutol or pyrazinamide if disease is active) an injectable agent and two alternative agents.
 - d. Resistant to Rifampin: Isoniazid, ethambutol, and a fluoroquinolone, supplemented with pyrazinamide for the first 2 months, an injectable agent may be included for the first 2 to 3 months for patients with extensive disease.
 - e. Injectable agents include aminoglycosides (such as streptomycin, kanamycin, and amikacin) or capreomycin
 - f. Diarylquinolines
 - i. For MDR-TB or XDR-TB when others are ineffective

10. Chemoprophylaxis for TB

Goal: Understand the rational and process for preventing latent infections from progressing to clinically active TB disease.

- 1. Candidates for Preventive Therapy
 - i. People with HIV Infection
 - ii. Close contacts with TB case
 - iii. People who have undergone organ transplants and other immunosuppressed patients
 - iv. People with fibrotic changes on chest x-ray constant with old TB disease

- v. People receiving specialized treatment for arthritis or Crohn's disease
- vi. People who have a 10mm or larger TB test
 - 1. Recent arrivals in the US <5 years from high prevalence countries
 - 2. IV drug users
 - 3. Residents or employees of high-risk congregate settings
 - 4. Myco-bacteriology lab personnel
 - 5. Persons with medical conditions that make them high risk (diabetes, silicosis, cancer of the head and neck, end-stage renal disease, intestinal bypass or gastrectomy, chronic mal-absorption syndromes.
 - 6. Children exposed to adults in high-risk categories.
- 2. Vaccination....not generally used in the US

11. Children and TB

Goal: Understand the special issues and treatment plans for children with TB.

- 1. Prophylactic Treatment
- 2. Newborns

12. TB and Pregnancy

Goal: Understand the special issues associated with pregnancy and TB treatment.

- 1. First Trimester
- 2. Breastfeeding

13. Care of the patient with TB

Goal: Understand the overall goals of care, care settings, etc. associated with caring for patients with TB

- 1. Inpatient Care
 - i. Negative pressure rooms
 - ii. HEPA filters
 - iii. Germicidal lamps
 - iv. PPE
- 2. Ineffective Breathing Patterns
 - i. Increased rate
 - ii. Productive cough including hemoptysis
 - iii. Accessory muscles
 - iv. Retractions
 - v. Diaphoresis

- vi. Tachycardia
- vii. Interventions include O2, hydration, semi-Fowler's position
- 3. Acute Infection
 - i. Assessing secretions and sputum for amount, color, and consistency
 - ii. Measure temperature Q4
 - iii. Sputum culture reports
 - iv. Interventions
 - 1. Respiratory isolation
 - 2. Disposing of secretions properly
 - 3. Hand hygiene practices
 - 4. Medications
- 4. Patient Knowledge Deficit
 - i. Teaching patients about TB
 - ii. Teaching patients and their families how to follow their regimen
 - iii. Reinforce isolation techniques
 - iv. Nutrition education
 - v. Encourage patients to stop smoking
- 5. Case Management
 - i. Coordination of patient, family, clinics, and other support services.
- 6. Outpatient Care
 - i. Directed Observed Therapy
 - ii.



Ventura and Santa Barbara Counties

Ventura and Santa Barbara County Hospice Support Program

Project Number CP006

**A Proposal to: The California Emergency Medical Services
Authority**

**From: Ventura County EMS Agency, The Santa Barbara County
EMS Agency, AMR Ventura, LifeLine Medical Transportation, and
The Hospice Providers of Ventura and Santa Barbara Counties**

May 13, 2014

Contact Information

Mike Taigman
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Title of the Project

- Ventura and Santa Barbara County Hospice Support Program: Project Number CP006

Scope of Practice Categories

- Assess, treat, and refer
- Care for chronic conditions

Brief description of propose concept

The basic concept behind this proposed project is to improve the care and service provided to hospice patients who have activated the 911 system or had the 911 system activated on their behalf. The primary objective is to have Community Paramedics provide patients with comfort care using the patient's own comfort care kit and supplemental medications until hospice clinicians can take over care. This will require expanded protocols developed by the hospice medical director and the County EMS Medical Director. This will allow patients to remain in their location of choice rather than being transported to the hospital.

The secondary objective is to provide grief support and crisis support services for the patient, their family, and their friends until hospice clinicians arrive bedside.

This project will serve Ventura and Santa Barbara Counties.

This project is collaboration between Ventura County EMS Agency, Santa Barbara County EMS Agency, AMR Ventura, AMR Santa Barbara, Gold Coast Ambulance, LifeLine Medical Transportation, Assisted Hospice Care of Ventura, Thousand Oaks, and Santa Barbara, and The Palms at Bonaventure. First response agencies, other hospice providers and other appropriate partners will be recruited to join the project if approved for a pilot program.

The oversight for the project will be provided by a committee that includes the medical director for Assisted Hospice, the EMS Medical Director for both County EMS Agencies, a manager from participating hospice organizations, a representative of the Ventura County EMS Agency, a representative from the Santa Barbara County EMS Agency, a manager from LifeLine Medical Transportation and a Manager from AMR Ventura/Gold Coast. The project will be coordinated by Mike Taigman, General Manager for AMR Ventura/Gold Coast.

Estimated project length

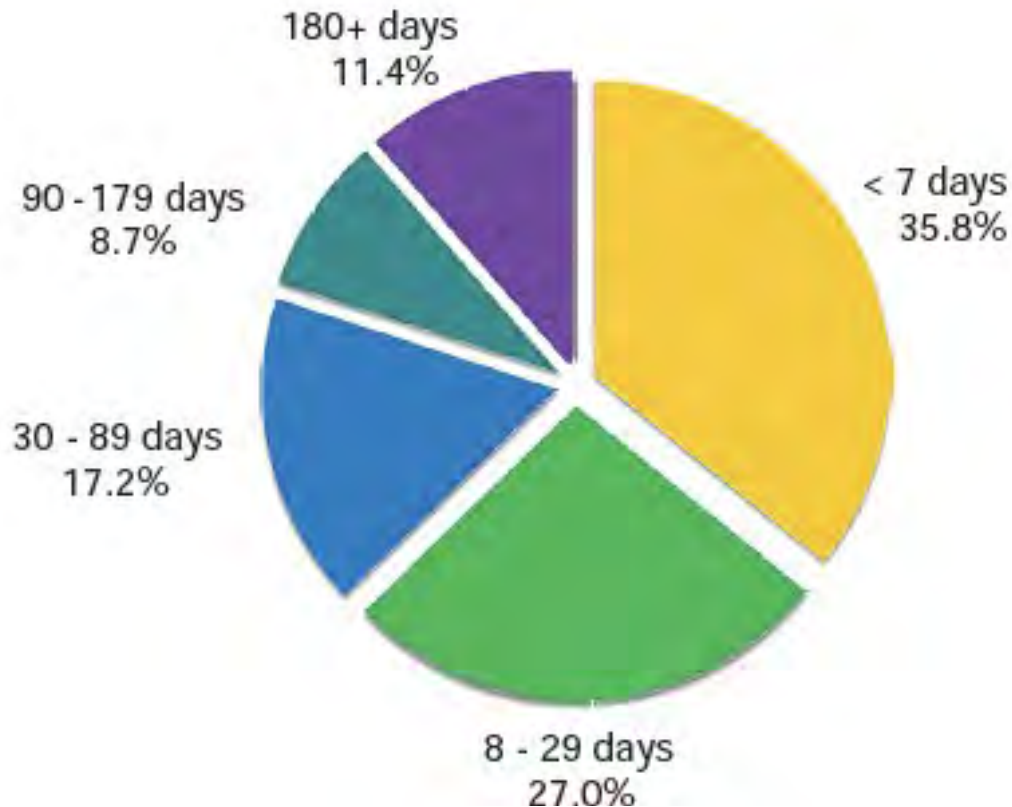
The project is estimated to require a bit more than two years from notification of approval (October 2013) until completion. It's anticipated to complete December 2015.

Background Information

Need for Project

Ventura County AMR Paramedic Bob Scott and his partner responded to a call for a "person not breathing." As the crew arrived they anticipated working a full arrest, instead they found Manny a 60-year-old male comforting his daughter. Manny said, "I'm not going with you. I've got an aneurysm in my belly. I don't want surgery. My doctor told me that when it happens I'll have about 45 minutes of severe pain and then I'll be dead. The pain started about an hour ago and I'm not dead yet, so my daughter called."

Hospice is an approach to care that supports those facing life-limiting illness when cure is not possible, but comfort is desired. Hospice is designed to provide a safe comfortable journey for the patient and to help their loved ones go on living after they die. In 2011 an estimated 1,650,000 people received care from one of the more than 4,700 hospice programs in the U.S. This graph shows the length of time before death for patients admitted to hospice in the U.S.



Hospice is not a place but a concept of care. Eighty percent of hospice care is provided in the patient’s home, a family member’s home and in skilled nursing homes. Hospice is a covered benefit under Medicare and California provides payment for hospice under Medi-Cal. The most common diseases that bring people into hospice are cancer, congestive heart failure, chronic obstructive pulmonary disease, Alzheimer’s, and renal disease.

One of the ideals in the hospice movement is that a good life deserves a “good death.” According to the Debate of the Age Health and Care Study Group there are 12 principles of a good death:

1. To know when death is coming and to understand what can be expected.
2. To be able to retain control of what happens.
3. To be afforded dignity and privacy.
4. To have control over pain relief and other symptom control.
5. To have choice and control over where death occurs (at home or elsewhere)
6. To have access to information and expertise of whatever kind is necessary.
7. To have access to any spiritual or emotional support required.
8. To have access to hospice care in any location, not only in hospital.
9. To have control over who is present and who shares the end.
10. To be able to issue advance directives which ensure wishes are respected.
11. To have time to say goodbye, and control over other aspects of timing.
12. To be able to leave when it is time to go, and not to have life prolonged

pointlessly.

While most patients admitted to hospice care die according to their wishes, it's common in the final stages of life for a friend or family member to panic and call 911. Currently paramedics arrive with limited options for helping patients find comfort other than small doses of morphine or Ondansetron than transportation to a hospital emergency department where there is the potential for them to be admitted to the hospital. Transport and hospitalization often interfere with the principles of a good death.

Types and number of patients likely to be served

In 2013 262 hospice patients in Ventura had 911 activated on their behalf. Of those 111 were transported to the hospital. An initial evaluation indicates that the majority of those transports could have been avoided with this program. Approximately 400-500 patients are in the hospice programs managed by our team members in Ventura and Santa Barbara Counties on an average day. Over the course of the project we estimate that 350 patients will receive services from Community Paramedics in Ventura and Santa Barbara Counties.

Employment opportunities for community paramedics

The paramedics selected to participate in this program are all full time Paramedic Field Supervisors. They will continue in their role as Field Supervisors and Community Paramedics throughout this project and will continue to be employed as Paramedic Field Supervisors after the completion of the project.

Other programs serving as models for this project

Medstar Mobile Healthcare in Fort Worth, Texas has a partnership similar to the one proposed in this project with Vitas Innovative Hospice.

Program Management

Project Leadership and Local Advisory Committee

This team meets monthly and has collaboratively designed the curricula, designed the protocols, will provide the supplemental hospice education, and once the project is live will provide quality oversight with a detailed review of each patient seen by the system.

- The project manager is Mike Taigman, General Manager for AMR Ventura and Gold Coast Ambulance.
- The project Medical Director is Angelo Salvucci M.D., Medical Director, Ventura County EMS Agency
- The project coordinator is Lindsey Simpson, paramedic for AMR Ventura, Faculty Instructor at Loma Linda University, and Ph.D. Candidate
- Darryl McClanahan, Paramedic Supervisor, AMR Santa Barbara
- Jeff Winter, Operations Manager LifeLine Medical Transportation
- Chad Panke, Clinical/Education Services Manager, AMR Ventura County/Gold Coast Ambulance
- Jeff Shultz, Paramedic Supervisor, Gold Coast Ambulance

Hospice Team Members

- Michele Bower, Buena Vista Hospice
- Mary Leste, CEO of TLC Home Hospice
- Lena Beker, Rose Room Hospice
- Tracy Shoop, Assisted Hospice
- Sandy Morse, Livingston Hospice
- Dave Schireman, Operations Manager AMR Santa Barbara
- Nancy Lopolla R.N., Director Santa Barbara County EMS Agency
- David Mack, Vitas Hospice
- Michelle Evans, Rose Room Hospice
- Carolyn Divine, Silverado Hospice

Operational Methodology

911 calls for hospice patients will continue to receive a full EMS response as appropriate for the nature of the call as defined by Medical Priority Dispatch protocols. As soon as a patient is identified (during call taking or after arrival of first response units) as being under hospice care the closest community paramedic (5-6 on duty 24 x 7 between the two counties) will be dispatched and the patient's hospice provider will be notified. During the hospice/CP team response a 3 way phone conference will be established between first arrivers, the on-call hospice triage nurse, and the responding community paramedic.

Operational Logistics

When the Community Paramedic arrives on scene, the first responders from the fire department and the paramedic ambulance company will turn care over to the CP and depending on the circumstances may go back into service. The CP will perform an assessment on the patient and communicate with the family. The CP will work with the hospice nurse to create a right now care plan focused on getting the patient through the next few moments until hospice can arrive. The plan may include transport to the hospital, administration of medications for pain, nausea, difficulty breathing, etc. or just tender loving care.

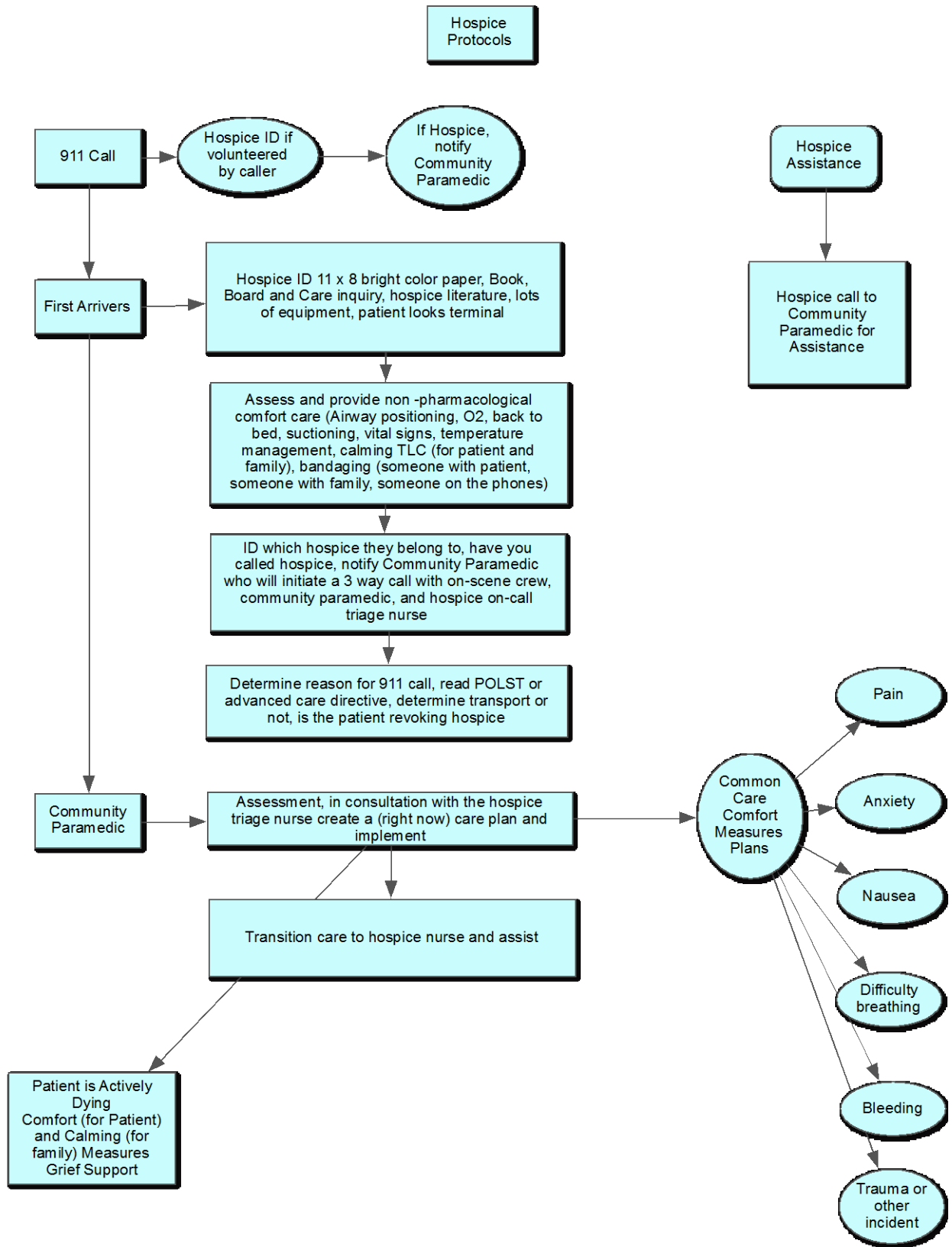
Protocols

- When a 911 call is placed for a patient who are under hospice care, Medical Priority Dispatch protocols will be followed and the appropriate first response/paramedic ambulance will be dispatched to the scene. Additionally the Community Paramedic/Supervisor will be dispatched to the scene. While responding the patient's hospice team will be notified.
- On arrival at the scene the Community Paramedic/Supervisor will assume care of the patient and management of the scene. The situation will be assessed to determine if the reason for 911 activation is the same illness that caused hospice admission or something outside of the reason for hospice. If the reason 911 was called is not related to the hospice illness then traditional EMS protocols will be implemented to care for the patient. If the reason for the 911 call is related to their hospice admitting illness then the patient will be cared for following the project's EMS hospice palliative care protocols.
- The medical oversight for this project will be provided by the EMS Medical Director for the two counties in consultation with the Hospice Medical Director.
- The project Oversight Committee will meet monthly for the duration of the

project to coordinate the training, protocol development, implementation, data collection, data analysis, safety, and progress of the project.

- Patient safety will be addressed by bedside clinical supervision of hospice clinical professionals and 100% case review for protocol compliance and unintended consequences.
- Ambulance provider continuing education and R&D funds will provide financial support for the project. Additionally we will search for and apply for grant funds to support the project.
- The paramedics selected for this program will have at least four years 911 system experience and have a background as a field training officer or preceptor. They will also be Field Supervisors or Associate Field Supervisors.

Local Community Paramedic training will be provided by UCLA.



Documentation

Each encounter with a hospice patient will be documented using Image Trend EPCR with a supplemental form specific to this project.

Provisions for protecting patient safety

These patients are under the care of a hospice physician and a team of hospice professionals. This project is designed to support the on-going care of patients who are expected to die. 100% of hospice patient encounters will be reviewed for protocols compliance, suffering reduction, and unanticipated consequences by the project manager, coordinator, and medical director within 48 hours of the call. And 100% of the cases will be reviewed by the project oversight committee each month.

Anticipated sources of funding

Funding for this project is provided by AMR Ventura, Gold Coast Ambulance, and LifeLine Medical Transportation. Post project funding will be provided by the local hospice providers.

Paramedic Eligibility

The process used to select candidates for this project began with a system overview and a consideration of talent, experience, training logistics, impact of the integration of new work, and financial impact. We chose to use the existing Paramedic Supervisors from AMR Ventura, AMR Santa Barbara, LifeLine Medical Transportation, and Gold Coast Ambulance because they are some of the most capable and experienced paramedics in the system, with some reconfiguration of current work the system allows them to complete the training, and care for these patients with minimal disruption to the rest of the EMS system. The primary financial impact is training costs; once the training is complete the ongoing cost for the project should be minimal.

The eighteen candidates are all current full time Paramedic Field Supervisors:

AMR Ventura		Years in EMS	Years as a Paramedic	Years as a Supervisor
	Ambrose Stevens	10	8	4
	Rob Rolf	28	27	5
	Jim Hall	26	21	5
	Mike Sanders	20	16	14
	Dan Kost	13	10	4
	Chris Gaskins	15	11	3
AMR Santa Barbara				
	Mike Rhoades	19	15	7
	Darryl McClanahan	9	5	1
	Tim Thompson	8	6	2
	Patrick Crull	18	18	13
	Dave Tosti			
	Wes Frank			
Gold Coast Ambulance				
	Jeff Shultz	11	8	6
	Justin Johnson	11	7	1.5
	Jaime Villa	8	4	1
LifeLine Medical Transportation				
	Ryan Coccia	5	3	1.5
	James Rosolek	6	4	2
	Weston Williams	14	3.5	1

The people who will be providing operational oversight for these Paramedic Supervisor/Community Paramedics will include clinical and operational managers from all four organizations:

AMR Ventura and Gold Coast

- Mike Taigman: General Manager, AMR Ventura/Gold Coast Ambulance
- Chad Panke: Clinical/Education Manager, AMR Ventura/Gold Coast Ambulance
- Mike Stillwagon: Community Clinical Care Manager, AMR Ventura/Gold Coast Ambulance
- Charles Drehsen M.D. Medical Director, AMR Ventura/Gold Coast Ambulance

AMR Santa Barbara

- Dave Schierman, Operations Manager, AMR Santa Barbara
- Les Hugh, Clinical/Education Manager, AMR Santa Barbara
- Charles Drehsen M.D. Medical Director AMR Santa Barbara

LifeLine Medical Transportation

- Jeff Winter, Operations Manager, LifeLine Medical Transportation
- Elizabeth Patterson, MD, FACEP, Medical Director LifeLine Medical Transportation

The Medical Directors of our partner Hospice organizations and their triage nurses will provide clinical oversight.

Local CP Training

The hospice portion of the Community Paramedic education program will be provided by the nurse educators and physicians from our local hospice providers. (Appendix B)

Data Collection and Analysis

Data will be collected and analyzed quantitatively and qualitatively each month. The percentage of hospice patient transported to the hospital is the primary indicator, which will be tracked monthly using a p-chart (statistical process control chart).

Quality Management Plan

Patient safety will be addressed prospectively with clear protocols designed by the hospice physicians and the EMS Medical Director, concurrently by real time communications between the on-call hospice nurse and our Community Paramedics and retrospectively by 100% case review for protocol compliance and unintended consequences. The project manager, our clinical manager, a hospice nurse manager, and our EMS Medical Director will perform the case review monthly.

The project will be managed using the Institute for Healthcare Improvement framework following the Standards for Quality Improvement Reporting Excellence (SQUIRE) Guidelines.

This project blends in with our evolving county Quality Management system illustrated below:

American Medical Response-Ventura & Santa Barbara are required to conduct Quality Assurance and Quality Improvement (QA/QI) reviews as part of the Paramedic Provider Contract with Ventura & Santa Barbara County Emergency Medical Services Agency's. The Community Paramedic (CP) Pilot QA/QI plan will integrate into the existing EMS QA/QI plan, with program-specific enhancements and heightened monitoring.

In addition to normal review of care coordination activities, AMR and Ventura EMS will review one hundred percent of all incidents involving use of an expanded scope of practice item. These incidents will be identified through mandatory reports by community paramedics, as well as a secondary records log review by the project manager. EMS will review incidents associated with an expanded scope protocol for:

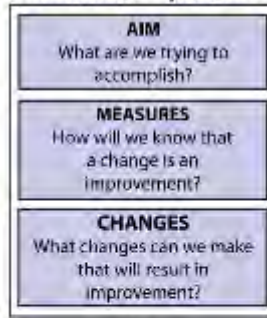
- medical appropriateness
- situational appropriateness
- time appropriateness
- compliance with protocols
- unusual circumstances
- adequacy of protocol
- outcome
- safety issues
- non-emergency contacts requiring the CP to request emergency assistance
- system trends involving CPs
- system trends involving 9-1-1 field responders

The EMS QA/QI team will handle expanded scope incidents under the following process:

1. Project manager refers incident to QA/QI
2. QA/QI staff assign a QA number to the incident
3. Incident is referred to the designated Community Paramedic QA Nurse Specialist
4. The QA Nurse Specialist determines appropriateness, compliance, safety
5. Feedback to respective community paramedic
6. The paramedic, project manager or QA nurse will investigate the outcome, depending upon which individual is most appropriate for the situation.
7. Review between QA/QI, project manager, paramedic and medical director
8. Report to LEMSA or EMSA, if needed
9. Feedback and education to CPs and 9-1-1 responders
10. Record retention as indicated by EMSA

This project blends in with our evolving county Quality Management system framework whereby 100% of the time, energy, and attention of the system is placed on performance improvement projects following the Institute for Healthcare Improvement's Model For Improvement.

The Model for Improvement



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Appendix A

County Letter of Support



**Ventura County
Public Health**

A Division of the Ventura County Health Care Agency

RIGOBERTO VARGAS, MPH
Director

EMERGENCY MEDICAL SERVICES
2220 E. Gonzales Road, Suite 130, Oxnard, CA 93036-0619
Phone: 805-981-5301
Fax: 805-981-5300
www.vchca.org/ph/ems

STEVEN L. CARROLL, EMT-P
EMS Administrator
ANGELO SALVUCCI, M.D., F.A.C.E.P.
Medical Director

September 26, 2013

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Health
Emergency Medical Services Authority
10901 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670

Dear Mr. Meyer,

The Ventura County EMS Agency is one of the collaborators on the Ventura and Santa Barbara County Hospice Support Program.

Sincerely,

A handwritten signature in blue ink, appearing to read "S. Carroll".

Steven Carroll
EMS Administrator

A handwritten signature in black ink, appearing to read "A. Salvucci".

Angelo Salvucci, MD
Medical Director

Appendix B Local Training Curricula

Community Paramedic Project

Supplemental Hospice Curriculum Approximately 55 Hours of Training

1. Hospice Background

Goal: Identify the philosophy and purpose of hospice

1. Definition of Hospice
2. Philosophy of Hospice
3. The history of Hospice
4. Hospice Licensure, Certification, and Accreditation
5. Hospice Medicare Benefit/Conditions of Participation
 - Patient rights
 - Patient assessment
 - Inter-disciplinary Group, care planning, and coordination of services
 - Infection control
 - Core services, nursing, medical social, physician, counseling,
 - Non-Core services including PT, OT, Speech therapy, homemaker services
 - Administration of services
 - Medical Director
 - Clinical Record
 - Medications, and medical supplies
 -
6. Ethical Precepts and goals of hospice
7. Palliative Care
8. Glossary
 - Accreditation
 - Advanced Directive
 - Artificial nutrition and/or hydration
 - Assessment
 - Assisted Suicide
 - Autonomy
 - Bereavement
 - Cap Period
 - Capacity
 - Capitation
 - Care Plan

- Caregiver
- Centers for Medicare and Medicaid Services (CMS)
- Certification
- Chronic
- Clinical Path
- Community
- Competency
- Comprehensive assessment
- Confidentiality
- Contracted Services
- Cultural Diversity
- Dementia
- Diagnostic-related Groups DRGs
- Discharge
- Do Not Resuscitate Orders DNRs
- Double Effect (principle of)
- Durable Medical Equipment DME
- Emotional Support
- Enteral Nutrition
- Euthanasia
- Extended Care Services
- Fee for Service
- Facility-Based Care
- Family
- Gatekeeper
- Grief
- Health Maintenance Organization HMO
- Home
- Home Health Aid/nursing aid/assistant
- Homemaker
- Hospice Physician
- Holistic
- ICD-9 Code
- Informed Consent
- Inpatient Services
- Inpatient Setting
- Interdisciplinary Team Conferences IDG or IDT
- Intermediary
- Initial assessment
- Length of stay/service LOS
- License (Hospice)
- Life-Sustaining Treatment
- Living Will

- Managed Care Plan or organization MCP or MCO
- Medicaid
- Medical Chart/Record
- Medical Director
- Mourning
- Medicare
- Outcome
- Palliative Care
- Patient
- Patient/Family and Unit of Care
- Power of Attorney for Healthcare
- Preferred Provider Organizations PPO
- Pressure Ulcer
- Primary Caregiver
- Prognosis
- Qualified
- Quality assessment and performance improvement
- Restraint
- Seclusion
- Standard
- Staff
- Staff Support
- Terminally Ill
- Time Line
- Utilization Review
- Volunteer
- Withdrawal of treatment
- Withholding of treatment

2. Hospice Medicare Benefit

Goal: Be able to select the criteria for hospice eligibility, the time frame for initial certification, the four services offered under the hospice benefit, understand hospice reimbursement under Medicare, and understand the difference between discharge and revocation.

1. Hospice Medicare Benefit
2. Eligibility for hospice care
3. Hospice benefit periods and certification process
4. Services provided
5. Levels of care
6. Reimbursement

7. Causes for termination of services.

3. Patient Rights and Advance Directives

Goal: Understand PSDA, Informed Consent and Advanced Directives. Explain the Medicare requirements about who can make the decision to elect the Medicare Hospice Benefit when the patient is unable to make decisions for themselves. Describe how patient's rights are to be communicated to the patient and/or their legally authorized representative.

1. Patient Self-Determination Act (PSDA) the law
2. Condition of Participation – Patient Rights
3. Informed Consent and its relationship to hospice
4. Decision Making Capacity
 - Communicate a choice
 - Understand the issues
 - Appreciate the situation and its consequences
 - Rationally manipulate information
5. Lack of Decision-Making Capacity
 - Surrogate Decision Maker
6. Advanced Directives
 - Five Wishes® Form
 - Out of State Directives

4. Interdisciplinary Teams

Goal: Describe the disciplines on the core team and match them with the services/tasks they provide.

1. Inter-disciplinary Group
 - a. Physician
 - b. RN
 - c. Social Worker
 - d. Pastoral or other counselor
 - i. Emotional Counseling
 - ii. Financial Counseling and Information
 - iii. Information about Legal Instruments and Services
 - iv. Community Resource Referrals and Advocacy
 - v. Non-invasive pain and Symptom Control
 - vi. Assessing Patient's needs and Problems
 - vii. Pastoral Care and Counseling
 - viii. Bereavement Support
 - ix. Dietary Counseling
 - x. Other services PRN
 - e. Hospice Aid

5. Hospice Care Planning and Integration

Goal: Understand the elements of a standard plan of care.

1. Medications
2. Treatments
3. DME
4. Supplies
5. Scope, frequency and duration of services
6. Problems, goals and interventions
7. Physician Orders
8. Process for changing plan of care
9. Nursing home variations

6. Documentation and Confidentiality

Goal: Review proper documentation, HIPAA Privacy Rules, and key information to be included in a clinical note.

1. Standard content of clinical record for each patient
 - a. Initial plan of care, updated plans, initial assessment, comprehensive assessment
 - b. Signed copies of the notice of patient rights
 - c. Responses to medications, symptom management, treatments, and services
 - d. Outcome measure data elements
 - e. Physician certification and recertification of terminal illness
 - f. Advanced directives
 - g. Physician Orders
 - h. Allergies and sensitivities to drugs and food
 - i. Medication orders
 - j. Diet orders
 - k. Orders for other therapies and services
 - l. Degree of activity allowed
 - m. Daily notes
2. What to document
 - a. Care and services provided
 - b. Patient/family response to services provided
 - c. Progress, lack of progress toward measurable outcomes
 - d. Observations about the patient's disease process, condition, coping
 - e. Communication with others regarding the patient
 - f. Patient/family education
 - g. Patient/family agreement/involvement in the plan of care
 - h. Patient/family emotional status
 - i. Psychosocial issues regarding pain and other symptoms

- j. Status re: the grieving process
- k. Patient's understanding of the nature of their condition
- l. Utilization and the need for community resources

3. Confidentiality

7. Admission Process for Hospice

Goal: Describe the special characteristics involved with admission to hospice.

1. Activities prior to and during the visit.
2. Determine the decision-maker
3. Determine the Patient/Family Understanding of Hospice
4. Obtain Pertinent Information
5. Checklist
 - Financial
 - Psychosocial
 - Medical
 - Terminal Diagnosis
 - Level of Medical Knowledge
 - Family dysfunction
6. Guidelines for determining prognosis of 6 months or less
7. Palliative Performance Scale (Adapted Karnofsky)
8. Katz Basic Activities of Daily Living (ADL) Scale
9. New York Heart Association Functional Classification
10. Functional assessment Staging Tool (for Alzheimer's Disease)
11. Mental Status
12. Mini-Mental Status Examination

8. Hospice in Alternate Settings

Describe the adaptations of hospice that's provided in places other than the patient's home.

1. Residential care facilities for the elderly also known as Board and Care
2. Assisted Living Facility
3. Residential Care Facility Adult (Usually mental health facilities for residents under age 62)
4. Residential hospice
5. Inpatient hospice
6. Acute care hospital
7. Acute care hospital transitional care unit
8. Special Issues
 - a. Weight Loss

b. Restraints

9. End Stage Disease

Goal: Describe the experience of end stage disease.

1. Anorexia and Weight Loss
2. Fatigue and Weakness
3. Loss of ability to perform activities of daily living
4. Sadness, Grief, and Depression
5. Fear and Anxiety
6. Confusion
7. Sedation
8. Cancer
9. Non-cancer diagnosis
 - End Stage Dementia
 - End Stage Lung
 - End Stage Cardiovascular
 - End Stage Renal
 - End Stage Liver

10. Pain Management

Goal: Understand the factors that affect the patient's quality of life, the difference between chronic and acute pain, and issues with addiction, physical dependency, and tolerance.

1. Basic Pain Management
2. Quality of Life
3. Barriers to providing adequate pain relief
 - a. Medical profession
 - b. Society
 - c. Misunderstanding of addiction, tolerance, and physical dependence
4. Side effects and their management
5. Pain assessment for the non-verbal patient
6. Types of pain...nociceptive (somatic or visceral tissue damage) and neuropathic
7. Principles of pain management
8. Role of team members in pain management
9. Color intensity pain scale
10. Faces pain rating scale
11. Simple descriptive pain intensity scale
12. 0-10 numeric pain intensity scale
13. Pain assessment in advanced dementia

11. Management of Symptoms Other Than Pain

Goal: Identify the most distressing symptoms from the patient's perspective.

1. Loss of appetite
2. Seizures
3. Difficulty swallowing
4. Difficulty breathing
5. Hopelessness
6. Anxiety

12. Nutrition and Hydration at the End of Life

Goal: Understand the nutrition and hydration issues associated with hospice.

1. Artificial Nutrition
2. Artificial Hydration
3. Ethical Decision Making
 - a. Autonomy-self determination
 - b. Veracity-truth telling
 - c. Non-maleficence-to do no harm
 - d. Beneficence-to do good for others
 - e. Justice-fair and equal treatment of all
4. Benefits and Burdens of Artificial Nutrition/Hydration
5. Benefits of not eating or drinking

13. Communication

Goal: Understand effective techniques for communication and the barriers to effective communication.

1. The Communication Cycle
2. Myths/Realities of Communication
3. Barriers to good communication
4. Developing good communications
5. Tools for good communication
6. Active Listening techniques

14. Death and the Dying Patient

Goal: Understand the stages of dying including the signs and symptoms. Learn to manage issues that may arise during the death and dying process.

1. Elizabeth Kubler-Ross Stages of Dying
 - a. Denial

- b. Anger
- c. Bargaining
- d. Depression
- e. Acceptance
- 2. Myths about Death
- 3. Death Dynamics
- 4. Preparation for Approaching Death
- 5. Physical Signs and Symptoms
 - a. Coolness
 - b. Sleeping
 - c. Disorientation
 - d. Incontinence
 - e. Congestion
 - f. Restlessness
 - g. Fluid and Food Decrease
 - h. Urine Decrease
 - i. Breathing Pattern Change
 - j. Withdrawal
 - k. Vision-Line Experiences
 - l. Decreased Socialization
 - m. Unusual Communication
 - n. Giving Permission
 - o. Saying Good By
- 6. Death in the Home
- 7. Death in the Nursing Home
- 8. The Dying Person's Bill of Rights
- 9. Writing your own obituary notice
- 10. Personal Questioner on dying

15. Grief and Bereavement Management

Goal: Understand the dynamics of Grief, bereavement, and mourning along with compassion fatigue.

- 1. Normal Grief
- 2. Common "Grief Expressions"
- 3. The Grief Process
- 4. Instrumental VS. Intuitive Grief
- 5. Determining factors on Grief Outcome
- 6. Tasks of Mourning
- 7. Grief vs. depression
- 8. Working with the bereaved
- 9. A child's understanding of death
- 10. Compassion Fatigue, what it is and how to manage it.

16. Human Behavior and Family Dynamics

Goal: Understand family roles/systems and their relationship to the hospice process.

1. Family Roles
2. Family Rules
3. Types of Family Behavior
4. Phases of Family Adaptions when facing terminal illness
5. Interventions
6. The needs of the dying and their families
7. Bill of rights for the family and friends of the critically ill

17. Cultural Diversity and It's Relationship to Death

Goal: Understand how cultural dynamics interweave with the death and dying process.

1. Cultural Diversity
2. Stereotype vs. Generalization
3. Ethnocentrism and Cultural Relativism
4. Time Orientation
5. Hierarchical vs. Egalitarian Cultures
6. Family of Orientation vs. Family of Procreation
7. Disease Etiology
8. Developing Cultural Competency
9. Models of Cultural Assessment
 - Barret Inferential Model
 - Giger and Davidhizar Model
10. Cultural Consideration in Healthcare
 - Folk Remedies
 - Folk Diseases
 - Folk Healers
11. Hospice and Multiculturalism
12. Providing Culturally Competent Care dos and don'ts

18. Spirituality

Goal: Understand spirituality, religion, emotional concerns and their relationship to spiritual distress and pain.

1. Spirituality vs. Religion
2. Emotional vs. Spiritual concerns
3. Spiritual Assessment
4. Spiritual Care
5. Guidelines in providing spiritual support

6. The role of the spiritual counselor

19. Basic Patient Care

Goal: Understand the overall framework of patient care from the hospice perspective.

1. Comfort
2. Dignity
3. Safety
4. Feeding and assisting with eating
5. Nail care
6. Assisting with dressing and undressing
7. Operating a hospital bed
8. Wheelchair etiquette and safety
9. Restraints and seclusion

20. Difficult/Sensitive Issues

Goal: Understanding abuse and reporting requirements along with suicide risk.

1. Incident reporting
2. Child and Dependent/Elder Abuse
3. Suicide potential, risk, and interventions
4. Assessment medical and non-medical
5. Physical Abuse
6. Financial Abuse

21. Compliance

Goal: Understand the terms licensure, certification, and accreditation along with Medicare certification.

1. Licensure
2. Certification
3. Accreditation
4. Professional Organizations
5. Internal systems to maintain quality JCAHO

22. Case Management

Goal: Understand the dynamics and issues involved with case management from the hospice perspective.

1. Regulatory Requirements
2. Job Descriptions

3. Time Management
4. Critical Thinking
5. Characteristics of Successful Case Managers

23. Safety and Provider Self-Care

Goal: Understand self care strategies involved with lifting, moving, and body mechanics.

1. Body Mechanics
2. Lifting
3. Infection Control
 - Isolation
 - Disinfection
 - Sterilization
 - Clean
 - Dirty
 - Standard Precautions
 - Transmission-Based Precautions (Isolation)
 - Contact, droplet, and airborne transmission
4. Stress Management
 - Physical
 - Emotional
 - Mental
 - Spiritual
5. Professional Boundaries
 -

ALAMEDA COUNTY COMMUNITY PARAMEDIC PILOT PROJECT

*Community Paramedics Addressing
the Needs of Frequent 911 Callers and
Recently Discharged Hospital Patients*

Submitted: May 12, 2014



A proposal to:

**The
California
Emergency
Medical
Services
Authority**



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Need for Proposed Project

Alameda County's population is the seventh largest in California at 1.5 million within a geographic area of 821 square miles. Annually the emergency medical services (EMS) system runs 110,000 calls per year with 90,000 transports. Area emergency departments (EDs) see 475,000 patients annually and hospitals discharge roughly 110,000 patients. Based on national research, not these entire EMS calls, ED visits, and hospitalizations may have been necessary. The Institute on Medicine identified that \$750 billion of the \$2.6 trillion spent on healthcare did nothing to make anyone healthier. Roughly \$0.30 of every dollar spent was wasted. Medicare has already taken strides to eliminate spending by not reimbursing readmissions within 30 days for certain conditions.

Frequent 911 Callers

In Alameda County, these inefficiencies cause numerous challenges in the local healthcare delivery system. Over the last 12 months, EDs collectively have been saturated to the point of diverting ambulance traffic for a total of 792 hours. Many people in Alameda County use the 911 systems as their main point of access to primary healthcare, medical consults, "after hours/weekend" care, etc. Many studies indicate that 35-40 percent of these ED patients could have been seen in a primary care environment. Frequent, unnecessary utilization of these resources by low-acuity patients can make EMS resources unavailable to high-acuity patients in their time of need.

A review of 2013 EMS data identified 162,252 responses and 109,923 transports were performed within the county of Alameda. Based on other successful community paramedic projects, approximately 30 percent most likely did not require an ambulance or an emergency department. That equates to 32,976 ambulance transports to an emergency department that could have been handled differently. As further evidence of the need for more proactive and comprehensive healthcare and social services, 163 patients were transported by EMS more in Alameda County more than 20 times in 2013 – 32 were transported more than 50 times – 11 more than 100 times and 3 more than 200 times, with the highest being 358 transports for one patient in a year. These "Familiar Faces" require significant EMS and ED resources each time 911 is activated. There is a gap in their healthcare delivery system that is causing this excessive number of transports.

Through additional training in assessment and resources available, the community paramedics (CPs) will have the skills and tools to educate the Familiar Faces on how to access the needed healthcare and county resources for non-acute conditions instead of using the 911 system. Other community paramedicine programs have been successful at reducing Familiar Face transports by 70 percent, saving significant EMS and ED resources for those who really need them as well as reducing the overall cost of healthcare.

Recently Discharged Hospital Patients

9,355 patients were discharged from St. Rose and Alameda hospitals during 2013. Some of these patients returned to the hospital (via EMS or private vehicle) within 30 days of being discharged. As stated previously, Medicare is taking a hard line on a few primary diagnoses and will no longer reimburse the hospital or physician for the related readmission. There are five discharge diagnoses that Medicare has identified as the most costly – CHF, COPD, MI, Sepsis, and Pneumonia. 2011 data indicates they caused 463,500 readmissions at a cost of \$6 billion. The assumption is that either these patients were discharged too soon or there was a lack of follow-up to ensure compliance with discharge instructions.





Community Paramedicine Pilot Project



Of the patients discharged from St. Rose and Alameda hospitals, roughly 1,450 had one of these five primary diagnoses. During the pilot project, the CP's will meet with recently discharged hospital patients to ensure they fully understand the discharge instructions, any new prescriptions, and when their next physician follow-up visit is scheduled. The CPs will also use the expanded assessment skills to identify changes in healthcare that need to be relayed to the physician before the next appointment. Each readmission avoidance is estimated to save the healthcare system \$13,000 based on Medicare's 2011 report.

Gap

Currently, there is no service that provides this level of pre-hospital assessment and care for non-acute medical conditions. This pilot project does not include patients who require constant in-home care, such as that provided through home healthcare agencies.

The goal of the pilot project is to connect patients with their primary healthcare providers proactively and avoid unnecessary EMS transports, ED visits, and hospitalizations. The CP will fill this current void solidifying new and successful means of communication between patients and health professionals to provide more timely and effective patient care.





Community Paramedicine Pilot Project



Project Partners and Supporting Agencies

Project Partners

- Alameda City Fire Department
- Alameda County Emergency Medical Services Agency
- Alameda Firefighters Local 689
- Alameda Hospital
- Hayward City Fire Department
- Hayward Firefighters Local 1909
- Kaiser Permanente
- St. Rose Hospital

Supporting Agencies

- Adult and Aging Services
- Alameda Alliance
- Alameda County Fire Department
- Alameda County Healthcare for the Homeless
- Alameda County Hospice Systems Coordinator
- Alameda County Medical Center (includes Alameda City Healthcare District & San Leandro Hospital)
- Alameda County Public Health
- Alameda County Regional Emergency Communications Center
- Alameda Police Department
- Alta Bates Hospital
- Asthma Start Program
- Behavioral Health Care Services
- CalFresh
- CalWORKS
- Cherry Hill Detox and Sobering Centers
- Children's Hospital
- Developmental Disabilities Council
- Eden/Sutter Hospital
- Fast Response School of Healthcare Education
- Federally Qualified Health Centers (FQHCs)
- General Assistance
- HAART Addiction Treatment Center
- Hayward Police Department
- Health Coaches Program
- Injury Prevention Program
- Las Positas College Paramedic
- Medi-Cal
- Paramedics Plus
- Regional Center of the East Bay
- St. Regis Retirement Center
- Summit Hospital
- Tiburcio Vasquez Health Center
- TRUST Clinic
- Valley Care Hospital





Community Paramedicine Pilot Project



Steering Committee

The Steering Committee of the Alameda County Community Paramedicine Pilot Project will be an entrusted panel of hospital, public health, and EMS personnel whom have expertise within the healthcare field. They will guide the development of the project and serve as subject matter expert consultants for the pilot project. The Project Coordinator is the chair of the Steering Committee, facilitating the meetings, acting as the agenda organizer, and ensuring the project remains on track. The members of the Steering Committee consist of:

1. Dr. Karl Sporer, EMS Agency, Project Medical Director
2. Brandon Rowley, EMS Agency, Specialist (Project Coordinator)
3. Garrett Contreras, Hayward Fire, Chief
4. Bob Negri, RN, Hayward Fire, EMS Coordinator
5. Doug Long, Alameda City Fire, Division Chief
6. Gail Porto, RN, Alameda City Fire, EMS Coordinator
7. Louise Nakada, Alameda Hospital, Director of Community Relations
8. Karen Taylor, Alameda Hospital, Director of Quality and Risk
9. Sylvia Ventura, St. Rose Hospital, Chief Nursing Officer
10. Marie Flacis, St. Rose Hospital, Director of Performance and Risk
11. Dr. Jay Goldman, Kaiser Permanente, Northern California EMS Liaison





Community Paramedicine Pilot Project



CP Selection, Supervision, and Monitoring

Selection

- **Candidate Criteria:** The candidates will undergo an interview selection process by a panel of fire, EMS agency, and hospital personnel. In addition, the supervisors will be involved in the selection process due to their firsthand working knowledge of the paramedics currently working within the Alameda County EMS System.
- **Experience Level:** The candidate will have a minimum of four years' experience as a practicing licensed paramedic.
- **Informing the Candidate:** During the selection process, the candidate will be informed of responsibilities and limitations of their paramedic practice under the Health Workforce Pilot Project statute and regulation and sign a written agreement upon selection.
- **Number of Candidates:** A minimum of 20 and maximum of 30 candidates will be selected for the pilot program.

Supervisor Information

- **Criteria Selection:** Due to the knowledge depth of the current operating EMS system and licensure as registered nurses, the EMS Coordinators from Alameda and Hayward City Fire Departments will act as supervisors of the candidates selected. In addition, an Alameda City Division Chief will act as the program manager for that city.
- **Orientation Plan:** Both supervisors are nurses with extensive hospital experience. They are also accomplished paramedic instructors and will be utilized as much as possible during the educational phase. The supervisors will likely conduct a site visit to MedStar Mobile Healthcare in Fort Worth, Texas to observe and orient themselves with a high functioning, successful Community Health and CP program. In addition, actively working CP's from MedStar may be asked to travel to Alameda County as guest instructors and/or field training officers for the CP program.
- **Number of Supervisors:** There will be a total of three supervisors.





Community Paramedicine Pilot Project



Monitoring

- **Candidate Progress & Competency:** The pilot project will use charting software to monitor the candidate's progression and competency benchmarks. Software from several successful CP programs is currently being evaluated to determine the most appropriate solution.
- **Supervisor Fulfillment of Roles:** An outline of expectations and roles will be developed with the supervisors based on existing supervisors from other CP programs. They will have complete access to the selected charting software to effectively monitor the personnel providing services. In addition, the supervisors will be responsible for reports and aggregated data analysis as required for the pilot projects.
- **Site Compliance with Selection Criteria:** The supervisors will provide the initial review of the patients selected for the pilot projects to ensure compliance. The Steering Committee will also be provided regular reports that would identify non-compliance with the approved selection criteria.
- **Information Reporting System:** The pilot projects will use charting software to monitor the candidate's progression and competency benchmarks. Software from several successful CP programs is currently being evaluated to determine the most appropriate solution. Partner hospitals have agreed to participate with the information gathering and reporting necessary for these projects.





Project Methodology and Protocols

Client Identification

1. The selection of Familiar Faces (i.e., frequent 911 patients) for the pilot project will be data driven through the centralized EMS database.
2. Hospital patients with eligible discharge diagnoses for the pilot project will be identified by hospital case managers at St. Rose and Alameda hospitals.

Client Scheduling

1. Once identified, the CP Coordinator will contact the prospective Familiar Face client and explain the pilot project. If interested, the CP Coordinator will assign a CP to make contact with the new enrollee.
2. Once referred from the hospital, the discharged patient will be assigned a CP by the CP Coordinator.

Client Initial Visit

1. The CP will meet with the Familiar Face client and obtain written consent to participate in the program. Following a routine and comprehensive assessment (see appendices), the CP will determine healthcare and social needs.
2. The CP will review discharge instructions, new medications, and confirm the client's next physician appointment. A routine and comprehensive assessment (see appendices) will also be completed. Any findings that cannot wait until the follow-up appointment will be immediately shared with the patient's primary care physician.

Client Follow-Up

Each client will require different levels of phone and in-person contact. Following each visit, subsequent calls and/or visits will be scheduled.

Client Unscheduled Follow-Up

If the client contacts the CP pilot project using the non-emergency phone number, an available CP will be notified immediately to follow up with the client. Should the client call 911, the dispatch center will send the normal level of EMS resources following dispatching protocols. In addition, an available CP will be dispatched.

Learning Skills

The CP will learn how to provide long-term, chronic care management that includes but not limited to:

- Point of care testing (e.g., i-Stat system).
- Accurately reading and understanding of lab values and results.
- Professional interactions with hospital and social service program personnel.
- Home safety.
- Remote technology and medical equipment.
- Public Health programs available to patients.





Patient Safety

Frequent Faces

These patients will be identified from a search of existing prehospital patient care records and by referrals from prehospital and hospital providers. Since this will be a finite number of patients, a Working Subgroup of the Steering Committee (EMS Medical Director, EMS CP Liaison, Hayward FD representative, Alameda City FD representative) will review the routine and comprehensive assessments of these patients at reasonable intervals. Primary and secondary problems will be delineated and prioritized for interventions. Once the need for specific interventions are identified (such as need for case management, development of a relationship with a primary care provider, application for health insurance, application for other entitlements, referral for housing, or referral for substance use treatment), the progress on these interventions will be monitored monthly by the CP. The CP will work with the client as well as various other enrollment officers, case managers, etc. to ensure follow through with the established plan. The Working Subgroup of the Steering Committee will review the progress of these patients every 90 days until adequate improvement or it becomes clear that further progress will not be made with a voluntary program.

All unusual occurrences, ED admissions, and hospitalizations will be reviewed by the Working Subgroup for appropriateness and for opportunities for improvement. The overall progress of our clients will also be evaluated every 90 days and changes in our approach and strategy can be revisited. We will assess our need for improving our ties with specific local programs necessary for our clients.

Follow up of patients discharged from St. Rose and Alameda Hospital

These patients will be identified by the hospital case managers at the respective hospitals. We expect our episodes of CP care for these patients will be of shorter duration. The CP will review discharge instructions, new medications, and confirm the client's next physician appointment. A routine and comprehensive assessment will also be completed. Any findings that cannot wait until the follow-up appointment will be immediately shared with the patient's primary care physician.





Community Paramedicine Pilot Project



A record of this assessment and plan will be electronically captured. Initially, a Working Subgroup of the Steering Committee will review all of these records for a period of 4-8 weeks. Once we develop a better sense of functionality of this system, we will develop a peer review method of reviewing all of the charts that will allow the Community Paramedicine to review and critique each other's charts and plans. A sampling of a third of all of these cases will be flagged for full review by the Working Subgroup of the Steering Committee. These cases will be evaluated for unusual events, readmissions to the ED or hospital, and complications of the initial disease process. As cost data becomes available, this group will evaluate the efficacy of the overall program.





Community Paramedicine Pilot Project



Local Curriculum

Training Goal: The student will understand and analyze their role in the pilot program for hospital discharge follow-up and EMS familiar faces.

Module 1: Pilot Project Descriptions and Standards for Client Inclusion. Time: 3-hour classroom.

Goal: The community paramedic will be able to understand the pilot project and the related guidelines utilized to determine client eligibility to participate in the pilot project.

Objectives and summary: At the end of this teaching session the community paramedic will demonstrate or be able to discuss knowledge of the following:

- 1.1 The need for hospital discharge and EMS familiar faces proactive attention to mitigate EMS and hospital utilization
- 1.2 Definition of informed consent and components necessary to achieve this. Ineligibility for informed consent such as mental status and communication barriers. Declined consent and how to document consent or non-consent.
- 1.3 Review of the Alameda County CP Administrative Protocol
- 1.4 Review of the Alameda County Routine and CP Comprehensive Assessment Protocols
- 1.5 State how patient safety and quality improvement will be measured in the pilot project
- 1.6 Describe how outcome measures will be done and how they will be reported
- 1.7 Use of patient satisfaction surveys as provided by the state project manager
- 1.8 Providers will receive ongoing education regarding the program

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

Module 2: CP Assessment Skills. Time: 10-hour classroom.

Goal: The community paramedic will be able to perform routine and CP comprehensive assessments as identified in Alameda County EMS policies.

Objectives and summary: At the end of this teaching session the community paramedic will demonstrate or be able to discuss knowledge of the following:

- 2.1 Perform the standard ALS Routine Assessment
- 2.2 Perform the CP Comprehensive Assessment
 - 2.2.1 General health status
 - 2.2.2 Integumentary system





Community Paramedicine Pilot Project



- 2.2.3 Cardiovascular system
- 2.2.4 Respiratory system
- 2.2.5 Gastrointestinal system
- 2.2.6 Genital/Urinary system
- 2.2.7 Musculoskeletal system
- 2.2.8 Central nervous system
- 2.2.9 Endocrine system
- 2.2.10 Psychosocial status
- 2.2.11 Environmental health
- 2.3 Conduct point-of-care testing and interpret results
- 2.4 Identify findings that could require 911 activation, physician consultation, or other action

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

Module 3: Resources. Time: 2 hour in classroom

Goal: The community paramedic will be able to identify the local, county, and state resources available to benefit clients.

Objectives and summary: At the end of this session the community paramedic can describe how to access resources available to them and the client.

- 3.1 Appropriately identify the relevant resource for each client
 - 3.1.1 Asthma Start Program
 - 3.1.2 Injury Prevention
 - 3.1.3 Behavioral Health Care Services
 - 3.1.4 Alameda County Public Health Department
 - 3.1.5 TRUST Clinic
 - 3.1.6 Alameda County Healthcare for the Homeless
 - 3.1.7 HAART Addiction Treatment Center
 - 3.1.8 Cherry Hill Detoxification and Sobering Centers
 - 3.1.9 Federally Qualified Health Centers (FQHCs)





Community Paramedicine Pilot Project



Module 4: Documentation requirements. Time: 4 hour in classroom, instructor led “live training” with fictitious client data entry.

Goal: The community paramedic will be able to accurately document the client encounter.

Objectives and summary: At the end of this session the community paramedic will understand the data requirements and will be able to successfully document the client encounter.

- 4.1 Describe baseline data requirements required for pilot project.
- 4.2 Accurate completion of charting client encounter using designated CP charting software.

Competency demonstrated by accurately completing the charting requirements with no critical omissions.

Module 5: CP Continuous Quality Improvement. Time: 2 hours classroom

Goal: The community paramedic will participate within the continuous quality improvement (CQI) process.

Objectives and summary: At the end of this session the community paramedic will understand the quality assurance/improvement process and the role of the CP CQI sub-committee.

- 5.1 Overview of pre-hospital research studies (i.e., IRB)
- 5.2 Role of Local EMS Agency (LEMSA) and LEMSAs Medical Director
- 5.3 Role of Local Project Manager
- 5.4 100% retrospective review of CP charts

Module 6: Clinical Rotations. Time: 40 hours

Goal: The community paramedic will rotate through a variety of clinical environments to increase knowledge of chronic diseases and community healthcare resources.

Objectives and summary: At the end of this module the community paramedic will have increased comprehensive assessment skills and working knowledge of chronic diseases.

- 6.1 Demonstrate ten comprehensive assessments under the supervision of primary care providers
- 6.2 Interpreting lab results
- 6.3 Enhanced working knowledge of common medications used to treat chronic diseases

Competency will be demonstrated by successfully assessing 90% of the patients.





Appendices

- I. **Frequent 911 callers Protocol**

- II. **Recently Discharged Hospital Patients Protocol**

- III. **Routine Medical Care – Adult Policy**

- IV. **Community Paramedic Comprehensive Assessment Policy**

- V. **Home Safety Inspection Checklist**

- VI. **Community Paramedic Continuous Quality Improvement Plan**





Community Paramedicine Pilot Project



I. Frequent 911 Callers Protocol

PURPOSE:

To provide healthcare and social assessments, resources, and referrals to super and mega users (i.e., “Familiar Faces”) of the 911 system by approved Alameda County EMS Community Paramedic (CP) personnel as part of the California State EMS Authority Community Paramedicine Pilot Project.

The goals of the Alameda County EMS Community Paramedicine Pilot Project include:

- A. Ensure that Familiar Face clients receive the following:
 - 1. Further medical and social assessment of their chronic conditions.
 - 2. Coordination of necessary follow up care.
 - 3. Medications have been obtained and are being taken as prescribed.
 - 4. Referral and coordination of social and healthcare resources available within Alameda County for Familiar Face clients.
- B. Allow CP personnel to make home visits.
- C. Allow CP personnel to make necessary referrals when an intervention by a licensed healthcare provider could prevent an exacerbation of a medical condition.

AUTHORITY:

California Code of Regulations, Title 22, Division 9, Chapter 4.

California Code of Regulations, Title 22, Division 7, Chapter 6.

Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218.

Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Projects Program.

California Office of Statewide Health Planning and Development (OSHPD)

Health Workforce Pilot Projects Program (HWPP) – Program Approval #173.





Community Paramedicine Pilot Project



IMPLEMENTATION & DURATION:

The anticipated Community Paramedicine Pilot Project implementation date is January 1, 2015 with an expected duration of up to 24 months. HWPP projects may be extended one year at a time if the OSHPD Director determines that continuation of the project will contribute substantially to the availability of high-quality services in the state or region.

CLIENT INCLUSION CRITERIA:

Clients must meet the following criteria for inclusion in the Alameda County EMS Community Paramedicine Pilot Project:

- A. Defined as a Super User (20-49 transports per year) or Mega User (50+ transports) of the 911 system.
- B. Agree to participate in the pilot project and complete/sign an OSHPD/HWPP required pilot project informed consent form. The CP must obtain informed consent from the patient at each encounter.

PROCEDURE:

- A. Super and Mega Users will be identified by the Alameda County EMS Agency using the transport data collected by Alameda City and Hayward Fire Departments and stored within the Alameda County centralized EMS database. Contact information will be given to the CP Coordinator within HIPAA depicted safeguards.
- B. Using a scripted text, CP Coordinator will contact and inform the potential client defined as a Super or Mega User of the CP project "Familiar Faces" and obtain client signature consenting to enrollment in the project.
 1. CP Coordinator will refer newly enrolled CP client (i.e., discharged patient) to an available CP.
 2. Client information will be entered by the CP Coordinator into the CP charting software.
 3. CP Coordinator will notify and instruct the 911 dispatch center to flag client's address as a CP project client in the Computer Aided Dispatch (CAD).
 4. CP Coordinator will share all patient health information in a secure manner and accordance with HIPAA laws.
 5. Any unusual occurrences will be reported by the CP Coordinator to the local and state project managers within 24 hours.





Community Paramedicine Pilot Project



- C. The CP will contact the client and schedule an initial visit within 24-48 hours.
1. During the client visit, the CP will perform initial ALS assessment following the Alameda County EMS Patient Care Policy "Routine Medical Care-Adult" guidelines. If the client needs immediate hospital care based on this assessment, the CP will initiate 911. Assuming the routine assessment identifies no critical concerns, the CP will conduct a comprehensive assessment. The guidelines for the CP comprehensive assessment will be based on the core and regional assessment training and include, but are not limited to:
 - a. Living/ Home Safety Assessments
 - b. Vital Signs and Skin conditions
 - c. Patient Condition and Complaints
 - d. Patient Signs and Symptoms
 - e. Dietary Intake
 - f. Medication Compliance
 - g. Social Environment/Need for Social Resources
 2. Following the assessments, the CP will determine if the client's status warrants attention before the next follow-up visit. This decision will be based on reviewing prior visit chart notes (if applicable), lab results, and findings from the routine and comprehensive assessments. If so, the CP will contact the client's PCP for consultation. The CP will update the PCP on the client's condition and provide additional assessments as requested by the PCP. Upon conclusion of the referral, the PCP will determine the next course of action – such as a medication adjustment, sooner follow-up visit, transport to the emergency department (ED), etc.
 3. The CP will schedule the next follow-up visit. The frequency will be based on the assessment findings and any direction from the PCP, if indicated.
 4. Any unusual occurrences will be reported immediately to the CP Coordinator.
 5. The CP will document the client visit, related assessments and findings, and any actions taken (e.g., PCP contact, transport to ED) using the CP charting software at the conclusion of the visit.
- D. The PCP will be the primary resource for directing client care.
1. The CP will consult with the PCP any abnormal findings discovered during the client visit and assessment.
 2. The PCP will direct the CP to conduct any additional assessments.
 3. The PCP will determine and advise the CP any change in treatment and/or need for reevaluation at the PCP office or the ED.





**Community Paramedicine
Pilot Project**



- E. The 911 dispatch centers will be available as a resource to CP project clients.
 - 1. If dispatch receives an emergency call from any client (identifiable as each client address is flagged within the CAD), dispatchers will follow standard emergency medical dispatch procedures. In addition, dispatch will send a CP with the appropriate EMS resources. If the CP is unavailable, dispatch will notify the CP Project Hotline for appropriate follow-up by the CP Coordinator.
 - 2. If a client calls the non-emergency phone number, the dispatcher will take a message and relay it to an available CP. If unavailable, the client will be referred to the CP Coordinator.
 - 3. When a CP responds to a scheduled or unscheduled client residence, the CP will notify dispatch. The response will be entered into the CAD and standard dispatching policies followed for unit status, welfare checks, etc.

- F. CP chart review will occur within 24 hours of the client visit by the CP Coordinator. The review will follow guidelines produced by the quality improvement/assurance subcommittee specifically established for this pilot project. Any unusual occurrence will be immediately relayed to the local and state CP project managers.

Written Script of CP Project for Frequent 911 Callers

Community Paramedic Frequent 911 Caller Pilot Project

We are participating in a pilot project aimed at helping people who are not receiving the care they need and are forced to call 911 frequently. Our goal is to identify necessary healthcare services proactively so that medical problems do not become serious and require an ambulance and hospitalization. There is no cost to participate.

During this project, a community paramedic will help you coordinate your medical care and share healthcare resources available to you. A non-emergency number will be provided if you have questions and the community paramedic is also available to meet with you in person.

If you are interested in participating in this pilot project, I will ask our community paramedic to contact you to schedule a time to discuss your health needs. During the first visit, we will provide a written consent form that you will need to sign in order to participate.

**Community Paramedic Non-Emergency Number
(XXX) XXX-XXXX**





Community Paramedicine Pilot Project



II. Recently Discharged Hospital Patients Protocol

PURPOSE:

To provide a mechanism for post hospital discharge follow up, treatment and referral of patients with a diagnosis of Acute Myocardial Infarction (AMI), Congestive Heart Failure (CHF), Sepsis, Pneumonia, or Chronic Obstructive Pulmonary Disease (COPD) approved by the Alameda County EMS Community Paramedic (CP) personnel as part of the California State EMS Authority Community Paramedicine Pilot Project.

The goals of the Alameda County EMS Community Paramedicine Pilot Project include:

- A. Ensure that AMI, CHF, COPD, Sepsis, and Pneumonia patients receive the following:
 - 1. Understanding and follow through of their hospital discharge instructions.
 - 2. Coordination of necessary follow up care.
 - 3. Facilitation of necessary follow ups with patient's PCP and coordination of necessary/appropriate transportation.
 - 4. Medications have been obtained and are being taken as prescribed.
 - 5. Coordination of necessary dietary restrictions.
- B. Allow CP personnel to make post hospital discharge home visits.
- C. Allow CP personnel to make necessary referrals when an intervention by a licensed healthcare provider could prevent an exacerbation of a medical condition.

AUTHORITY:

California Code of Regulations, Title 22, Division 9, Chapter 4.

California Code of Regulations, Title 22, Division 7, Chapter 6.

Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218.

Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Projects Program.

California Office of Statewide Health Planning and Development (OSHPD)

Health Workforce Pilot Projects Program (HWPP) – Program Approval #173.





Community Paramedicine Pilot Project



IMPLEMENTATION & DURATION:

The anticipated Community Paramedicine Pilot Project implementation date is January 1, 2015 with an expected duration of up to 24 months. HWPP projects may be extended one year at a time if the OSHPD Director determines that continuation of the project will contribute substantially to the availability of high-quality services in the state or region.

PATIENT INCLUSION CRITERIA:

Patients must meet the following criteria for inclusion in the Alameda County EMS Community Paramedicine Pilot Project:

- A. Diagnosis of AMI, CHF, COPD, Sepsis, or Pneumonia.
- B. Discharge from Alameda Hospital or St. Rose Hospital to a residence within the cities of Alameda or Hayward.
- C. Agree to participate in the pilot project and complete/sign an OSHPD/HWPP required pilot project informed consent form. The CP must obtain informed consent from the patient at each encounter.

PROCEDURE:

- B. When a patient has been determined to meet inclusion criteria, the hospital Case Manager will perform the following steps.
 1. The Case Manager will provide a written description (attached) of the CP pilot project to the potential enrollee. After discussing the project, the patient can choose to participate or not. If the patient says no, there is no further action taken.
 2. If interested, the Case Manager will obtain the patient's signature consenting to enrollment in the project and the sharing of medical information. The OSHPD approved informed consent form will be used to show acceptance by the patient.
 3. The Case Manager will call the CP Project Hotline and provide referral information within HIPAA guidelines as well as the Primary Care Physician (PCP) contact for care coordination.
- C. CP Coordinator will refer newly enrolled CP client (i.e., discharged patient) to an available CP.
 1. Client information will be entered by the CP Coordinator into the CP charting software.
 2. CP Coordinator will notify and instruct the 911 dispatch center to flag client's address as a CP project client in the Computer Aided Dispatch (CAD).
 3. CP Coordinator will share all patient health information in a secure manner and accordance with HIPAA laws.





Community Paramedicine Pilot Project



4. Any unusual occurrences will be reported by the CP Coordinator to the local and state project managers within 24 hours.
- D. The CP will contact the client and schedule an initial visit within 24-48 hours.
1. During the client visit, the CP will perform initial ALS assessment following the Alameda County EMS Patient Care Policy "Routine Medical Care-Adult" guidelines. If the client needs immediate hospital care based on this assessment, the CP will initiate 911. Assuming the routine assessment identifies no critical concerns, the CP will conduct a comprehensive assessment. The guidelines for the CP comprehensive assessment will be based on the core and regional assessment training and include, but are not limited to:
 - a. Living/ Home Safety Assessments
 - b. Vital Signs and Skin conditions
 - c. Patient Condition and Complaints
 - d. Patient Signs and Symptoms
 - e. Dietary Intake
 - f. Medication Compliance
 - g. Social Environment/Need for Social Resources
 2. Following the assessments, the CP will determine if the client's status warrants attention before the next follow-up visit. This decision will be based on reviewing prior visit chart notes (if applicable), lab results, and findings from the routine and comprehensive assessments. If so, the CP will contact the client's PCP for consultation. The CP will update the PCP on the client's condition and provide additional assessments as requested by the PCP. Upon conclusion of the referral, the PCP will determine the next course of action – such as a medication adjustment, sooner follow-up visit, transport to the emergency department (ED), etc.
 3. The CP will schedule the next follow-up visit. The frequency will be based on the assessment findings and any direction from the PCP, if indicated.
 4. Any unusual occurrences will be reported immediately to the CP Coordinator.
 5. The CP will document the client visit, related assessments and findings, and any actions taken (e.g., PCP contact, transport to ED) using the CP charting software at the conclusion of the visit.
- E. The PCP will be the primary resource for directing client care.
1. The CP will consult with the PCP any abnormal findings discovered during the client visit and assessment.
 2. The PCP will direct the CP to conduct any additional assessments.





Community Paramedicine Pilot Project



3. The PCP will determine and advise the CP any change in treatment and/or need for reevaluation at the PCP office or the ED.
- F. The 911 dispatch centers will be available as a resource to CP project clients.
1. If dispatch receives an emergency call from any client (identifiable as each client address is flagged within the CAD), dispatchers will follow standard emergency medical dispatch procedures. In addition, dispatch will send a CP with the appropriate EMS resources. If the CP is unavailable, dispatch will notify the CP Project Hotline for appropriate follow-up by the CP Coordinator.
 2. If a client calls the non-emergency phone number, the dispatcher will take a message and relay it to an available CP. If unavailable, the client will be referred to the CP Coordinator.
 3. When a CP responds to a scheduled or unscheduled client residence, the CP will notify dispatch. The response will be entered into the CAD and standard dispatching policies followed for unit status, welfare checks, etc.
- G. CP chart review will occur within 24 hours of the client visit by the CP Coordinator. The review will follow guidelines produced by the quality improvement/assurance subcommittee specifically established for this pilot project. Any unusual occurrence will be immediately relayed to the local and state CP project managers.
- H. Once clients reach 30 days post-discharge, they are no longer eligible to participate in the pilot project. At the last home visit, the CP will share any pertinent materials or resources that the client can continue to access (e.g., meals on wheels).

Written Description of CP Project for Patients Being Discharged

Community Paramedic Discharge Follow-Up Pilot Project

St. Rose and Alameda Hospital are participating with community paramedics from Hayward and Alameda City Fire Departments to provide no cost, in-home visits. During this visit, the community paramedic will check on your overall health status, perform an assessment, and help with any questions related to your discharge instructions. This pilot project is available for 30 days after you are discharged from the hospital. You will also have access to the community paramedics through a non-emergency number to ask questions or request help.

If you are interested in participating in this pilot project, the case manager has a consent form that you will need to sign. Within a few days of discharge, a community paramedic will contact you to schedule your in-home visit.

Community Paramedic Non-Emergency Number
(XXX) XXX-XXXX





III. Routine Medical Care – Adult Policy

Patient Care Policy (Adult)

Modified On: June 10, 2013

ROUTINE MEDICAL CARE – ADULT

1. **DEFINITIONS:**

Baseline vital signs:

- Pulse rate
- Blood pressure
- Respiratory rate
- Pulse Oximetry
- Consider temperature

SAMPLE History:

- S** = Signs & symptoms
- A** = Allergies
- M** = Medications
- P** = Pertinent past history
- L** = Last oral intake
- E** = Events leading to the injury/illness

Adapted from Emergency Care and Transportation of the Sick and Injured, 8th Edition

2. **SCENE SIZE-UP:**

- Substance isolation
- Scene safety
- Determine mechanism of injury | nature of illness
- Determine number of patients
- Request additional assistance

3. **INITIAL ASSESSMENT:**

- Form general impression of the patient
- Assess mental status
- Assess the airway
- Assess breathing
- Assess circulation
- Identify priority patients

4. **TRAUMA PATIENTS:** Focused History and Physical Exam - Reconsider mechanism of injury

Significant Mechanism of Injury:

- Rapid trauma assessment
- Baseline vital
- SAMPLE History
- Transport
- Detailed physical exam

No Significant Mechanism of Injury:

- Focused assessment based on chief complaint
- Baseline vital signs
- SAMPLE History
- Transport
- Detailed physical exam

5. **MEDICAL PATIENTS** - Focused History and Physical Exam - Evaluate responsiveness

Responsive:

- History of illness
- SAMPLE history
- Focused physical exam based on
- Chief complaint
- Baseline vital signs
- Re-evaluate transport decision
- Detailed physical exam

Unresponsive:

- Rapid medical assessment
- Baseline vital signs
- SAMPLE history
- Re-evaluate transport decision
- Detailed physical exam

6. **ONGOING ASSESSMENT**

→ Repeat initial vitals signs	→ Reassess vital signs
→ Repeat focused assessment	→ Reassess interventions

ROUTINE MEDICAL CARE – ADULT





Patient Care Policy (Adult)

Modified On: June 10, 2013

ROUTINE MEDICAL CARE – ADULT

7. TREAT AS APPROPRIATE, WITHIN SCOPE OF PRACTICE (See specific treatment protocols)

7.1 Airway:

- ▶ Open airway – suction, as needed
- ▶ Head tilt / Chin lift or jaw thrust without head extension if C-spine injury suspected
- ▶ Oropharyngeal | Nasopharyngeal airway

7.2 Breathing:

7.2.1 Oxygen Administration:

- ▶ Administer O₂ – titrate to 94-99% SpO₂ appropriate to patient condition
- ▶ If there is a history of COPD, observe for respiratory depression and support respirations as needed. Do not withhold oxygen from a patient in distress because of a history of COPD
- ▶ The patient presents with signs and symptoms of pulmonary edema or severe respiratory distress, O₂ should be initiated at 15L/minute by non-rebreather mask

7.2.2 Assist ventilation.

7.2.3 CPAP (see [page 120](#))

7.2.4 Endotracheal intubation, King-LTD (see Advanced Airway Management see [page 113](#))

7.3 Circulation:

- ▶ Initiate CPR, as needed.(see [page 8](#))

7.4 Fluid Administration:

- ▶ Start an intravenous/intraosseous line as needed
- ▶ When IV access is needed, most of the time a saline lock is sufficient. Consider an IV line with Normal Saline when the patient may need to receive volume or when frequent IV meds are being given (e.g. - cardiac arrest)
- ▶ When starting an IV/IO/saline lock, use chlorhexidine as a skin prep. Label insertion site with "PREHOSPITAL IV – DATE AND TIME"

8. PATIENT POSITION

- 8.1 **Conscious, no trauma, good gag reflex:** Position of comfort
- 8.2 **Depressed Level of Consciousness, no trauma, decreased gag reflex:** Left lateral position
- 8.3 **Trauma:** Spinal Motion Restriction (SMR), as needed. (see Spinal Motion Restriction (SMR) Procedure [page 134](#)). Make sure the patient can be rolled to the side in the event of vomiting
- 8.4 **Pregnancy:** Do not lay the patient flat if more than 20 weeks pregnant. Transport either in semi-fowlers position or left lateral decubitus position. If patient requires SMR, secure to a backboard first then tilt the board 20 – 30 degrees to the left
- 8.5 **Respiratory distress:** Fowler’s position or position of comfort

9. PATIENT MEDICATIONS

- 9.1 Field personnel must either bring all medication bottles with the patient to the hospital (preferred), or make a list of the medications, including the drug name, dose and frequency.
- 9.2 Field personnel may assist patients with the administration of physician prescribed devices, including but not limited to, patient operated medication pumps, sublingual nitroglycerin, and self-administered emergency medications, including epinephrine devices





Community Paramedicine
Pilot Project



IV. Community Paramedic Comprehensive Assessment Policy

Patient Care Policy (Adult)

Modified On: April 30, 2014

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT - ADULT

The Community Paramedic (CP) will respond to a client who has consented to and enrolled in the Community Paramedicine Project. For recently discharged hospital patients, the CP will review and follow guidelines outlined by the medical provider's orders for proper history and physical exam assessments.

Purpose

To assist the medical provider in observing and documenting objective and subjective information for the purpose of identifying the patient's state of health and comparing it to the ideal.

Procedure

- Obtain and review patient's health history and medical provider's orders prior to visit.
- Follow medical provider's orders.
- All information may be recorded prior to paramedic's consultation. It will be decided by the medical provider and paramedic what information to update.

Health History

1. Demographic Data (if not already recorded)
 - Including name, gender, address and telephone #, birth date, birthplace, race, culture, religion, marital status family or significant others living in home, social security number, occupation, contact person, advance directive, durable power of attorney for health care, source of referral, usual source of health care, type of health insurance

Reason for seeking care/ Chief Complaint

1. Present Health Status
 - Current health promotion activities (diet, exercise, etc.), clients perceived level of health, current medications, herbal preparations, type of drug, prescribed by whom, when first prescribed, reason for prescription, dose of med and frequency, clients perception of effectiveness of med.
 - Symptom analysis- location (where are the symptoms), quality (describe characteristics of symptom), quantity (severity of symptom), chronology (when did the symptom start), setting (where are you when the symptom occurs), associated manifestations (do other symptoms occur at the same time), alleviating factors, aggravating factors.
2. Past Health History
 - Allergies, childhood illnesses, surgeries, hospitalizations, accidents or injuries, chronic illnesses, immunizations, last examinations, obstetric history
3. Family History
 - Family history should include questions about Alzheimer's, Cancer, Diabetes, Heart Disease, Hypertension, Seizures, Emotional problems, Alcoholism/drug use, Mental Illness, Developmental delay, Endocrine diseases, Sickle cell anemia, Kidney disease, Cerebrovascular accident

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT – ADULT

CP-1





Patient Care Policy (Adult)

Modified On: April 30, 2014

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT - ADULT

4. Environmental Assessment

- PEAT scale (Physical Environment Assessment Tool) for all patients on initial visit
- Repeat PEAT scale as need arises

Review of Systems

1. General Health Status

- Fatigue, weakness
- Sleep patterns
- Weight, unexplained loss or gain
- Self-rating of overall health status

2. Integumentary System

- Skin disease, problems, lesions (wounds, sores, ulcers)
- Skin growths, tumors, masses
- Excessive dryness, sweating, odors
- Pigmentation changes or discolorations
- Rashes
- Pruritus (itching)
- Frequent bruising
- Eyes
 - PERRL (pupils equal, round, reactive to light) symmetrical
- Neck
 - Swelling
 - Pain/tenderness
 - Limitation of movement
 - Stiffness

3. Cardiovascular System

- Heart
 - Palpitations
 - Chest pain
 - Dyspnea
 - ECG
 - Orthopnea
 - Neck vein distention
 - Paroxysmal nocturnal dyspnea
- Peripheral vasculature
 - Coldness/numbness
 - Discoloration
 - Paresthesia
 - Leg color changes

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT – ADULT

CP-2





Patient Care Policy (Adult)

Modified On: April 30, 2014

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT - ADULT

4. Respiratory System
 - Cough, nonproductive or productive (color if productive)
 - Hemoptysis
 - Dyspnea
 - Wheezing/Rales/Rhonchi
 - Stridor
 - Pain on inspiration or expiration
 - Smoking history, exposure

5. Gastrointestinal System
 - Thirst
 - Indigestion or pain associated with eating
 - Pyrosis (burning)
 - Dyspepsia
 - Nausea / Vomiting
 - Appetite changes
 - Abdominal pain
 - Jaundice
 - Ascites
 - Constipation
 - Diarrhea / Changes in stool (e.g., color and consistency)

6. Musculoskeletal System
 - Muscles
 - Twitching, cramping pain
 - Weakness
 - Back
 - Back pain
 - Limitations in joint range of motion
 - Interference with activities of daily living

7. Central Nervous System
 - History of central nervous system disease
 - Fainting episodes or LOC
 - Seizures
 - Dysphasia
 - Dysarthria
 - Cognitive changes (inability to remember, disorientation to time/place/person, hallucinations)
 - Motor-gait (loss of coordinated movements, ataxia, paralysis, paresis,
 - tremor, spasm, interference with activities of daily living
 - Sensory-paresthesia, anesthesia, pain

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT – ADULT

CP-3





Patient Care Policy (Adult)

Modified On: April 30, 2014

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT - ADULT

Environmental Health

1. General statement of client's assessment of environmental safety and comfort
2. Hazards of employment (inhalants, noise etc.)
3. Hazards in the home (concern about fire etc.)
4. Hazards in the neighborhood or community (noise, water and air pollution, etc)
5. Hazards of travel (use of seat belts etc.)
6. Travel outside the US

Physical Assessment

1. Techniques
 - Inspection
 - Palpation
 - Percussion
 - Auscultation
2. Vital Signs
 - Temperature
 - Pulse
 - Respiration
 - Blood Pressure
3. General Assessment
 - Weight
 - Height
4. Documentation
 - Document all information and communicate with the medical provider.
 - If on evaluation of the patient any of the following S/S are found contact the patient's referring medical provider via phone while still on scene with the patient.
 - Systolic BP > 190 or < 80
 - Diastolic BP > 120
 - Temperature when ordered of > 101.5
 - Pulse at rest > 120
 - Respirations at rest >24
 - O2 sat of < 86 on any patient not on O2

COMMUNITY PARAMEDIC COMPREHENSIVE ASSESSMENT – ADULT

CP-4





Community Paramedicine Pilot Project



V. Home Safety Inspection Checklist

Physical Environment Assessment Tool (P.E.A.T. scale)

Total Score: _____ by observation: by interview: Score unable to obtain:
(Guidelines: 7-16 urgent intervention, 17-27 referral assistance, 28-31 less than optimal, 32-36 healthy)



Table with 6 columns: Dwelling, Cleanliness, Social Structure, Hazards, and two empty columns for scores. Rows include categories like enclosed shelter, electricity, running water, temp. safe, immaculate, clutter, bio. waste, lives with other(s), lives alone, verbal abuse/neglect, phys. abuse/neglect, and none/possible/probable/certain hazards.

notes: _____ Follow up? Y N

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Trip # _____

Definitions:

Dwelling:

- Enclosed shelter: Any enclosed shelter that keeps the weather out.
Electricity: Electricity in the home.
Running water: Access to potable water in the home.
Temperature safe: The temperature in the home is acceptable for good health.

Cleanliness:

- Immaculate is completely clean with no clutter. All objects in their place.
Clutter is boxes, clothes, toys, or other non biodegradable items scattered about.
Small bio waste is the presence of small amounts of biodegradable materials.
Large bio waste is the presence of large amounts of biodegradable materials.

Social Support: (If there is doubt on which category to chose, select the lower ones.)

- Lives with other(s): The patient lives with one or more other people and has no abuse or neglect.
Lives alone: The patient lives alone and has no abuse or neglect.
Verbal/ emotional abuse and or neglect: The patient suffers verbal abuse or neglect, whether they live alone or not.
Physical abuse and or neglect: The patient suffers physical abuse or neglect, whether they live alone or not.

Hazards:

- None: There are no unusual hazards in the home or from their relationships. Household items are safely used and properly stored.
Possible hazards: Anything that has the reasonable possibility to cause injury or illness. Household items are either unsafely used or improperly stored.
Probable hazards: Anything that will probably cause injury or illness.
Certain hazards: Anything that is certain to cause injury or illness.





VI. Community Paramedic Continuous Quality Improvement Plan



Alameda County Community Paramedicine Quality Improvement Program Plan

Last Modified: 4/28/2014

***“Our purpose is to reduce pain and suffering
and improve the health of our patients.”***

California Code of Regulations
TITLE 22. SOCIAL SECURITY
DIVISION 9. PRE-HOSPITAL EMERGENCY MEDICAL SERVICES
CHAPTER 12. EMS System Quality Improvement

The URL for the **EMS Quality Improvement Program (EQIP) Template from EMSAAC** is:

<http://www.emsa.ca.gov/systems/files/EMSAACQITemplate.doc>





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- I. Goals - Mission - Vision - Values
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- III. Data Collection, Evaluation of Indicators, Reporting
- IV. Action to Improve
- V. Training and Education
- VI. Annual Update

Introduction

The Alameda County Community Paramedicine (CP) Pilot Project is a patient centered program. With this patient centered perspective, Alameda County CP understands that the practice of medicine is dynamic. We are committed to adapting the service we provide to our continually changing community. We believe in continuous education and Quality Improvement of ourselves, our providers and our community. Input from field providers and the public we serve is essential in developing and improving this plan. This QI Plan is created to augment the current Alameda County EMS QI Plan which will be used as well to assure Quality Assurance.

Reference - <http://www.acphd.org/media/286017/alco%20qi%20plan%20website.pdf>

From **The Institute of Medicine**, Alameda County CP Pilot Project adopted a shared vision of six specific aims for Quality Improvement. These aims are built around the core need for health care to be:

Safe: Avoiding injuries to patients from the care that is intended to help them.

Effective: Providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit.

Patient-centered: Providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.

Timely: Reducing waits and sometimes harmful delays for both those who receive and those who give care.

Efficient: Avoiding waste, including waste of equipment, supplies, ideas, and energy.

Equitable: Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.





I. Goals of the Alameda County CP Program:

The goals of our Clinical CQI program have been adapted from Dr. W. Edward Deming’s 14 points of quality improvement (NHTSA, 1997) which have been successfully instituted into practice worldwide. It is our belief that only after all levels of the organization have embraced these principles can change be effected and continuous improvement achieved.

1. To create a dynamic process of self-evaluation and performance improvement in which all members strive for the delivery of the most optimum levels of patient care obtainable.
2. To create a process in which all members have input and vested interesting in achieving the goals of the program.
3. To define both minimum acceptable performance standards, and achievable performance standards for which crewmembers strive.
4. To create a constancy of purpose for the improvement of patient care combining long –term strategies of research, education and innovation.
5. Inspect and monitor the entire process for deficiency rather than focusing on mistakes after the fact. Make changes in the process as needed.
6. Institute meaningful quality training and retraining.
7. Create an environment in which crewmembers are not afraid to bring forth variances and/or identify areas where clinical education is needed and establish a culture that is non-punitive.
8. Create an atmosphere of teamwork between management and field personnel in which mutual goals are supported.
9. Remove barriers to pride in workmanship. Provide the necessary instruction, tools, materials and standards for accomplishing the job.
10. Through a system of vigorous training and retraining, invest in personnel for the achievement of long term goals.

The Alameda County CP Quality Improvement Plan integrates Quality Improvement models from a wide variety of sources including Result Based Accountability, Baldrige, Deming and Six Sigma. While these Quality Improvement models, on the surface, seem to vary in their methodologies, they all focus on answering fundamental questions. This Quality Improvement Plan focuses on answering these 5 fundamental question: (Mike Taigman)

“Why do we do what we do?”

“How do we see ourselves in the future?”

“What governs our day to day decisions?”

“How are we doing?”

“What are we doing to make things better?”





Alameda County EMS Mission – Vision – Values

Mission *“Why do we do what we do?”*

The Alameda County CP mission is to assist patients in the community to access appropriate resources, navigate through a complex healthcare system and provide post-hospital discharge follow up for patients with chronic disease.

“Our purpose is to reduce pain and suffering and improve the health of our patients.”

Vision *“How do we see ourselves in the future?”*

The Alameda County CP vision is to explore new frontiers while creating an environment where collaboration and consensus building thrive among staff and stakeholders.

*“We look to **measurably** reduce pain and suffering and improve the health of our patients.”*

Values *“What governs our day to day decisions?”*

Alameda County CP values a caring environment sustained by empowerment, honesty, integrity, and mutual respect. We embrace excellence through innovation, teamwork, and community capacity building.

STARCARE is a values based checklist developed by paramedic author/EMS educator **Thom Dick**. It has been adopted by the current largest ground transport provider, Paramedics Plus. STARCARE promotes a patient centered; values based culture as a guide for providers for decision making.

- **Safe** -- *Were my actions safe for me, for my colleagues, for other professionals and for the public?*
- **Team-based** -- *Were my actions taken with due regard for the opinions and feelings of my co-workers, even those from other agencies?*
- **Attentive to human needs** -- *Did I treat my patient as a person? Did I keep him or her warm? Was I gentle? Did I use his or her name throughout the call? Did I tell him or her what to expect in advance? Did I treat his or her family and / or relatives with respect?*
- **Respectful** -- *Did I act toward my patient, my colleagues, my first responders, the hospital staff and the public with the kind of respect that I would have wanted to receive myself?*
- **Customer accountable** -- *If I were face-to-face right now with the customers I dealt with on this response, could I look them in the eye and say, “I did my very best for you.”*





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- **Appropriate** -- Was my care appropriate - medically, professionally, legally and practically, considering the circumstances I faced?
- **Reasonable** -- Did my actions make sense? Would a reasonable colleague of my experience have acted similarly under the same circumstances?
- **Ethical** -- Were my actions fair and honest in every way? Are my answers to these questions honest with integrity?

II. Structure, Organizational Description, Responsibilities

“Why do we do what we do?”

“What governs our day to day decisions?”

Structure, Responsibilities, and Organizational Description

Internal Quality Improvement Structure:

The Clinical Quality Improvement Process is managed by Alameda City Fire, Hayward Fire with a designated Community Paramedicine Steering Committee.

CP Steering Committee:

Karl Sporer, MD, FACEP, FACP, Alameda County EMS Medical Director
 Jay Goldman, MD, FACEP, Medical Director of Ambulance and EMS Kaiser Permanente NCAL Region
 Karen Taylor, RN Director of Quality of Risk & Resource Management for Alameda Hospital, Alameda, CA
 Louise Nakada, Director of Community Relations for Alameda Hospital
 Kristen Gallegos, RN Assistant Nurse Manager for St. Rose Hospital, Hayward, CA
 Garrett Contreras, Chief of Hayward Fire
 Michael D’Orazi, Chief of Alameda City Fire
 Douglas Long, Division Chief of Alameda City Fire
 Bob Negri, RN EMS Coordinator for Hayward Fire
 Gail Porto, RN EMS Coordinator for Alameda City Fire
 Brandon Rowley, EMT-P Prehospital Care Coordinator for Alameda County EMS

CP CQI Sub Committee:

Karl Sporer, MD, FACEP, FACP, Alameda County EMS Medical Director
 Brandon Rowley, EMT-P Prehospital Care Coordinator for Alameda County EMS
 Kristen Gallegos, RN Assistant Nurse Manager for St. Rose Hospital, Hayward, CA
 Bob Negri, RN EMS Coordinator for Hayward Fire
 Gail Porto, RN EMS Coordinator for Alameda City Fire





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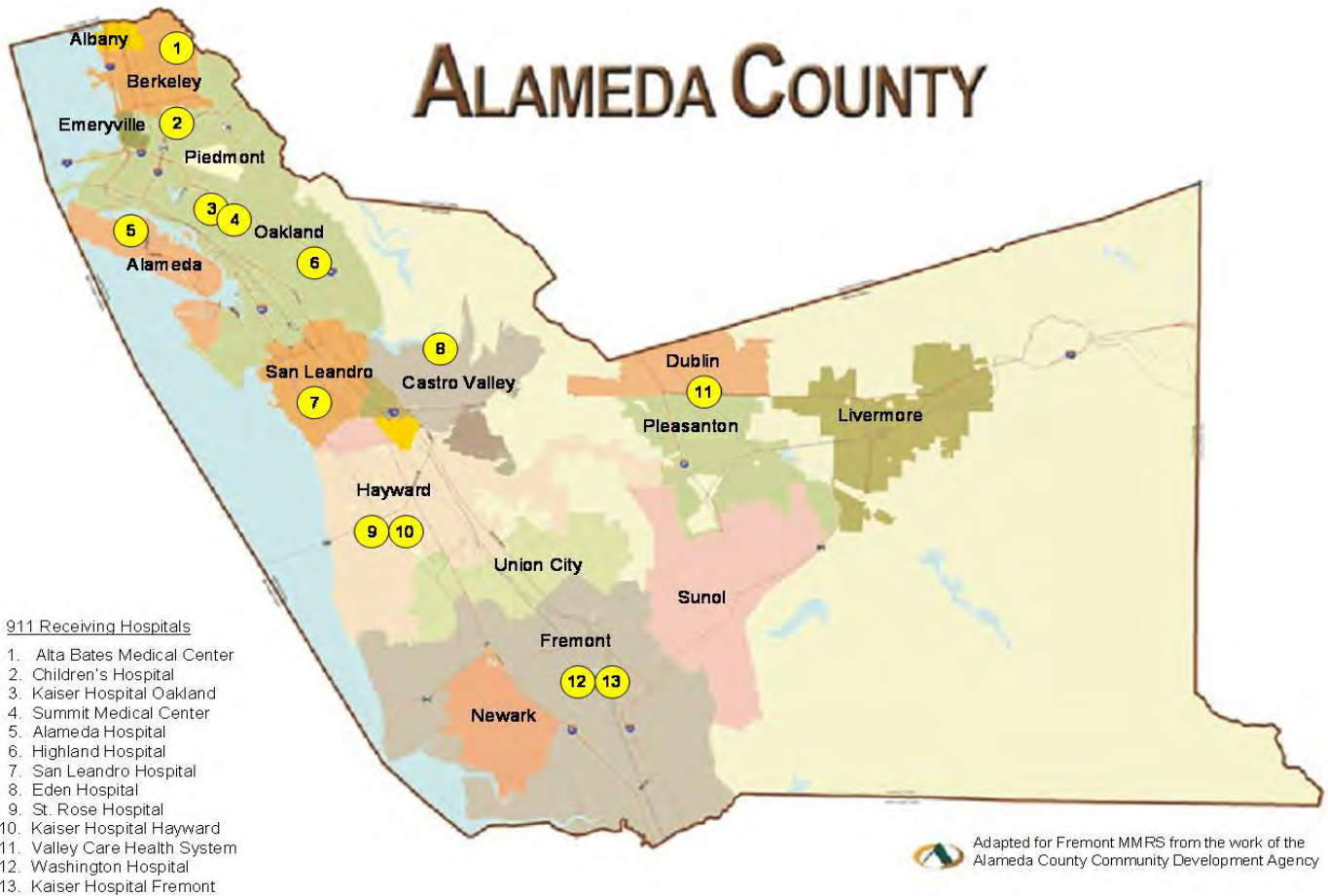


Alameda County Demographics

Alameda County is both geographically and demographically diverse. The entire county covers 738 square miles and includes highly dense urban areas; the shoreline of San Francisco Bay is on the western border, lower density residential areas, a high concentration of industrial sites, and rural, wilderness and parks areas that stretch to the east. More than 1.5 million people live in Alameda County.

The City of Oakland, in the north part of the County, is the largest city with a population of 412,000+. Other large cities include Fremont in the south (210,000+), and the City of Berkeley in the northern sector of the County (105,000+). Approximately 160,000+ people reside in the cities of Livermore, Dublin and Pleasanton that are located in eastern Alameda County.

***In the two Pilot sites Hayward houses 146,000+ people and Alameda City houses 75,000+ people.*





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EMS Overview

The Alameda County EMS system responds to approximately 124,000 patients annually for medical emergencies. Generally a fire department unit and a Paramedics Plus ambulance responds to emergency medical calls. Alameda, Albany, Berkeley and Piedmont fire departments provide ambulance transport services in addition to first response. In the remaining areas of the county, fire departments respond with ALS fire units and Paramedics Plus provides emergency transport services under contract with the County. Below is a list of the EMS providers in Alameda County.

EMS System Providers	EMS System Partners
<p><u>ALS Ground Transport Providers</u></p> <ul style="list-style-type: none"> • Alameda City Fire Department • Albany Fire Department • Berkeley Fire Department • Piedmont Fire Department • Paramedics Plus 	<ul style="list-style-type: none"> • Patients • Patient Families • The Community • All Providers • All Receiving Facilities • County Board of Supervisors and City Councils • Insurance companies and other third party payers • Vendors • Education/Training Organizations • Other Regulatory Agencies
<p><u>First Responder ALS (FRALS)</u></p> <ul style="list-style-type: none"> • Alameda City Fire Department • Alameda County Fire Department • Albany Fire Department • Berkeley Fire Department • Camp Parks Fire Department • East Bay Regional Parks Fire Department • Fremont Fire Department • Hayward Fire Department • Livermore-Pleasanton Fire Department • Oakland Fire Department • Piedmont Fire Department <p>*Alameda County FD at Livermore Lab transports patients from its facility with fewer than 100 responses</p>	
<p><u>Air Transport Providers</u></p> <ul style="list-style-type: none"> • CALSTAR • East Bay Regional Parks • Lifeflight • REACH 	
<p><u>Interfacility Transport (IFT) Providers</u></p> <ul style="list-style-type: none"> • Alameda City Fire Department • AMR • Norcal • Priority One • Pro Transport One • Royal • Westmed 	





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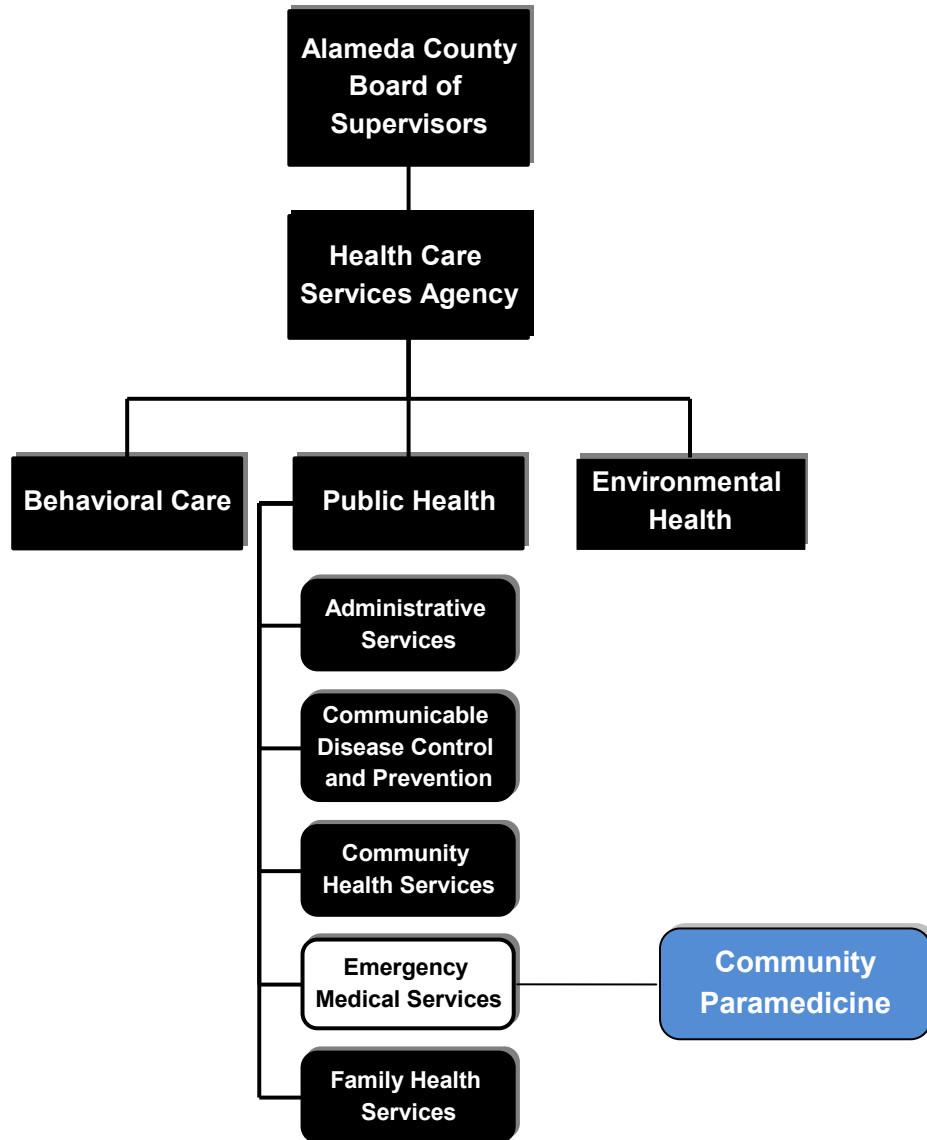
Receiving Facilities	
<ul style="list-style-type: none">• Alta Bates Hospital• Summit Hospital• Children's Hospital Oakland• Kaiser Oakland Hospital• Alameda Hospital• Alameda County Medical Center(Base Hospital)• San Leandro Hospital• John George Pavilion• Willow Rock• Eden Hospital• Valley Care Hospital• Kaiser Hayward Hospital• Kaiser Fremont Hospital• Washington Hospital	





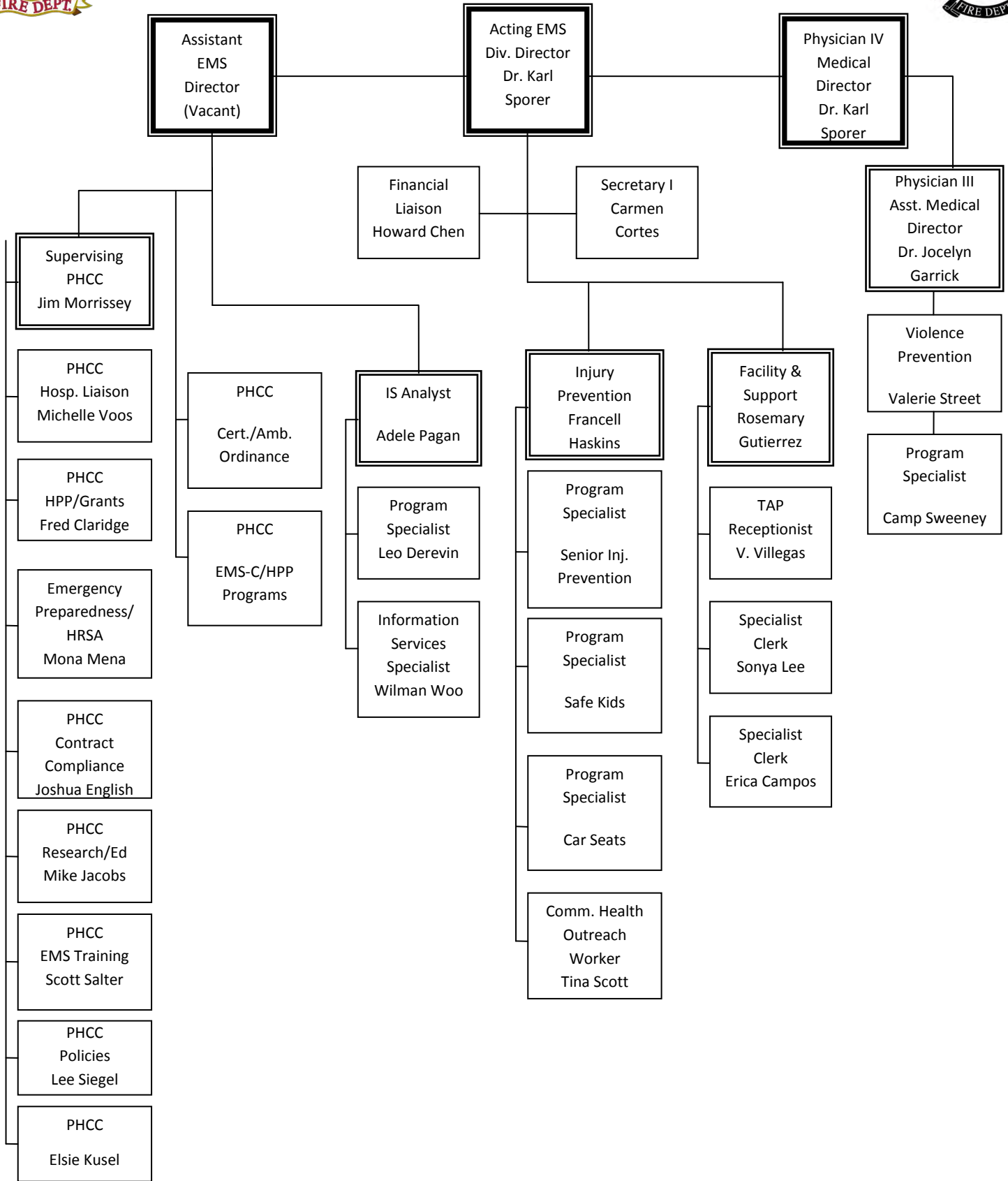
ORGANIZATIONAL STRUCTURES

The EMS Agency is a division of the Alameda County Health Care Services Agency, Department of Public Health. The EMS Agency coordinates EMS activities in Alameda County. The Board of Supervisors (five members) makes general policy decisions affecting the EMS Agency. The Director of Health Care Services reports to the Board of Supervisors. The County Health Officer is designated the EMS District Medical Director by the Board of Supervisors. The County Health Officer delegates this responsibility to the EMS Agency Medical Director. Medical control of the prehospital medical care within the system is the responsibility of the EMS Medical Director.





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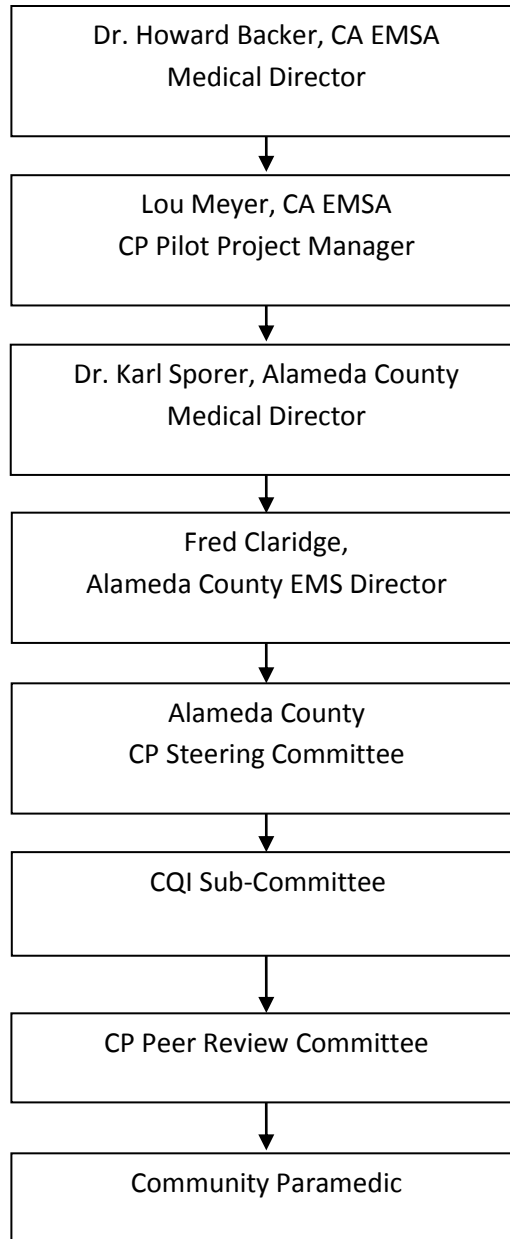
QUALITY IMPROVEMENT RESPONSIBILITIES - GENERAL GUIDELINES

1. The CP Program shall establish and facilitate a quality improvement program to monitor, review, evaluate and improve the delivery of prehospital care services.
 - 1.1 The program shall involve all system participants and shall include, but not be limited to the following activities:
 - 1.2.1 **Prospective** - designed to prevent potential problems.
 - 1.2.2 **Concurrent** - designed to identify problems or potential problems during the course of patient care.
 - 1.2.3 **Retrospective** - designed to identify potential or known problems and prevent their recurrence.
 - 1.2.4 **Reporting/Feedback** - all quality improvement activities will be reported to the EMS Agency in a manner to be jointly determined. As a result of Q.A. activities, changes in system design may be made.
2. Each participating agency will follow the Alameda County CP Quality Improvement plan, based on the appropriate policy to the EMS Agency for approval. The time frame for submission will be determined by the EMS Agency.
3. Appropriate revisions shall be made as requested by the EMS Agency.
4. Each CP program shall conduct an annual review of their Q.A. plan.
5. The EMS Agency will evaluate the implementation of each CP Q.A plan.
6. See below for Q.A. Plan Organizational Chart:





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QUALITY IMPROVEMENT RESPONSIBILITIES - CP

Authority: *Division 2.5 of the Health and Safety Code, Chapter 4.*

1. **Prospective**

- 1.1 Comply with all pertinent rules, regulations, laws and codes of Federal, State and County applicable to emergency medical services.
- 1.2 Coordinate CP quality improvement committees. 100% charting audit will be mandatory by Peer Review and CQI Sub-Committee.
- 1.3 Plan, implement and evaluate the CP program including public and private agreements and operational procedures.
- 1.4 Approve and monitor CP training programs.
- 1.5 Establish policies and procedures to assure patient safety, which may include dispatch, basic life support, advanced life support, activating EMS, patient care guidelines and quality improvement requirements.
- 1.6 Facilitate implementation by system participants of required Quality Improvement plans.
- 1.7 Design reports for monitoring identified problems and/or trends analysis.
- 1.8 Establish a CP Peer Review process to audit quality of care, documentation, completeness and appropriateness
- 1.9 Approve standardized corrective action plan for identified deficiencies in CP.

2. **Concurrent**

- 2.1 Site visits to monitor and evaluate system components.
- 2.2 On call availability for unusual occurrences.





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3. Retrospective

- 3.1 Evaluate the process developed by system participants for retrospective analysis of CP care by auditing 100% of all CP charts through peer review and CP Supervisor review. Medical Director to be notified immediately if patient
- 3.2 Evaluate identified trends in the quality of CP care delivered in the system.
- 3.3 Establish procedures for implementing the Certificate Review Process for CP medical personnel.
- 3.4 Monitor and evaluate the Incident Review Process.

4. Reporting/Feedback

- 4.1 Evaluate submitted reports from system participants and make changes in system design as necessary.
- 4.2 Provide feedback to system participants when applicable or when requested on Quality Improvement issues.
- 4.3 Design CP research and efficacy studies regarding the CP pilot project.





ALAMEDA COUNTY COMMUNITY PARAMEDICINE PROGRAM PRODUCT EVALUATION FORM

Product Evaluated:	Date:
Evaluated by:	
Type of Incident:	Run #/PCR #:
Describe how you used the product:	
Describe any problems associated with using the product:	
<input type="checkbox"/> none	
What was the outcome of the product use?	
Describe what you liked about the product:	
Describe what you didn't like about the product:	
How many times have you used this product in the past day? _____ week? _____	
Do you think this product would improve patient care or make your job easier or better? <input type="checkbox"/> yes <input type="checkbox"/> no why?	
Crew members (print names) 1.	2.
3.	Your unit #:





III. Data Collection, Evaluation of Indicators and Reporting

“How are we doing?”

“MEASURE – IMPROVE, MEASURE – IMPROVE, MEASURE – IMPROVE”

~ Mickey Eisenberg, MD

Various data systems in the Alameda County Community Paramedicine system, including CAD, ZOLL, Beyond Lucid ePCR, Reddinet, and First Watch, contain relevant data. Electronic PCR data elements are NEMSIS/CEMSIS compliant. The implementation of all these data systems into user friendly data entry and reporting formats is essential to ensure that clean usable data is obtained. Integration of these data systems between dispatch, EMS providers, receiving facilities and state and national data systems is essential in opening up communication necessary to facilitating Quality Improvement.

These data systems are used to:

- Prospectively identify areas for improvement and enable data driven decisions
- Monitor system changes after QI interventions have been implemented
- Monitor individual and group performance in the CP system
- Support research
- Provide benchmarks with other CP systems

Data Quality Improvement activities include:

- Implementation of a user friendly ePCR program for all CP providers
- Implementation of a user friendly data reporting tool
- Integration and continuing maintenance of all data systems





Process, Data and Quality Indicator Analysis

RESULTS BASED ACCOUNTABILITY (RBA) – Mark Friedman - “Trying Hard Is Not Good Enough: How to Produce Measurable Improvements for Customers and Communities”

RBA uses a practical model for developing meaningful performance measures (quality indicators) by asking 3 simple questions:

- **“How much do we do?”** Input resource components (such as leadership, workforce, suppliers, equipment, etc.) are measured. These are the least important performance measures but the easiest to obtain. These performance measures assess the quantity of effort we put in.
- **“How well do we do it?”** The efficiency of design and delivery of work processes, productivity and operational performance are measured. These performance measures assess the quality of effort we put in.
- **“Is anyone better off?”** The result or outcome of patient care, support services, and fulfillment of public responsibilities are measured. These are the most important performance measures and the most difficult to obtain. These performance measures assess the quality effect of our efforts.

An example of Alameda County Performance Indicators

		Performance Measures	
		Quantity	Quality
Effect	Effort	How much do we do? (#)	How well do we do it? (%)
	Effect	Is anyone better off? (#) (%)	

Sudden Cardiac Arrest	
“How much did we do?” # EMS Responses to Cardiac Arrest Patients	“How well did we do it?” % of EMS Responses in < 4 minutes
“Is anyone better off?”	
Number of Cardiac Arrest Patients That Are Neurologically Intact at Hospital Discharge	Percent of Cardiac Arrest Patients That Are Neurologically Intact at Hospital Discharge





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CHARTS

The use of charts is essential in the analysis of processes, data and quality indicators. While many different types of charts exist, the following charts provide the best process analysis. These charts are also easy to create and use.

CONTROL CHARTS measure process improvement.

Process Improvement = Quality Improvement

“Our current processes are perfectly designed to produce the results we are getting.” **Davis Balestracci**

If given two different numbers, one will be bigger than the other. However, if given a series of numbers over a period of time and then “plotting the dots”, a picture of a process starts to emerge.

All data has a time component of some sort. While many charts analyze process improvements, Control charts provide the best illustrations of process improvement over time. These charts are simple to create and easy to understand. Control charts in particular are a necessary tool all organizations **must** use to determine whether a process is improving or merely operating within some variation.



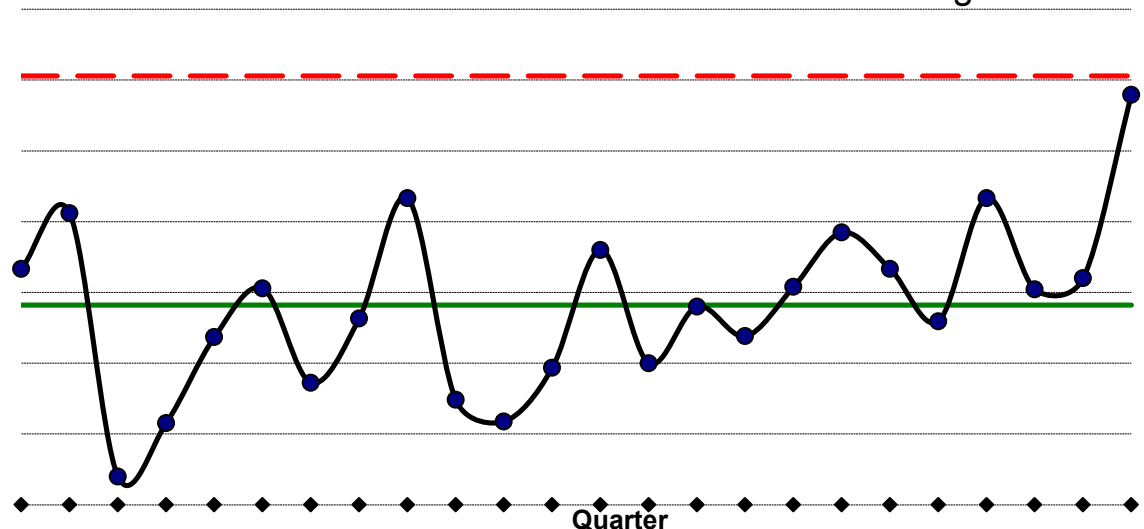
A chart of numbers is just a chart of numbers.

A Control Chart presents a picture of the story.



Quarter	Witnessed VF/VT Survival # To Discharge	Witnessed VF/VT	Witnessed VF/VT Survival % To Discharge
2005-01	11	33	33.33%
2005-02	7	17	41.18%
2005-03	1	25	4.00%
2005-04	3	26	11.54%
2006-01	9	38	23.68%
2006-02	11	36	30.56%
2006-03	5	29	17.24%
2006-04	5	19	26.32%
2007-01	13	30	43.33%
2007-02	4	27	14.81%
2007-03	4	34	11.76%
2007-04	6	31	19.35%
2008-01	9	25	36.00%
2008-02	3	15	20.00%
2008-03	7	25	28.00%
2008-04	5	21	23.81%
2009-01	8	26	30.77%
2009-02	10	26	38.46%
2009-03	8	24	33.33%
2009-04	7	27	25.93%
2010-01	13	30	43.33%
2010-02	7	23	30.43%
2010-03	8	25	32.00%
2010-04	11	19	57.89%

Witnessed VF/VT Survival % To Discharge



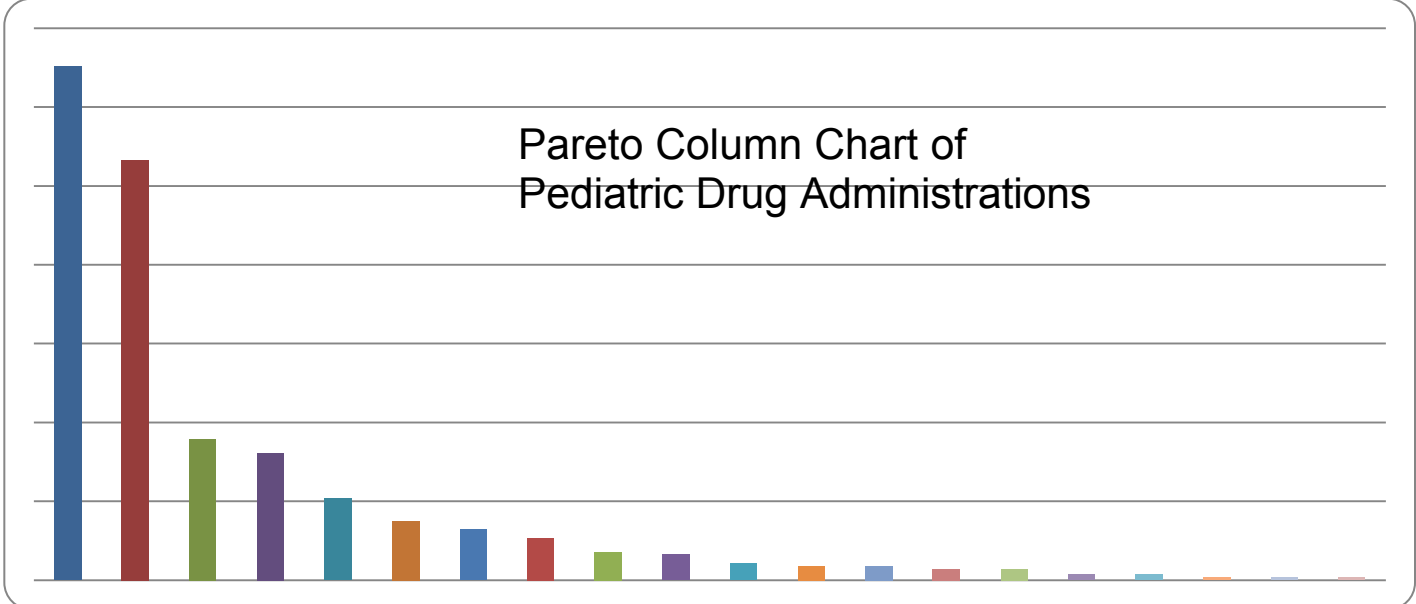
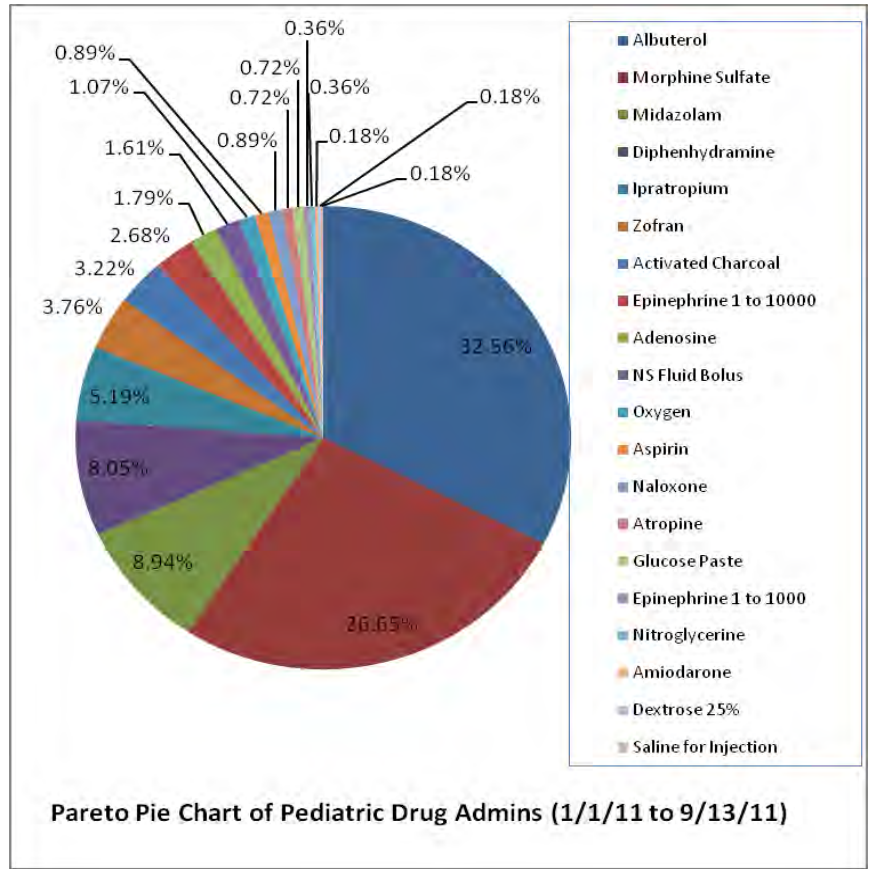


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PARETO CHARTS / PIE CHARTS identify the most common contributing factors to a process. For example, regarding pediatric medication safety, first focusing efforts in analyzing and reducing errors in Morphine and Midazolam administrations makes sense.

	% of Total Pediatric Med. Administrations
Albuterol	32.56%
Morphine Sulfate	26.65%
Midazolam	8.94%
Diphenhydramine	8.05%
Ipratropium	5.19%
Zofran	3.76%
Activated Charcoal	3.22%
Epinephrine 1 to 10000	2.68%
Adenosine	1.79%
NS Fluid Bolus	1.61%
Oxygen	1.07%
Aspirin	0.89%
Naloxone	0.89%
Atropine	0.72%
Glucose Paste	0.72%
Epinephrine 1 to 1000	0.36%
Nitroglycerine	0.36%
Amiodarone	0.18%
Dextrose 25%	0.18%
Saline for Injection	0.18%
TOTAL	100.00%



FLOW CHARTS provide a picture of the structure of an organization or the workflow of a process over time.





IV. Action to Improve

“What are we doing to make things better?”

Using the Triple AIM process CP is defining a process to provide resources to patients that over utilize 911 and need assistance in managing their chronic disease. The CP Program shall establish and facilitate a system wide quality improvement program to monitor, review, evaluate and improve the delivery of health care services.



The program shall involve all system participants and shall include, but not be limited to the following activities:

- Prospective - designed to prevent potential problems.
- Concurrent - designed to identify problems or potential problems during the course of patient care.
- Retrospective - designed to identify potential or known problems and prevent their recurrence. Reporting/Feedback - all quality improvement activities will be reported to the EMS Agency in a manner to be jointly determined. As a result of Q.A. activities, changes in system design may be made.
- Reporting/Feedback - all quality improvement activities will be reported to the EMS Agency in a manner to be jointly determined. As a result of Q.A. activities, changes in system design may be made.

In developing QI activities, various models and methodologies such as The Model for Improvement, PDSA, DMAIC and The Program/Project Management Model can be used by any organization’s quality improvement team.

The Model for Improvement – PDSA Cycle *Institute for Healthcare Improvement*

- The **Aim**: *What are we trying to accomplish? How good? By when? For whom?*
- The **Measures**: *How will we know a change is an improvement? What are the process and outcome measures?*
- The **Changes**: *What change can we make that will result in improvement?*

The PDSA cycle gives us a way to quickly test changes on a small scale, observe what happens, tweak the changes as necessary, and then test again—before implementing anything on a broad scale.

The Model for Improvement



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- **Plan** – State objective of the test, make predictions, Develop an improvement plan to carry out the test (who, what where, when)
- **Do** - Carry out the test or trial, document problems and unexpected observations, begin analysis of the data
- **Study** - Complete the analysis of the data, compare the test data to predictions, and summarize what was learned
- **Act** - What changes are to be put into policy and institutionalized? What will be the objective of the next cycle? What, if any, re-education or training is needed to effect the changes?

Six Sigma

Institute For Healthcare Improvement

The focus of Six Sigma is reducing variation or the defect rate, measured by Sigma level, or “Defects per Million Opportunities.” The Six Sigma improvement framework consists of six basic steps, known as DMAIC for short:

- **Define.** Define the problem in detail.
- **Measure.** Measure defects (in terms of “defects per million,” or Sigma level).
- **Analyze.** In-depth analysis using process measures, flow charts, defect analysis to determine under what conditions defects occur.
- **Improve.** Define and test changes aimed at reducing defects.
- **Control.** What steps will you take to maintain performance?

Example of using the Six Sigma

1. Define –
 - a. In Alameda County there are over 30 patients that over utilize 911 emergency services by call 911 at least 16 times and up or more than 50 times a year.
 - b. Patients discharged from hospitals with chronic illness (specifically MI, CHF, Asthma, Diabetes and Pneumonia) have a likelihood of revisiting the ED or readmission.

St. Rose Hospital

(Example)

Patients discharged with
Diabetes
06/01/2012 - 08/30/2013

TOTAL PTS WITH DIABETES	
Patient Type	Total
ER	317
IP (ER Admits)	151
Grand Total	468





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2. Measure –
 - a. Reduce the amount of times a frequent 911 caller activated 911
 - b. Reduce the amount of return ED visits and readmissions
3. Analyze – find a target number of patients to follow through program. Reducing patients pain/suffering and improving vital signs (blood pressure).
4. Improve – Assist patients in accessing resources in Alameda County, connect to primary care physicians, and educate patients on medication compliance.
5. Control – Follow patients in healthcare system.

Once an Improvement Plan has been implemented, the results of the improvement will be measured. Changes to the system will be integrated and standardized. A plan for monitoring future activities will be established to ensure the change continues. Findings and plans are discussed and implemented through the EMS Quality Council.

What will be measured????

- Pain and Suffering - a patient with a pain scale of a 10 would be reduced with a goal of no pain. Follow care will can be measureable by documenting if pain and suffering has improved

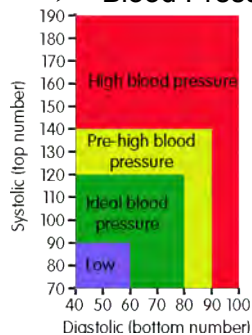
Subjective Pain Scale	
	0 No pain. Feeling perfectly normal.
Minor Able to adjust to pain	1 Very Mild Very light barely noticeable pain
	2 Discomforting Minor pain, like lightly pinching the fold of skin
	3 Tolerable Very noticeable pain, like a doctor giving you an injection
Moderate Interferes with many activities	4 Distressing Strong, deep pain, like an average toothache
	5 Very Distressing Strong, deep, piercing pain, such as a sprained ankle
	6 Intense Strong, deep, piercing pain like several bee stings
Severe Patient is disabled and unable to function independently.	7 Very Intense Comparable to an average migraine headache
	8 Utterly Horrible Comparable to childbirth or a real bad migraine headache
	9 Excruciating Unbearable Pain so intense you cannot tolerate it and demand pain killers
	10 Unimaginable Unspeakeable Pain so intense you will go unconscious shortly.

Wong-Baker FACES Pain Rating Scale



From Wong D.L., Hockenberry-Eaton M., Wilson D., Winkelstein M.L., Schwartz P.: Wong's Essentials of Pediatric Nursing, ed. 6, St. Louis, 2001, p. 1301. Copyrighted by Mosby, Inc. Reprinted by permission.

- Blood Pressure – Measure if a patient’s blood pressure has improved.





Program/Project Management Model

Program/Project Title	A short title that labels the program/project should be concise and clear.
Purpose	A clear program/project purpose related to the overall EMS <u>Purpose</u> to improve health and reduce pain and suffering should be clearly defined in one sentence.
Vision	Where we see the program/project in the future related to the overall EMS <u>Vision</u> should be clearly defined in one sentence.
Values	The main concerns and cares of the program/project related to the overall EMS <u>Values</u> of STARCARE should be stated.
Program/Project Scope	The parameters of the program/project, what's included and/or not included, "what's in or out", should be defined.
Program/Project Members	The program/project leader and members should be listed. The roles and responsibilities of the leader and each member should be clearly defined.
Measurements, Outcome	Established benchmarks and measures as well as other innovative data measures that are pertinent to the improvement program/project should be established. Results and measurements from the patient's perspective are essential.
Improvement Projects	Define the specific work being done within the Quality Improvement program/project.
Schedule	The difference between a wish and a goal is that a goal contains a deadline. Intermediate and final project deadlines should be determined and followed.





POLICY REVIEW PROCESS

1. INTRODUCTION

- 1.1 The policy review process is an advisory process to the County Health Officer and the EMS Medical Director for the formulation of medical protocols. Policy suggestions and/or draft policies are accepted from committees, system participants, individuals, and/or interested parties.
- 1.2 Policies will be evaluated on an annual basis with adequate time allowed for training and distribution. Specific recommendations for additions, deletions and/or revisions should be forwarded to the EMS Agency.

2. POLICY PROCESS

2.1 Written Public Comment Draft

- 2.1.1 The EMS office will distribute draft policies to the appropriate system participants and/or interested parties for written comments.
- 2.1.2 Policies under consideration that affect the EMS system as a whole will be sent out for review by all systems participants. A policy under consideration that applies to a limited group will only be sent to those who would be directly affected.
- 2.1.3 The time frame allowed for the return of comments will be 60 days. Comments may be mailed or faxed to the EMS office, but must be received no later than 4 p.m. on the deadline date.
- 2.1.4 All comments will be reviewed by the EMS Medical Director. All suggestion will be taken into consideration.

2.2 Public Testimony

- 2.2.1 Public comments will be heard at the next most appropriate Emergency Medical Oversight Committee (EMOC) meeting (usually in August)
- 2.2.2 A final draft of the policy will be distributed prior to the meeting.
- 2.2.3 Time will be allotted at the meeting for public testimony and discussion. All recommendations will be taken into consideration during the finalization of the policy.

Unusual Occurrences

All unusual occurrences will be investigated by the individual agency and the EMS Agency.





V. Training and Education

Training and Education

The CP curriculum program will provide the community paramedic two specific training programs. The “core” curriculum consisting of approximately 120 hours will be provided by University of California, Los Angeles (UCLA) and hosted regionally. In addition, a “local” curriculum of 60 to 80 hours will be delivered by an Alameda County approved Paramedic program, Chabot College. The local curriculum will be matched to meet the needs of the two domains: managing frequent 911 callers and assisting in post hospital discharged patients. The program will be tailored based on the past experience of each individual and the services the Community Paramedic will be providing for their area. The program will consist of a didactic component with associated lab sessions and a clinical component consisting of rotations with physicians, nurse practitioners, physician assistants and/or public health providers in Home Health care, local doctor’s offices, clinics and/or hospitals. Students will receive this training under the supervision of the Alameda Medical Director and CP Supervisors.

Upon completion, the training program aims to produce CP’s who have the competencies, knowledge, and professional skills to function as a Community Paramedic.

VI. Quarterly Update

ALAMEDA COUNTY QUARTERLY REPORT

The EMS Medical Director will evaluate the QI Program with the EMS QI Council at least quarterly. This group will be tasked with ensuring that the QI Plan is in alignment with our strategic goals, and will review the plan to identify what did and did not work. From this information, a Quarterly Update will be provided to the CQI Team and will include the following:

- Indicated monitors
- Key findings and priority issues identified
- Identification of any trends
- Improvement action plans and plans for further action
- Description of any in-house policy revisions
- Description of any continuing education and skills training provided as a result of Improvement Plans
- Description of whether the goals were met and whether follow up is needed
- Description of next quarter’s work plan based on the current year’s indicator review





Community Paramedicine
Pilot Project



Description of Organizations

The description should include an organizational chart showing how the QI Program is integrated into the organization.

Statement of CP QI Program goals and objectives

Describe processes used in conducting Quality Improvement activities.
Were goals and objectives met?

List and define indicators utilized during the reporting year

- Define state and local indicators
- Define provider specific indicators
- Define methods to retrieve data from receiving hospitals regarding patient diagnoses and disposition
- Audit critical skills
- Identify issues for further system consideration
- Identify trending issues
- Create improvement action plans (what was done and what needs to be done)
- Describe issues that were resolved
- List opportunities for improvement and plans for next review cycle
- Describe continuing education and skill training provided as a result of Performance Improvement Plans
- Describe any revision of in-house policies
- Report to constituent groups
- Describe next year's work plan based on the results of the reporting year's indicator review

Sample Work Plan Template

Indicators Monitored	Key Findings/Priority Issues Identified	Improvement Action Plan Plans for Further Action	Were Goals Met? Is Follow-up Needed?





San Bernardino County Community Paramedicine Pilot Project

On Post Discharge Follow-up of the CHF Patient

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Letter Of Intent Proposal

For Community Paramedicine Pilot Project

San Bernardino County Fire Department, Rialto Fire Department, Arrowhead Regional Medical Center and San Bernardino County Department of Public Health

A. Title

San Bernardino County Community Paramedicine Pilot Project on Post Discharge Follow-up of the CHF Patient

B. Category Proposed to Pilot

- a. Post discharge follow-up of hospital or emergency department patients

C. Description of Proposed Concept, Project Management and Partners (including geographic area to be served)

Proposed Concept: Due to rising costs in healthcare, California continues to struggle with an increasing gap between demand for healthcare services and a decreasing supply of healthcare workers. In order to fill this gap, healthcare services are forced to be creative in order to optimally utilize current available resources, thus the advent of Community Paramedicine programs. With some additional training, these programs utilize Paramedics, already trained to perform thorough physical assessments, recognize life threatening emergencies and provide medical care in less than optimal settings, to assist in increasing access to primary care for medically underserved populations. According to a recent report prepared for the California Healthcare foundation and the California Emergency Medical Services Authority (EMSA) by UC Davis, Community Paramedics (CPs) can serve as an integral part of the patient's care transition team. Patients recently discharged from a hospital may benefit from assistance, prior to regularly scheduled follow-up care in the form of understanding post-discharge instructions, medications, self-care, and the timing and importance of follow-up appointments. CPs could review these topics with patients and, if applicable, their families. The CP can additionally ensure there is a safe home environment for the patient to recover in and can provide feedback to primary care and/or emergency care providers regarding the patient's function at home. This type of service can improve patient follow-up and integration in the health care system and overall quality of patient care in addition to reducing 911 calls, emergency department (ED) visits, and hospital readmissions.

According to Medicare, there are 4.6 million Medicare beneficiaries with (CHF) nationwide, which equates to approximately 14% of all Medicare subscribers. The Medicare Payment Advisory Commission states that 43% of all Medicare spending is applied to CHF. In addition, they report the national 30-day readmission rate for CHF at 24.7%. In San Bernardino and Riverside Counties, The Health Services Advisory Group (HSAG) reports the 30-day readmission rate for CHF in 2012/2013 at 27.2% and according to The New England Journal of Medicine, as many as 52% of re-admitted CHF patients have not seen a physician between the time of discharge and readmission.

San Bernardino County Fire Department and Rialto Fire Department, in collaboration with Arrowhead Regional Medical Center, San Bernardino County Department of Public Health, and Inland Counties Emergency Medical Agency (ICEMA) will utilize this study to identify ways in which Paramedics can operate more effectively as community funded healthcare providers in order to provide high quality patient care in today's challenging healthcare environment and possibly reduce readmission rates to areas hospitals. The study population will include recently discharged patients from Arrowhead Regional Medical Center (ARMC) with a diagnosis of CHF, one of the so-called "3 and 30" conditions. Once identified, a Community Paramedic will perform a post discharge follow-up visit to augment discharge planning and provide assistance in accessing primary care through the Department of Public Health (DPH) or ARMC primary care clinic networks.

- a. Project Management: This project will be managed by San Bernardino County Fire Department and in collaboration with Rialto Fire Department, Arrowhead Regional Medical Center, San Bernardino County Department of Public Health and ICEMA.
- b. Geographic area to be served: San Bernardino County spans over twenty thousand square miles with many areas containing vulnerable patients. This project will focus on the cities of Hesperia, Victorville, Fontana and Rialto, four areas that currently exhibit service gaps in healthcare and a robust paramedic workforce.

D. Purpose and Objectives

- a. Purpose: As part of the California State EMS Authority Community Paramedicine Pilot Project, this project will utilize the Community Paramedic to conduct post hospital discharge follow up on patients discharged from ARMC with a diagnosis of CHF. The purpose of this visit is to:
 - i. Provide needed healthcare services to underserved patients that are not affiliated with managed care systems in the cities of Fontana, Hesperia, Rialto and Victorville
 - ii. Save healthcare dollars by preventing re-admissions of patients with discharge diagnoses of CHF who are often re-admitted due to a lack of access to post discharge services such as clinics, pharmacies and other specialty consultations,
 - iii. Improve access to primary care, medications, and specialty consultations through a collaborative team approach with DPH and ARMC.
- b. Objectives:
 - i. San Bernardino County Fire Department and Rialto Fire Department will collaborate with Arrowhead Regional Medical Center and San Bernardino County Department of Public Health to augment discharge planning and promote treatment plan compliance by identifying those patients who do not have access to home health or other discharge follow up.

- ii. The Community Paramedic team will conduct a home visit to identified patients for the purpose of:
 - 1. Conducting a physical assessment.
 - 2. Assuring the patient obtained discharge instructions and that they have the ability to follow all instructions.
 - 3. Assuring follow up appointments were made and that no obstacles to attending any necessary appointments exist.
 - 4. Assuring that patient has obtained any post discharge prescriptions.
 - 5. Answering questions and directing patient to appropriate resources.
 - 6. Conducting a general home safety check.
 - 7. Conducting patient satisfaction surveys.
 - 8. Collecting and evaluating data.

E. Estimated Project Length

- a. The project length will be up to 24 months.

F. Background Information

- a. Need for the project: A large gap exists between patients that are discharged from the hospital and are not affiliated with managed care systems, and the lack of medical healthcare professionals that can assist in providing access to post discharge primary care services. San Bernardino County Fire Department First Responders are an excellent resource, paid for by property taxes, to assist in filling this gap as they are strategically placed throughout communities and they are already trained to function in less than optimal environments outside the hospital setting. In addition, they have potential to provide care for rural residents who live in areas far from health services, thus leaving them vulnerable for re-admission. When not responding to emergencies, Community Paramedics can help people manage care prescribed in post discharge follow-up instructions and can provide information and counseling about ways to care for themselves and their families. There is an increasing need for healthcare workers to be the eyes, ears and voices of residents to assist in identifying problems in healthcare access and finding solutions in order to provide optimal patient care.
- b. Types and number of patients: This project will focus on patients who were admitted and discharged from ARMC with the diagnosis of CHF. Preliminary data shows that the Community Paramedic will visit roughly 5 patients per day in each of the identified geographical locations (Fontana, Victorville, Hesperia and Rialto).
- c. Number of Community Paramedics to be trained: For the purposes of this pilot study, approximately 24 Community Paramedics (2 for each shift in each of the four geographic areas), 2 Registered Nurses and 1 Paramedic Training Officer (already employed by San Bernardino County Fire Department) and 1 EMS Coordinator (already employed by Rialto Fire Department) will need to be trained.

- d. Future anticipated employment opportunities for Community Paramedics: The County of San Bernardino is the largest county in the United States by area, spanning over twenty thousand square miles. There are a high number of underserved areas, as well as designated Health Professional Shortage Areas (HPSA's), Medically Underserved Populations (MUPs) and Medically Underserved Areas (MUAs) throughout the County, thus the need for a Community Paramedicine program is great. Should the pilot program succeed, and future funding becomes available, we would be able to train and employ Community Paramedics to augment the ever changing healthcare system.
- e. Other programs serving as models for this project: San Diego and San Francisco have both looked at utilizing Community Paramedics to identify frequent users of the 911 system; however, due to statutory constraints, there are currently no programs in California utilizing Community Paramedics for post-discharge follow up care.

G. Program Management

- a. Operational Methodology: Specially trained Paramedics from San Bernardino County Fire Department and Rialto Fire Department will conduct home visits 24-72 hours post discharge from ARMC with a diagnosis of CHF. The visit will include a patient assessment where the Community Paramedic will determine 1) the patient is maintaining or improving their discharge health status and can wait for their scheduled follow up appointment, 2) the patient is exhibiting signs and symptoms in which a same day appointment is necessary or 3) The patient's condition has deteriorated requiring a 911 transport for emergent medical intervention. The Community Paramedic will also conduct a thorough review of discharge instructions and assess the patient's understanding in order to determine any difficulties the patient may be experiencing in following the instructions. Should any difficulties be identified, such as inability to obtain medications or follow up dr. appointments, the Community Paramedic will provide assistance in accessing primary care through the Department of Public Health (DPH) or ARMC primary care clinic networks.
- b. Provisions for Patient Safety:
Provisions for patient safety include the following:
 - 1. All Community Paramedics will complete the core curriculum approved by the California EMS Authority in addition to site specific training on CHF.
 - 2. The Community Paramedic will conduct a home safety inspection to determine that the patient can perform all activities of daily living in a safe environment.
 - 3. All medical and home safety assessments will be recorded in an electronic format and will be reported back to ARMC and the San Bernardino County Fire Department project QI Coordinator via secure electronic communications.
 - 4. IRB approval will be obtained from ARMC in order to ensure the safety and welfare of the patients.
- c. Local Governance and Medical Control: This project will be approved by the EMS Authority and will be locally governed by Inland Counties Emergency Medical Agency (ICEMA). Medical control will be provided on a global level by the ICEMA Medical Director, Dr. Reza Vaezazizi and in collaboration with the San Bernardino County Fire Department Medical Director, Dr. Troy Pennington. Additional medical control will be provided by base hospitals, if needed, on a call-to-call basis.

- d. Anticipated sources of funding: All possible funding sources will be researched, however, at this time, there are no anticipated sources of funding for post discharge follow-up care. San Bernardino County Fire Department will plan to utilize County resources that are currently in place and paid for by property tax dollars to conduct post discharge follow-up visits. DPH and ARMC have existing infrastructure to support increased access to primary and specialty care.
- e. Paramedic Eligibility: This program will follow the eligibility parameters set forth by California Emergency Medical Services Authority (EMSA). In addition, the individual must be an employee in good standing and must possess a strong desire to participate in this study.
- f. Local Community Paramedic Training: Community Paramedics will participate in standardized core curriculum set forth by The California EMSA. Site specific curriculum will be delivered by Physicians and Registered Nurses employed by San Bernardino County Fire Department and certified by The National Association of EMS Educators (NAEMSE).

H. Evaluation and Data Collection

- a. Process Evaluation: The pilot project will be evaluated by a data collection tool (currently in development) for utilization by the CP in the field and in collaboration with ARMC and DPH. Data will be sent electronically back to the designated Program Manager.
- b. Qualitative Evaluation: All patients receiving a post discharge follow-up visit during the study period will be reviewed by the designated QI Program Manager.
- c. Impact Evaluation and Utilization: A retrospective study will be administered upon program completion with results submitted to EMSA.
- d. Estimate of Healthcare Cost Savings: According to MedPAC, the average inpatient cost to CMS for each CHF patient is \$17,500. Ambulance, Emergency Department, and physician fees are added to this cost and are not included in the potential savings.
- e. Dissemination of Results: Upon completion of a thorough retrospective study, results of the pilot program will be reported back to EMSA.

I. Contact Information

- a. For the purposes of designing the pilot study, the below contact information applies:

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COMMUNITY PARAMEDIC

PURPOSE

To provide guidance and medical oversight to the Community Paramedic while performing post discharge follow up, treatment and referral to patients discharged from Arrowhead Regional Medical Center (ARMC) with a diagnosis of congestive heart failure (CHF).

This policy is for use by specially trained community paramedics as part of the California State EMS Authority Community Paramedicine Pilot Project.

The goals of this pilot project include:

- A. Conduct a post discharge follow up visit with 24-72 hours of discharge and ensure the patient receives the following:
 1. A patient assessment,
 2. A thorough review of all discharge instructions to ensure patient understanding,
 3. Assessment of adherence to discharge instructions to include:
 - a. Coordination of follow up care,
 - b. Coordination of transportation,
 - c. Medication compliance
 4. A referral, if needed, to a licensed healthcare provider when such referral could assure patient compliance to discharge instructions or prevent an exacerbation of their condition.

AUTHORITY

California Code of Regulations, Title 22, Division 9, Chapter 4

California Code of Regulations, Title 22, Division 7, Chapter 6

Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218

Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Project Program

DEFINITIONS

Community Paramedic (CP): An Inland Counties Emergency Medical Agency (ICEMA) Paramedic who is specifically selected to participate in the California State EMS Authority Community Paramedicine Pilot Project. and meets all required State core curriculum and local curriculum training.

REQUIREMENTS

1. Must be a current licensed Paramedic in California,
2. Must be a currently accredited paramedic in the ICEMA region.
3. Currently employed by San Bernardino County Fire Department or Rialto Fire Department.
4. Must complete all required State core curriculum training.
5. Must complete all required local curriculum training.

IMPLEMENTATION AND DURATION

The current pilot project implementation date is January 1, 2015 with an expected duration of up to 24 months.

MEDICAL CONTROL AND PROJECT MONITORING

This project will be approved by the EMS Authority and will be locally governed by Inland Counties Emergency Medical Agency (ICEMA). Medical control will be provided on a global level by the ICEMA Medical Director, Dr. Reza Vaezazizi and in collaboration with the San Bernardino County Fire Department Medical Director, Dr. Troy Pennington. Additional medical control will be provided by base hospitals, if needed, on a call-to-call basis.

LOCAL ADVISORY COMMITTEE

- A. A Community Paramedicine Local Advisory Committee will be established and maintained for the duration of the pilot project.
- B. The Community Paramedicine Local Advisory Committee will be responsible for the following:
 1. Work in collaboration with the EMSA Community Paramedicine Project Manager as necessary throughout the project.
 2. Create policies and protocols to ensure paramedic and patient safety.
 3. Develop local training curriculum
 4. Develop documentation tools
 5. Develop and monitor the project QI plan
 6. Monitor and review project data.

- C. The Community Paramedicine Local Advisory Committee will consist of the following members:
 - 1. Project Co-Managers
 - 2. San Bernardino County Fire Department Fire Chief
 - 3. San Bernardino County Fire Department EMS Supervisor
 - 4. Rialto Fire Department EMS Coordinator
 - 5. ICEMA Medical Director
 - 6. ICEMA Administrator
 - 7. San Bernardino County Fire Department Medical Director
 - 8. Rialto Fire Department Medical Director
 - 9. Public Health Director
 - 10. ARMC Administrator
 - 11. San Bernardino County Fire Department Paramedic
 - 12. Rialto Fire Department Paramedic
 - 13. Data Analyst

PATIENT INCLUSION CRITERIA

Patients must meet the following criteria for inclusion in the pilot project:

- A. Diagnosis of CHF
- B. Discharged home from ARMC
- C. Agree to participate in the pilot project and sign the informed consent

PROCEDURE

- A. Eligible patients will be contacted by the Case Managers at ARMC prior to hospital discharge to explain the purpose and benefits of the Community Paramedic Pilot Project and obtain the required informed consent for participation in the project.
- B. San Bernardino County Fire Department Project Manager will contact ARMC Case Manager on a daily basis for patient information.
- C. The assigned Community Paramedic will make initial contact to consented patients by telephone in order to schedule a convenient time for a follow up visit within 24-72 hours post discharge.
- D. The Community Paramedic will utilize and ICEMA approved protocol to perform the following actions:
 - 1. Conduct a thorough review of discharge instructions to ensure patient understanding. In the event the patient is unclear on their instructions, the Community Paramedic will educate the patient and will either refer the patient to their primary care physician or contact the assigned DPH representative or ARMC case manager.

2. Ensure the patient has obtained medications and is taking them as prescribed. In the event the patient does not have their medications, or has any issues with the medications, the Community Paramedic will attempt to resolve any minor issues and/or will refer the patient to their primary care physician or will contact DPH or the ARMC Case Manager as needed.
3. Assess the patient to determine the following:
 - a. The patient is maintaining or improving their discharge health status and will not need medical intervention before their scheduled follow up appointment,
 - b. The patient is exhibiting signs and symptoms in which a same day appointment is necessary in which proper referral will be made to San Bernardino County Department of Public Health or appropriate ARMC clinic.
 - c. The patient's condition has deteriorated requiring a 911 transport for emergent medical intervention.
4. Conduct a home safety inspection to ensure a safe home environment for the patient to recover in.

DOCUMENTATION

The Community Paramedic will utilize an approved user friendly electronic data collection tool that will capture all assessments, treatments and education performed by the Community Paramedic. The documentation will be sent electronically to the assigned Project Manager for review. There will be a 100% quality review on all documents pertaining to the project.

QUALITY ASSURANCE (QA) AND CONTINUOUS QUALITY IMPROVEMENT (CQI)

A QA/CQI Review Committee will be formed to assure that the quality of care and safety of the patient is at the forefront of the pilot program at all times. (See Addendum D: Community Paramedicine Quality Improvement Plan)

ADDENDUMS

- A. Community Paramedicine Local Site Curriculum
- B. Patient consent form
- C. Community Paramedicine Documentation form
- D. QI Plan

Addendum A: Community Paramedicine Local Site Curriculum

California Community Paramedic Curriculum Framework

Adapted from [North Central EMS Institute Community Paramedic Curriculum v 3.0](#)

Version 1.4 12/17/2013

8 Clinical Skills Testing and Experience for Community Paramedic (Local Site Responsibility) (Subject to modification as the program moves forward)

Goal

8. The Community Paramedic will demonstrate competence to provide the clinical care of the identified population through skills testing and clinical experience. The student will attend an estimated minimum of 50 hours, and up to 100 hours, of clinical experience to achieve competence.

Objectives & Summary

8.1. Demonstrate in skills labs and scenarios how to manage patients that will be encountered in the prehospital setting, utilizing standard pilot project procedures.

- 8.1.1. Detailed Physical Assessment

Assessment/Interventions: The Community Paramedic will understand the components of the detailed physical assessment including but not limited to:

- Vital signs/oxygenation/Neuro status (report changes in heart and respiratory rate/patterns as well as changes in LOC).
- Daily weight (a 2 lb weight increase over a 1 day period is considered significant).
- Lung sounds (monitor for increased crackles, rhonchi or pulmonary congestion).
- Capillary refill (if greater than 3 seconds, assess for signs of peripheral edema).
- Presence of jugular vein distention (jugular vein distention can be a sign of worsening right sided heart failure).
- Presence of hepatomegaly (also a sign of worsening right sided heart failure).
- Presence of ascites
- EKG changes
- Pain level
- Intake and Output (monitor effects of diuretic therapy and observe for signs and symptoms of either fluid overload or deficit)
- Activity tolerance (provide a proper rest/activity balance).
- Restless, anxious behavior and promote self-care participation.
- Assess adequate bowel function

Psychosocial Assessment: The Community Paramedic will understand the components of the psychosocial assessment including but not limited to:

- Self-care habits of the patient
- Patient's perception of their illness
- Caregiver availability and willingness

8.2. Demonstrate in skills labs and scenarios how to manage patients with common, chronic conditions that will be encountered in the community, utilizing standard pilot project procedures.

- 8.2.1. Heart failure

Upon completion of this lesson, the Community Paramedic will be able to:

1. Describe the pathophysiologic changes seen with congestive heart failure.
2. List the causative factors associated with congestive heart failure.
3. State the signs and symptoms associated with congestive heart failure.
4. Have a better understanding of the current medical treatment options for patients with congestive heart failure.
5. Discuss pharmaceutical interventions for treating congestive heart failure.
6. Describe the follow up care and management of the patient with congestive heart failure.
7. Understand co-morbid factors that commonly accompany CHF and Index scoring for risk assessment for death or readmission.

8.3. Demonstrate in skills labs and scenarios how to manage patients with in various situations that will be encountered in the community, utilizing standard pilot project procedures.

- 8.3.1. Inadequate Self-Care

- The Community Paramedic will utilize activities of daily living checklist to determine the following:
 - Inadequate nutrition
 - Ineffective coping mechanisms
 - Knowledge deficit of disease process

- 8.3.2. Medication Reconciliation

- The student will understand commonly prescribed post discharge medications, and
- Identify common side effects related to prescribed post discharge medications

- 8.3.3. Public Health Resource Needs

- The student will obtain a working knowledge of San Bernardino County Public Health Department resources available to the Community Paramedic

- 8.3.4. Home Safety/Fall Prevention

- The Community Paramedic will understand and utilize a home safety check list to insure patient and family safety in the home including:
 - Kitchen
 - Bedrooms
 - Living room
 - Laundry room
 - Exterior rooms and Misc. household areas
 - Smoke detector inspections

- 8.3.5. Caregiver Problems
 - The Community Paramedic will describe the Caregiver Assessment Tool and utilize the tool to conduct a proper assessment of the patient's caregiver.
 - Background on the caregiver
 - Caregiver's perception of health and status of patient
 - Well-being of the caregiver
 - Caregiver skills/capabilities
 - Caregiver resources

- 8.3.6. The student will discuss the components of a proper Nutrition, Hydration, and Weight assessment in the CHF patient.
 - Nutrition
 - Understand and conduct patient education on low sodium diet options
 - Hydration
 - Understand and conduct patient education on proper hydration with CHF
 - Weight
 - Understand and conduct patient education on proper weight trending

8.4. Demonstrate in skills labs and scenarios how to provide education to patients that will be encountered in the community, utilizing standard pilot project procedures.

- 8.4.1. Discharge Follow-up and Instructions

The student will understand the elements of patient education to be provided at post discharge follow-up visits:

- Discharge medication regimens and knowledge of medication
- Diet (low sodium)
- Fluid restrictions
- Activities of daily living
- Exercise
- Smoking cessation
- Available community resources/referrals
- The importance of making and keeping Dr.'s appointments
- Avoiding infection
- Self-monitoring (when to report symptoms or changes)

8.5. Demonstrate in skills labs and scenarios how to document and communicate care to patients utilizing ePCR capability and other methods of communication with healthcare partners, utilizing standard pilot project procedures.

- 8.5.1. Complete data entry
 - The Community Paramedic will describe the required documentation for the post discharge follow-up visit.
 - General appearance
 - Color
 - Breath sounds
 - Heart sounds
 - Peripheral edema
 - Activity tolerance
 - Vital Signs
 - Respirations
 - Pulse
 - Blood pressure
 - Intake and output
 - Weight
 - Patient Education
 - Diet
 - Activity
 - Medication
 - Signs and symptoms of complications
 - Skin care
 - Deteriorating condition protocol
 - SOAP Documentation
 - Components
 - Subjective
 - Objective
 - Assessment
 - Plan
- 8.5.2. Pilot Project Forms

The Community Paramedic will describe the forms to be utilized during the pilot project.

- Consent letter
- Referrals
- Assessment tools
 - Physical assessment tools
 - Nutrition/hydration assessment tools
 - Weight Management Assessment tool
 - Home safety Assessment tool

- 8.5.3. Communication with Higher Level of Care

The student will define the situations in which s/he will communicate with a higher level of care during the pilot project.

- Base Hospital Physicians
 - The Community Paramedic shall activate the 911 system and operate under the local established protocols in the event that the patient’s condition requires acute medical care.
- Public Health facilities
 - If the patient requires additional resources to comply with their post discharge follow-up plan, the Community Paramedic will notify the assigned contact at The Department of Public Health.

- 8.5.4. ePCR

- The Community Paramedic will understand and utilize the ePCR data tool intended for this pilot project.

8.6. The Community Paramedic will demonstrate competency in following procedures through supervised experience with patients in a Family Practice setting, based upon local pilot site activities. The minimum number of procedures shall be documented by clinical preceptors for each identified skill.

PROCEDURES LEVEL 1	# PERFORMED	CLINICAL SITE
Blood Pressure Checks	2	Field/Public Health Clinic
Medical Equipment		Field/Public Health Clinic
Scale	5	
Cardiac Monitor	5	
Home Medications		Field/Public Health Clinic
Compliance	7	
Medication Reconciliation	7	
Patient Documentation		Field/Public Health Clinic
SOAP Notes	5	
Chart Review	15	
e-pcr	5	
Assessment	20	Field/Public Health Clinic
Results from Tests/Diagnostic tools	15	Cardiology clinic
Identifying Red Flags	5	
Identifying further testing needs	5	
Illness Management (18 + years)	5	Internal medicine/cardiology floor
Chronic Illness Management	5	Internal medicine/cardiology floor
CHF		
Provide Patient Education	5	ARMC discharge planners and Public Health

Class Schedules

The Community Paramedic Local Curriculum will be tentatively delivered according to the following schedules:

Didactic

Topic	Hours
8.1.1. Detailed Physical Assessment	3
8.2.1. Heart Failure	4
8.3.1. Inadequate self-care	1
8.3.2. Medication Reconciliation	2
8.3.3. Public Health Resource Needs	2
8.3.4. Home Safety/Fall Prevention	1.5
8.3.5. Caregiver Problems	1.5
8.3.6. Nutrition/Hydration/Weight Assessment	2.5
8.4.1. Discharge Follow-up Instructions	1.5
8.5.1. Data Entry	2
8.5.2. Pilot Project Forms	2
8.5.3. Communication with Higher Level of Care	1

Skills Days

Skills Days	Hours
Location to be determined	8

Clinical Hours

Clinical Rotations	Hours
Cardiology	8
Public Health	8
Discharge Planning	8

Total Local Curriculum Hours: 56

Addendum B:
Patient Consent Form

Informed Consent

We are asking you to participate in a research study. Please take your time to read the information below and feel free to ask any questions before signing this document.

Title: San Bernardino County Community Paramedicine Pilot Project on Post Discharge Follow-up of the Vulnerable Patient

Purpose:

California residents continue to struggle with an increasing demand for healthcare services and a decreasing supply of healthcare workers. This program will utilize Community Paramedics to help increase patient access to healthcare after they have been discharged from the hospital. Research indicates that recently discharged patients may benefit from assistance, prior to regularly scheduled follow-up care. This study is being conducted to determine if follow-up care, provided by a Community Paramedic will foster a positive outcome for the patients included in the study.

Inclusion Criteria:

You are eligible for this study if you are an adult patient, recently discharged from Arrowhead Regional Medical Center with the diagnosis of Congestive Heart Failure.

Procedures:

With your consent, a referral will be generated to the Community Paramedicine Program. Within 48 to 72 hours of the referral, a Community Paramedic from San Bernardino County Fire Department or Rialto Fire Department will contact you to schedule an appointment to perform an in-home assessment as part of your follow-up treatment plan. During this visit, the Community Paramedic will provide education on your medical diagnosis, review your discharge instructions, medications and the importance of attending follow-up doctor appointments. In addition, the Community Paramedic will perform a home safety assessment to ensure a safe home environment for you to recover in. The Community Paramedic will provide feedback to your healthcare providers, which will improve the overall quality of your care, resulting in decreased need for visits to the emergency department and hospital readmissions.

Risks to Participation:

There are no foreseeable risks to you as a result of taking part in this pilot study. There are also no risks if you prefer not to participate.

Compensation:

There will be no compensation for participation. However, we anticipate an improvement in the quality of care that you receive, as well as your overall well-being, as a result of your participation in the pilot project.

Initial _____

Benefits to Participants:

You may not directly benefit from participating in this study. This study might help you by improving your ability to manage your medical condition long term, decrease the frequency of hospitalization, improve your overall well-being, and improve the safety of your home. What we learn from this pilot study may help others with your same or similar medical condition. The information learned from this study will be shared with the project team, the state Emergency Medical Services Authority, and your health care provider. This sharing will assist the project team in developing programs to utilize Community Paramedics in other ways that may be beneficial to your community and you.

Alternatives to Participation:

Participation in this pilot study is voluntary and withdraw from the study can be done at any time in writing.

Questions/Concerns:

Should you have any questions or concerns regarding this study, you may contact the principle investigator, Leslie Parham, RN, BSN, JD at the following phone number: (909) 253-4319 or via email at lparham@sbcfire.org or the co-investigator, Meaghan Ellis, PsyD, PHN, MSN at 909-387-6225, or mellis@dph.sbcounty.gov. If you have questions concerning your rights in this pilot project you may contact Cheryl Ives at the ARMC Institutional Review Board (IRB), which is concerned with the protection of subjects in pilot projects. You may reach the IRB office Monday-Friday by calling (909) 580-6365.

Confidentiality:

A screening tool will be completed for each participant and stored electronically in a database for two years, at which time it will be deleted. Your information will remain confidential and will only be reviewed by the members of the project team. Any identifying personal information will not be released.

Patient initial _____

Patient Consent:

The pilot project and the procedures have been explained to me. I agree to participate in this project. My participation is voluntary and I do not have to sign this form if I do not want to be part of this project. I have received a copy of the California Experimental Subject Rights and I will receive a copy of this consent form for my records.

Signature of Participant: _____ **Date:** _____

Signature of Person Obtaining Consent:

_____ **Date:** _____

Initial _____

Addendum C:
Community Paramedicine Documentation

Name _____ Address _____ City _____ State _____ Zip _____ Phone _____ Age _____ DOB ____/____/____ <input type="checkbox"/> M <input type="checkbox"/> F Weight _____ Approx. Height _____ Patient's Physician _____ Patient's Discharge Diagnosis _____ Medical History : <input type="checkbox"/> CHF <input type="checkbox"/> Diabetes <input type="checkbox"/> HTN <input type="checkbox"/> Other Cardiac <input type="checkbox"/> Cancer <input type="checkbox"/> Asthma <input type="checkbox"/> CVA <input type="checkbox"/> COPD <input type="checkbox"/> Psych <input type="checkbox"/> MI (Date): _____	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:20%;">Exam:</th> <th style="width:15%;">N</th> <th style="width:15%;">A</th> </tr> <tr><td>General</td><td></td><td></td></tr> <tr><td>Skin</td><td></td><td></td></tr> <tr><td>HEENT</td><td></td><td></td></tr> <tr><td>Neck</td><td></td><td></td></tr> <tr><td>Breast</td><td></td><td></td></tr> <tr><td>Chest/lungs</td><td></td><td></td></tr> <tr><td>Cardiac</td><td></td><td></td></tr> <tr><td>Abdomen</td><td></td><td></td></tr> <tr><td>Anorectol</td><td></td><td></td></tr> <tr><td>GU</td><td></td><td></td></tr> <tr><td>MSK</td><td></td><td></td></tr> <tr><td>Peripheral Vascular</td><td></td><td></td></tr> </table>	Exam:	N	A	General			Skin			HEENT			Neck			Breast			Chest/lungs			Cardiac			Abdomen			Anorectol			GU			MSK			Peripheral Vascular		
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Medications: _____ _____ Has a prescription to fill <input type="checkbox"/> Yes <input type="checkbox"/> No Had a prescription filled <input type="checkbox"/> Yes <input type="checkbox"/> No Taking medications as prescribed <input type="checkbox"/> Yes <input type="checkbox"/> No Verbalizes understanding of medications <input type="checkbox"/> Yes <input type="checkbox"/> No	Discharge Instructions: Review of hospital discharge instructions with patient <input type="checkbox"/> Yes <input type="checkbox"/> No Patient has follow up appointment with Primary Care Physician <input type="checkbox"/> Yes <input type="checkbox"/> No Patient verbalized understanding of discharge instructions and need to adhere to discharge plan <input type="checkbox"/> Yes <input type="checkbox"/> No Patient referred to Primary Care Physician, DPH or ARMC <input type="checkbox"/> Yes <input type="checkbox"/> No Education Provided: <input type="checkbox"/> CHF <input type="checkbox"/> Medications <input type="checkbox"/> Other																																							
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Addendum D: Community Paramedic Continuous Quality Improvement Plan



Community Paramedicine Quality Improvement Program Plan

San Bernardino County Fire Department/Rialto Fire Department/San Bernardino County Department of Public Health/Arrowhead Regional Medical Center/ICEMA

California Code of Regulations
TITLE 22. SOCIAL SECURITY
DIVISION 9. PRE-HOSPITAL EMERGENCY MEDICAL SERVICES
CHAPTER 12. EMS System Quality Improvement

EMS Quality Improvement Program (EQIP) Template:
<http://www.emsa.ca.gov/systems/files/EMSAACQITemplate.doc>

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- I. Goals**
- II. Structure, Responsibilities, Organizational Chart**
- III. Data Collection, Evaluation of Indicators, Reporting**
- IV. Action to Improve**
- V. Training and Education**

I. Goals

The San Bernardino County Community Paramedicine Pilot Project on Post Discharge Follow-up of the CHF Patient is a patient centered program designed to ultimately assure that the recently discharged Congestive Heart Failure (CHF) patients are either 1) following their post discharge instructions as ordered or 2) determine reasons for inability to follow discharge instructions including assistance in finding a medical home in which to manage the care prescribed in their post discharge follow-up instructions. The program is also designed to utilize already existing fire department resources, strategically placed throughout communities to provide information and perform home safety inspections to assure a safe home environment for the patient to properly recover in. Success of this program will largely depend on a proper quality improvement plan. The San Bernardino County Community Paramedicine Pilot Project Quality Improvement Plan is adapted from several quality improvement models and will focus on the following principles:

1. Self-evaluation and performance improvement where members strive for excellent delivery of patient care.
2. Maintaining a process where all members are vested and have input into the program.
3. Defining performance standards.
4. Continual monitoring of the process and adapting where necessary when any deficiencies are noted.
5. Continuous training.
6. Promoting a positive team environment where individuals can identify variances and corresponding education without fear of punishment.

II. Structure and Responsibilities

Internal Quality Improvement Structure

The internal quality improvement process will be managed by San Bernardino County Fire Department and Rialto Fire Department with a designated Community Paramedicine QI Committee. The Committee will consist of, but not be limited to, the following members:

Medical Director, San Bernardino County Fire Department
Medical Director, Rialto Fire Department
EMS Nurse Educator, San Bernardino County Fire Department
EMS Supervisor, San Bernardino County Fire Department
EMS Coordinator, Rialto Fire Department
Community Paramedics from San Bernardino County Fire and Rialto Fire Dept.

Responsibilities

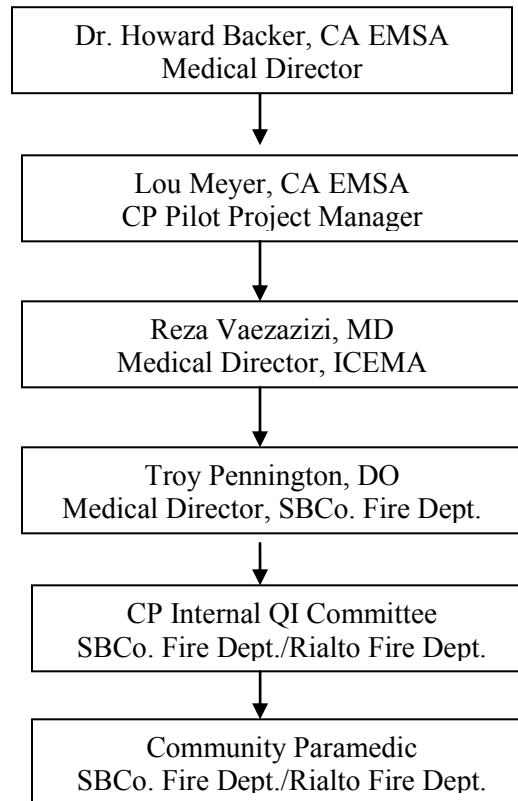
1. The CP program shall establish a quality improvement program to monitor, review, evaluate and improve the delivery of community paramedicine. The program shall involve all system participants and shall include, but not be limited to the following:
 - A. **Prospective Component-** Prospective designed to prevent potential problems.
 1. Comply with all pertinent Federal, State and County rules, regulations, laws and codes
 2. Coordinate CP quality improvement committees
 3. Plan, implement and evaluate the overall CP program
 4. Approve and monitor CP education
 5. Establish policies and procedures to ensure patient safety
 6. Identification of quality program indicators
 7. Establish a peer review process to audit quality of care
 8. Establish an improvement plan for identified deficiencies
 - B. **Concurrent Review-** Concurrent reviews of programs are designed to identify problems or potential problems while patient care is occurring.
 1. Site visits for real time evaluation of system components
 2. Available contacts for direction should unusual circumstances occur
 - C. **Retrospective Review-** Retrospectives reviews are designed to identify potential or known problems and prevent their recurrence.
 1. Chart review on 100% of all patient care records
 2. Education on any and all unusual incidents
 - D. **Reporting-** Any unusual incidents will be reported to the QI program manager and to the EMS Agency as needed for appropriate follow up and system improvement.
 1. Evaluate all records and make any changes to system design as needed
 2. Provide feedback and data to all system participants

The committee will utilize the following DMAIC acronym, developed by The Hospital Quality Institute when conducting QA/CQI reviews:

- D-** Defining the purpose, scope and goal of the project
- M-** Measuring baseline data, developing data collection plans
- A-** Analyzing data to determine program issues and root causes of issues
- I-** Improve the process by identifying and implementing solutions to program problems
- C-** Control. The final solution becomes standard and will be re-evaluated for continued positive result.

2. The QI Plan shall be approved by the LEMSA and reviewed by the participants on a yearly basis.

Organizational Chart



III. Data Collection, Evaluation of Indicators and Reporting

Data Collection

The CP will utilize a user friendly electronic patient care record for data collection. In addition, the integration of data from multiple data systems including dispatch, EMS providers, hospital and Public Health will be essential for a successful quality improvement program. The data systems will be utilized to:

- A. Identify patients for post discharge follow up
- B. Collect patient assessment information
- C. Prospectively identify QI indicators
- D. Monitor changes after QI education and system changes have occurred
- E. Monitor individual CP performance

Evaluation of Indicators

The following data will be collected by the Community Paramedic and analyzed by the Project Manager/QA/CQI Committee:

1. Number of discharged patients
2. Number of consented patients
3. Number of patients visited
4. Percentage of patients readmitted within 30 days without a Community Paramedic post discharge visit
5. Percentage of patients readmitted within 30 days with a Community Paramedic post discharge visit
6. Number of patients where a referral was given either to DPH or ARMC
7. Number of patients where 911 was activated
8. Community Paramedic compliance to policies and protocols
9. Medical appropriateness
10. Compliance with protocols
11. Unusual circumstances
12. Outcome
13. Safety issues

Reporting

Any unusual occurrences determined through the QA/QI process will be referred to the respective department Medical Director and the LEMSA as needed. All quality improvement activities will be discussed with the QI Committee for feedback and necessary adjustments to system design.

IV. Action to Improve

The QI Committee will utilize The Model for Improvement- PDSA Cycle from The Institute for Healthcare Improvement for all identified QI activities.

- **Plan-** State objective of the test, make predictions, develop and improvement plan to carry out the test (who, what, where, when)
- **Do-** Carry out the test or trial, document problems and unexpected Observations, begin analysis of data
- **Study-** Complete the analysis of the data, compare the test data to predictions and summarize what was learned
- **Act-** What changes are to be put into policy and institutionalized? What will be the objective of the next cycle? What, if any, re-education or training is needed to effect the changes?

The Model for Improvement



V. Training and Education

The pilot project training and education is designed so that, when completed, the CP will be competent in the objectives set forth by The State Community Paramedic Educational Advisory Committee. The education and training consists of the following components:

1. Community Paramedicine Core Education- This is a 6-week, 100+ hour course required by The State of California EMS Agency where the CP will learn the Core objectives set forth by The State Community Paramedic Educational Advisory Committee.
2. Site Specific Training- This 50+ hours of additional training will be offered at the local level and will focus specifically on the care and treatment of the CHF patient. (See Addendum A: Community Paramedicine Local Site Curriculum)



Study Contact Person:

EMS Manager Linda Allington, RN, MPH, MPA
Carlsbad Fire Department

Other Contacts:

Fire Chief Mike Davis, MPA
Carlsbad Fire Department

Dr. Gary Vilke, M.D., FACEP, FAAEM
Carlsbad Fire Department, Principal Investigator

Collaborators:

Dr. Bruce Haynes, MD
Medical Director, Emergency Medical Services, County of San Diego Public Health, HHSA

Dr. Richard Chen, MD
Assistant Chief, Kaiser Permanente

Debi Workman, RN, MICN, MS EMS Admin
AHA Training Center Coordinator/Program Director, Palomar College

Carlsbad Fire Department Community Paramedicine Letter of Intent

The Carlsbad Fire Department (CFD) has formally submitting a Letter of Intent to participate in the Health Workforce Pilot Project (HWPP) being offered by the California Emergency Medical Services Authority (EMSA) and the Office of Statewide Planning and Development (OSHPD).

We view our organization as being in an optimum position to look forward to the future of healthcare. We recognize that the Affordable Healthcare Act (ACA) will have a profound effect on the future of EMS, and we project in the future that our paramedics will become “navigators” in directing patients to the most appropriate resources specific to their needs. We view this role as a responsibility to our community—to promote and provide the services that are needed in an efficient and financially efficacious way. In 2011, the CFD EMS Bureau was awarded the prestigious San Diego Healthcare Champion “*Innovation in Healthcare*” award by the San Diego Business Journal.

The Carlsbad Fire Department is a municipal fire agency in north San Diego County, with six stations and 25 sworn personnel staffed 24 hours each day. The department is “all-risk” with EMS calls representing the majority of the call volume. In fiscal year 2012, there were a total of 10,447 calls with 82% or 8,576 representing EMS/Traffic Collision. CFD has 74 paramedics with 91% of our line staff holding EMT-P certification. CFD has seven EMT’s. The CFD staffs three ambulances full-time with two Firefighter/Paramedics. CFD does participate in a jurisdictional boundary drop where the closest, most appropriate resource is dispatched to the call. The service areas of the boundary drop include the cities of Oceanside, Vista, and Encinitas primarily.

Forty-Nine percent of our payer mix is comprised of Medicare or Senior HMO insurance. The City of Carlsbad does not have any hospitals within its geographical boundaries but does have Kaiser medical offices and Scripps Clinics as well as North County Health Services, a family-based practice offering medical care on a sliding scale.

Carlsbad Fire Department Community Paramedicine Letter of Intent

Carlsbad is an affluent city with a mean household income of \$96,084 (Comprehensive Annual Financial Report, 2010). Fortunately, Carlsbad has not had the financial problems many municipal, special districts and counties have recently experienced. With a robust tax base and fiscal conservatism, the CFD is not looking at eliminating or reducing services to the community.

The CFD has a well-educated command staff with 70% holding advanced degrees and employs a part-time medical director, Gary Vilke, MD, who is a fellow in the American College of Emergency Physicians and a professor of clinical emergency medicine at the University of California, San Diego. Dr. Vilke has over 15 years of experience in EMS operations and medical oversight. Research and pilot projects would be attainable and staff would operate within established study parameters and oversight. Additionally, the CFD has developed collaborative relationships with our local teaching institution, Palomar College, as well as our receiving hospitals: Tri-City Medical Center, Scripps Encinitas, and Scripps La Jolla. We also work closely and collaboratively with our LEMSA managed by Bruce Haynes, MD and his staff.

CFD has also performed a need or gap assessment to study what areas would benefit from a workforce pilot study. Community resources in business, education, healthcare, and other industries were given an overview of the study criteria, CFD's general concept, and copies of the University of California Davis study as well as other reference material. Overwhelmingly, the community leaders supported CFD taking on this project.

The title of our proposed project is: *New Methods of Directing Patient Care*. The general project area is section (a) *Transport patients with specified conditions not needing emergency care to alternate, non-emergency department locations.*

A description of the proposed concept, project management, collaborators, and other participants is as follows:

Carlsbad Fire Department Community Paramedicine Letter of Intent

The CFD will collaborate with medical personnel at certain of the Kaiser Permanente's affiliated entities (collectively Kaiser or KP); using two-way methods of communication yet to be determined; the project will direct certain appropriate KP patients to their facilities. Kaiser does not have a hospital in the Carlsbad area, and Kaiser patients frequently request to go to a Kaiser facility. In the pilot study, if the patient is a Kaiser member, the paramedic will use clinical protocols established to determine if transport to an intermediate level Kaiser medical office is appropriate. If so, the paramedic would obtain written consent to transport to an intermediate level Kaiser medical office versus the closest Basic Emergency Facility (BEF) ensuring the patient understands they may be transported to a facility other than a hospital emergency department. If a patient declines to participate and requests transport to the BEF, the paramedic will not proceed according to the pilot, but will use the normal procedures for routing the patient to a proper facility. If it is during the hours the Kaiser intermediate level medical office is open to the type of patient covered in the protocols to be established, the paramedic would contact the physician at the Kaiser intermediate level medical office. The Kaiser physician would make the determination if the intermediate level medical office was able to accept the patient based on its capability and available space capacity. If the paramedic determines pursuant to the clinical protocols that the patient is appropriate for routing to the Kaiser intermediate level medical office and the Kaiser physician confirms that the medical office has the capacity to treat the patient, the paramedics would transport the patient to the requested Kaiser intermediate level medical office and give turnover report to the receiving Kaiser staff.

A CFD retrospective review with data obtained from FY 12-13, revealed 439 of the 6,237 total CFD patients (separating out EMS Traffic Collision/non-patient) as having Kaiser health coverage. With this being just over 7% of the patient pool, the frequency of Kaiser members going to the intermediate level Kaiser offices would be manageable and would allow for 100% case review for continuous quality improvement. The usual communication with the local base hospital would not happen unless the patient was deemed to be

Carlsbad Fire Department Community Paramedicine Letter of Intent

inappropriate for transport to a Kaiser intermediate level medical office by the paramedic based on the clinical protocols or if the Kaiser physician at this medical office declined the patient because of acuity, bed availability, hours, or other issues. If the Kaiser physician determined that the Kaiser member was not appropriate for such transport, the usual contact with the local base hospital would then ensue.

Paramedic Eligibility:

The CFD would train the entire line workforce on the use of communication devices for use in the pilot. Primary contact would be made by the paramedic assigned to radio duties.

Data Collection:

CFD currently utilizes an ePCR and has documented this way since May, 2007.

As mentioned earlier, 100% continuous quality improvement data would be collected on all mobile video communication uses. CFD continues to work with the LEMSA on improving linkage for data.

Objectives for Evaluation:

Increased access to care by getting the patient to the correct facility without having repatriation issues; thereby creating efficiency, decrease in low acuity hospital transports and Emergency Department (ED) visits, cost savings, and satisfaction levels with both the patient, paramedic workforce, and the health system.

Need for Project:

Transporting patients to the ED when they could be served at a local medical office could be more efficient and cost effective. Patient satisfaction may be increased as the patient is staying within their healthcare system.

Types and Number of Patients Likely to be Seen:

Carlsbad Fire Department Community Paramedicine Letter of Intent

As mentioned previously, a retrospective review of CFD data showed 439 Kaiser members are responded to annually. Some of those would sign out AMA, some would require transport to an ED, and others would fall outside the hours of the Kaiser medical office or there may be limited capacity at the Kaiser medical office. It is anticipated that the number of transports diverted to an alternate destination would be approximately 100 per year.

Program Management:

The program would be overseen by the EMS Manager and the CFD Medical Director. The Principal Investigator (PI) is Gary Vilke, MD. All cases will be reviewed for appropriateness of resources. Quarterly reports will be generated initially and could be done more frequently if requested. Reports will be submitted to the CFD Medical Director and PI, Gary Vilke, MD, the LEMSA, and a to be determined Kaiser physician. Medical control would be medic to Kaiser physician for the population potentially going to the Kaiser intermediate level medical office after confirmation by a Kaiser physician that the medical office had capacity for the patient.

Additionally, a local Community Paramedicine Project Steering Committee has been established to provide additional medical and administrative oversight. Further, the data evaluated by an independent evaluator.

Patient Safety:

The objective is to enhance patient safety. Instead of speaking to a Mobile Intensive Care Nurse (MICN) via radio, the paramedic would speak to a Kaiser physician at the Kaiser intermediate level medical office. These Kaiser physicians are board-certified in emergency medicine. If the Kaiser member was deemed to be inappropriate for transport to a Kaiser intermediate level medical office or if Kaiser was otherwise unable to accept the patient, the medic would then follow the usual channels for making base hospital contact.

Funding:

Carlsbad Fire Department Community Paramedicine Letter of Intent

CFD understands there is no funding currently and readily available for this project from EMSA.

Paramedic Eligibility and Local CP Training:

The CFD would train the entire paramedic workforce on this project. CFD would start with the mobile video communication component and then may look to branch out into other areas in the future, which may include areas such as preventive health services, post-hospital discharge follow up, and proactive care for chronic conditions. Having our workforce trained, we would be poised to take on further roles going forward. Workforce training would be accomplished by partnering with our local accredited paramedic program, and at clinical sites at Kaiser and other sites in our community; details of which are to be determined.

Evaluation and Data Collection:

All patients would be entered into the respective data base. As mentioned earlier, the LEMSA will receive quarterly reports as well as be an integral component of the local steering committee. Components such as process evaluation, qualitative analysis and impact evaluation and utilization will be measured. An estimate of the healthcare cost saved by transferring to an intermediate level medical office versus an ED visit will be reported. Using the CFD average transport cost of approximately \$1,200 multiplied by 150 transports, the cost savings would be \$180,000 to the patients and to Kaiser.

Carlsbad Fire Department Community Paramedicine Letter of Intent

Dispatch:

Carlsbad Fire Department belongs to a joint powers authority (JPA) dispatch known as “NorthComm”, who dispatches all fire related calls. Additional information on this dispatch JPA can be found on their website:

<http://www.ncdjpa.org/> . EMD protocols are used but there is no tiered dispatch. When a request for 911 services is made, the computer aided dispatch (CAD) picks the closest, most appropriate engine or truck company and ambulance. All engine companies and the truck company are ALS equipped.

For the community paramedicine program, the patients would access the 911 system just the same as they do now. The dispatcher would send the appropriate resources to the scene. There would be no questions asked by the dispatcher that would dictate the disposition of the patient or identifying any type of insurance. The patient would be identified as a potential candidate for our community paramedicine program once the paramedic had completed the assessment and basic intake information. Historically, it is during this time the patient or their family members frequently identify themselves as a “Kaiser patient” or another type of insurance. Further, it is during this phase of the call that the CFD frequently receives a patient or family request to be transported to a Kaiser facility.

After identifying the patient as a Kaiser member, and also fitting the clinical protocols that have been established regarding transporting to an intermediate level medical office, the paramedic will then contact the physician at the Kaiser office. The current hours of operation for the intermediate level clinic are Monday through Friday from 1000 to 2000 and Saturday and Sunday from 0900-1700.

As mentioned earlier, the Kaiser physician at the intermediate medical office could decline the patient because of acuity, bed availability, hours of operation, or other issues. If the Kaiser physician determined that the Kaiser member was not appropriate for such transport, the usual contact with the local base hospital would then ensue. Again, this process would not be for all patients who are Kaiser insured, but rather, the patients that fit

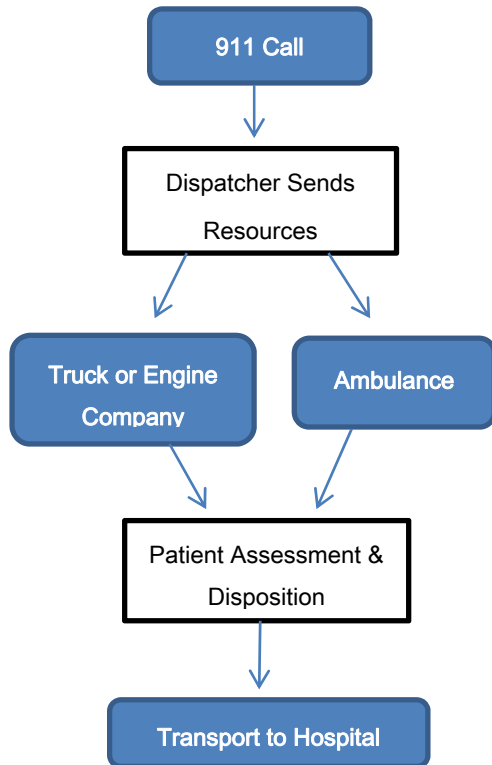
Carlsbad Fire Department Community Paramedicine Letter of Intent

the established clinical protocols. See attached flow chart for a visual depiction of how the patient would be treated (see Figure1).

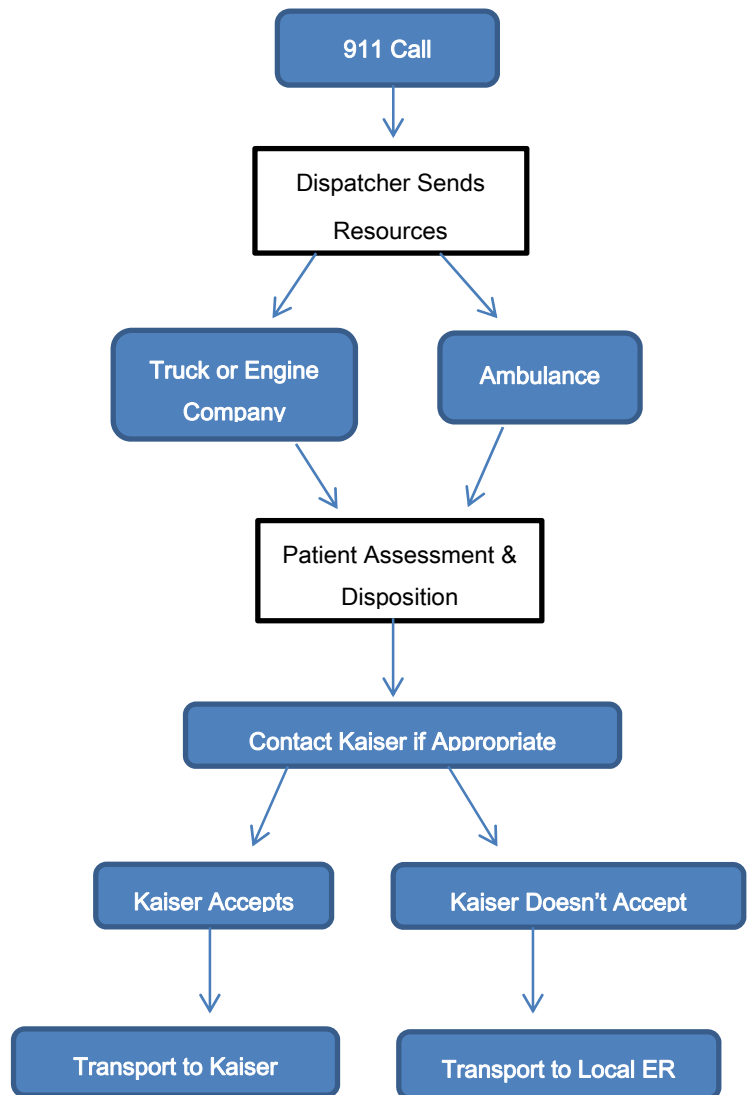
Although 91% of our line staff holds EMT-P certification, we would be training those that are in a firefighter/paramedic position. This represents a total of 36 individuals over three shifts. CFD operates five engine companies, each with a designated firefighter/paramedic, one truck company with a dedicated firefighter/paramedic, and three ambulances; each with two firefighter/paramedics.

Figure 1
Carlsbad Fire Department Community Paramedicine

Traditional Model



Community Paramedicine Model



Carlsbad Fire Department (CFD)-Kaiser Permanente (KP) San Marcos Intermediate Care Service (ICS) Alternate Destination EMS Transport Protocol

Purpose: Transport patients to the closest, appropriate, receiving facility of their choice, unless otherwise indicated by their clinical condition.

The goals of the CFD-KP Pilot Project include:

- A. Be innovative and responsive to the changing face of healthcare while keeping patient safety at the forefront.
- B. Utilize and leverage technology to improve efficiencies.
- C. Keep patients in their medical home while achieving the Affordable Care Act (ACA) triple aim approach of improving the patient experience of care, improving the health of populations, and reducing the per capita cost of health care.
- D. Has the ability for development of alternative roles for health care and for developing a reallocation of health care tasks which could improve the effectiveness of the health care delivery systems.
- E. Provide a high level of patient satisfaction.
- F. Proof-of-concept-it is anticipated that the number of patients who fit the protocol criteria and fall within the operational hours of the KP ICS clinic will be relatively small. However, the pilot study will demonstrate that CFD paramedics can safely and efficiently transport a low-acuity 911 patient to a facility other than an ED.

Authority:

- California Code of Regulations, Title 22, Division 9, Chapter 4 & Chapter 6.
- Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218.
- Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Projects Program (HWPP).

Implementation & Duration:

The current anticipated Community Paramedicine Pilot Project implementation date is January 1, 2015 with an expected duration of up to 24 months. HWPP projects may be extended one year at a time if the OSHPD Director determines that continuation of the project will contribute substantially to the availability of high-quality services to the region.

Medical Control and Project Monitoring:

The CFD Medical Director will act as the principal investigator (PI) for the Community Paramedicine Pilot Project. The CFD Medical Director will work closely with the LEMSA Medical Director, and the KP designated liaison to ensure compliance and oversight.

Need for Project:

Transporting low acuity patients to the Emergency Department when they could be served at a local medical clinic is less efficient to the regional health care system as well as to the patient and is less cost effective. Patient satisfaction may be increased when transporting to an alternate site as the patient can stay within their healthcare system where their records and providers are and can avoid the cost of repatriation from one healthcare system to another.

Currently, the Emergency Departments in the region we serve, are stressed regarding capacity and overcrowding. Ambulance off-load delays are regular occurrence and have become part of the culture of transporting to a hospital.

The CFD frequently must wait for a bed in the ED, which results in a delay in our ability to clear the call, get back into service, and respond to the next citizen needing assistance. Off-load delays have a cascade effect on the ability of a community's EMS system to respond to emergent calls. With responding units needing to come from further distances because what would be the closest ambulance is still waiting to offload its patient at the overcrowded ED, response times are greatly increased and can have a direct negative effect on patient outcomes.

Transporting low acuity patients directly to an appropriate resource, like an advanced clinic, gets the patient to the services they need quickly and efficiently and can facilitate getting the ambulance back in service more quickly as well.

Off-load delay times have been tracked via an independent surveillance company for over a year and peak times for delays in getting ambulances back in service are between 1200-1800 hours. The KP ICS will be able to serve the low-acuity KP patients between the hours of 1000-2000 on weekdays and 0900-1700 on weekends.

Protocol

1. The patient accesses the 911 system, has a chief complaint and requests transport to a medical care facility.
2. By county recommended practice, all patients are asked where they receive their medical care to facilitate getting them to their medical "home" if possible. If the patient is identified as a Kaiser member he or she can be considered for inclusion in the trial.
3. The patient is willing to be transported to the Kaiser Urgent Care in San Marcos instead of one of the region's emergency departments.
4. The patient does not have any of the following
 - a. Age <18 years old
 - b. Conditions covered by another destination protocol:
Stroke, STEMI, Trauma, Burn, Pediatric
 - c. Signs of Airway Obstruction/ Significant Respiratory Distress or Compromise
 - d. Signs of Shock
 - e. Abnormal Vital Signs including SBP <90, HR<50 or >120, RR<8 or >25, O2 Sat <90
 - f. Sustained Altered Neurologic Function

- g. Discomfort/Pain with Suspected Cardiac Etiology or Dysrhythmia
 - h. Abdominal pain with suspected obstetric origin or aortic aneurysm origin
 - i. Poisoning/Overdose/ Nerve Agent or Envenomation Injuries
 - j. Hemodialysis-related conditions
 - k. Decompression Illness/Diving/Altitude-Related Injury
 - l. Sexual Assault
 - m. Psych/Behavioral Emergencies
 - n. Severely angulated or open fracture
5. The patient or Designated Decisional Maker (DDM) signs the consent.
 6. The Kaiser physician on duty at the Kaiser San Marcos has available bed space and has accepted the patient via communication with prehospital provider.
 7. The patient is transported to Kaiser San Marcos.
 8. If the patient does not meet these criteria for Kaiser San Marcos, they will be transported to the closest appropriate facility as per standard county protocol.

Rationale for Protocol

1. Patients should be transported to the destination of their choice as long as the facility has the capability and capacity to safely care for their medical condition.
2. Regionalized EMS systems specific to certain medical conditions (i.e., STEMI, Stroke, and Trauma) will not be affected by this protocol.
3. This protocol does not change the scope of practice of a paramedic other than utilizing the current treatment protocols and changing the destination based on the capability of the destination in a manner that is desirable to the patient, and is safe.
4. Patients deemed eligible to be transported to the alternate destination will be approached for consenting for the study.
5. If at any time the patient’s condition deteriorates, the paramedic will follow standard protocol, contact a base hospital, and transport to the appropriate facility per base hospital medical direction.
6. Radio traffic is at an all-time high level with >206,000 radio calls over the past year in San Diego County. This represents an increase of approximately 7,000 radio calls over the prior year and represents a system that is not sustainable. Each Base Hospital in San Diego runs an average of 82 paramedic calls per day (Kahn, A Review of San Diego Base Hospitals, 2014).
7. Medical control in the trial will be from an emergency physician to the paramedic compared with the current Mobile Intensive Care Nurse (MICN) to the paramedic. This results in a higher level of oversight and thereby increasing patient safety and decreasing the likelihood of taking an inappropriate patient to an alternative destination that is not equipped to handle the patient’s needs.

The San Diego County Rapid Radio Report study (Allington, Anderson, Duffy, Seabloom, 2012, (p=0.004) demonstrated only 5% of radio traffic involved acute medical or severe trauma patients. In 20% of the base hospital calls medics had to repeat information to the MICN adding to the overall length of the call; and 73% of the total radio volume represented the lowest level “mild” status patients.

Because county protocols require base contact and the base call volumes are so high, San Diego County paramedics routinely “base shop” to access an open base. Communication failure protocols have had to be utilized due to the inability to make base hospital contact.

San Diego County Adult Treatment Protocols

Included in Protocol

- S-120 Abdominal Discomfort/GI/GU (non-traumatic)
 - Except for suspected symptomatic aortic aneurysm, Hypotension, or shock
- S-121 Airway Obstruction resolved
- S-122 Allergic Reaction/Anaphylaxis
 - Except for Anaphylaxis or acute allergic reaction as defined by protocol (facial/cervical angioedema, bronchospasm or wheezing)
- S-123 Altered Neurologic Function resolved except suspected CVAs/TIAs
- S-124 Burns
 - Except for: Burns Partial Thickness > 10% BSA, or involving face, eyes, ears, hands, feet, perineum, major joints, Full thickness 3rd degree
 - Serious Electrical/Chemical burns, Inhalation injury
- S-130 Environmental Exposure
 - Except: Heat Stroke, Near Drowning, Severe Hypothermia with Cardiac Arrest
- S-139 Trauma
 - Except those meeting Trauma Center Criteria
- S-140 Multiple Patient Incident/Mass Casualty Incident/Annex D
- S-141 Pain Management

Excluded from Protocol

- S-126 Discomfort/Pain Suspected Cardiac Origin
- S-127 Dysrhythmias
- S-129 Envenomation Injuries
- S-131 Hemodialysis Patient
- S-132 Decompression Illness/Diving/Altitude Related Injury
- S-133 Obstetrical Emergencies
- S-134 Poisoning/Overdose
- S-135 Pre-Existing Medical Interventions
- S-136 Respiratory Distress
- S-137 Sexual Assault
- S-138 Shock

S-142 Psych/Behavioral Emergencies
S-150 Nerve Agent Exposure
All Pediatric Treatment Protocols

Applicable County Protocols

Medical Control

P-401 Scope of Practice of Paramedic in San Diego

III.B.15 Perform any prehospital medical care treatment procedure(s) or administer any medication(s) on a trial basis when approved by the medical director of the local EMS agency. Study procedures shall be defined in Title 22, Division 9 Chapter 4 of the California Code of Regulations.

S-407 Triage to Appropriate Facility

III.A. Patients will be transported from the scene of the incident to the most accessible and appropriate facility staffed, equipped, and prepared to administer care appropriate to the needs of the patient.

III.D. Transport to other than the most accessible facility will be out of the interest of the patient, based on the medical judgment of the Base Hospital.

S-412 Pre-hospital treatment and transportation of adults- Refusal of care or suggested destination, release.

S-415 Base Hospital Contact, patient transportation and report-Emergency Patients

Purpose: To identify Conditions under which EMT's and paramedics shall, when encountering an emergency patient, contact a base hospital for notification, medical direction, or give report; or (for EMTs) contact a receiving hospital to verify appropriate transport destination and give report.

Definitions

III.F. Emergency Patient – Any person for whom the 9-1-1/EMS system has been activated and who meets the following criteria:

1. Has a chief complaint or suspected illness or injury; or
2. Is not oriented to person, place, time or event; or
3. Requires or requests field treatment or transport; or
4. Is a minor who is not accompanied by a parent or legal guardian and is ill or injured or appears to be ill or injured

Policy

IV.B Paramedics – Base hospital contact is required by paramedics in the following situations

1. Any emergency patient transport by paramedics,

including transports by paramedic ambulance to a BLS destination following downgrade to BLS.

2. Any emergency patient treatment involving ALS medications or skill (except EKG monitoring).
3. Any emergency patient assessment involving abnormal vital signs, or altered level of consciousness.
4. Any suspicion that the emergency patient (or designated decision maker [DDM]) is impaired by alcohol or drugs.
5. The emergency patient/DDM is unable to comprehend or demonstrate an understanding of his/her illness or injury.
6. The emergency patient meets criteria as a trauma center candidate. (T-460)
7. The emergency patient is >65 years of age and has experienced an altered/decreased level of consciousness, significant mechanism of injury, or any fall.
8. An emergency patient who is a minor is ill or injured or is suspected to be ill or injured.
9. Whenever paramedics have a question regarding appropriate treatment or disposition of the patient.

Local Advisory Committee:

The County of San Diego Local Emergency Medical Services Agency (LEMSA) is utilizing the already existing Education & Research subcommittee of the Emergency Medical Care Committee (EMCC) to satisfy the Advisory Committee requirement for the local Community Paramedicine pilots.

Representation on the EMCC Education and Research subcommittee includes:

Emergency Medical Care Committee (EMCC) members that are on the EMCC Education/Research Subcommittee:

- San Diego County Ambulance Association – Mike Rice, Paramedic
- San Diego Fire Chiefs’ Association – Chief Bob Leigh (City of Santee) – primary representative/ Frank Parra, National City Director of Emergency Services – alternate representative
- County of San Diego District 1 – Katy Green, RN
- County of San Diego District 5 –Stephen Abbott, Paramedic
- Base Hospital Nurse Coordinators of San Diego County – Christine Wells, RN

Community attendees:

- Linda Allington, RN, MPH, MPA – City of Carlsbad

- Anne Jensen, Paramedic - City of San Diego
- Jodie Pierce, RN, Paramedic – San Diego Fire Department
- Judith Yates, Senior Vice President – Hospital Association of San Diego/Imperial Counties
- Sharon Carlson, RN – Hospital Association of San Diego/Imperial Counties
- Linda Rosenberg, RN, BSN – Emergency Nurses Association
- Mike Davis – San Diego County Fire Chiefs
- Gary Vilke, MD, FACEP, FAAEM – UCSD/Carlsbad Fire
- Deborah Workman, RN, BS – Palomar Community College, Director of Emergency Medical Education Department
- James Dunford, MD, FACEP – City of San Diego EMS
- Jason Hums, Paramedic, Assistant Professor – Southwestern College, Paramedic Training Program Instructor

County of San Diego EMS Staff:

- Bruce E. Haynes, MD, Diplomat, ABEM – EMS Medical Director
- Marcelyn Metz, RN, BS, CEN – EMS Chief
- Susan Smith, RN, CEN – EMS Coordinator
- Diane Ameng, RN, BSN – QA Specialist

Documentation

An electronic pre-hospital patient care record will be generated for each community paramedic study patient enrolled. These pre-hospital records will be auto-faxed to the receiving facility as per current practice. An alert will automatically be sent to the program manager via the already established surveillance program when a community paramedic study patient has been identified and transported to the Kaiser ICS.

Human Subjects Approval

Human subject's approval will be obtained from the University of California, San Diego Human Research Protection Program (HRPP) prior to any formal research presentations or peer reviewed publication submissions of the data.

Quality Assurance & Performance Improvement

On-going case review will be completed on all patients who meet the protocol to ensure patient safety and quality assurance. Prospective and retrospective quality review processes will include administrative and medical treatment of protocols.

The following will be tracked by the Pilot Project Manager and PI and reported to the local advisory committee on a regular basis for the duration of the study:

Data to be reviewed includes:

Pre-hospital record - confirming that inclusion and exclusion criteria were satisfied,

Consent – confirming the completion of the written consent process and that the paperwork was appropriately signed and dated

Kaiser records - assessing patient outcome. This will include final diagnosis, if the patient was discharged from the facility or required transfer to another facility for further evaluation or admission.

Additional information to be tracked and evaluated includes ambulance off-load times at the Kaiser facility and system status at the time of the transport defined as whether local emergency departments are on ambulance diversion or if there are ED ambulance off-load delays occurring at the time the study patient was transported to the Kaiser facility.

Any unusual occurrences related to the pilot project will be reported to the Local & EMSA Project Manager within 24 hours of occurrence for in-depth review by the project Medical Director.

External Sources of Protocols (See Attached Protocols)

Wake County Free Standing Emergency Departments

Exclusions:

Suspected active labor >20weeks

Open fracture

Conditions covered by another destination plan

Stroke, STEMI, Trauma, Burn, Pediatric, Out of Hospital Cardiac Arrest

San Francisco Destination 5000

Exclusions

1. Airway Obstruction or Respiratory Insufficiency with inadequate ventilation
2. Hypotension with shock
3. Status Epilepticus
4. Acute Deteriorating level of consciousness
5. Stroke
6. STEMI
7. Amputations and Devascularization Injuries
8. Burns Partial Thickness > 10% BSA or involving face, eyes, ears, hands, feet, perineum, major joints, full thickness 3rd degree, Serious Electrical/Chemical burns, Inhalation injury
9. Abnormal Vital Signs including SBP <90, HR <60 or >120, RR <12 or >25, O2 Sat <90

Goal: The student will understand and analyze their role in the pilot program for alternate destination transportation.

Training Staff: Principal Investigator, Pilot Project Manager, Selected Supervisory paramedics, Palomar College Emergency Medical Education Staff, Kaiser Permanente (KP) staff.

Module 1: Time-3 hours in classroom, instructor led “live training”, plus pre-assignment of 3 hours:

Pre-assignment material: Instructional materials: Each student will receive a binder with the following studies: 1. *“Community Paramedicine: A Promising Model for Integrating Emergency and Primary Care,* 2. *Finding a New Seat at the Healthcare Table: Will the emerging concept of mobile integrated healthcare practice transform EMS?* 3. *Innovation Opportunities for Emergency Medical Services, A Draft White Paper from NHTSA (DOT) and Office of the Assistant Secretary for Preparedness and Response (HHS).*

Objectives and Summary:

- 1.1.1 The paramedic will be able to discuss the community Paramedicine pilot project and the associated requirements. **** Request overview of program via video clip that summarizes Dr. Backer’s philosophical position regarding the program.**

Overview of program will include a discussion of the articles and why Carlsbad Fire is interested in pursuing this pilot.

- 1.1.1 Definition of mobile integrated health care and the community paramedic.

What is Mobile Integrated Healthcare (MIHC)?

Defined: MICH is the provision of healthcare using patient-centric, mobile resources in the pre-hospital environment. This may include, but is not limited to, MIHC component services which may include advice to 911 callers, providing community Paramedicine primary care or post-discharge follow-up visits; or transport or referral to appropriate care, which may not be a hospital. Source: Adapted from NAEMT website (<http://www.naemt.org>).

- 1.1.2 History of Community Paramedicine

Providing healthcare has been a challenge in rural and remote areas of the country. Twenty-five percent of Americans live in rural areas with only ten percent of America’s physicians practicing in those areas. Four times as many rural and remote area residents must travel at least 30 miles for healthcare as compared to urban populations. Shortages of healthcare workers, recruitment and retention of primary health care providers are of major concern in rural areas.

A number of well-developed programs have been instituted throughout the country. These programs include MedStar in Texas, programs in Minnesota, and Colorado as model programs.

Utilizing paramedics in an expanded scope is realistic and practical as they are already trained to perform patient assessment and recognize and manage life-threatening conditions. Paramedics practice in all areas: from a private residence, to a jail. From the freeway to the bottom of the cliff. Further, paramedics are widely trusted by the community and are used to collaboration with other members of the healthcare team. (Source: Community Paramedicine: A Promising Model for Integrating Emergency & Primary Care).

- 1.1.3 Three reference articles mentioned on page 1 will be in a binder sent out two weeks prior to the first session. These articles will also be posted on Target Solutions (department training and records management site).
- 1.1.4 Explain roles of Office of Statewide Health Planning and Development (OSHPD), Health Force Work Pilot Projects. There is no assurance that future changes in the laws after evaluation of the pilot project will occur. The purpose of the pilot is to see if the roles can be safely expanded.
- 1.1.5 Explain role of EMSA in this pilot project. Discuss timeline, requirements thus far, site visits, data reporting.
- 1.1.6 Health and Safety Code Statutory Requirements-review
<http://www.oshpd.ca.gov/HWDD/pdfs/HMPPPregs.pdf>
- 1.1.7 Data requirements-will be covered in separate module.
- 1.1.8 Community Health Partners: Kaiser, EMCC Subcommittee Education/Research-Discuss roles and responsibilities

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

Module 2: Assessing Patients for Inclusion in Study. Time: 2 hour classroom.

Goal: The paramedic will be able to perform a focused history and physical assessment of a patient in order to determine appropriate entry into the alternate destination portion of the study.

Objectives and summary: At the end of this teaching session the paramedic will demonstrate knowledge of the following:

- 2.1 Definition of informed consent and components necessary to achieve this. Ineligibility for informed consent such as mental status, age minors are excluded, and communication barriers. Declined consent and how to document consent or non-consent.
- 2.2 Review of the CP Alternate Destination Protocol
- 2.3 Discussion of inclusion and exclusion criteria
- 2.4 Detailed history taking for the study population
- 2.5 State how patient safety and quality improvement will be measured in the pilot project

2.6 Describe how outcome measures will be done and how they will be reported (study and to providers)

2.7 Patient satisfaction surveys-each patient will be sent a survey. This will be in addition to our routine survey protocol.

2.8 Providers will receive ongoing education regarding the program

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

Module 3: Data requirements. Time: 1 hour in classroom, instructor led “live training”. Instruction and return demonstration with fictitious patient entry-

Objectives and summary: At the end of this session the paramedic will understand the data requirements and will be able to successfully document for the alternate destination patient.

3.1 Data requirements- Data fields will be determined prior to class. Entry on iPad or approved device as well as making contact with Kaiser Facility physician during training session.

3.2 Review of baseline data requirements prior to study.

3.3 Review of data requirements during the study (once determined).

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

Module 4: Area Familiarization. Time: 2 hours not including travel time.

Objectives and summary: At the end of this session the paramedic will understand the capabilities of the Kaiser ICS facility as well as how to communicate with them and provide advanced notification.

Each community paramedicine medic candidate will do a familiarization tour to the Kaiser ICS facility. Areas such as where to off-load, where to give report and an opportunity for both Kaiser staff and CFD staff to have a question and answer session will occur.

4.1 Understand the hours, limitations, and restrictions of Kaiser ICS

4.2 Review of alternate destination protocol with Kaiser Staff.

4.3 Review of communication with Kaiser as well as advanced notification

4.4 Review of how to navigate if Kaiser is unable or unwilling to accept patient (usual transport protocol).

Competency demonstrated by passing a written exam, taken individually with 80% or higher.

Module 5: Medical Director Oversight. Time: 2 hours classroom

5.1 Overview of pre-hospital research studies

5.1.2 Role of Local EMS Agency (LEMSA) and LEMSAs Medical Director-Dr. Haynes

5.1.3 Role of Project Medical Director/Principle Investigator

5.1.4 Integrity of Study and Data

5.1.5 Off-line/On-line medical direction

5.1.6 100% Retrospective Review

Competency will be demonstrated by successfully passing a written exam with 80% or higher.

Module 6: Competency testing by Palomar College. Written test and individual simulations. Total time 1.5 hours allotted for each student. One hour for written test and 30 minutes one-on-one with Palomar College instructor.

Objective and summary: The paramedic will demonstrate cumulative knowledge learned in the modules by passing a written exam and manipulative exam.

There will be a final written test covering all the modules.

Individually, each paramedic will go through a series of simulations and correctly decide if the patient meets the protocol for alternate destination demonstrating knowledge in policies, procedures, and protocols.

Sample Training Curriculum for KP Physicians

Base Hospital Curriculum

Developed by UCSD Base Hospital Medical Director Chris Kahn, MD

Used with permission

Objectives

Overview of EMS system

Review Paramedic Base Hospital

- Review Base Hospital Physician (BHP) responsibilities
- Certify you as BHP
- EMS
- Emergency Medical Services
 - Prehospital Emergency Care
 - Emergency Departments
 - Trauma Centers
 - STEMI Centers
 - Stroke Centers
 - Burn Center
- Medical Oversight (Base Hospital)
 - Direct & Indirect
- Overview of San Diego County
- 3.3+ million people
- 24 ALS agencies
- 1000+ paramedics
- 4000+ EMTs
- 18 Emergency Departments (1 peds only)
 - Also two military EDs (Pendleton and Balboa) and the VAMC
- 5 Adult and 1 Pediatric trauma centers
- 1 Regional Burn Center
- 5 Paramedic Training Agencies
 - Palomar, Southwestern, EMSTA, NCTI, WestMed
- Helicopters
- BLS rescue
 - Sheriff
- ALS rescue
 - San Diego City

- Air Ambulances
 - Mercy Air
 - Reach
- System Overview
- California EMSA
- LEMSA
 - San Diego County
 - San Diego City (Fire/Rescue)
 - Other Areas
- Base Hospitals in San Diego
- MD Input to System
- County Board of Supervisors Advisors
 - EMCC (Emergency Medical Care Committee)
 - SD HHS (Health & Human Services Agency)
 - County EMS
- Major County EMS Advisors:
 - BSPC (Base Station Physicians Committee)
 - PAC (Prehospital Audit Committee)
 - MAC (Medical Audit Committee on Trauma)
 - San Diego Healthcare Disaster Council
- Also:
 - Cardiac Advisory Committee, Stroke Advisory Committee
 - EMS-C (EMS for Children)
 - CSA-17 and CSA-69 Advisory Committees
 - EMOC (Emergency Medical Oversight Committee – SDCMS)
- Traditional Radio Room
- Medic calls the hospital
- Nurse on the radio
- Physician available
- Base Hospital System
- Base providers
 - BHNC: Base Hospital Nurse Coordinator
 - MICN: Mobile Intensive Care Nurse
- Base:
 - Prehospital providers call to prior to bringing patient to facility
 - MICN provides additional guidance and orders as needed (BHO)

- MICN contacts BHP for guidance/orders (BHPO)
- Most are Standing Orders
- QCS
- San Diego Base Hospitals
- UCSD
 - Sharp CV, Sharp Coronado, UCSD-LJ
- Scripps Mercy
 - PVH, Scripps CV, USN Balboa*
- Scripps La Jolla (Memorial)
 - VA Medical Center*, Scripps Green*
- Sharp Memorial
 - Kaiser, Childrens
- Sharp Grossmont
 - Alvarado
- Palomar
 - Pomerado, Fallbrook
- Tri-City
 - Scripps Encinitas, USN Camp Pendleton*

*Not officially designated as an emergency facility

- Medical Catchment Areas
- San Diego Trauma Centers
- UCSD-HC
- Scripps Mercy
- Scripps La Jolla (L2)
- Sharp Memorial (L2)
- Childrens Hospital (L2)
- Palomar (L2)
- Trauma Catchment Areas
- SD EMT-Basic Scope of Practice
- Evaluate
 - Temp, BP, P, RR, O₂ sat
 - LOC, pupils
- BLS
 - CPR, AED (cert)
- Airway Aids

- ETAD, OPA, NPA, Sxn, O₂ (NC, FM, PPV)
- Trauma
 - Immobilization, extrication, triage, transport
- Pilot Studies
- SD EMT-Basic Scope of Practice
- Meds
 - Assist pt w/ oral glucose, own NTG/pumps/Epi-pen & other self admin emergency meds (e.g., albuterol)
- Assist Paramedics
 - ALS procedures & Saline
- Transport pt with lines & monitors
 - If stable, infusions of glucose or isotonic solution at pre-set rate, no meds 30 min prior to transport
 - NGT, hep lock, foley, g-tube, trach, indwelling lines (cannot transport with a-line or uncapped central lines)
 - Has not received ALS interventions/equipment
- SD Paramedic Scope of Practice
(P-401) / ALS Skills (P-104)
- Cardiac:
 - 12-lead Monitors w/ pulse oximetry
 - Defibrillation, Cardioversion
 - Pacemaker
 - Valsalva
- Venous Access
 - PIV incl EJ; IO (adult & peds)
 - Indwelling: emergency access only
- Misc
 - FSBG
 - Temp
 - Broselow Tape (P-117)
- SD Paramedic Scope of Practice
(P-401) / ALS Skills (P-104)
- Airway
 - CPAP
 - ETT, ETAD (Combi-tube/King LT)
 - Confirmation: quantitative ETCO₂, colorimetric ETCO₂, EDD
 - NG/OG tubes

- Nebulizer
- Remove FB w/ Magill's
- Trauma
 - Spinal immobilization, splinting
 - Needle Thoracostomy
 - Tourniquets
- Access
 - Intranasal Meds
 - EZ-IO (adults & peds)
- SD ALS Med List (P-115)
 - Adenosine
 - Albuterol
 - Aspirin
 - Atropine
 - Atrovent
 - Benadryl
 - Calcium Chloride
 - Charcoal
 - Dextrose (50%, 25%)
 - Dopamine
 - Epi
 - Glucagon
 - Lidocaine
 - Lidocaine Jelly 2%
 - Morphine
 - Narcan
 - Normal Saline
 - NTG
 - NaHCO₃
 - Oxygen
 - Versed
 - Zofran
- ALS Standing Orders (SO)
- Synchronized cardioversion
 - Unconscious SVT
 - Unconscious Afib/A-flutter with HR ≥ 180
 - Unstable VT

- CPAP
 - Age \geq 15
 - RR \geq 25 or SpO₂ < 94%
 - Moderate to severe respiratory distress from CHF, COPD, asthma, pneumonia, or drowning
- Defibrillation (VF, pulseless VT)
- ALS Standing Orders (SO)
- External cardiac pacing
 - Narrow complex bradycardia with pulse refractory to atropine
 - Wide complex bradycardia
- Glucose monitoring
- Access indwelling devices
 - For immediate IV therapy only, not just access
- IO initiation/infusion in acute status patients
- Intubation (ET/ETAD/PAA/Stoma)
 - Apnea or ineffective respirations
 - Unconscious or decreasing LOC
- ALS Standing Orders (SO)
- Direct laryngoscopy/Magill forceps
 - Airway obstruction from foreign body with decreasing LOC/unconscious
- NG/OG placement
 - Gastric distention interfering with ventilation
- Needle thoracostomy
 - Severe respiratory distress with unilateral absent breath sounds and SBP < 90 in intubated or PPV patients
- ALS Standing Orders (SO)
- Reduction of fractures
 - Grossly angulated long bone fractures, if necessary for splinting
- Tourniquet
 - For severe extremity injury when direct pressure or pressure dressing fails to control life-threatening hemorrhage (more liberal in mass casualty incident, can use first-line)
- Valsalva for SVT
- MICN Base Hospital Order (BHO)
- Adenosine – if h/o COPD or bronchospasm
- Amiodarone post-conversion of VT/VF
- Epi (IV/IO) for anaphylaxis

- Dopamine
- Morphine/NTG for hypotensive CP or resp. distress
- Cardioversion of conscious but unstable SVT
- 4th and later doses of atropine for OP poisoning
- Repeat Narcan for symptomatic opioid OD
- 4th and later doses of epi for VF/pulseless VT/PEA
- Change in previously started medical interventions
- Pediatric needle thoracostomy, neonatal IO
- CaCl₂ and NaHCO₃ for crush injury (>2 hrs)
- MICN will call BHP (ie, YOU)
 - BHPO
 - MCI
 - Cardiac Arrest
 - Cardioversion-Peds
 - STEMI
 - Stroke Code
 - Anaphylactic Reactions
 - Epi SQ in >65 yo w/ card hx
 - Diving Accidents
 - Near Drowning
 - In-coming MTVs
 - Trauma Resource
 - Airway difficulties
 - Acute status pts advice
- AMA
 - aloc,
 - lack of capacity,
 - etoh/drugs,
 - peds <1 yo,
 - hypoglycemia resolved +tx,
 - poss signif risk for m/m
- Prehospital delivery (Baby & Mom go to ED first)
- Imminent delivery unable to send to L+D safely
- NaCO₃ for TCA OD
- BHP Orders (BHPO)
- AMA
- Pronouncements (except for obvious death)

- MD on Scene
- Variations from protocol--to prevent M/M (P-408)
- External Pacing
 - Unstable bradycardia unresponsive to atropine
- Cardioversion in conscious pt with AFib/A-flut
- Versed for pre-cardioversion for AfF/A-flut
- Morphine
 - chronic pain states, isolated CHI, acute onset severe HA, Drug/ETOH intoxic, multiple trauma, GCS < 15, abdominal pain, active labor
- BHP Orders (BHPO)
- Suspected cardiac CP or respiratory distress
 - Repeat NTG for SBP < 100
- Epi for respiratory distress patients without definite history of asthma
- Removal of impaled object
 - SO face/neck for AW Obstruction
- Peds:
 - SVT: adenosine, versed, synch CV
 - Cardioversion contraindicated if defib cannot deliver <5J/kg or equivalent biphasic energy
- Trauma Resource
- Cyanide kit use
- BHP on Radio for:
- MD On-Scene
- MICN must consult BHP for the following:
- AMA
 - If Medic or MICN feel BHP should speak to a patient prior to singing out AMA
 - Elderly AMA (>65 yo) or peds > 1 yo if abnl v/s)
 - Significant risk of morbidity
 - Parental AMA of patient <1 yo
 - Pt wanting to AMA that is not oriented, on drugs/etoh, otherwise lacks capacity to make decisions
- Interfacility Transfers (S-008)
- Emergency medical condition has been stabilized
 - Can transfer unstable pts to medically facilitate patients care (sending & receiving MD must concur)
- Transferring MD determines mode of txpt & accompanying medical provider level
- Sending facility must do a Medical Screening Exam

-
- EMTALA
 - MD On Scene (P-403)
 - MD on Scene may:
 - Offer assistance, but leave Base in control
 - Our EMS system is specialized for this care
 - Commandeer the Scene
 - BHP Must:
 - Be in direct voice contact with MD at scene
 - Get name, specialty
 - Read "P403 attachment A" to MD at scene
 - If MD still wants to take over scene control, you can:
 - Request Ca Med Lic proof shown to medics
 - Approve/deny MD on scene's involvement
 - Medics can only do EMT-Basic skills now
 - Definitions
 - Unstable:
 - Adult: SBP<90 and CP, dyspnea, or LOC
 - Peds: poor perfusion (cyanosis, delayed cap refill, mottling, diminished/absent peripheral pulses), ALOC, dyspnea, or SBP <(70+(2 x age))
 - Peds
 - Child: <37 kg, appears <15yo
 - Otherwise considered an adult
 - Infant: 1 mo-12 mo
 - Newborn: <= 30 days
 - Infant Safe Surrender at any Fire Station
 - STEMI System
 - Ability to provide prompt PCI & meet outcome benchmarks (AHA)
 - County Wide:
 - Medics obtain 12 lead ***ACUTE MI*** & calls MICN for "Code STEMI"
 - MICN calls you w/ story-cardiologist can be sent ECG. No cath lab activation until you see ECG which is electronically transmitted from field provider
 - Stroke System
 - Focal neuro sxs
 - Unilateral weakness/numbness/blindness
 - Loss of Speech
 - Loss of balance
 - Well established time of onset

- <4 hrs(tPA) or 4-12 hrs for study protocols
- Age> 18 yo
- MICN calls you w/ “Stroke Code in X min”
- Stroke Team activated from field
- Hospital Diversion/Bypass (S-010)
- Indications
 - ED saturation—resources are fully committed & unavailable for incoming ambulance patients
 - Specialty Bypass
 - Neuro/CT scan unavailability—no Stroke Codes
 - Trauma—Trauma Attg will request
 - Internal Disaster (Code Orange)
- Rules:
 - Still take our own patients
 - If all closed, none closed
- Trauma System
- Major Trauma Victim (MTV) *See algorithm
 - Abnl v/s
 - Anatomy
 - Mechanism of Injury
 - Co-morbid or other mechanism factors
- Trauma Resource
 - Patient not meeting obvious MTV criteria but potential for serious traumatic injury needing trauma center resources is high
- UCSD is the Childrens Trauma Center B/U

- Trauma System
- OR Resus
 - Full cardiac arrest 2/2 penetrating trauma
 - 2/2 blunt traumatic arrest w/P, RR, or recent loss of this v/s (at door or on helipad)
 - Hemodynamically unstable, unresponsive to fluids
 - Major external hemorrhage that cannot be controlled
 - NOT for evisceration, amputation, isolated CHI
- ED Airway Backup
- Annex D
- SD County Multi-casualty/Disaster Plan

- MICN will call w/ “Annex D”
 - Reports #pts & their acuity
 - Initiates set up of disaster equip
 - Coordinates w/ HCC
- ED Response to Code Triage
- Receive & triage field pts
 - To ED: Immed, Delayed, less severe trauma pts
 - To Trauma: pts req’g urgent surgery
 - To Shock & Holding (PACU): when Trauma is full
 - NO OR RESUS in a disaster
- Suggestions for Happiness
- Know the difference between an EMT and a paramedic
 - EMT: About 120 hours of training. Can do basic (but very important!) skills.
 - Paramedic: About 2,000 hours of training. Can give medications and do advanced skills.
- Don’t assume that somebody does – or doesn’t – know something based on their level of formal training
Remember that paramedics have valuable insight into a patient’s history
 - They’ve been in their house, shack, office, etc.
 - They’ve often run on that patient before
 - They know that patient’s neighborhood
- So, try to get report from the medics before they leave on another call
 - If the nurse takes report, you can’t ask any questions of the medics
- Suggestions for Happiness
- Be courteous and polite to everybody you work with – this includes EMS personnel
- Don’t be rude, flippant, or vulgar on the MICN-MD phone or the EMS radio
 - We record each and every call for QI/QA
- Don’t hesitate to get off of the phone and come to the radio if you have questions for the medics
 - It’s faster and more accurate
- Suggestions for Happiness
- Most importantly, don’t be afraid to ask for help
 - Remember to look at the protocol book (coming soon to a doc box near you!) if you need clarifications
 - Chris Kahn can be paged 24/7 if needed for time-critical EMS issues
- Questions?



Appendix A - Letters of Support:

CFA Local 3730
Kaiser Permanente
San Diego County EMS
Palomar College



Carlsbad Firefighters Association • Local 3730

P.O. Box 945 • Carlsbad, California 92018-0945 • (760) 729-3730 phone • (760) 729-7971 fax
www.carlsbadfirefighters.org • iafflocal3730@aol.com

September 21, 2013

Howard Backer MD
Community Paramedicine – Mobile Integrated health
Emergency Medical Services Authority

Dr. Backer,

The Carlsbad Firefighters Association is submitting this letter in support of the Carlsbad Fire Department's letter of intent to participate in the Health Workforce Pilot Project.

Carlsbad Firefighter/Paramedics are proud to be a part of this progressive organization. In 1978 our Firefighters became some of the very first licensed Paramedics in the county. In the early 1990's, Carlsbad again led in the county by placing Firefighter/Paramedics on all first responding fire engines. We are aware of the additional training required and shall be committed to the success of this project. We appreciate the opportunity to work in expanded roles in order to enhance our community's health care needs.

Thank you for considering the Carlsbad Fire Department and its Members for this Pilot Project.

Sincerely,

Chris Lawrence

Chris Lawrence
President



County of San Diego

HEALTH AND HUMAN SERVICES AGENCY

NICK MACCHIONE, FACHE
DIRECTOR

WILMA J. WOOTEN, M.D., M.P.H.
PUBLIC HEALTH OFFICER

PUBLIC HEALTH SERVICES
HEALTH SERVICES COMPLEX

3851 Rosecrans Street
San Diego, CA 92110
(619) 542-4170 FAX (619) 542-4186

Border Health
California Children Services
Community Epidemiology
Emergency & Disaster Medical Services
HIV, STD and Hepatitis
Immunization
MAA/TCM Program
Maternal, Child and Family Health Services
Public Health Laboratory
Public Health Nursing
Tuberculosis Control & Refugee Health
Vital Records

EMERGENCY MEDICAL SERVICES

6255 Mission Gorge Road
San Diego, CA 92120
(619) 285-6429 Fax: (619) 285-6531

September 27, 2013

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Health
Emergency Medical Services Authority
lou.meyer@ emsa.ca.gov

Dear Mr. Meyer:

The County of San Diego Emergency Medical Services (EMS) has received and reviewed the Carlsbad Fire Department Letter of Intent to participate in the Health Workforce Pilot Project being offered by the California Emergency Medical Services Authority (EMSA). We are writing this letter in support of the proposed community paramedicine pilot project, *New Methods of Directing Patient Care*.

The Carlsbad Fire Department has the resources and local community support to participate in determining whether paramedics working in an expanded role can help improve health system integration, efficiency and fill identified health care needs. Once approved, County EMS will be involved in further project development, oversight and monitoring of patient safety, quality assessment and improvement of the pilot program, working with Carlsbad Fire Department.

Thank you for considering the Carlsbad Fire Department proposal for the pilot project. If you have any questions we can be reached at 619-285-6429.

Sincerely,

BRUCE E. HAYNES, M.D.
Medical Director

MARCY METZ, Chief
Emergency Medical Services

cc: Wilma J. Wooten, M.D., M.P.H., Public Health Officer



September 17, 2013

Linda Allington RN, MPH, MPA
EMS Manager
Carlsbad Fire Department
2560 Orion Way
Carlsbad, CA 92010

Dear Ms. Allington:

I am writing to express Kaiser Permanente's support in principle of the Carlsbad Fire Department proposal to develop a community paramedicine pilot program. We understand that the goal of this pilot program is to assess whether paramedics working in an expanded role in their community can help improve health system integration, efficiency, and/or fill identified health care needs.

We understand that the pilot program you have proposed is greatly needed in the Carlsbad community. We look forward to this program helping to alleviate overcrowding in emergency departments, decrease wait times for ambulances transporting patients to emergency departments, decrease overall healthcare expenditures and improve the patients' general care experience.

Kaiser Permanente is enthusiastic about participating in the pilot program as currently described, both within the currently identified local communities and if the program expands to service other Southern California communities. We believe this will benefit the residents of these communities generally, as well as contributing to optimal coordinated care for our Kaiser members. Our participation would be, naturally, conditioned on the paramedics being properly trained to follow appropriate patient selection criteria for your program, as approved the San Diego County EMS Agency, and other important parameters and assurances. We understand that the target patient population will be those patients transported by the fire department who have been appropriately determined not to require stabilizing emergency medical care and who have agreed to participate in the pilot program.

We share your optimism that this pilot program will be approved by the San Diego County EMS Agency, the California State EMS Authority and the California Office of Statewide Health Planning and Development. Once approved, Kaiser looks forward to further discussing our respective roles in detail.

Sincerely,

A handwritten signature in black ink, appearing to read "Mary Ann Barnes".

Mary Ann Barnes
Sr. Vice President and Executive Director

MAB:plm

4647 Zion Avenue
San Diego, California 92120
(619) 528-5000



EMERGENCY MEDICAL EDUCATION DEPARTMENT

Robert P. Deegan
Superintendent/President

09/20/13

Howard Backer, MD
EMSA Director
10901 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670-6073

Governing Board
Nancy C. Chadwick, M.S.W., M.P.A.
Mark R. Evilsizer, M.A.
John J. Halcón, Ph.D.
Nancy Ann Hensch, B.A.
Paul P. McNamara, B.A.
Student Trustee:
A.S.G. President

Dr. Backer,

I am writing this letter in support of the Carlsbad Fire Department's participation in the development, and implementation of Community Paramedic through the Health Workforce Project.

Palomar College is a large community college located in north San Diego County. We provide all levels of EMS education from Emergency Medical Response and CPR, to EMT and Paramedic training. We have been a paramedic training program since 1988 and are fully accredited by the Committee on Accreditation of Educational Programs for the EMS Professionals. Our instructors are active participants in the EMS system by being active on local and state committees. Pete Ordille is a regional faculty member for ACLS and I am an affiliate faculty for PHTLS.

Palomar College has reviewed the Community Paramedic curriculum and we have talked to several colleagues in Texas who teach their Community Paramedic course. We feel like we have a good understanding of the CP program and all the possibilities associated with it. With that, we feel we are poised to offer the training needed for this exciting new program.

We look forward to this new opportunity for education and advancement for our communities. Please feel free to call me if you require any further information.

Sincerely,

Debi Workman

Debi Workman, RN, MICN, MS EMS Admin
AHA Training Center Coordinator
Program Director Emergency Medical Education
Palomar College
1951 East Valley Parkway
Escondido, CA 92027
760-744-1150 x8150
Fax 760-432-0353

Carlsbad Fire Department Community Paramedicine

Appendix B

Patient Consent Form

I understand that this visit is part of a demonstration project intended to establish whether EMT-Paramedics in San Diego County can increase access to the most appropriate level of health care for patients who do not need care in an emergency department. I understand that only specially trained Alternate Destination Paramedics, will be able to participate in this study and the study is authorized by the California Office of Statewide Health Planning and Development.

As a participant in this demonstration project, I understand the following:

1. The specially trained Alternate Destination Paramedic can only provide services authorized under the demonstration project in addition to those services already authorized for EMT-Paramedics.
2. The specially trained Alternate Destination Paramedic can only provide services in locations authorized under the demonstration project in addition to those already authorized for EMT-Paramedics.
3. The specially trained Alternate Destination Paramedic can only provide transportation to locations authorized under the demonstration project in addition to those already authorized for EMT-Paramedics
4. A supervising health care professional is available for consultation at all times that the EMT-Paramedic is treating me or the person for whom I am consenting.
5. No warranty or guarantee has been made to me regarding any treatment or any procedure received.
6. Participation in this demonstration project does not constitute my assumption of risk.
7. I have the right to refuse to participate or decide to withdraw from this demonstration at any time without penalty.
8. If I to refuse to participate or decide to withdraw from this demonstration, transportation to the closest emergency department that is able to provide care at this time will be immediately provided in accordance with existing regulation of EMT-Paramedic practice.
9. My identity will not be disclosed without my separate consent, except as specifically required by law.

I have been given full opportunity to ask questions about this project, about the types of care that may be provided, about the location at which care will be provided, and about any risks involved. I voluntarily consent to and authorize treatment by the Community Paramedic(s). I certify that I have read this form and that I understand its contents.

Signature: _____
Date

Witness Signature: _____
Date

SUBJECT: SCOPE OF PRACTICE OF EMT-PARAMEDIC IN
SAN DIEGO COUNTY

Date: 7/01/2010

- I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.172 and 1798.
- II. **Purpose:** To identify the scope of practice of Paramedics in San Diego County.
- III. **Policy:**
 - A. A Paramedic may perform any activity identified in the scope of practice of an EMT-1 in Chapter 2 of the California Code of Regulations, Division 9, Title 22.
 - B. A Paramedic student, or a currently licensed Paramedic affiliated with an approved Paramedic service provider, while caring for patients in a hospital as part of his/her training or continuing education, under the direct supervision of a physician, registered nurse, or physician's assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, may, in accordance with the County of San Diego Emergency Medical Services Branch (EMS) Policies, Procedures and Protocols, perform the following procedures and administer the following medications:
 1. Perform defibrillation.
 2. Perform synchronized cardioversion.
 3. Visualize the airway by use of the laryngoscope and remove foreign body(ies) with forceps.
 4. Perform pulmonary ventilation by use of the lower airway multi-lumen adjuncts, Perilaryngeal airway, and by adult oral endotracheal intubation (adult and pediatric*).
 5. Institute intravenous (IV) catheters, needles or other cannulae (IV lines) in peripheral veins, institute saline locks, and monitor and administer medications through pre-existing vascular access.

Approved:



EMS Medical Director

SUBJECT: SCOPE OF PRACTICE OF EMT-PARAMEDIC IN
SAN DIEGO COUNTY

Date: 7/01/2010

6. Administer intravenous glucose solutions or isotonic salt solutions.
7. Obtain venous blood samples.
8. Perform Valsalva maneuver.
9. Perform nasogastric intubation* and gastric suction*.
10. Perform needle thoracostomy.
11. Monitor thoracostomy tubes.
12. Perform Intraosseous needle placement
12. Monitor and adjust IV solutions containing Potassium equal to or less than 20mEq/L.
13. Perform blood glucose monitoring test.
14. Administer, using prepackaged products when available, the following medications utilizing the listed routes: intravenous, intramuscular, intraosseous*, subcutaneous, transcutaneous, rectal, sublingual, endotracheal, oral or topical.
 - a. 25% and 50% dextrose;
 - b. Activated charcoal;
 - c. Adenosine;
 - d. Albuterol;
 - e. Aspirin;
 - f. Atropine sulfate;
 - g. Atrovent (ipratropium bromide); *
 - h. Calcium chloride;
 - i. Diazepam

Approved:


EMS Medical Director

SUBJECT: SCOPE OF PRACTICE OF EMT-PARAMEDIC IN
SAN DIEGO COUNTY

Date: 7/01/2010

- j. Diphenhydramine;
- k. Dopamine hydrochloride;
- l. Epinephrine;
- m. Furosemide;
- n. Glucagon;
- o. Lidocaine hydrochloride;
- p. Midazolam;
- q. Morphine sulfate;
- r. Naloxone hydrochloride;
- s. Nitroglycerine preparations (excluding IV);
- t. Sodium bicarbonate;
- u. Pralidoxime chloride (2 PAM Chloride) –requires completion of specialized training.

(Note: Items identified with an asterisk are included as a local optional paramedic intervention, pursuant to CCR Title 22, Div 9, Sec 100145,c, 2)*

15. Perform any prehospital emergency medical care treatment procedure(s) or administer any medication(s) on a trial basis when approved by the medical director of the local EMS agency. Study procedure shall be as defined in Title 22, Division 9, Chapter 4 of the California Code of Regulations.

Approved:



EMS Medical Director

SUBJECT: TREATMENT PROTOCOL --
AIRWAY OBSTRUCTION (Foreign Body)

Date: 7/1/2011

BLS

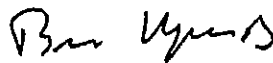
ALS

<p>For a <u>conscious</u> patient:</p> <ul style="list-style-type: none">• Reassure, encourage coughing• O₂ prn <p>For inadequate air exchange: airway maneuvers (AHA)</p> <ul style="list-style-type: none">• Abdominal thrusts• Use chest thrusts in the obese or pregnant patient <p><u>If patient becomes unconscious or is found unconscious</u></p> <ul style="list-style-type: none">• Begin CPR <p><u>Once obstruction is removed:</u></p> <ul style="list-style-type: none">• High flow O₂, ventilate prn• O₂ Saturation prn	<p><u>If patient becomes unconscious or has a decreasing LOC:</u></p> <ul style="list-style-type: none">• Direct laryngoscopy and Magill forceps <u>SO</u>. MR prn <p><u>Once obstruction is removed:</u></p> <ul style="list-style-type: none">• Monitor/EKG• IV/IO <u>SO</u> adjust prn
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Note: If unable to secure airway, transport STAT.

Document revised: 7/1/2011

Approved:



EMS Medical Director

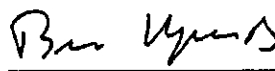
BLS

ALS

<ul style="list-style-type: none">• Ensure patent airway• O₂ Saturation prn• O₂ and/or ventilate prn • Remove stinger/injection mechanism • May assist patient to self medicate own prescribed EpiPen or MDI ONE TIME ONLY. Base Hospital contact required prior to any repeat dose.	<ul style="list-style-type: none">• Monitor EKG• IV/IO <u>SQ</u> adjust prn <p><u>Allergic Reaction: mild (rash, urticaria)</u></p> <ul style="list-style-type: none">• Benadryl 50 mg IV/IM <u>SQ</u> <p><u>Allergic Reaction: acute (facial/cervical angioedema, bronchospasm or wheezing):</u></p> <ul style="list-style-type: none">• Epinephrine 1:1000 0.3mg IM <u>SO</u>. MR x2 q10" <u>SO</u>• Benadryl 50mg IM/IV <u>SQ</u>• Albuterol 6ml 0.083% via nebulizer <u>SO</u>. MR <u>SO</u>• Atrovent 2.5ml 0.02% via nebulizer added to the first dose of Albuterol <u>SQ</u> <p><u>Anaphylaxis (shock or cyanosis):</u></p> <ul style="list-style-type: none">• Epinephrine 1:1,000 0.3mg IM per <u>SQ</u>. MR x2 q10" <u>SO</u>.• 500 ml fluid bolus IV/IO for systolic BP < 90 <u>SQ</u>. MR to maintain systolic BP >90 <u>SQ</u>• Benadryl 50mg IM/IV <u>SQ</u>• Albuterol 6ml 0.083% via nebulizer <u>SO</u> MR <u>SO</u>• Atrovent 2.5ml 0.02% via nebulizer added to the first dose of Albuterol <u>SQ</u> • Epinephrine 1:10,000 0.1mg IV/IO <u>BHO</u>. MR x2 q3-5" <u>BHO</u> • Dopamine 400mg/250ml @ 10-40mcg/kg/min IV/IO drip. Titrate systolic BP >90 <u>BHO</u>
---	--

Document revised 7/1/2011

Approved:



EMS Medical Director

BLS

ALS

<ul style="list-style-type: none">• Ensure patent airway, O₂ and/or ventilate prn• O₂ Saturation prn• Spinal stabilization prn• Secretion problems, position on affected side• Do not allow patient to walk• Restrain prn <p><u>Hypoglycemia (suspected) or patient's glucometer results read <60 mg/dL</u></p> <ul style="list-style-type: none">• If patient is awake and has gag reflex, give 3 oral glucose tabs or paste (15g total). Patient may eat or drink if able.• If patient is unconscious, NPO <p><u>CVA/Stroke:</u></p> <ul style="list-style-type: none">• For suspected stroke with major deficit with onset of symptoms known to be <4 hours in duration, expedite transport.• Make initial notification early to confirm destination.• Use the Prehospital Stroke Scale in the assessment of possible CVA patients (facial droop, arm drift and speech abnormalities).• Only use supplemental O₂ for O₂ saturation <94% <p><u>Seizures:</u></p> <ul style="list-style-type: none">• Protect airway, and protect from injury• Treat associated injuries <p><u>Behavioral Emergencies (S-422 and S-142)</u></p>	<ul style="list-style-type: none">• Monitor EKG• IV/IO <u>SO</u> adjust prn• Monitor blood glucose prn <u>SO</u> <p><u>Symptomatic ?opioids OD (with respiratory rate <12: (Use caution in opioid dependent pain management patients)</u></p> <ul style="list-style-type: none">• Narcan 2mg IN/IM/IV <u>SO</u>. MR <u>SO</u>, titrate IV dose to effect• If patient refuses transport, give additional Narcan 2mg IM <u>SO</u> <p><u>Hypoglycemia:</u></p> <p><u>Symptomatic patient with altered LOC or unresponsive to oral glucose agents:</u></p> <ul style="list-style-type: none">• D₅₀ 25Gm IV/IO <u>SO</u> if BS <60 mg/dL• If patient remains symptomatic and BS remains <60 mg/dL MR <u>SO</u>• If no IV: Glucagon 1ml IM <u>SO</u> if BS < 60 mg/dL <p><u>Seizures:</u></p> <p>For:</p> <ul style="list-style-type: none">A. Ongoing generalized seizure lasting ≥5" (includes seizure time prior to arrival of prehospital provider) <u>SO</u>B. Focal seizure with respiratory compromise <u>SO</u>C. Recurrent seizures without lucid interval <u>SO</u>D. Eclamptic seizure of any duration <u>SO</u> <p>Give:</p> <ul style="list-style-type: none">• Versed 0.1mg/kg slow IV/IO <u>SO</u> to a max dose of 5mg (d/c if seizure stops) <u>SO</u>, MR x1 <u>SO</u> <p><u>If no IV/IO:</u></p> <ul style="list-style-type: none">• Versed 0.2mg/kg IM <u>SO</u> to max dose 10mg <u>SO</u>, MR x1 <u>SO</u>OR• Versed 0.2mg/kg IN <u>SO</u> to max dose 5mg <u>SO</u>, MR x1 <u>SO</u>
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In symptomatic ?opioids OD (excluding opioid dependent pain management patients) administer Narcan IN/IM prior to IV.

SUBJECT: TREATMENT PROTOCOL – BURNS

Date: 7/1/2011

BLS

ALS

<ul style="list-style-type: none">• Move patient to a safe environment• Break contact with causative agent• Ensure patent airway, O₂ and/or ventilate prn• O₂ Saturation prn• Treat other life threatening injuries <p><u>Thermal burns:</u></p> <ul style="list-style-type: none">• Burns of < 10% body surface area, stop burning with non-chilled water or saline• For burns \geq 10% body surface area, cover with <u>dry</u> dressing and keep warm• Do not allow the patient to become hypothermic <p><u>Chemical burns:</u></p> <ul style="list-style-type: none">• Brush off dry chemicals• Flush with copious amounts of water <p><u>Tar burns:</u></p> <ul style="list-style-type: none">• Cool with water, transport; do not remove tar	<ul style="list-style-type: none">• Monitor EKG• IV/IO <u>SO</u> adjust prn <ul style="list-style-type: none">• Treat pain as per Pain Management Protocol (S-141) <p>For patients with \geq20% 2nd or \geq5% 3rd degree burns and \geq15 yo:</p> <ul style="list-style-type: none">• 500 ml fluid bolus IV/IO then TKO <u>SO</u> <p>In the presence of respiratory distress with bronchospasm:</p> <ul style="list-style-type: none">• Albuterol 6ml 0.083% via nebulizer <u>SO</u>. MR <u>SO</u>
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Note: Base Hospital Contact and Transport (Per S-415) will be made to UCSD Base Hospital for patients meeting burn center criteria.

BURN CENTER CRITERIA

Patients with burns involving:

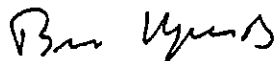
- \geq 20% 2nd or \geq 5% 3rd degree of BSA
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet or perineum or circumferential
- significant electrical injury due to high voltage (greater than 110 volts)

Disposition:

- Consider Hyperbaric chamber for suspected CO poisoning in unconscious or pregnant patients.

Document 7/1/2011

Approved:



EMS Medical Director

BLS

- Ensure patent airway, protecting C-spine
- Spinal stabilization pm. (Except in penetrating trauma without neurological deficits.)
- O₂ Saturation pm
- O₂ and/or ventilate pm
- Control obvious bleeding
- Keep warm

Abdominal Trauma:

- Cover eviscerated bowel with saline pads

Chest Trauma:

- Cover open chest wound with three-sided occlusive dressing; release dressing if ?tension pneumothorax develops.

Extremity Trauma:

- Splint neurologically stable fractures as they lie. Use traction splint as indicated.
- Grossly angulated long bone fractures with neurovascular compromise may be reduced with gentle unidirectional traction for splinting per BHO
- Apply tourniquet in severely injured extremity when direct pressure or pressure dressing fails to control life-threatening hemorrhage.
- In Mass Casualty direct pressure not required prior to tourniquet application

Impaled Objects:

- Immobilize & leave impaled objects in place. Remove BHPO
- **Exception:** may remove impaled object in face/cheek or from neck if there is total airway obstruction.

Neurological Trauma (head and spine injuries):

- Ensure adequate oxygenation without hyperventilating patient. Goal: 6-8 ventilations/minute

Pregnancy of ≥ 6mo:

- Where spinal stabilization precaution is indicated, tilt on spine board 30 degrees.

Blunt Traumatic Arrest: Consider pronouncement at scene
BHPO

ALS

- Monitor EKG
- IV/IO SO
- If MTV IV/IO en route SO
- 500ml fluid bolus to maintain BP at 80
- EtCO₂ monitoring, SO

- Treat pain as per Pain Management Protocol (S-141)

Crush injury with extended compression > 2 hours of extremity or torso:

Just prior to extremity being released:

- 500ml fluid bolus IV/IO, then TKO SO
- CaCl₂ 250mg IV/IO over 30 seconds BHO
- NaHCO₃ 1mEq/kg IV/IO BHO

Grossly angulated long bone fractures

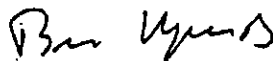
- Reduce with gentle unidirectional traction for splinting SO

Severe Respiratory Distress with unilateral absent breath sounds and systolic BP < 90 in intubated or positive pressure ventilated patients:

- Needle thoracostomy SO

Blunt Traumatic Arrest:

- Consider pronouncement at scene*



*Reference Policy S-402 Prehospital Determination of Death

TRANSPORT GUIDELINES:

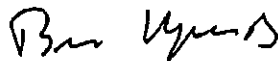
Routine Disposition-Pediatric patients who meet criteria outlined in T-460 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Designated Pediatric Trauma Center, EXCEPT in the following situations:

1. Adult + Child:

- a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility. If both patients are critical, or if there are other questions, both may be delivered to the designated adult trauma center.
 - b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to pediatric trauma facility and the adult to the catchment area trauma facility.
- 2. Bypass/Diversion:** If the designated pediatric trauma center is "on bypass", pediatric trauma candidates should be delivered to UCSD.
- 3. A <15 year old pregnant patient** should be delivered to the UCSD.

Document revised 7/1/2011

Approved:



EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- TRIAGE, MULTIPLE PATIENT
INCIDENT/MASS CASUALTY INCIDENT/ANNEX D

Date: 7/1/2012

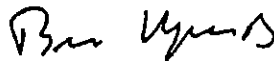
BLS/ALS

- A. One person will assume responsibility for all scene medical communication
- B. Only one (1) BH will be contacted during the entire incident.
- C. Prehospital providers will utilize Simple Triage and Rapid Treatment (START) guidelines to determine priorities of treatment and transport
- D. If staffing resources are limited, CPR need not be initiated for arrest victims, however, if CPR has been initiated prior to arrival of ALS personnel or briefly during assessment, discontinue only if one of the following occurs or is present*:
- 1) subsequent recognition of obvious death SO
 - 2) BHPO
 - 3) presence of Advance Health Care Directive that specifies DNR status, DNR Form/Order or Medallion SO
 - 4) lack of response to brief efforts in the presence of any other potentially salvageable patient requiring intervention SO
- E. Radio communication for multi-patient incident (MPI) need only include the following on each patient:
1. patient number assignment (i.e., #1, #2 . . .)
 2. age
 3. sex
 4. mechanism
 5. chief complaint
 6. abnormal findings
 7. treatment initiated
 8. ETA
 9. destination
 10. transporting unit number
- F. Radio Communication for mass casualty incident (MCI) or Annex D activation need only include the following on each patient:
1. patient number if assigned (i.e., #1, #2 . . .)
 2. triage category (Immediate, Delayed, Minor)
 3. destination
 4. transporting unit number

* Reference Policy S-402 Prehospital Determination of Death

Document reviewed: 7/1/2012

Approved:



EMS Medical Director

BLS

ALS

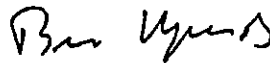
<ul style="list-style-type: none">• Assess level of pain• Ice, immobilize and splint when indicated• Elevation of extremity trauma when indicated	<p><u>Pain score assessment of < 5:</u></p> <ul style="list-style-type: none">• Continue to monitor and reassess pain as appropriate <p><u>For treatment of pain score assessment of >5 with BP >100 systolic:</u></p> <p><u>Titrate to pain and vital signs:</u></p> <ul style="list-style-type: none">• MS 2-10mg IV to max 10mg <u>SQ</u> MR to max of 20mg <u>BHO</u>OR• MS 2-10mg IM <u>SQ</u>. MR to max 20mg <u>BHO</u>OR• MS 10mg PO <u>SQ</u>. MR to max 30mg <u>BHO</u> <p><u>BHPO for:</u></p> <ul style="list-style-type: none">• Chronic pain states• Isolated head injury• Acute onset severe headache• Drug/ETOH intoxication• Multiple trauma with GCS <15• Suspected active labor• Abdominal pain <p><u>For nausea and/or vomiting with MS administration:</u></p> <ul style="list-style-type: none">• Zofran 4mg IV/IM/ODT <u>SQ</u>, MR x1 q10' <u>SQ</u>
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Note: These orders may be implemented after the paramedic assesses the level of pain and determines if patient agrees to treatment. ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.

The parenteral dose relative strength of MS is three times the oral dose of MS.

Document revised: 7/1/2011

Approved:



EMS Medical Director

SUBJECT: PREHOSPITAL TREATMENT AND TRANSPORTATION OF ADULTS - REFUSAL OF CARE OR SUGGESTED DESTINATION, RELEASE Date: 7/01/2010

- I. **Authority:** Health and Safety Code, Division 2.5, Section 1798.
- II. **Purpose:** To establish a procedure for a patient or designated decision maker (DDM) to refuse care (assessment, treatment, or transport) or request an alternate disposition by EMS personnel.
- III. **Definitions:**
- A. AMA - The refusal of treatment or transport, by an emergency patient or his/her designated decision maker, against the advice of the medical personnel on scene or of the base hospital.
- B. Designated decision maker (DDM) - An individual to whom a person has legally given the authority to make medical decisions concerning the person's health care (i.e., through a Durable Power of Attorney for Health Care).
- C. Emergency Patient - Any person for whom the 9-1-1/EMS system has been activated and who meets the following criteria:
1. Has a chief complaint or suspected illness or injury; or
 2. Is not oriented to person, place, time, or event; or
 3. Requires or requests field treatment or transport; or
 4. Is under the age of 18 and is not accompanied by a parent or legal guardian.
- D. Release - A call outcome that occurs when the patient and the EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services and the patient does not require the services of the prehospital system.

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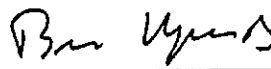

EMS Medical Director

SUBJECT: PREHOSPITAL TREATMENT AND TRANSPORTATION OF ADULTS - REFUSAL OF CARE OR SUGGESTED DESTINATION, RELEASE Date: 7/01/2010

IV. Policy:

- A. All emergency patients will be offered treatment and/or transport following a complete assessment.
- B. Against Medical Advice (AMAs)
 1. Adults have the right to accept or refuse any and all prehospital care and transportation, provided that the decision to accept or refuse these treatments and transportation is made on an informed basis and provided that these adults have the mental capacity to make and understand the implications of such a decision.
 2. The decisions of a Designated Decision Maker (DDM) shall be treated as though the patient was making these decisions for him/herself.
 3. For those emergency patients who meet base hospital contact criteria (S-415) and wish to sign AMA, prehospital personnel shall use their best efforts to make base hospital contact prior to the patient leaving the scene and prior to the responding unit leaving the scene. In the event that the patient leaves the scene prior to base hospital contact, field personnel shall still contact the base hospital for quality improvement and trending purposes only.
 4. The EMT, AEMT or paramedic should contact the base hospital and involve the MICN and/or base hospital physician in any situation in which the treatment or transport refusal is deemed life threatening or "high risk" by the EMT, AEMT or paramedic.
 5. Field personnel shall document, if possible, the following for all patients released AMA:
 - a. Who activated 9-1-1 and the reason for the call.

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Approved:



EMS Medical Director

SUBJECT: PREHOSPITAL TREATMENT AND TRANSPORTATION OF ADULTS - REFUSAL OF CARE OR SUGGESTED DESTINATION, RELEASE Date: 7/01/2010

- b. All circumstances pertaining to consent issues during a patient encounter.
- c. The presence or absence of any impairment of the patient/DDM such as by alcohol or drugs.
- d. The ability of the patient/DDM to comprehend and demonstrate an understanding of his/her illness or injury.
- e. The patient/DDM has had the risks and potential outcome of non-treatment or non-transport explained fully by the EMT, AEMT or Paramedic, such that the patient/DDM can verbalize understanding of this information.
- f. The reasons for the AMA, the alternate plan, if any, of the patient/DDM and the presence of any on-scene support system (family, neighbor, or friend [state which]).
- g. That the patient/DDM has been informed that they may re-access 9-1-1 if necessary.
- h. The signature of the patient/DDM on the AMA form, or, if the prehospital personnel are unable to have an AMA form signed, the reason why a signed form was not obtained.
- i. Consideration should be given to having patient/family recite information listed in sections IV.B.5. d-g above, to the MICN/BHP over the radio or telephone.

C. Patient Refusal of Transport to Recommended Facility

Should the situation arise wherein a patient refuses transport to what is determined by the base hospital to be the most accessible emergency facility equipped, staffed and prepared to administer care appropriate to the needs of the patient, but the patient requests transport to

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SUBJECT: PREHOSPITAL TREATMENT AND TRANSPORTATION OF ADULTS - REFUSAL OF CARE OR SUGGESTED DESTINATION, RELEASE Date: 7/01/2010

an alternate facility:

1. Field personnel should discuss with the base hospital the patient's or DDM's rationale for their choice of that alternate facility.
2. Inform the patient or DDM of base hospital's rationale for its selected destination.
3. If the patient still refuses transport to the selected destination, follow procedures for the patient to refuse treatment and/or transport "against medical advice" (AMA). However, if, in the judgment of the base hospital, the patient's refusal of transport would create a life-threatening or high-risk situation, and the patient continues to refuse the recommended destination, document the AMA and transport the patient to the requested facility if possible.
4. Arrange for alternate means of transportation to the facility of choice if appropriate.

D. Downgrade

1. Following a complete paramedic assessment and base hospital report (as required per County of San Diego EMS Policy S-415), the base hospital may authorize a downgrade in the transportation and treatment needs of an ALS-dispatched patient from advanced life support (i.e., paramedic treatment and transport) level of prehospital care to BLS (EMT treatment and transport) level of care and that unit can continue to transport the patient to any destination. All downgrades shall be reviewed by the agency's internal Quality Improvement program.
2. If the patient's condition deteriorates during the transport, the paramedic shall contact the base hospital authorizing the downgrade, initiate appropriate ALS treatment

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SUBJECT: PREHOSPITAL TREATMENT AND TRANSPORTATION OF ADULTS - REFUSAL OF CARE OR SUGGESTED DESTINATION, RELEASE Date: 7/01/2010

protocols, and deliver the patient to the most appropriate facility at the direction of the base hospital. The Base Hospital shall generate a report to the Prehospital Audit Committee documenting the incident.

3. If the paramedics have transferred care to a BLS service provider and the patient's condition deteriorates during the BLS transport, the EMT shall contact a base hospital, inform the base hospital that the patient had been downgraded from ALS to BLS, and deliver the patient to the most appropriate facility at the direction of the base hospital. The Base Hospital shall generate a report to the Prehospital Audit Committee documenting the incident.

E. Release

If the patient and EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services, and the patient does not require the services of the prehospital system, the patient may be released at scene. For those patients who meet base hospital contact criteria (S-415), field personnel shall attempt to contact the base prior to the patient leaving the scene.

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EMS Medical Director

**SUBJECT: BASE HOSPITAL CONTACT, PATIENT TRANSPORTATION
AND REPORT - EMERGENCY PATIENTS**

Date: 7/1/2010

- I. **Authority:** Health & Safety Code, Division 2.5, Section 1797.88; 1798. Title XXII, Section 100170, Civil Section 25.8.
- II. **Purpose:** To identify conditions under which EMT, AEMTs and paramedics shall, when encountering an emergency patient, contact a base hospital for notification, medical direction, or to give report; or (for EMTs) contact a receiving hospital to verify appropriate transport destination and give report.
- III. **Definitions:**
- A. **Aid Unnecessary** - Calls in which the person for whom 9-1-1 was called does not meet the definition of "emergency patient," and has agreed to make alternate transportation arrangements if necessary.
- B. **Call Canceled** - Calls to which EMS personnel were responding but the response was canceled prior to encountering an emergency patient or potential patient.
- C. **Complete Patient Report** - A problem-oriented verbal communication which includes:
1. Acuity.
 2. Age.
 3. Gender.
 4. Chief complaint(s).
 5. Vital signs (including O₂ saturation when possible).
 6. Pertinent history, allergies, medications.
 7. Pertinent findings of the primary and secondary survey.
 8. Field treatment and response:
 9. Anticipated destination facility.

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EMS Medical Director

SUBJECT: BASE HOSPITAL CONTACT, PATIENT TRANSPORTATION
AND REPORT - EMERGENCY PATIENTS

Date: 7/1/2010

10. Estimated time of arrival.

- D. Initial Notification- A brief communication by the field personnel to provide the acuity, age, gender, and chief complaint of the patient to the base hospital to assist in determining appropriate patient destination. This communication is intended to verify resource capability and availability of the facility that will receive the patient.
- E. Release - A call outcome that occurs when the patient and the EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services and the patient does not require the services of the prehospital system.
- F. Emergency Patient - Any person for whom the 9-1-1/EMS system has been activated and who meets the following criteria:
1. Has a chief complaint or suspected illness or injury; or
 2. Is not oriented to person, place, time, or event; or
 3. Requires or requests field treatment or transport; or
 4. Is a minor who is not accompanied by a parent or legal guardian and is ill or injured or appears to be ill or injured
- G. Elopement - The departure from the scene of a patient, in which the patient has refused to comply with established procedures for refusing care or transportation.
- H. Minor - A person under the age of 18 and who is not emancipated
- I. Designated decision maker (DDM) - An individual to whom a person has legally given the authority to make medical decisions concerning the person's health care (i.e., a parent, legal guardian, an "attorney in fact" through a Durable Power of Attorney for Health Care, or an

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SUBJECT: BASE HOSPITAL CONTACT, PATIENT TRANSPORTATION
AND REPORT - EMERGENCY PATIENTS

Date: 7/1/2010

"agent" through an Advance Health Care Directive).

IV. Policy:

- A. EMT, AEMTs - Hospital contact is required for all patients who are transported to the Emergency Department of a hospital.
1. EMT, AEMTs shall contact the intended facility as soon as possible to verify their destination and to provide a complete patient report.
 2. EMT, AEMTs shall call:
 - a. A base hospital if they have a question regarding the appropriate treatment or disposition of any patient.
 - b. A designated trauma center for those patients who meet trauma center criteria (T-460).
 - c. UCSD base for those patients meeting Burn Center criteria (S-124).
- B. Paramedics - Base hospital contact is required by paramedics in the following situations (except in cases of elopement - see III. D.):
1. Any emergency patient transport by paramedics, including transports by paramedic ambulance to a BLS destination following downgrade to BLS.
 2. Any emergency patient treatment involving ALS medications or skills (except EKG monitoring)
 3. Any emergency patient assessment involving abnormal vital signs, or an altered level of consciousness.
 4. Any suspicion that the emergency patient (or designated decision maker [DDM]) is impaired by alcohol or drugs.

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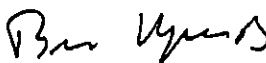

EMS Medical Director

SUBJECT: BASE HOSPITAL CONTACT, PATIENT TRANSPORTATION
AND REPORT - EMERGENCY PATIENTS

Date: 7/1/2010

5. The emergency patient/DDM is unable to comprehend or demonstrate an understanding of his/her illness or injury.
 6. The emergency patient meets criteria as a trauma center candidate (T-460).
 7. The emergency patient is > 65 years of age and has experienced an altered/decreased level of consciousness, significant mechanism of injury, or any fall.
 8. An emergency patient who is a minor is ill or injured or is suspected to be ill or injured.
 9. Whenever paramedics have a question regarding appropriate treatment or disposition of the patient.
- C. Any other communications between the patient, DDM, family member or care giver and prehospital personnel regarding refusal of care or care that is in variance with San Diego County prehospital treatment protocols or the San Diego County Resuscitation policy (S-414) (such as an Advance Health Care Directive, Living Will, Comfort Care communication, verbal notification from family member or care giver, DPAHC without attorney-in-fact present, etc.), shall be immediately referred to the base hospital for evaluation. The base hospital shall evaluate this information and determine the plan of treatment and transport for the patient.
- D. Treatment and transport decisions for emergency patients in involuntary or protective custody (i.e., under arrest by law enforcement, placed on a "5150" hold, or serving a prison term) are to be made by the authority under which they are being held.
- E. Paramedics shall contact a base hospital as soon as possible to verify destination. Paramedics will first attempt to call their regularly assigned base hospital unless the

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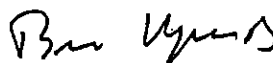
**SUBJECT: BASE HOSPITAL CONTACT, PATIENT TRANSPORTATION
AND REPORT - EMERGENCY PATIENTS**

Date: 7/1/2010

emergency patient meets one of the following criteria:

1. Adult Trauma: For all adult emergency patients who appear to meet trauma center candidate criteria in T-460, paramedics shall first attempt to call the trauma base in the catchment area of the incident.
 2. Pediatric Trauma: Paramedics shall first attempt to contact the designated pediatric trauma base for pediatric trauma center candidates (T-460).
 3. Burns: Paramedics shall first attempt to contact the UCSD base for all emergency patients that meet burn center disposition criteria (S-124).
- F. A complete patient report is required as soon as reasonably possible for all emergency patients transported. However, an initial notification may be made to a base hospital prior to the complete patient report without interfering with the paramedic's ability to implement standing orders. Standing orders for medications may not be implemented following the initiation of a complete patient report.
- G. MICNs shall relay patient information received from the patient report to the appropriate receiving facility personnel.
- H. Treatment and/or Transport of a Minor:
1. Treatment or transport of a conscious minor who is ill or injured or suspected to be ill or injured shall be with the verbal consent of the natural parent, legal guardian, or any adult authorized in writing by the legal guardian pursuant to Section 25.8 of the Civil Code (Attachment A).
 2. Treatment or transport of a conscious minor who is ill or injured or suspected to be ill or injured, where the natural parents, legal guardian, or authorized persons are not

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**SUBJECT: BASE HOSPITAL CONTACT, PATIENT TRANSPORTATION
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present, will be under the direction of the Base Hospital. Transport shall be to the most accessible appropriate receiving or specialty care center.

3. Treatment or transport of a minor who is unconscious or suffering from a life threatening disease, illness, or injury in the absence of a natural parent, legal guardian or authorized person (Attachment A) may be initiated without parental consent.

I. Base Hospital contact is NOT REQUIRED on individuals who meet the following criteria:

1. Obvious death (S-402).
2. Discontinuation of CPR with a Prehospital DNR order or DPAHC on scene (S-414).
3. Release of a minor on scene who is neither ill nor injured, nor suspected to be ill or injured, may be permissible without Base Hospital contact if:

- a. Parent or legal guardian so requests

OR

- b. A responsible adult other than parent or legal guardian (i.e. school nurse, law enforcement, or person of similar standing) so requests.
 - c. The field EMT, AEMT or Paramedic shall document the circumstances and identification of the person accepting responsibility for the minor.
4. Patients who wish to be released and do not meet base hospital contact criteria.
 5. Dispatched as a BLS call where ALS treatment or intervention is not anticipated nor required.

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Approved:



EMS Medical Director

City of San Diego

Enhanced Resource Access Program

A Proposal to: The California Emergency
Medical Services Authority

From: The City of San Diego Emergency
Medical Services

30 April 2014

Community Paramedics Addressing the Needs of Frequent 911 Callers

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TITLE OF PROJECT

San Diego Enhanced Resource Access Program (E-RAP): Community Paramedics (CP) Addressing the Needs of Frequent 911 Callers

SCOPE OF PRACTICE CATEGORIES

E-RAP will assess the safety and value of modifying the EMT-P Scope of Practice (SOP) to achieve the following objectives:

- Manage frequent 911 callers—Improve access to primary care and other social services for *frequent 911 callers*.
- Assess, Treat and Refer—Safely release or refer *frequent 911 callers* at the scene of an emergency response after appropriate assessment and treatment.
- Transport to alternate locations—Transport *frequent 911 callers* with specified conditions not requiring emergency care to alternate, non-emergency department locations.
- Post hospital or emergency department follow-up—Provide follow-up assistance for *frequent 911 callers* at increased risk of return visits to the emergency department (ED) or readmission after hospital discharge.
- Care for chronic conditions—Reinforce primary care provider (PCP) instructions for *frequent 911 callers*.

BRIEF DESCRIPTION OF PROPOSED CONCEPT

E-RAP will leverage a 2-year modification of the current EMT-P SOP with additional training, novel health information technology (HIT) and the support of key stakeholders to safely improve care, lower cost and improve satisfaction for *frequent 911 callers* and their providers.

The current San Diego Resource Access Program (RAP) consists of a single, full-time Rural/Metro Ambulance paramedic, titled the RAP Coordinator (the “Coordinator”), who collaborates with the City EMS Medical Director and community social resources to address the needs of City’s most *frequent 911 callers*. The Coordinator is currently unable to make independent treatment and transport decisions for her clients. E-RAP will utilize the Coordinator and 4 additional community paramedics, once appropriately trained and enabled by a temporarily expanded EMT-P SOP to assist 500 *frequent 911 callers* over a two year period. CP will harness the capacity of novel hand-held EMS technology with the San Diego Regional Health Information Exchange (RHIE) and the Community Information Exchange (CIE) to best address the needs of *frequent 911 callers*. Street Sense will be deployed: it is an innovative

EMS-based software tool that monitors the RHIE EMS Hub to identify, track, trend and alert on *frequent 911 callers, in real time*(1). The EMS Hub is the RHIE gateway for inbound electronic patient care records (ePCR) and computer-aided dispatch (CAD) data from the region's EMS provider agencies. Street Sense can store the case plans of *frequent 911 callers* and can also rapidly alert case managers (along with the Coordinator) when E-RAP clients are encountered by EMS. The CIE is a social information exchange under development by City of San Diego EMS, 211 San Diego (a referral utility connecting callers to >6000 regional services), the Regional Task Force on the Homeless (RTFH) and others to connect the region's siloed social providers of the vulnerable.

ESTIMATED PROJECT LENGTH

2 years

BACKGROUND INFORMATION

A relatively small group of adults disproportionately and ineffectively use acute services including emergency medical services (EMS) and emergency departments (ED). The resulting episodic, uncoordinated care is of lower quality and higher cost and simultaneously consumes valuable public safety and acute care resources. In 2008, the City of San Diego and its paramedic provider, Rural/Metro Corporation, developed a novel, EMS-based case management and referral intervention system, termed the San Diego Resource Access Program (RAP), to reduce EMS, ED, and inpatient (IP) visits by *frequent 911 callers*. The Coordinator contacts frequent callers to assist them with their complex social needs in an effort to reduce EMS requests for low acuity calls. The Coordinator partners (when needed) with the San Diego Homeless Outreach Team (HOT), which consists of a San Diego Police Department officer, a psychiatric emergency response team (PERT) clinician and a County eligibility worker. A pilot study of 51 individuals with ≥ 10 EMS transports within 12 months demonstrated RAP success (2). EMS transports declined 37.6% from 736 to 459 ($p=0.001$), resulting in a 32.1% decrease in EMS charges from \$689,743 to \$468,394 ($p=0.004$). EMS task time and mileage decreased by 39.8% and 47.5%, respectively, accounting for 262 ($p=0.008$) hours and 1,940 ($p=0.006$) miles. ED encounters at the one participating hospital declined 199 to 143 (28.1%), which correlated with a decrease in charges from \$413,410 to \$360,779 (12.7%). IP admissions declined from 33 to 30 (9.1%) and IP charges declined from \$687,306 to \$646,881 (5.9%). Hospital length of stay was reduced from 122 to 88 days (27.9%). Across all services, total charges declined by \$314,306. To accomplish this result, the Coordinator provided the following services: background interviews (139); coordination of treatment and social services (103); patient visits (72); EMS interface, education, and discussion of care (19); phone calls to patients (8); transport to rehabilitation, housing, clinic appointments, and from jail to treatment (15); community volunteers/family coordination with living conditions, home repairs donations (6). We believe

this experience places the City of San Diego in a unique position to test a California CP pilot project.

The City of San Diego EMS has a history of addressing *frequent 911 callers*. In 2007, the San Diego Serial Inebriate Program (3) was awarded the Pursuit of Solutions Research Award by the U.S. Interagency Council on Homelessness for demonstrating a community-based solution to reduce 911 calls and hospital charges for chronic homeless alcoholics. In 2011, City of San Diego EMS partnered with the United Way and other key stakeholders to implement Project 25 (P25) (4) to demonstrate the economic benefits of offering housing and wrap-around services to the community's 25 (now 36) "most impactful" individuals. Preliminary results demonstrate remarkable reductions in costs for ambulances, ED visits, IP hospitalizations (medical and psychiatric), jail days, public defender hours, crisis houses, homeless shelters and PERT services.

San Diego EMS has been the recent beneficiary of numerous exciting HIT opportunities. In 2010, our region received a \$16M federal Beacon Community grant to demonstrate the value of regional health information exchange (RHIE). Dr. Ted Chan, Chair, the University of California, San Diego (UCSD) Department of Emergency Medicine served as Principal Investigator. (Dr. Chan is in full support of E-RAP). Of note, San Diego was the only recipient to propose that bi-directional EMS exchange was of value. San Diego EMS had already achieved success in developing a wireless pre-hospital ePCR. In 2011 the Alliance HealthCare Foundation awarded a \$1M Innovation Grant to create the CIE in order to create real-time, bi-directional links between RAP, 211 San Diego and the Homeless Management Information system (HMIS) of the Regional Task Force on the Homeless (RTFH). The recently elected CIE Board of Directors has selected *frequent 911 callers* as its first use case.

In 2012, the Coordinator developed Street Sense in collaboration with Infotech Systems Management, Inc., a local software developer. Street Sense is an electronic surveillance and case management platform that continuously monitors incoming data to the RHIE EMS Hub. Street Sense analyzes past and present activity to provide real-time, comprehensive status of repeated 9-1-1 activity, including the impact of individual patients on operations and resources over time. Street Sense enables the RAP Coordinator to prioritize and strategically deploy resources to the scene of RAP clients, including those with case management plans. For the first time, EMS data are being utilized to identify, prioritize and assist the community's most vulnerable (as defined by frequency of 911 calls). Street Sense received a 2012 EMS Innovation Award and the praise of Farzad Mostashari, M.D., then National Coordinator for Health Information Technology, Office of the National Coordinator (ONC).

The first CIE use case will link existing databases of 211 San Diego, the RTFH, and Street Sense to create real-time bi-directional exchange in support of *frequent 911 callers*. Future use cases will target sub-populations including the elderly, who currently constitute 35.3% of *frequent 911 callers*. For example, RAP and the UCSD Department of Preventive Medicine are analyzing the social determinants of frequent 911 use by clients of the West Health Senior Wellness Center (WHSWC), a \$5 million project sponsored by the Gary and Mary West Foundation. WHSWC provides nutritional services, nursing case management, affordable housing, homeless prevention, mental health services, etc. We believe it would be valuable to exchange data between E-RAP and their novel “medical kiosk” information system, allowing CP to strengthen existing care plans while Street Sense monitors (and alerts) on client's EMS activity.

The City of San Diego utilizes a new tablet-based ePCR (onScene) for all first responders and ambulance providers. onScene pairs with Street Sense, allowing EMS providers to confidentially refer individuals with complex, unmet needs to the Coordinator. EMS is also in formal planning for a new referral program with 211 San Diego. EMS providers will electronically refer social issues directly to 211. 211 SD call-takers will provide next-day follow-up calls to consenting individuals to offer assistance with food, childcare, utility, finance, healthcare navigation, housing/shelter, education and mental health. In addition, the UCSD Department of Emergency Medicine Division of EMS will explore the use of HIPAA-compliant mobile wireless telemedicine to provide on-line consultation to E-RAP.

E-RAP has wide support in the community. In addition to the San Diego Health and Human Services Agency, the program has the support of the San Diego State (SDSU) Institute of Public Health, the SDSU School of Social Work, the UCSD Department of Preventive Medicine, the UCSD Department of Emergency Medicine, the Hospital Association of San Diego and Imperial Counties (HASDIC), the San Diego Organizing Project (PICO), and numerous other regional stakeholders.

Need for Project

There are numerous reasons why the City of San Diego would benefit from the proposed Community Paramedic pilot program. Upon implementation of RAP, frequent users generated nearly twenty percent of all 911 calls. RAP has addressed and decreased this impact partially but, due to current statutes and regulations, the RAP Coordinator may currently only address the *social* aspects of *frequent 911 callers*. The needs of too many *medically* vulnerable individuals remain unaddressed. RAP is often hobbled by the current scope of practice, unable to address these client needs in even the most critical of circumstances. After exhausting all internal and external options, the Coordinator is sometimes left to concede to an individual's situation. Sadly, her extensive clinical paramedic training and experience, as well as near-daily

encounters and familiarity with clients, have the potential to assist the individual, but remain ignored and inaccessible in this context.

In addition to an individual's vulnerability, the total impact of vulnerability and misuse of 911 is burdensome to emergency services. Currently, EMS has no legitimate ability to teach and reinforce proper healthcare navigation or use of 911. Combined with EMS offload delays due to hospital overcrowding, first responders have become increasingly concerned about response readiness and preservation of the public's safety net in the current healthcare environment.

The process of transport and care coordination under the current scope of practice is ineffective so long as the Coordinator lacks authority to affect healthcare decisions. For example, she may not independently modify a client's transport to a hospital even if a more prudent option existed. E-RAP seeks to show the value of a new health provider, i.e., the "(urban) community paramedic," who not only possesses clinical talent and "street sense" but can also assist in developing and implementing custom-developed case plans for *frequent 911 callers*. We believe that the proposed additional training and augmented clinical decision-making authority will result in fewer public safety resources (police, fire and EMS) being committed to non-urgent matters, better care for vulnerable individuals, improved compliance with care plans and ultimately lower cost to the community.

Types and Number of Patients Likely to be Served

With an expanded scope of practice Community Paramedics will have the ability to address a number of additional patient types:

1. Individuals who use 9-1-1 as a primary coping mechanism, where the convenience and consistency of EMS have led to habitual, inappropriate 9-1-1 use.
2. Individuals who manipulate the 9-1-1 system for transportation, errands or other personal purposes not related to medical care, but who may mask their intentions with medical complaints.
3. Cases where repetitive transport to an emergency department conflicts with a primary or psychiatric care plan.
4. Serial inebriate or psychiatric clients without active medical conditions, who are best served by primary transport to a more appropriate facility.
5. Patients who repetitively call 9-1-1 for prescription refills when safe, more cost-effective solutions exist.
6. Patients who repetitively call 9-1-1, for conditions more appropriately addressed in a primary care environment.
7. Extremely needy patients who repeatedly require 9-1-1 services for exacerbations of poorly controlled chronic medical or psychiatric conditions.

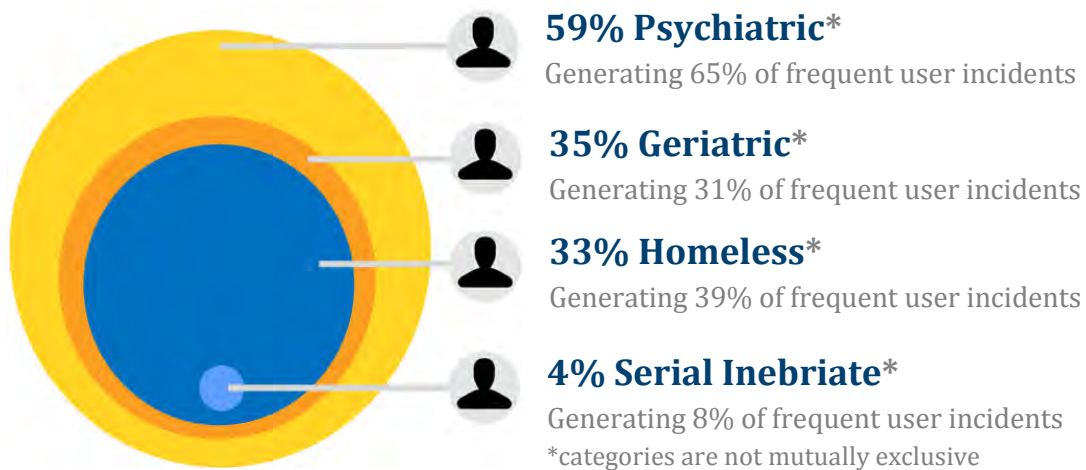
San Diego stratifies *frequent 911 callers* as follows.

Frequent Users	Super Users	Mega Users
1163 people, who used EMS more than 6 times in 1 year , are classified as a General Frequent User .	69 people, who used EMS more than 20 times in 1 year , are classified as a Super User .	5 people, who used EMS more than 50 times in 1 year , are classified as a Mega User .

For 09/01/12 – 09/01/13, 1,163 frequent users generated 11.67% of all responses in San Diego, the nation’s 8th largest city. These frequent users are associated with EMS and Fire charges totaling \$15,394,082.68. The following table demonstrates the potential impact of E-RAP, which is expected to address the needs of 500 *frequent 911 callers*.

0.088% of the population	11.7% Of all 911 calls	\$15,394,083 In costs/charges
Of the 1,326,000 people who live in San Diego, 1163 are frequent 911 callers.	Of 100,370 incidents, 11,714 were generated by a frequent user.	Frequent 911 callers generated more than \$15M dollars in costs and charges.

Additionally, we expect our use case to proportionately serve specific vulnerability populations.



Anticipated Number of Community Paramedics

We estimate that 5 CPs (including the current Coordinator) can address 500 *frequent 911 callers* over 2 years, once equipped with the appropriate training and resources.

Employment Opportunities for Community Paramedics

The City of San Diego E-RAP pilot will serve the entire San Diego region. The lessons learned from E-RAP will quickly extend to neighboring communities and numerous job opportunities will be created for skilled, empathic paramedics once the pilot verifies the value of the concept.

Other Programs Serving as Models for this Project

San Diego follows the progress of rural and urban CP programs across the country and around the world. The City of San Diego EMS Medical Director serves as Co-Chair of the Community Paramedicine Committee of the National Association of EMS Physicians (NAEMSP). He also represents emergency medicine on the National Quality Forum MAP Dual Eligibles Work Group and Affordability Committee and recently spoke about CP at the National Health Policy Forum in Washington, DC. RAP shares its experiences with other CP programs including the nationally-recognized Fort Worth MedStar Program (5).

PROGRAM MANAGEMENT

Project Leadership and Local Advisory Committee

The project leadership and local advisory committees will work in collaboration with the EMSA Community Paramedic Project Manager, Independent Evaluator, and State Community Paramedic Advisory Committee as necessary throughout the duration of the pilot project. Project leadership and local advisory committee members are described below:

Project Leadership

Principal Investigator and Medical Control

- James Dunford, MD
City of San Diego EMS Medical Director

Project Manager

- Anne M. Jensen, Paramedic
City of San Diego EMS and Rural/Metro Ambulance
Resource Access Program Coordinator

City of San Diego EMS Pilot Program Leadership

- Christopher Kahn, MD
UCSD Medical Center
Role: Curriculum and education development, data collection and analysis
- Roger Fisher, Paramedic
City of San Diego EMS Administrative Manager

- Role: Administrative oversight

 - Wayne Johnson,
Rural/Metro Ambulance Regional Director
Role: Budget, Administrative oversight
 - Steve Osborn, Paramedic
Rural/Metro Ambulance Assistant General Manager
Role: Staffing, logistics, equipment
 - Jodie Pierce, RN
San Diego Fire-Rescue Department
Role: Patient safety and QA/QI
 - Noah Brazier
City of San Diego Deputy City Attorney
Role: Legal compliance
 - Kate Pettigrew, MD
UCSD Preventative Medicine Resident
Role: Screening and assessment

LEMSA Advisory Committee

In support of project leadership, the County of San Diego Local Emergency Medical Services Agency (LEMSA) is utilizing an already existing subcommittee of the Emergency Medical Care Committee (EMCC) to satisfy the Advisory Committee requirement for the Community Paramedic Pilot. The Education/Research subcommittee contains varied areas of expertise that will serve well as the Advisory Committee to ensure patient safety and quality improvement.

Members of the EMCC Education/Research Subcommittee include:

- Mike Rice, Paramedic
San Diego County Ambulance Association
- Chief Bob Leigh (City of Santee)
San Diego Fire Chiefs' Association
Primary Representative
- Frank Parra
National City Director of Emergency Services
Alternate Representative
- Katy Green, RN
County of San Diego District 1
- Stephen Abbott, Paramedic
County of San Diego District 5
- Christine Wells, RN
Base Hospital Nurse Coordinators of San Diego County

Community Attendees:

- Linda Allington, RN, MPH, MPA
City of Carlsbad
- Anne Jensen, Paramedic
City of San Diego
- Jodie Pierce, RN, Paramedic
San Diego Fire Department
- Judith Yates, Senior Vice President
Hospital Association of San Diego/Imperial Counties
- Sharon Carlson, RN
Hospital Association of San Diego/Imperial Counties
- Linda Rosenberg, RN, BSN
Emergency Nurses Association
- Mike Davis
San Diego County Fire Chiefs
- Gary Vilke, MD, FACEP, FAAEM
UCSD/Carlsbad Fire
- Deborah Workman, RN, BS
Palomar Community College, Director of Emergency Medical Education Department
- James Dunford, MD, FACEP
City of San Diego EMS
- Jason Hums, Paramedic
Southwestern College, Paramedic Training Program Instructor

County of San Diego EMS Staff:

- Bruce E. Haynes, MD, Diplomat, ABEM
EMS Medical Director
- Marcelyn Metz, RN, BS, CEN
EMS Chief
- Susan Smith, RN, CEN
EMS Coordinator
- Diane Ameng, RN, BSN
- QA Specialist

Operational Methodology

E-RAP will strive to either reconnect *frequent 911 callers* to existing primary care providers (PCP) or establish new connections to PCPs. E-RAP does not intend to become a chronic care management program, although CP will offer education and reinforce existing plans. E-RAP will

aggressively develop care plans with PCP input and assure those plans are safely implemented. ERAP will provide PCPs with real-time alerts (e.g., cell phone, fax, page, A-D-T feed) regarding their patients' EMS activity along with summary reports that track and trend their patient's use of EMS resources. E-RAP will supplement these plans with available social support networks.

E-RAP will expand alternate destinations capable of meeting the needs of *frequent 911 callers*. Since mental health needs are prevalent in this population, new connections will be fostered. For example, it is common that psychiatrists and mental health workers do not know their patients are actually *frequent 911 callers*. When informed, clinicians typically request notification and want to participate in a solution. Therefore, E-RAP will develop case plans (to include transport contracts designating one ED as their "ER home"), notification rules and considerations for care other than transport to an ED. For example, the Coordinator currently collaborates with the St. Vincent de Paul Village (SVDP) Medical Clinic, home of the UCSD Family Medicine/Psychiatry dual-residency training program and medical home of all SIP and P25 clients. SVDP case managers receive alerts on P25 patients encountered in the EMS system, which they feel is a significant benefit by allowing rapid interventions. E-RAP is exploring how other care providers (beyond HOT, SIP and PERT) can be utilized to address *frequent 911 callers*.

A 2-semester SDSU Masters of Social Work (MSW) EMS internship is planned for September 2015. Graduate students will collaborate with E-RAP to participate in the SVDP-sponsored Homeless Outreach Programs for Entitlement (HOPE) program, a national best practice model that dramatically accelerates the process for vulnerable homeless (or persons at risk of homelessness) to obtain Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI). SSI and SSDI provide Medi-Cal and/or Medicare health insurance eligibility, and accessing these benefits is often a critical first step in recovery. Until HOPE, such processes could literally take years. E-RAP will offer focused psychiatric training in partnership with PERT, who support the SDPD during encounters with those experiencing mental health crises.

Operational Logistics

The City of San Diego EMS Medical Director will serve as the PI for the E-RAP Pilot Project. The PI will coordinate with the County EMS Medical Director in full accord with the CA EMSA rules governing the conduct and oversight of CP pilot programs. E-RAP will be based at the current offices of the RAP Coordinator and the City EMS Medical Director: San Diego Fire-Rescue Department (SDFD) Division of EMS, 1010 Second Avenue, San Diego, CA 92101. The RAP Coordinator is a Rural/Metro paramedic, and it is anticipated that future CPs will also be Rural/Metro employees. The Rural/Metro Regional Manager and SDFD EMS administrative leadership are co-located. E-RAP will initially operate on staggered morning and evening shifts; night issues routed to E-RAP by EMS personnel will be reviewed and prioritized the following

day. The current RAP Coordinator will assume the Lead CP role, overseeing the education and transition of future CPs as regards local educational issues of the City of SD EMS system.

All CPs will carry iPads equipped with Street Sense and linked to the Internet. CP will have a vehicle branded as a City of San Diego “Community Paramedic.” CP will not respond red-lights-and-sirens and CP vehicles used to drive patients to appointments, non-ED destinations, etc. will not be required to meet CA ambulance regulations. CP may also respond with EMS providers (BLS and ALS), field supervisors and mobile teams including HOT and SIP or independently to Street Sense notifications. CP may independently use BLS and ALS skills in the course of assessing patients, e.g., finger stick glucose, O2 sat monitor, vital signs assessment, 12-lead ECG, etc. Should the CP determine a patient is a candidate for treat/release, treat/refer, or transfer to an alternate facility, the treating EMS crew will document in the ePCR “Patient Released to E-RAP” and may go available without notifying the assigned Base Hospital.

CP report to the City EMS Medical Director (or his designee), who will be available for on-line advice. UCSD EMS fellows and faculty will share on-line medical oversight, employing telemedicine once available. All care plans will be approved by the EMS Medical Director. CP will use Street Sense to record patient encounters and interventions. All CP care and decision-making will be subject to routine City EMS CQI/QA processes.

Protocols

The following is a summary of each policy proposed for this pilot. Full policies are located in Appendix B.

Policy 1: Assess, Treat, and Refer

Policy 1 addresses:

1. Individuals who use 9-1-1 as a primary coping mechanism, where the convenience and consistency of EMS have led to habitual, inappropriate 9-1-1 use.
2. Individuals who manipulate the 9-1-1 system for transportation, errands or other personal purposes not related to medical care.
3. Patients who repetitively call for prescription refills only, but who have access to the prescription without a visit to the emergency department or a medical clinic.
4. Patients who repetitively call for social reasons, not related to medical care, where the Emergency Department is ill-suited to address the need.
5. Cases where repetitive transport to an emergency department conflicts with a primary or psychiatric care plan.

Policy 2: Alternate Destinations

Policy 2 addresses:

1. Serial inebriate clients without active medical conditions, who are best served by primary transport to sobering centers and detoxification.
2. Psychiatric patients without active medical conditions, who are best served by primary transport to psychiatric facilities.
3. Cases where repetitive transport to emergency departments (ED) conflict with a primary or psychiatric care plan.
4. Patients who repetitively call 9-1-1 for prescription refills when safe, more cost-effective solutions exist.
5. Patients who repetitively call 9-1-1, for conditions more appropriately addressed in a primary care environment.

Policy 3: Post-Discharge Follow-Up and Care for Chronic Conditions

Policy 3 addresses extremely needy patients who repeatedly require 9-1-1 services for exacerbations of poorly controlled chronic medical or psychiatric conditions. They are in need of assistance, education, and connection to primary care. For such patients, the CP will focus primarily on addressing the circumstances that result in repeated 9-1-1 calls, rather than intervening during such calls

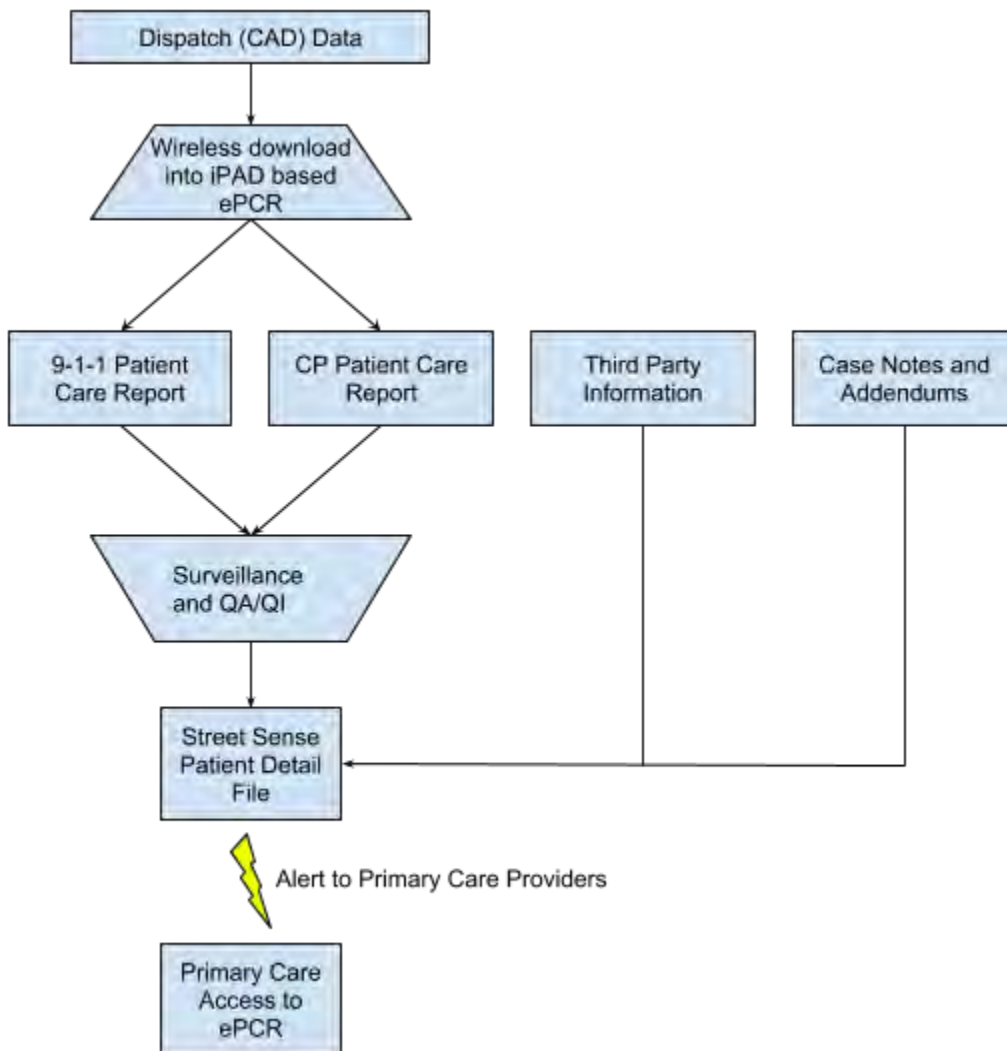
Documentation

Community Paramedics will document patient contacts using existing, secure, HIPAA-compliant software:

- onScene - Community paramedics will document medical patient contacts via the 9-1-1 system's electronic patient care report (ePCR) program, called onScene. Data fields and values will be modified to accommodate community paramedic needs. Incidents involving community paramedics will be recorded in dispatch with a distinct prefix and incident number. If the community paramedic contact occurs during a 9-1-1 call, the community paramedic team will be CAD-assigned to both incidents, allowing for association of the two calls in the dispatch and patient care databases.
- Street Sense - Street Sense is San Diego City's EMS surveillance and case management platform. Street Sense imports incidents from CAD and onScene, and matches appropriate calls into a patient-centric database. Information not associated with a medical contact, such as referrals or third party information, is documented on the patient detail file in Street Sense. Street Sense also has the ability to store surveys and screening tools. Using all of these features Street Sense can store information associated with 9-1-1 incidents, community paramedic contacts, and case management efforts in a single location.

Transmission of Information to Outside Providers

EMS will automatically transmit documentation to the appropriate care providers through the Street Sense. Using recognition and alerting software, Street Sense supplies a web link via email or text. Care providers are able to login and view contact details (see figure below).



Provisions for Protecting Patients' Safety

Current effective RAP safeguards will be adopted, and additional efforts will be introduced to assure that this CP pilot program is safe. We understand that frequent 911 callers constitute a vulnerable subset of the population, and that our procedures must assure that CP decisions remain exclusively focused on the safety and welfare of the patient. Specifically:

- For the first 6 months, all CP calls will be reviewed on-line by the PI or his designee. Thereafter, a specific list of indications requiring contact with on-line medical control will be established.
- Whenever possible, telemedicine will assist medical oversight
- The goals and plans of the patient’s primary care physician are paramount
- No patient with a chief complaint reflecting the need for on-going ALS monitoring or treatment will be treated/released, treated/referred, or transferred to an alternate facility
- No transport will be delayed by an ambulance crew awaiting contact with a CP
- Only pre-selected patients with established care plans will receive E-RAP intervention.
- Alternate care E-RAP plans will not be initiated from general ambulance crews. Instead, candidates will be identified (and alternate care plans initiated) only by CP. E-RAP can provide this since Street Sense provides patient identification during an active call.
- Unsupervised patient follow-up is unlikely to occur until trust has been established. No patient will be abandoned.
- E-RAP will follow all HIPAA regulations, assuring full confidentiality of protected health information [PHI]
- Data will inform everything we do to assess safety, effectiveness, satisfaction and value

Anticipated Sources of Funding

Funding for this program is understandably challenging, given the lack of an existing business model. Thus, E-RAP must identify any and all funding opportunities over the next year while developing a sustained business model by attracting payors and participants. It is anticipated that the value afforded by CP pilots will attract public and private interest, and that State payment reform will eventually underpin sustainability.

Expected sources of funding to operate E-RAP during the 2-year pilot include:

- Rural/Metro Ambulance Company (current City of San Diego ALS provider)
- City of San Diego EMS Medical Director discretionary funds
- San Diego Community Information Exchange
- Grants and private sources of funding

Paramedic Eligibility

Paramedics will meet the requirements set forth in the CA EMSA Letter of Intent. In addition, they will undergo routine screening and background checks as employees of the City ALS ambulance provider, Rural/Metro Ambulance Company. CP will be selected through an

interview process with the final determination resting on the decision of the City EMS Medical Director. Qualified medics must be in good standing and must have demonstrated the humanistic and professional skills required to perform this job, which include:

- Integrity—the presence of congruence between one’s stated values and actual behavior
- Compassion—the recognition of another’s suffering coupled with a desire to relieve it
- Altruism—the ability to place the needs and interests of others ahead of one’s own
- Respect—a regard for the autonomy and values of others
- Empathy—the ability to place oneself in another’s situation
- Service—the willingness to share talent, time & resources beyond that which is required
- Intelligence—the capacity for reasoning and understanding
- Versatility—the ability to embrace a variety of subjects, fields or skills

Local CP Training

E-RAP will collaborate with the regional CP training center to develop and implement the required CP training. The local training course curriculum is located in Appendix C.

DATA COLLECTION AND EVALUATION

Data Collection and Analysis

San Diego EMS has developed successful processes to analyze the impact of *frequent 911 caller* initiatives (see Appendix D). Existing data sources and outcome metrics used to assess SIP, RAP and P25 will be adopted, and necessary data sharing agreements amended to measure relevant outcomes. E-RAP will provide a report of quarterly results to the local CP Project Steering Committee, Independent Evaluator, and the State CP Advisory Committee through the EMSA Project Manager for review, to evaluate effect of E-RAP on: EMS calls for low acuity conditions, ED visits for low acuity conditions, access to care, efficiency of healthcare delivery, hospital care, cost of care, patient satisfaction and provider satisfaction (PCP, EMS, Fire, etc). Currently, more than 28 health and social providers anonymously share outcomes-related data to measure the impact of Project 25, compliant with privacy requirements. Similar data sources and HIPAA-compliant methods will be employed for E-RAP.

Quality Assurance and Improvement

The City of San Diego EMS is required to conduct Quality Assurance and Quality Improvement (QA/QI) reviews as part of the City’s Paramedic Provider Contract with San Diego County Emergency Medical Services Authority. The Community Paramedic (CP) Pilot QA/QI plan will

integrate into the existing EMS QA/QI plan, with program-specific enhancements and heightened monitoring.

In addition to normal review of care coordination activities, San Diego City EMS will review one hundred percent of all incidents involving use of an expanded scope of practice item. These incidents will be identified through mandatory reports by community paramedics, as well as a secondary records log review by the project manager. EMS will review incidents associated with an expanded scope protocol for:

- medical appropriateness
- situational appropriateness
- time appropriateness
- compliance with protocols
- unusual circumstances
- adequacy of protocol
- outcome
- safety issues
- non-emergency contacts requiring the CP to request emergency assistance
- system trends involving CPs
- system trends involving 9-1-1 field responders

The EMS QA/QI team will handle expanded scope incidents under the following process:

1. Project manager refers incident to QA/QI
2. QA/QI staff assign a QA number to the incident
3. Incident is referred to the designated Community Paramedic QA Nurse Specialist
4. The QA Nurse Specialist determines appropriateness, compliance, safety
5. Feedback to respective community paramedic
6. The paramedic, project manager or QA nurse will investigate the outcome, depending upon which individual is most appropriate for the situation.
7. Review between QA/QI, project manager, paramedic and medical director
8. Report to LEMSA or EMSA, if needed
9. Feedback and education to CPs and 9-1-1 responders
10. Record retention as indicated by EMSA

CONTACT INFORMATION

Principal Investigator

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APPENDIX A – COUNTY LETTER OF SUPPORT



County of San Diego
HEALTH AND HUMAN SERVICES AGENCY

NICK MACCHIONE, FACHE
DIRECTOR

WILMA J. WOOTEN, M.D., M.P.H.
PUBLIC HEALTH OFFICER

PUBLIC HEALTH SERVICES
HEALTH SERVICES COMPLEX

3851 Rosecrans Street
San Diego, CA 92110
(619) 542-4170 FAX (619) 542-4186

Border Health
California Children Services
Community Epidemiology
Emergency & Disaster Medical Services
HIV, STD and Hepatitis
Immunization
MAA/TCM Program
Maternal, Child and Family Health Services
Public Health Laboratory
Public Health Nursing
Tuberculosis Control & Refugee Health
Vital Records

EMERGENCY MEDICAL SERVICES

6255 Mission Gorge Road
San Diego, CA 92120
(619) 285-6429 Fax: (619) 285-6531

September 27, 2013

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Health
Emergency Medical Services Authority
lou.meyer@emsa.ca.gov

Dear Mr. Meyer:

The County of San Diego Emergency Medical Services (EMS) has received and reviewed the City of San Diego Letter of Intent to participate in the Health Workforce Pilot Project being offered by the California Emergency Medical Services Authority (EMSA). We are writing this letter in support of the proposed community paramedicine pilot project, *San Diego Enhanced Resource Access Program (E-RAP): Community Paramedics Addressing the Needs of Frequent 911 Callers*.

In 2008, the City of San Diego initiated an EMS-based case management and referral intervention termed the San Diego Resource Access Program (RAP) to reduce EMS, emergency department and inpatient visits by frequent 911 callers. We agree with the City that this experience places the City of San Diego in a unique position to take the next step to test a California community paramedicine pilot project. County EMS will be involved in the oversight and monitoring of patient safety, quality assessment and improvement of the pilot program, working with James V. Dunford, MD, FACEP, who will serve as the Principal Investigator.

Thank you for considering the City of San Diego proposal for the pilot project. If you have any questions we can be reached at 619-285-6429.

Sincerely,

BRUCE E. HAYNES, M.D.
Medical Director

MARCY METZ, Chief
Emergency Medical Services

cc: Wilma J. Wooten, M.D., M.P.H., Public Health Officer

APPENDIX B – POLICIES

Policy 1 – Assess, Treat, and Refer

PURPOSE

To outline the criteria and provide guidance to safely assess, treat and refer 9-1-1 clients, where transport is unreasonable or conflicts with primary or psychiatric care.

AUTHORITY

- California Code of Regulations, Title 22, Division 9, Chapter 4.
- California Code of Regulations, Title 22, Division 7, Chapter 6.
- Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218.
- Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Projects Program.
- California Office of Statewide Health Planning and Development (OSHPD)
- Health Workforce Pilot Projects Program (HWPP) – Program Approval #173.

NEED FOR PROTOCOL

Small populations of individuals use 9-1-1 services improperly: either intentionally, due to poor health literacy, or due to behavior which causes bystanders to activate 9-1-1 on the patient's behalf. This protocol addresses needs associated with the following types of patients:

8. Individuals who use 9-1-1 as a primary coping mechanism, where the convenience and consistency of EMS have led to habitual, inappropriate 9-1-1 use.
9. Individuals who manipulate the 9-1-1 system for transportation, errands or other personal purposes not related to medical care.
10. Patients who repetitively call for prescription refills only, but who have access to the prescription without a visit to the emergency department or a medical clinic.
11. Patients who repetitively call for social reasons, not related to medical care, where the Emergency Department is ill-suited to address the need.
12. Cases where repetitive transport to an emergency department conflicts with a primary or psychiatric care plan.

POLICY:

1. Only paramedics operating as a state-appointed Community Paramedic (CP), during a community paramedic-specific shift, may assess, treat, and refer a patient, in lieu of transport.
2. Community Paramedics will initiate this protocol through surveillance and intervention; alternatives to ED transport will not be initiated by first-responder or ambulance

paramedics.

3. This protocol will only be executed if approved by the RAP Care Committee, and written into the patient's RAP community case plan prior to the 9-1-1 event upon which it is initiated.
4. No patient reflecting the need for ongoing ALS or BLS assessment will be considered for this protocol.
5. The CP must not leave a patient in an unsafe situation, using a reasonable standard. If, in the event, this cannot be accomplished, the patient will be transported per existing pre-hospital county protocol.
6. For the first six months of the pilot program, CPs are required to contact medical direction for approval on each call. After six months, RAP leadership and local Pilot Oversight Committee (The Education/Research Sub-Committee of the San Diego County Emergency Medical Care Committee) will evaluate whether there are circumstances where medical direction may not be necessary and implement accordingly.
7. Any RAP community case plan which includes a no-transport option will be reviewed at each RAP Care Committee meeting.
8. The RAP pilot program, or any portion thereof, may be terminated at any time by the EMS Agency.
9. The RAP Committee may withdraw this protocol from a patient's case plan at any time.

PROCESS

1. The RAP Care Committee approves use of this protocol for each patient.
2. RAP surveillance identifies and alerts that the patient is active in the 9-1-1 system.
3. The CP intervenes and provides an alternative to transport, according to the following criteria:
 - a. The nature of the patient complaint makes the individual eligible for a RAP intervention, as documented in his or her case plan.
 - b. The CP clinical assessment meets the criteria stipulated in the patient's care plan.
4. The CP initiates the alternate care plan. If appropriate resources are available, the plan is executed. If they are not, the patient is transported to an appropriate ED.
5. At no time will the CP leave the patient in an unsafe situation, using a reasonable standard.
6. The CP documents the intervention and submits to QA/QI for review.
7. The care coordination committee receives feedback regarding this intervention and has the opportunity to revise the patient's care plan.

Policy 2 – Alternate Destinations

PURPOSE

To outline the criteria and provide guidance to safely assess and transport a 9-1-1 patient to an alternate location, where transport to an emergency department is unreasonable, conflicts with primary care, or a more prudent and effective alternative exists.

AUTHORITY

- California Code of Regulations, Title 22, Division 9, Chapter 4.
- California Code of Regulations, Title 22, Division 7, Chapter 6.
- Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218.
- Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Projects Program.
- California Office of Statewide Health Planning and Development (OSHPD)
- Health Workforce Pilot Projects Program (HWPP) – Program Approval #173.

NEED FOR PROTOCOL

Small populations of individuals use 9-1-1 services improperly: either intentionally, due to poor health literacy, or due to behavior causing bystanders to activate 9-1-1 on the patient's behalf. This protocol addresses needs associated with the following types of patients:

6. Serial inebriate clients without active medical conditions, who are best served by primary transport to sobering centers and detoxification.
7. Psychiatric patients without active medical conditions, who are best served by primary transport to psychiatric facilities.
8. Cases where repetitive transport to emergency departments (ED) conflict with a primary or psychiatric care plan.
9. Patients who repetitively call 9-1-1 for prescription refills when safe, more cost-effective solutions exist.
10. Patients who repetitively call 9-1-1, for conditions more appropriately addressed in a primary care environment.

POLICY:

1. Only paramedics operating as a state-appointed Community Paramedic, during a community paramedic-specific shift, may initiate an alternate destination.
2. Community Paramedics will initiate this protocol through surveillance and intervention; alternatives to ED transport will not be initiated by first-responder or ambulance

paramedics.

3. This protocol will only be executed if approved by the RAP Care Committee, and written into the patient's RAP community case plan prior to the 9-1-1 event upon which it is initiated.
4. No patient with a chief complaint or condition reflecting the need for ALS assessment and ongoing ALS monitoring/treatment will be considered for this protocol.
5. The CP must not leave a patient in an unsafe situation, using a reasonable standard. If, in the event, this cannot be accomplished, the patient will be transported per existing pre-hospital county protocol.
6. For the first six months of the pilot program, CPs are required to contact medical direction for approval on each call. After six months, RAP leadership and local Pilot Oversight Committee (The Education/Research Sub-Committee of the San Diego County Emergency Medical Care Committee) will evaluate whether there are circumstances where medical direction may not be necessary and implement accordingly.
7. Any RAP case plan which includes an alternate destination option will be reviewed at each RAP Committee meeting.
8. The RAP pilot program, or any portion thereof, may be terminated at any time by the EMS Agency.
9. The RAP Committee may withdraw this protocol from a patient's case plan at any time.

PROCESS

1. The RAP Care Committee approves use of this protocol for each patient.
2. RAP surveillance identifies and alerts that the patient is active in the 9-1-1 system.
3. The CP intervenes and provides an alternative to ED transport, according to the following criteria:
 - a. The nature of the patient complaint makes the individual eligible for a RAP intervention, as documented in his or her case plan
 - b. The CP clinical assessment meets the criteria stipulated in the patient's care plan.
 - c. The patient meets criteria for the receiving facility.
4. The CP initiates the alternate care plan. If appropriate resources are available, the plan is executed. If they are not, the patient is transported to an appropriate ED.
5. At no time will the CP leave the patient in an unsafe situation, using a "reasonable" standard.
6. The CP documents the intervention and submits to QA/QI for review.
7. The RAP Committee receives feedback regarding this intervention and has the opportunity to revise the patient's care plan.

Policy 3 – Post-Discharge Follow-Up and Care for Chronic Conditions

SUBJECT

Community Paramedic Expanded Scope of Practice: Post-Discharge Follow-Up and Care for Chronic Conditions

PURPOSE

To outline the criteria and provide guidance to safely address the needs of frequent 9-1-1 patients whose medical or psychiatric conditions are insufficiently stabilized to qualify for alternate care plans.

AUTHORITY

- California Code of Regulations, Title 22, Division 9, Chapter 4.
- California Code of Regulations, Title 22, Division 7, Chapter 6.
- Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218.
- Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Projects Program.
- California Office of Statewide Health Planning and Development (OSHPD)
- Health Workforce Pilot Projects Program (HWPP) – Program Approval #173.

NEED FOR PROTOCOL

A small number of individuals repeatedly require 9-1-1 services for exacerbations of poorly controlled chronic medical or psychiatric conditions. They are in need of assistance, education, and connection to primary care. For such patients, the CP will focus primarily on addressing the circumstances that result in repeated 9-1-1 calls, rather than intervening during such calls. This protocol addresses the needs of extremely needy patients whose complaints or situations lack a care plan sufficient to be considered for alternative CP protocols.

POLICY:

1. Only paramedics operating as a state-appointed community paramedic, during a community paramedic-specific shift, may provide post-discharge follow-up on behalf of the agency.
2. Community Paramedics will initiate this protocol outside of the 9-1-1 system once a

need or critical situation is recognized.

3. The RAP Committee will make every effort to include the patient's physicians and caregivers in case planning. The primary goal of the CP will be to support the physician's treatment plan.
4. If the patient does not have a primary care provider, the CP will attempt to connect the client to one.
5. The CP may provide transport to a medical appointment, if needed.
6. CPs may generate a 9-1-1 response during the visit, if needed.
7. CPs may assist in education, provided they are relaying the message of the primary care provider, psychiatrist or medical director.
8. CPs may medically assess the patient, as instructed in the care plan by the primary care provider or medical director. For example, a CP may assess a finger stick glucose of a diabetic patient if the result could influence a destination decision.
9. CPS may provide interventions as long as the intervention is approved by the Pilot Oversight Committee (The Education/Research Sub-Committee of the San Diego County Emergency Medical Care Committee), the RAP Committee, and any existing primary care provider.
10. The pilot program, or components of it, may be terminated at any time by the EMS Agency.
11. The RAP Committee may withdraw this option from a patient's case plan at any time.

PROCESS

1. The CP identifies appropriate patients and schedules a visit, if possible.
2. If the patient has a primary care physician or psychiatrist, the CP will make diligent efforts to contact him or her to facilitate participation in care coordination.
3. The CP assesses, educates and assists the individual in healthcare management or navigation.
4. The CP documents the intervention and submits to QA/QI for review.
5. The RAP Committee receives feedback regarding this intervention and has the opportunity to revise the patient's care plan.

APPENDIX C – LOCAL TRAINING CURRICULUM

Module 1 – Overview of RAP

Length: 2 hours

Objectives and Summary: The student will understand his or her role in the pilot program and be able to demonstrate knowledge of the following:

1. Overview of RAP
 - 1.1. Introduction to Leadership
 - 1.2. Current Scope
 - 1.3. Projected State Scope

Module 2 – Populations and Principles of Case Management

Length: 22 Hours

Objectives and Summary: The student will understand the regional spectrum of vulnerability, as well as appropriate case management principles.

2. Populations and Principles of Case Management
 - 2.1. Social Services Overview
 - 2.1.1. Case Management
 - 2.1.2. Managed Care
 - 2.1.3. Care Coordination
 - 2.2. Vulnerability
 - 2.2.1. Screening
 - 2.2.2. Degree of Vulnerability
 - 2.2.3. Unwilling Versus Unable
 - 2.2.4. Coping and Resources
 - 2.2.4.1. Culture
 - 2.2.4.2. Socioeconomics
 - 2.2.4.3. Disability
 - 2.2.4.4. Legal Dependence
 - 2.2.4.5. Chronic Medical Conditions
 - 2.3. Expressions of Vulnerability
 - 2.3.1. In Chronic 911 Use
 - 2.3.1.1. Client Types
 - 2.3.1.2. Causes
 - 2.3.1.3. Coping and Resources

- 2.3.1.4. Unwilling Versus Unable
- 2.3.1.5. Strategies
- 2.3.2. In Equally Vulnerable, Less Noticeable
 - 2.3.2.1. Client Types
 - 2.3.2.2. Causes
 - 2.3.2.3. Coping and Resources
 - 2.3.2.4. Unwilling Versus Unable
 - 2.3.2.5. Strategies
- 2.4. Populations
 - 2.4.1. Characteristics of San Diego Homeless
 - 2.4.1.1. Social
 - 2.4.1.2. Medical
 - 2.4.1.3. Strategies
 - 2.4.2. San Diego Substance Abuse Issues
 - 2.4.2.1. Social
 - 2.4.2.2. Medical
 - 2.4.2.3. Strategies
 - 2.4.3. Characteristics of San Diego Elderly
 - 2.4.3.1. Social
 - 2.4.3.2. Medical
 - 2.4.3.3. Strategies
 - 2.4.4. Multiple Diagnosis Clients
 - 2.4.4.1. Social
 - 2.4.4.2. Medical
 - 2.4.4.3. Strategies
 - 2.4.5. Law Enforcement Populations
 - 2.4.5.1. Social
 - 2.4.5.2. Medical
 - 2.4.5.3. Strategies
- 2.5. Eligibility
 - 2.5.1. Overview
 - 2.5.2. Application Process
 - 2.5.3. Local Facilities

Module 3 – Partner Programs

Length: 16 Hours

Objectives and Summary: The student will become familiar with partner agencies.

3. Partner Programs
 - 3.1. Homeless Outreach Team
 - 3.2. Serial Inebriate Program
 - 3.3. Project 25
 - 3.4. Psychiatric Emergency Response Team

Module 4 – Overview of Community Resources

Length: 16 Hours

Objectives and Summary: The student will learn about existing community resources.

4. Overview of Community Resources
 - 4.1. Health and Human Services Case Management
 - 4.2. 2-1-1 San Diego
 - 4.3. Psychiatric Case Management Services
 - 4.4. Detoxification and Sobering
 - 4.5. Correctional Medical Screening
 - 4.6. Homeless Shelters and Services
 - 4.7. Food
 - 4.8. Medical Clinics
 - 4.9. Faith-Based Organizations
 - 4.10. Youth
 - 4.11. Elderly
 - 4.12. Transitional and Permanent Housing
 - 4.13. Emergency Departments

Module 5 – Resource Gaps and Challenges

Length: 4 Hours

Objectives and Summary: The student will understand shortcomings of current community services. The student will also understand especially challenging patients and processes.

5. Resource Gaps and Challenges
 - 5.1. Mental Illness
 - 5.2. Homeless Resources
 - 5.3. Conservatorship issues
 - 5.4. Multiple Diagnosis Patients

Module 6 – HIPAA

Length: 8 Hours

Objectives and Summary: The student will review and understand privacy practices in the context of care coordination, as well as city policy regarding RAP.

6. HIPAA

6.1. General

6.1.1. Treatment and Care Coordination Activities

6.1.2. Threat to Safety

6.1.3. Disclosures to Law Enforcement

6.1.4. Correctional Institutions

6.1.5. Other Disclosures

6.2. RAP Policies

6.2.1. Phone Calls

6.2.2. Emails

6.2.3. Turnover

6.2.4. Physician Follow-Up

6.2.5. Referral Allowances and Restrictions

6.2.6. Document Handling

Module 7 – Technology, Documentation, and Operations

Length: 8 Hours

Objectives and Summary: The student will understand operational procedures and how to integrate into the current system.

7. Technology, Documentation and Operations

7.1. Street Sense Training

7.2. Dispatch Procedures

7.3. Client Contacts

7.4. Documentation

7.5. Other Policies

Module 8 – High Performance Team Culture

Length: 8 Hours

Objectives and Summary: The student will learn expectations and professional team etiquette.

8. High Performance Team Culture

8.1. Core Value Training and Preservation

8.2. Productivity Expectations

8.3. Core Measures

- 8.4. Specialty Projects
- 8.5. Peer Coaching of Specialties
- 8.6. Professional Boundaries and Chain of Command
- 8.7. Wellness
- 8.8. QA/QI
- 8.9. Community Paramedic Review Committee

Module 9 – Expanded Scope, Local Pilot Training

Length: 16 Hours

Objectives and Summary: The student will understand how the pilot program practices will integrate into the current system.

- 9. Expanded Scope, Local Pilot Training
 - 9.1. Alternative Destinations
 - 9.1.1. Receiving Facilities
 - 9.1.2. Eligibility
 - 9.1.3. Criteria
 - 9.1.4. Protocols
 - 9.2. Assess, Treat, and Refer
 - 9.2.1. Medical Partners Review
 - 9.2.2. Other Partners
 - 9.2.3. Eligibility
 - 9.2.4. Criteria
 - 9.2.5. Protocols
 - 9.3. Post-Hospital Follow-Up
 - 9.3.1. Criteria
 - 9.3.2. Resources
 - 9.3.3. Protocols
 - 9.4. Care for Chronic Conditions
 - 9.4.1. Medical Partners Overview
 - 9.4.2. Eligibility
 - 9.4.3. Criteria
 - 9.4.4. Protocols
 - 9.4.5. Procedures

Module 10 – Additional Partner Training

Length: 48 Hours

Objectives and Summary: The student will participate in partner agency training programs,

instructed by outside entities. Subject matter will address how the two agencies will cooperate, as well as specialized training in interaction with various populations.

10. Additional Partner Training (subject to budget approval)

- 10.1. PERT Academy (provided by the Psychiatric Emergency Response Team)
- 10.2. Culture of Poverty (provided by Project 25)
- 10.3. TBD

Module 11 – Competency Testing

Length: 8 Hours

Objectives and Summary: The student will demonstrate comprehension by a passing score of greater than eighty percent on a written exam, as well as completion of a field training task book and medical director interview.

11. Competency Testing

- 11.1. Written Exam
- 11.2. Task Book
- 11.3. Interview

APPENDIX D – STREET SENSE SCREEN SHOTS

The screenshot shows the 'Case Management Dashboard' for 'Frequent Callers'. The interface includes a sidebar with navigation options like Admin, Dashboard, CAD, Patient Search, Address Search, Managed, Algorithms, Action Items, Alerts, My Incidents, and My Profile. The main content area features a 'Return top: 30' dropdown and a checked 'Include Records on Watchlist' option. Below this is a table with columns for 'Last Week', 'Last 2 Weeks', 'Last Month', 'Last 6 Months', and 'Last Year'. The table contains 10 rows of data, each representing a patient with various counts across the time periods. The user's name 'Anne!' and a 'Log Out' link are visible in the top right. The page ID 'pid: AGEDSH' is at the bottom right.

	Last Week	Last 2 Weeks	Last Month	Last 6 Months	Last Year
	(8)	(8)	(11)	(50)	(77)
	(5)	(7)	(10)	(47)	(71)
	(4)	(5)	(9)	(47)	(69)
	(4)	(5)	(8)	(37)	(57)
	(4)	(5)	(8)	(36)	(53)
	(3)	(5)	(8)	(30)	(50)
	(3)	(4)	(8)	(28)	(50)
	(3)	(4)	(8)	(28)	(46)
	(3)	(4)	(7)	(27)	(46)
	(3)	(4)	(7)	(26)	(46)
	(3)	(4)	(7)	(25)	(42)
	(2)	(4)	(6)	(25)	(41)
	(2)	(4)	(6)	(24)	(40)
	(2)	(4)	(6)	(24)	(39)
	(2)	(4)	(6)	(23)	(39)
	(2)	(4)	(6)	(22)	(37)
	(2)	(4)	(6)	(21)	(37)
	(2)	(4)	(5)	(21)	(37)
	(2)	(3)	(5)	(20)	(37)

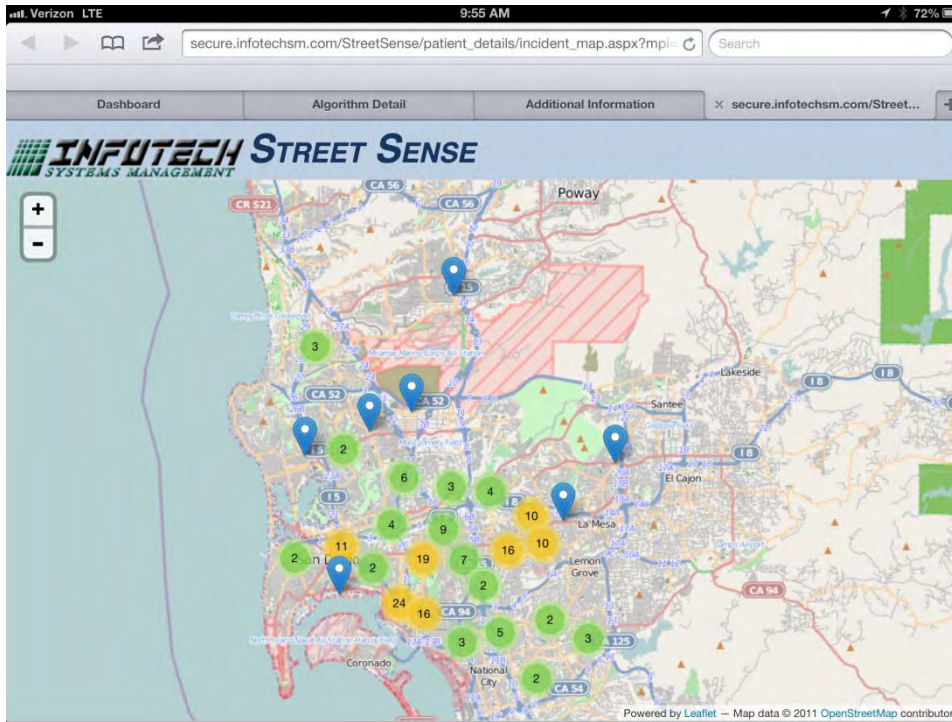
Patients are ranked according to system-wide EMS usage.

The screenshot shows the 'Frequent Homeless Users' section of the dashboard. It features a 'Return top: 10' dropdown and a checked 'Include Records on Watchlist' option. Below is a table with columns for 'Last Week', 'Last 2 Weeks', 'Last Month', 'Last 6 Months', and 'Last Year'. The table contains 10 rows of data. Below this table is the 'Frequent Behavioral/Psychiatric Users' section, which also has a 'Return top: 10' dropdown and a checked 'Include Records on Watchlist' option, followed by another table with the same column structure and 10 rows of data. The user's name 'Anne!' and a 'Log Out' link are visible in the top right. The page ID 'pid: AGEDSH' is at the bottom right.

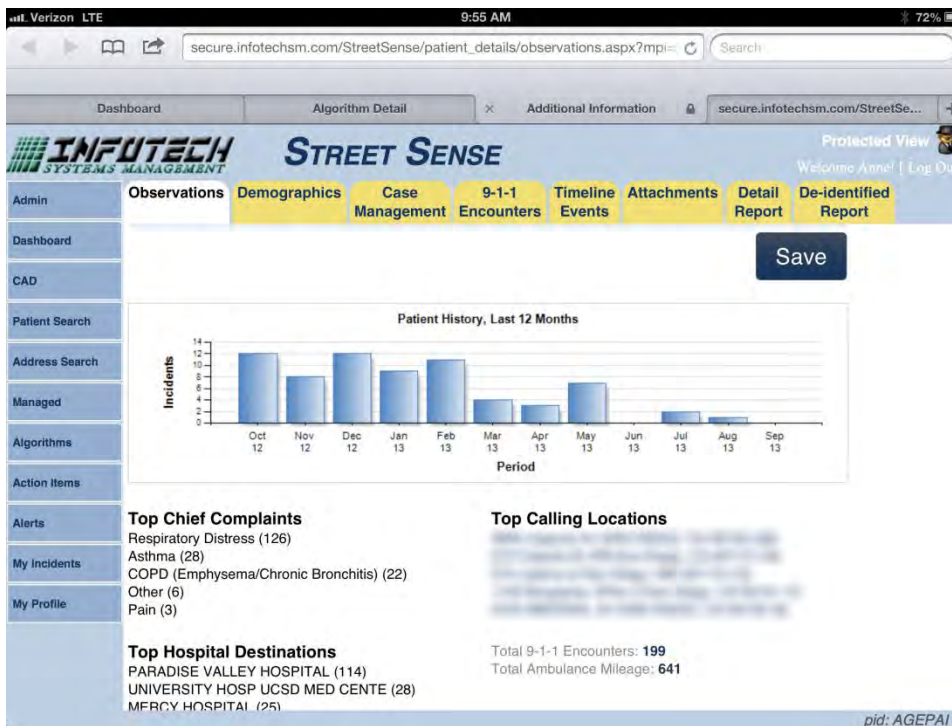
	Last Week	Last 2 Weeks	Last Month	Last 6 Months	Last Year
	(8)	(8)	(11)	(47)	(71)
	(5)	(7)	(10)	(47)	(69)
	(4)	(5)	(9)	(37)	(57)
	(3)	(5)	(8)	(36)	(53)
	(3)	(5)	(8)	(30)	(50)
	(2)	(4)	(8)	(28)	(50)
	(2)	(4)	(7)	(28)	(46)
	(2)	(4)	(7)	(27)	(46)
	(2)	(4)	(6)	(26)	(42)
	(2)	(4)	(6)	(25)	(41)

	Last Week	Last 2 Weeks	Last Month	Last 6 Months	Last Year
	(8)	(8)	(11)	(50)	(77)
	(5)	(7)	(10)	(47)	(71)
	(4)	(5)	(9)	(47)	(69)
	(4)	(5)	(8)	(37)	(57)

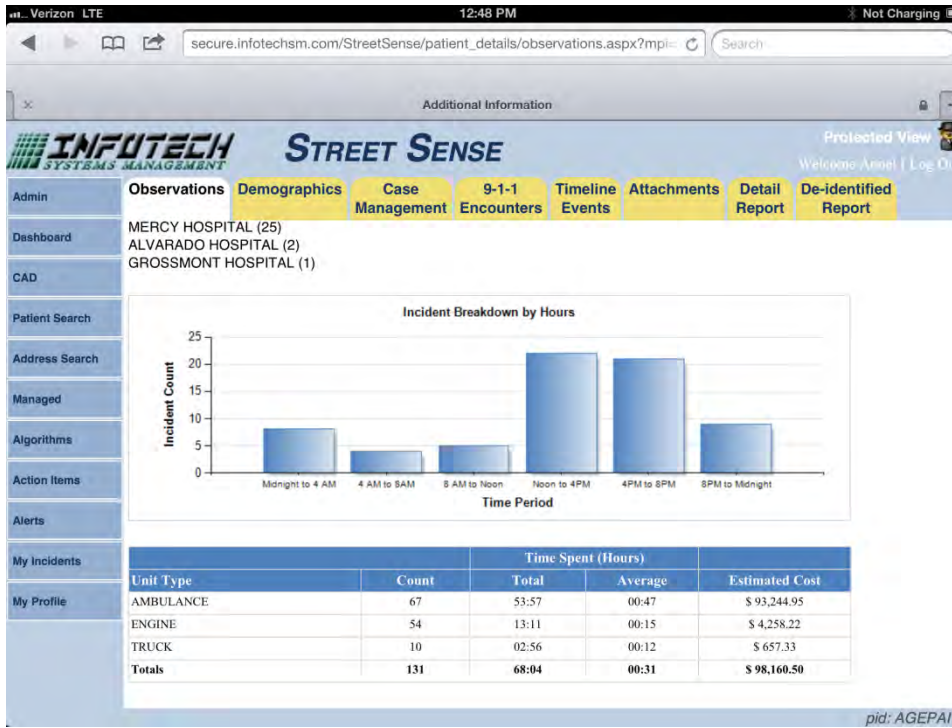
Patients are also ranked according to specific vulnerabilities for multi-disciplinary collaboration.



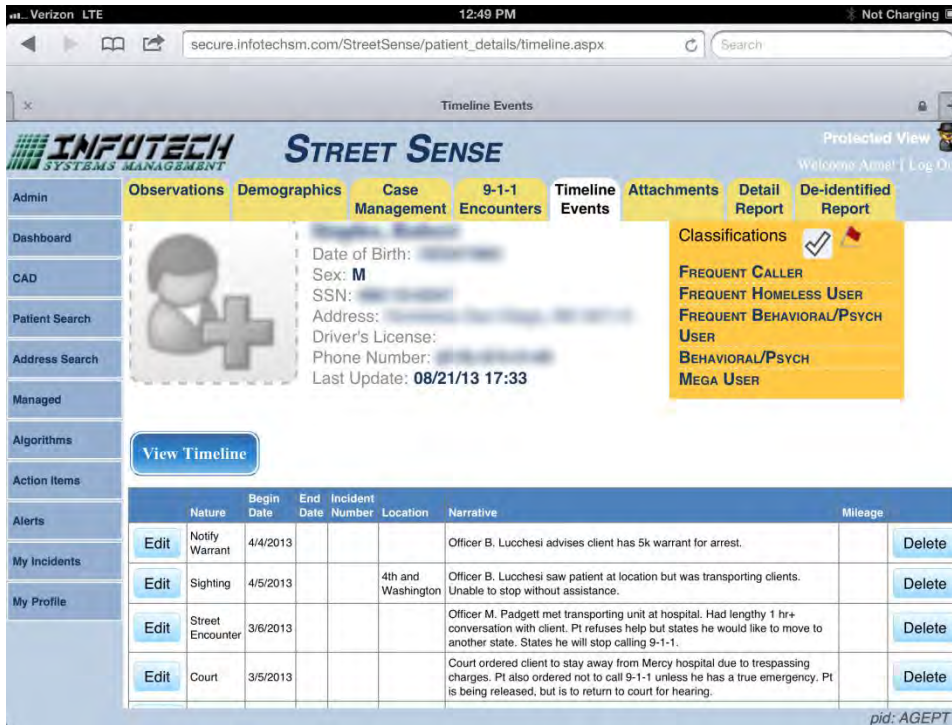
Historical geo-location assists in locating transient frequent callers needing intervention or coordination outside of an active 911 call.



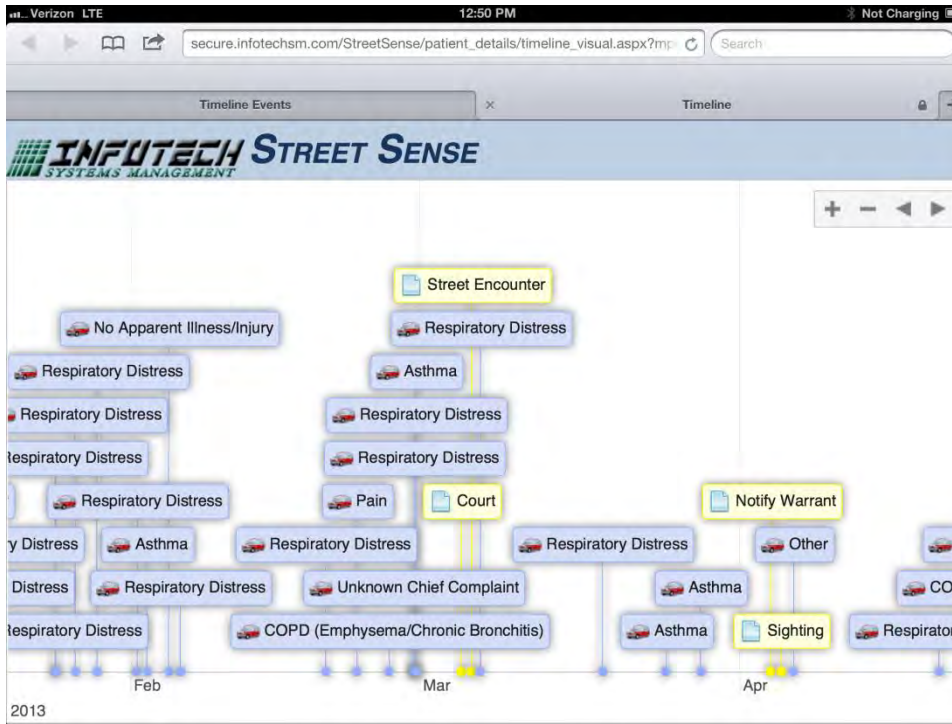
Tracking an individual's 911 calls over time helps gauge the effectiveness of interventions.



Tracking an individual's impact to the 911 system allows understanding of operational and financial costs of an individual.



Documentation of contacts with an individual provides perspective between multiple community paramedics or providers.



A timeline allows care providers to understand system-wide interventions in the context of 911 activity.

Patient Name	Age	# Of Incidents	# Of Related Incidents (Last 30 Days)	# Of Related Incidents (Last 30 Days)	Is Homeless?	SDPD At Scene Count	PERT At Scene Count
[REDACTED]	71	49	2	2	Y	26	2
[REDACTED]	55	50	36	0	Y	8	1
[REDACTED]	54	46	34	0	Y	13	1
[REDACTED]	50	37	27	0	Y	3	0
[REDACTED]	41	30	25	0	Y	16	0
[REDACTED]	64	29	24	1	Y	6	0
[REDACTED]	55	46	23	3	Y	13	0
[REDACTED]	40	41	22	1	Y	5	0
[REDACTED]	57	30	22	1	Y	9	1
[REDACTED]	57	35	20	1	Y	9	1
[REDACTED]	55	29	19	2	Y	5	0
[REDACTED]	50	25	19	0	Y	10	0
[REDACTED]	48	20	17	0	Y	2	1
[REDACTED]	43	25	17	0	Y	10	1
[REDACTED]	54	21	16	0	Y	8	0
[REDACTED]	50	40	15	0	Y	1	0
[REDACTED]	56	22	15	8	Y	7	0
[REDACTED]	50	25	15	0	Y	7	1
[REDACTED]	49	50	14	5	Y	8	0
[REDACTED]	41	13	13	0	Y	4	0
[REDACTED]	34	21	12	5	Y	8	0

Smart-analytics algorithms find patients with specific vulnerabilities, such as alcoholism.

Verizon LTE 12:56 PM Not Charging

secure.infotechsm.com/StreetSense/algorithm_detail_pages/welfare.aspx?d= Search

Algorithm Detail

INFUTECH SYSTEMS MANAGEMENT **STREET SENSE** Protected View Welcome Asset | Log Out

In-Home Difficulties

Location Name	Address	Common Patient Name	Common DOB	Related Events	CAD Events	ePCR Events	Mobility/Fall Involved	Total Transports	Total Engine Minutes	Total Truck Minutes	Ambulance Transport Minutes	Am noi Tra Mir
				63	133	133	70	0	0	0	0	0
				42	76	62	45	31	846	139	962	217
				24	84	51	35	22	1020	171	727	172
				24	62	55	32	30	724	93	1376	205
				24	58	53	31	33	1010	0	1097	200
				22	129	122	26	114	2456	22	4358	701
				22	70	62	34	33	852	81	885	233
				21	25	12	19	0	99	0	0	284

pid: AGEADT

Smart-analytics algorithms identify locations with a high likelihood of social difficulty. This particular algorithm is the focus of our ePCR social referral.

Verizon LTE 4:28 PM 15%

secure.infotechsm.com/StreetSense/cad.aspx?d= Search

CAD

INFUTECH SYSTEMS MANAGEMENT **STREET SENSE** Protected View Welcome Asset | Log Out

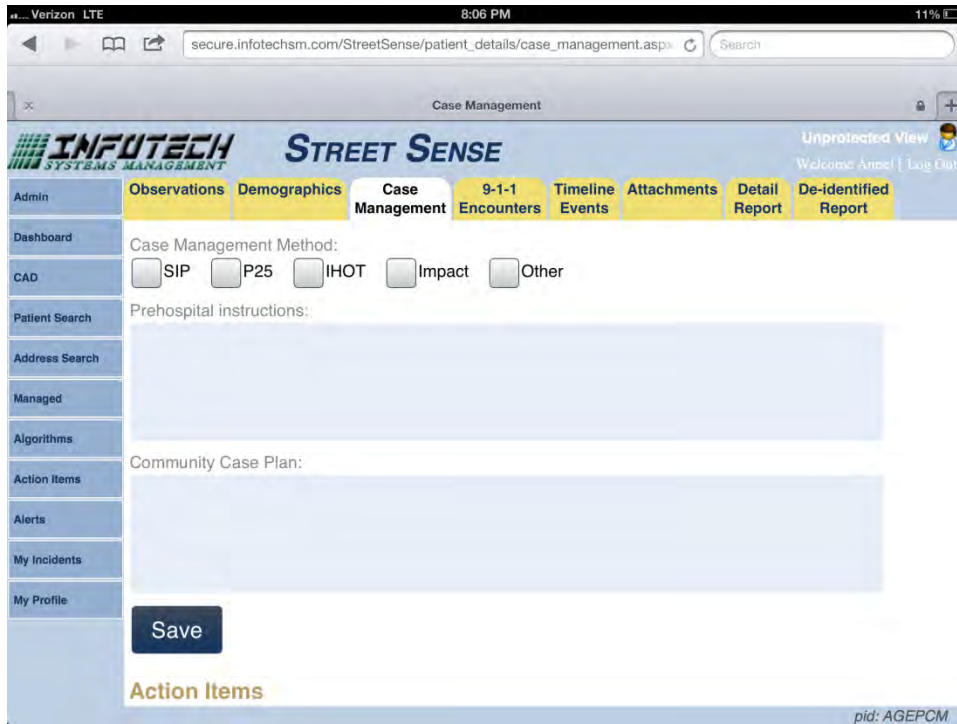
CAD Refresh

Chief Complaint:

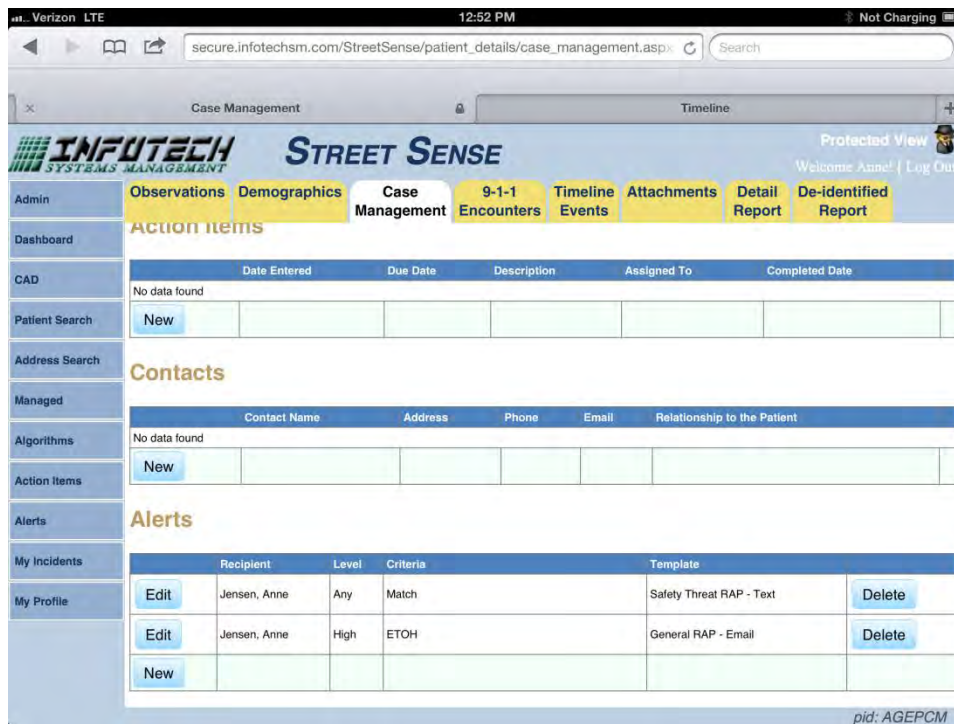
Indicators	Incident Number	Date/Time	Address	Chief Complaint	Priority Description	Unit
	FS13109211	09/24/2013 16:18		Traffic Accident (L1)	Level 1 Medical	
	FS13109210	09/24/2013 16:18		Ringin Alarm Highrise	Level 2 Fire	
	FS13109208	09/24/2013 16:15		Sick Person (Specific Dx)(L4)	Level 4 Medical	
	FS13109209	09/24/2013 16:14		Traffic Accident (L1)	Level 1 Medical	
	FS13109207	09/24/2013 16:13		Falls / Back Inj (Trauma) (L3)	Level 3 Medical	
	FS13109206	09/24/2013				

pid: AGECD

The live CAD feed shows active calls, identifying patients of interest or displaying vulnerability markers. This feature will allow the CP to plan an intervention for a specific patient and deploy during an active 911 call.



Storage of both pre-hospital and community case management plans allow CP to reinforce primary care instructions.



Alerts, contact lists and action items are controlled on each individual's case management page.



Stanislaus County

Mobile Integrated Behavioral Health Paramedicine Project 012

A Proposal

To: The California Emergency Medical Services
Authority

From: Mountain-Valley Emergency Medical Services
Agency

May 8, 2014

*Community Paramedics Addressing the
Needs of Behavioral Health Patients*

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TITLE OF PROJECT

Stanislaus County, Mobile Integrated Behavioral Health Paramedicine, project 012

SCOPE OF PRACTICE CATEGORIES

Stanislaus County will assess the safety and value of modifying the EMT-P Scope of Practice (SOP) to achieve the following goals and objectives:

Goals:

- Reduce utilization of emergency room services by behavioral health (BH) patients within Stanislaus County that would have normally been transported directly to emergency departments through the utilization of trained paramedics to assess, treat, and transport patients meeting specific and pre-identified criteria to appropriate alternative care at behavioral health treatment facilities.
- Demonstrate appropriate utilization of non-traditional alternate destinations for BH patients assessed and treated by paramedics.
- Reduce the utilization of emergency department (ED) services by BH patients within Stanislaus County.

Objectives:

- Designate the general assessment of the trained paramedic as “appropriate” or “inappropriate” in accordance with the established diagnosis by the treating behavioral health professional with 95% accuracy within six hours of admission.
- Less than 5% of BH patients transported to the ED by paramedics ultimately identified as a patient who should have gone directly to an alternative BH facility/service.
- Less than 5% of patients transported to an alternative destination were sent back to the ED within six hours.
- A 20% reduction in ED nursing hour utilization for the care and treatment of BH patients as a result of transporting BH patients to alternate/appropriate BH centers. (Nursing hour reduction per BH patients will be based on existing nursing hour utilization for BH patients transported to an emergency room.)

- Demonstrated competency at a 100% success rate with an average grade of 85% or better will be maintained by paramedics participating in the Community Paramedic Training Program.
- The BH QRV will remain in service 24/7 365 days a year with a minimum of one (1) trained community paramedic 95% of the time.
- 95% of requests for the BH QRV will be met.
- 100% of BH patients not receiving a response by a trained CP within 15 minutes will receive a 911-transport unit response.
- Each trained paramedic will meet community paramedic protocol compliance standards 100% of the time for every patient contact.

DESCRIPTION OF PROPOSED CONCEPT

The development of a Community Paramedic Pilot Project that expands the role and practice of the Emergency Medical Technician-Paramedic (EMT-P) will allow Mountain Valley EMS Agency to utilize leading edge and innovative concepts to address a problem that has not only overwhelmed Stanislaus County, but a multitude of other counties in California. The pilot project will permit the community paramedic, under the direction of the EMS Agency Medical Director, to provide medical clearance exams to behavioral health patients in the pre-hospital setting.

Assessments focused on behavioral health patients provide a medically safe method for the paramedic to transport behavioral health patients that meet specific criteria directly to a behavioral health center, thus avoiding an unnecessary transport to the emergency department. The program concept is aimed to obtain the right level of care to the right patients in an efficient, effective and timely manner.

Benefits of this program will be aimed at reducing hospital and EMS system costs and reducing emergency department overcrowding, thereby allowing for a more efficient use of emergency department resources and reducing secondary transfers between the emergency department and behavioral health centers.

Mountain-Valley EMS Agency will be partnering with AMR, Stanislaus County Hospitals, Stanislaus County Behavioral Health Services, and the Stanislaus County Health Services Agency. Geographically, the project will encompass the cities of Modesto and Turlock with a combined population of approximately 270,000 citizens. The estimated length for the pilot project will be 24 months.

ESTIMATED PROJECT LENGTH

2 years

BACKGROUND INFORMATION

Need for Project:

Over the last several years, behavioral health budget cuts have resulted in a system-wide surge of patients that have ultimately impacted our local emergency departments. This impact on Stanislaus County hospital emergency departments has resulted in regularly scheduled conference calls with system participants to help mitigate the overcrowding effects. Doctors Medical Center Modesto sees an average of 289 behavioral health patients a month, accounting for 1,671 monthly average hours to provide one-to-one care for these patients. The average length of stay for behavioral health patients requiring an evaluation in the emergency department is over 8 hours. Hospital management reports that it is becoming more common to have patients stay in the emergency department longer than 24 hours.

These patients, by nature, require a significant amount of resources, in particular nursing time, which draws resources away from regular emergency department operations. As emergency department volumes continue to escalate, help is needed to mitigate the emergency department crowding conditions and permit considerably more efficient use of resources. Unnecessary utilization of emergency room services can be reduced by transporting medically cleared behavioral health patients to facilities dedicated to their unique needs. This is a model of care that leverages the skills of paramedics and enables the EMS System to address care gaps identified through the health care needs within Stanislaus County.

Similar projects have seen successful prehospital triage methods decrease emergency department visits by this population by 30%, which would result in a reduction of 500 emergency department hours equating to 86 patients per month or 3 patients per day. The appropriate transport destination would have a cost saving benefit for the patient, the hospitals and the EMS provider

AMR data indicated responses to 2,571 behavioral health calls in 2012, which averages out to 7 calls per day. Transporting patients directly to a behavioral health center, following a prescribed and thorough paramedic screening, decreases the impact of interfacility transfers between the emergency departments and behavioral health centers. These transfers are often delayed because of facility security issues. This approach would also allow transport units to remain available for response in the 911 system by utilizing them only when transport is deemed necessary.

Types and Number of Patients Likely to be served:

It is anticipated the trained Community Paramedics will assess and treat 3-5 patients per day or approximately 86 patients per month.

Anticipated Number of Community Paramedics:

We estimate that 12 CPs (excluding the current Field Supervisors) can address 2093 behavior health patients over 2 years, once equipped with the appropriate training and resources.

Employment Opportunities for Community Paramedics:

American Medical Response will serve the entire Stanislaus County exclusive operating area. The lessons learned from CP pilot study will quickly extend to neighboring communities and numerous job opportunities will be created for skilled, empathic paramedics once the pilot verifies the value of the concept.

Other Programs Serving as Models for this Project:

The EMS Agency Medical Director and AMR CES Manager have been corresponding and coordinating with Wake County, North Carolina and San Mateo County, California. Both programs have successfully utilized paramedics to conduct field assessments on behavioral health patients; and have transported qualifying patients to alternative destinations.

PROGRAM MANAGEMENT

Project Leadership and Local Steering Committee:

The project leadership and local steering committee will work in collaboration with the EMSA Community Paramedic Project Manager, Independent Evaluator, and State Community Paramedic Advisory Committee as necessary throughout the duration of the pilot project. Project leadership and local advisory committee members are described below:

Mountain Valley Emergency Medical Services Agency (Dr. Kevin Mackey, Richard Murdock, Sheldon Gilbert, Project Manager); provide project management, regulatory oversight and medical direction.

American Medical Response (Cindy Woolston, Mike Corbin); provide and monitor quality improvement, staffing/funding, training, data collection and analysis.

Doctors Medical Center (Anita Schlenker); serve as the Primary Behavioral Health Services Partner, ED participant, and clinical mentor.

Memorial Medical Center (Mike Taylor); serve as a secondary partner and ED participant.

Kaiser (Chris Neilson); serve as a secondary partner, ED participant, and clinical mentor.

Emanuel Medical Center (Renee Pimentel); serve as a secondary partner and ED participant.

Doctors Behavioral Health Center (Tony Vartan); serve as alternate transport partner and secondary behavioral health expert.

Behavioral Health Resource Center (Cherie Dockery); serve as alternate transport partner and behavioral health expert provider.

Health Care Services Agency (Maria Blanco); serve as a project partner and provide public health oversight and direction.

Stanislaus County Fire Chiefs Association (Dale Skiles); serve as a system first responder stakeholder and function in a support capacity for the project.

Stanislaus County Police Chiefs Association (Adam Christianson); serve as a system first responder/law enforcement stakeholder and function in a support capacity for the project.

Operational Logistics:

American Medical Response, Stanislaus County will provide the community paramedics and logistical support for the CP 012 project. A quick response vehicle (QRV) staffed with a CP trained paramedic will be in service 24/7 to respond to behavioral health incidents anywhere within the exclusive operating area (EOA). In addition, the on duty supervisor will be trained as a CP and serve as a secondary response vehicle for behavioral health responses meeting the CP012 response criteria. Designated CP units will be posted, dispatched and tracked through Life-Com dispatch.

Training and education will be provided through AMR clinical services and augmented by Steering Committee representatives from Doctors Medical Center, Kaiser Permanente Modesto, Sutter Hospital Modesto and Stanislaus County behavioral health services.

The Improvement Process:

The attached Mountain Valley Emergency Medical Services Agency Quality Assurance/Quality Improvement process (Attachment C) will be utilized as the foundational quality program elements. The process has been utilized in the development of the CP 12 Program to define the customer, stakeholder and community opportunities/issues the program will be addressing. The process has ensured that the necessary measurement tools exist for baseline data; paramedic performance measurement; measuring adopted goals/objectives; evaluating program management; and ensuring that adequate physician and behavioral health professional and clinical elements are in place. Data analysis sources, variations and solutions have been identified and are included in the project. In addition, through the quality assurance process, forums such as steering, curriculum, and quality committees have been established to brainstorm, prioritize, and benchmark program elements that result in proposed solutions for improvement. Lastly, the quality improvement process has ensured control mechanisms are in place that pursue error proof solutions; a culture of safety and accountability (“Just Culture”); and sustainable practices that have adequate response plans in place to address findings and necessary changes.

Governance & Medical Control:

The EMS Agency Medical Director will act as the principle investigator and has primary responsibility for medical control. The EMS Agency Executive Director and Community Paramedicine Coordinator will have primary responsibility for the coordination of the pilot project. As project management, they will work closely with the local steering committee, the State EMS Authority Project Manager and

the Independent Evaluator. The steering committee will be tasked to provide feedback, direction, and monitor any program issues that may arise. This increase in medical control and oversight will be necessary to ensure patient safety and for quality assurance. The local steering committee will work in collaboration with the State EMS Authority Project Manager and the Independent Evaluator.

Provisions for Protecting Patients' Safety:

Community Paramedics will complete the core paramedicine curriculum approved by the California EMS Authority and a site-specific training program. A curriculum development sub-committee of the steering committee consisting of the project Medical Director as well as County behavioral health and program management staff developed the on-site training program utilizing national best practice curriculums as a reference. The curriculum presented includes didactic, clinical and field internship components. The training program has been approved by the steering committee, the Project Medical Director, and the County Health Department Behavioral Health Medical Director. It is recognized as being consistent with local and national standards.

The approved curriculum meets or exceeds local and national behavioral health training standards and learning objectives and will address specific patient safety and privacy standards and requirements.

Data Collection and Security:

Patient data will only be transmitted via secure electronic communications. All records will be maintained in a secure location and will only be available for data review by authorized investigators or data abstraction research associates. Mountain Valley EMS Agency will apply for and obtain Institutional Review Board (IRB) approval for this project to ensure the safety and welfare of participants. The protection of patients will further be met through the testing of the protocol and collection of six months of baseline data prior to implementation; use of electronic patient care records for quick identification of problems and generation of reports; monthly quality improvement meetings; hands-on physician oversight; and an active Community Paramedicine Steering Committee.

A weekly review of collected data elements, project objectives and system performance will be conducted by program management staff and reviewed by the Medical Director. Bi-weekly meetings of the steering committee will be conducted. The steering committee will review retrospective and concurrent data and performance in relation to established objectives. The steering committee will propose

recommendations for approval by the Medical Director and implementation by the program management staff. A data dashboard will be established and utilized for real time review of program data, performance, and outcomes.

APPENDIX A – Protocol Policy

MOUNTAIN-VALLEY EMS AGENCY
POLICIES AND PROCEDURES

POLICY: 2XX.XX
TITLE: **COMMUNITY
PARAMEDICINE**

APPROVED: SIGNATURE ON FILE IN EMS OFFICE
Executive Director

SIGNATURE ON FILE IN EMS OFFICE
Medical Director

EFFECTIVE DATE: DRAFT
SUPERSEDES:
REVISED:
REVIEW DATE:
PAGE: 1 of 3

COMMUNITY PARAMEDICINE

- I. **AUTHORITY:** Division 2.5, California Health and Safety Code, §1797.206; 1791.214; 1797.218; 1791.220 and 1791.221. Title 22, California Code of Regulations, §100144 and 100145.
- II. **DEFINITIONS:**
 - A. "Agency" means the Mountain-Valley Emergency Medical Services Agency.
 - B. "ALS" means Advanced Life Support, as defined in Section 1797.52, Division 2.5 of the Health and Safety Code
 - C. "Base Hospital" means a hospital approved and designated by the Agency to provide immediate medical direction and supervision of EMT-I, EMT-II, and EMT-P personnel in accordance with policies and procedures established by the Agency.
 - D. "Community Paramedic" means a paramedic trained and certified to provide a medical clearance exam and the issuance of a 5150 assessment hold

III. **PURPOSE**

To establish criteria to provide a medical clearance exam and referral to approved alternative destinations (i.e. transport to a location other than the emergency department) in order to facilitate the most appropriate triage and care for persons with acute mental health or substance abuse concerns.

IV. **POLICY**

- A. Steering Committee
The steering committee will be tasked to monitor as well as provide feedback and direction for any program issues that may arise. This increase in medical control and oversight will be necessary to ensure patient safety and quality improvement.
 - 1. The Agency Medical Director will act as the principal investigator and has primary responsibility for medical control.

2. The local steering committee shall work in collaboration with the State EMS Authority Project Manager and Independent Evaluator.
3. The Steering Committee will include a representative from the following agencies:
 - a. Mountain-Valley EMS Agency (Medical Director and Program Coordinator)
 - b. Health Services Agency
 - c. Memorial Medical Center
 - d. American Medical Response
 - e. Doctors Medical Center
 - f. Kaiser Permanente
 - g. Behavioral Health
 - h. Law Enforcement

B. QI/Patient Safety Committee

C. Paramedic Eligibility

1. Candidates will have a minimum of 4 years of ALS experience. The possession of an AA/AS degree is preferred but not required.
2. Candidates will be endorsed by the LEMSA Medical Director.

D. Training

1. The Community Paramedic must complete 120-180 additional training hours:
 - a. 80 hours of Core Curriculum will be provided by the State EMS Authority.
 - b. 80 hours of local training will be provided by the Agency based on local program requirements. This will include:
 - (1) Crisis Intervention Training (40 hours)
 - (2) Advanced clinical assessment and Breathalyzer training (4 hours)
 - (3) Local policy/procedure training and evaluation (4 hours)
 - (4) Preceptorship with ED Physician/Clinical Nurse (16 hours)
 - (5) Preceptorship with Behavioral Health Clinician (16 hours)

E. Quality Improvement and Data Collection

1. All patients evaluated by the Community Paramedic for referral will be documented on the Patient Care Record (PCR).
2. Specific behavioral health fields will be added to the PCR. These include, but are not limited to:

3. All cases referred to behavioral health facilities will be audited for appropriateness of referral.
4. Any patient who is referred to Behavioral Health and later transferred back within 6 hours to the emergency department will be audited, tracked and trended.
5. Evaluation components will include a process evaluation, qualitative evaluation, impact evaluation, utilization, and an estimate of healthcare cost savings.
6. Agency shall have access to electronic PCR information.
7. All data shall be collected and shared electronically.
8. Monthly reports will developed and maintained by the Agency
9. Monthly reports shall be available for review by the local steering committee, independent evaluators, and the State Advisory Committee through the State EMS Authority's Project Manager.

V. PROCEDURE

- A. Inclusion Criteria: Patients with a primary mental health or substance abuse complaint are eligible for consideration for an alternate destination if ALL of the following criteria are met:
 1. Patient has no medical complaint or traumatic conditions, other than superficial abrasions that do not require repair (ie: scratches to the wrist).
 2. Patient is ambulatory.
 3. Patient is cooperative and does not require physical restraint.
 4. GCS greater than 13.
 5. Heart rate greater than 60 and less than 120.
 6. SBP 90 – 200 and DBP 60-100. Note: Isolated hypertension (i.e. Hypertension with no associated symptoms such as headache, neurologic changes, chest pain, or shortness of breath) in a patient with a history of hypertension will not be a reason to decline the referral to Behavioral Health.
 7. Pulse Oximetry greater than 94%
 8. Diabetic patients with no evidence of ketoacidosis AND a blood glucose greater than 60 and less than 300 mg%.
 9. Blood alcohol concentration (BAC) less than 0.3.
- B. Exclusion Criteria: Patients who present with ANY of the following criteria are not eligible for transport to an alternative destination and must be transported to the appropriate emergency department for evaluation:
 1. Patient who fails to meet ANY of the INCLUSION criteria outlined above
 2. Patient who has taken ANY medications, prescribed or over the counter, outside of normal recommended dose.

- C. The Community Paramedic must approve and communicate with the behavioral health facility prior to transport in all cases. In any circumstance, transport crews must communicate directly with the Community Paramedic on-scene to ensure that proper notification of the behavioral health center has been made and approved.

APPENDIX B – Local Training Curriculum

Proposed Stanislaus County Community Paramedic Training Curriculum

Didactic Crisis Intervention Instruction (40 hours)

1. Module 1 – Introduction (2 Hour) The student will understand his or her role in the pilot program and able to demonstrate proficiency in the following
 - 1.1. Overview of Community Paramedicine
 - 1.2. Scope of Stanislaus CP Pilot Project
 - 1.3. CIT Program Overview
 - 1.4. Clinical Issues related to Mental Illness

2. Module 2 - Introduction to Behavioral Disorders (8 Hours) The student will become familiar with adult and adolescent mental health disorders to include major behavioral, cognitive, depressive and special focus disorders. Student will demonstrate proficiency with signs and symptom of behavioral Disorders.
 - 2.1. Sever, Persistent Mental Illness
 - 2.1.1. General Psychiatric Diagnosis and Symptoms
 - 2.1.2. Mood Disorders: Bipolar, Depression, Mania
 - 2.1.3. Thought Disorders: Schizophrenia
 - 2.2. Children, Youth and Adolescence
 - 2.2.1. Attention Deficit, Hyperactivity, or Impulse Control Disorders
 - 2.2.2. Autism, Childhood Schizophrenia
 - 2.2.3. Developmental Disabilities: such as Mental Retardation
 - 2.3. Cognitive Disorders
 - 2.3.1. Dementia
 - 2.3.2. Traumatic Brain Injury
 - 2.3.3. Delirium
 - 2.4. Special Focus Issues
 - 2.4.1. Posttraumatic Stress Disorder
 - 2.4.2. Personality, Borderline, Dissociative Disorder
 - 2.4.3. Geriatric Issues
 - 2.4.4. Anxiety Disorders/ Panic Disorders/ Obsessive-Compulsive Disorders
 - 2.4.5. Suicide Issues

3. Module 3 – Neuropharmacology (6 Hours) The student will be able to Identification and common effects of psychotropic medications
 - 3.1. Types of Medications
 - 3.1.1. Antidepressants

- 3.1.2. Mood stabilizers
 - 3.1.3. Anti-anxiety
 - 3.1.4. Antipsychotics
 - 3.2. Side Effects
 - 3.3. Medication Assessments
4. Module 4 – Mental Health Assessments (6Hours) The student will be to review the sociopathic checklist, personality assessments and mental health profiling used in current mental health assessments for inpatient and outpatient care. Learn how to interview the patient using medical history, substance abuse history, social-economic history and mental health examination to determine if the patient has a history or potential to be mentally ill. Learn special considerations for caring for substance/alcohol abuse, incarcerated, children, elderly and suicidal patients. Learn to effectively communicate with the mentally ill. Demonstrate patient risk assessment for the potential for harm.
- 4.1. Assessment Tools
 - 4.1.1. Special Considerations: Alcohol and Drug Abuse
 - 4.1.2. Special Considerations: The Incarcerated Patient
 - 4.1.3. Special Considerations: Children and Adolescents
 - 4.1.4. Special Considerations: The Elderly or Dependent Adult
 - 4.1.5. Special Considerations: Suicidal Emergencies
 - 4.2. Therapeutic Communications
 - 4.2.1. Verbal components
 - 4.2.2. Non-verbal components
 - 4.2.3. Factors that influence communication
 - 4.2.4. Communication statistics
 - 4.3. Interview Techniques
 - 4.4. Risk Assessment
 - 4.4.1. Violence Curve
5. Module 5 – Cross Cultural Considerations (2 Hours) The student will able to identify unique perceptions regarding mental health by various cultures, to include Hispanic, Asian, African American, Eastern European, and Native American cultures. Learn how to utilize appropriate community skills and techniques for individuals from identified cultures. Identify local community resources available to identify cultures.
- 5.1. Cultural Awareness
 - 5.2. Culturally Informed Intervention

6. Module 6 – Legal Issues (2 Hours) The student will be familiar with legal issues regard involuntary civil confinement, 5150/5170 statutes and patient right's.
 - 6.1. Civil Commitment
 - 6.2. Voluntary vs Involuntary holds
 - 6.3. 5150 Statutes
 - 6.4. Patient Rights

7. Module 7 – Self –Protection and De-escalation Techniques (6 Hours) The student will become familiar with techniques and strategies to use when encountering a crisis and ways to de-escalate the mental patient.
 - 7.1. Self-protection
 - 7.2. De-escalation techniques

8. Module 8 – Overview of Community Resources (8 Hours) The student will have the opportunity to tour Behavioral Health facilities and gain insight into intake procedures for each facility. Learn Referral process for APS, CPS and Public Health
 - 8.1. Referral Process (APS/CPS/HSA)
 - 8.2. Intake Process (DBHC/BHRC)

9. Module 9 – Clinical Decision Making for the Patient with a Behavioral Emergency (8 Hours) The student will be able to demonstrate competence through the use of pre-staged scenarios to manage behavioral emergencies and properly identify patient care needs. Understand operational procedures and how to integrate into the total system. Learn documentation standards and pilot scope of practice. Demonstrate equipment proficiency. Comprehension of didactic knowledge will be demonstrated by a passing score of eighty percent on a written exam. As well a passing score during hospital and field experience with behavioral health clinicians.
 - 9.1. Prehospital Management of Behavioral Emergencies
 - 9.2. Protocol Review
 - 9.3. Equipment review (Breathalyzer)
 - 9.4. Documentation (Patient Consent/PCR)
 - 9.5. Quality Review Process
 - 9.6. Mental Health Assessment Practice
 - 9.7. Review and Evaluation

10. Module 10 - Advanced Clinical Assessment (16 hours) The student will participate in a clinical practicum under the supervision of a ED nurse mentor
 - 10.1. Clinical Mentor (Doctor's Medical Center)
 - 10.2. Clinical Mentor (Kaiser Permanente – Modesto)

10.3. Breathalyzer familiarization

11. Module 11 - Clinical Experience with Behavioral Health Clinician (16 hours)

The student will participate in a clinical experience under the supervision of a mental health clinician. Patient evaluations will be approved by the MVEMSA Medical Director.

11.1. Field Assessments

Appendix C – MVEMSA Quality Improvement Policy

MOUNTAIN-VALLEY EMS AGENCY
POLICIES AND PROCEDURES

POLICY: 620.10
TITLE: **Quality Improvement Program**
EFFECTIVE DATE 5/2013
SUPERSEDES:
REVISED:
REVIEW DATE: 5/2018
PAGE: 19 of 23

APPROVED: SIGNATURE ON FILE IN EMS OFFICE
Executive Director
SIGNATURE ON FILE IN EMS OFFICE
Medical Director

QUALITY IMPROVEMENT

I. **AUTHORITY**

Division 2.5 of the California Health and Safety Code, Section 1797.107 and California Code of Regulations, Title 22, Section 100027.

II. **DEFINITIONS**

- A. **Local Quality Improvement Group (LQIG)** means an established committee, comprised of multiple provider agencies, which meets regularly to evaluate and act upon quality improvement information and issues within a local community.
- B. **Mountain-Valley Emergency Medical Services Agency (MVEMSA) Quality Improvement Program Manual** means the document which defines the standardized structure, process, and indicators to be used in performing quality improvement within the MVEMSA member counties' system.
- C. **Outcome Indicator** means the result of structural and process indicators (e.g. cardiac arrest survival rate (outcome) compared to number of AEDs per population (structural) or response times (process)).
- D. **Process Indicator** means a measurable activity of a system (e.g. IV's, intubations)
- E. **EMS Service Provider** means any agency which performs services directly or indirectly to a patient which has received pre-hospital care to include, but not be limited to: dispatch, first responder, ambulance, base hospitals, and receiving facilities.
- F. **Provider Improvement Program** means a written program in which an EMS Provider has established an organizational structure and standard operating procedures which allow for the continual evaluation and improvement of services.
- G. **Provider Quality Improvement Panel** means an established committee within a local EMS Provider organization which meets regularly to evaluate

and act upon quality improvement information and issues within a local provider service area.

- H. **Quality Improvement** means an organized and standardized process by which services and products delivered by an EMS System are continuously evaluated and improved based upon accepted benchmark standards.
- I. **Quality Indicator** means a measurement of the degree or frequency of compliance with an established standard or benchmark, including both core indicators and ad-hoc indicators, as approved by the EMS Agency Medical Director.
- J. **Quality Liaison Committee (QLC)** means an established committee of EMS service providers, which meets regularly to evaluate and act upon quality improvement information and standards within the regional service area.
- K. **Structural Indicator** means a physical attribute of a system or the structures in place to ensure quality (e.g. number of hospital or ambulances per population).

III **PURPOSE**

To provide the structure and process for the continual evaluation and improvement of emergency medical care within the Mountain-Valley EMS system.

IV **POLICY**

- A. **Data Collection & System Evaluation**
EMS Providers shall participate in an organized EMS system evaluation program at each of the following four levels:
 - 1. Regional Level/QLC
 - a. All EMS service providers shall collect and report data for core indicators to the EMS Agency on a regular basis.
 - b. All EMS service providers shall collect and report ad-hoc indicators to the EMS Agency as recommended by the QLC and approved by the EMS Agency Medical Director.
 - c. All EMS service providers shall participate in the regional QLC meetings and processes, which at a minimum provide review and assessment of structural, process, and outcome quality indicators as established within the regional EMS system.

2. Local Level/ LQIG

- a. All EMS service providers shall collect and report data for core indicators to the EMS Agency on a regular basis.
- b. All EMS service providers shall collect and report ad-hoc indicators to the EMS Agency as recommended by the LQIG and approved by the EMS Agency Medical Director.
- c. Each LQIG shall regularly report the results of any system evaluation to the Quality Liaison Committee.
- d. All EMS service providers shall participate in the LQIG meetings and processes, which at a minimum provide review and assessment of core structural, processes, and outcome quality indicators as established within the regional EMS system.

3. Provider Level

- a. All EMS service providers shall establish in writing an internal Data Collection and System Evaluation program, which includes, at a minimum a:
 - (1) list of structural, process, and outcome indicators, approved by the EMS AGENCY Medical Director
 - (2) procedure for the evaluation of all established indicators
 - (3) procedure for the regular reporting of core and ad-hoc indicators to the LQIG, QLC, and EMS Agency
 - (4) procedure for reporting information on any structural, process, or outcome indicator which falls outside the accepted benchmarks to the provider QI liaison
 - (5) procedure for reporting information on any structural, process, or outcome indicator which falls outside the accepted benchmarks to other agency provider QI liaisons when the information involves another EMS provider
 - (6) procedure for submitting unusual occurrence reports to the EMS agency for unresolved inter-agency issues.
- b. All providers shall immediately provide a written unusual occurrence report to the EMS Agency when any situation could be considered an imminent threat to the public health or safety.

4. Personnel level
 - a. All EMS personnel who provide pre-hospital medical care for an EMS provider shall participate in a system evaluation program that includes, at a minimum:
 - (1) collection and documentation of structural, process and outcome indicators as established by the EMS service provider
 - (2) periodic evaluation of established indicators
 - b. All EMS personnel shall immediately provide a written situation report to the EMS Agency when any situation could be considered an imminent threat to the public health or safety.

B. **EMS System Improvement Program**

1. EMS Providers shall participate in an organized EMS system improvement program. In cooperation with the EMS agency, providers shall use the following four-step improvement process:
 - a. **Plan:** Develop a Plan to implement a policy, procedure, or process to improve quality.
 - b. **Do:** After the plan is developed, DO it by putting the plan into action.
 - c. **Study:** After the plan has been put into action, STUDY the results to see if the plan has worked.
 - d. **Act:** After studying the results of the plan, ACT either to stabilize the improvement that occurred or to determine what went wrong if the gains that were planned for did not materialize.
2. EMS Providers shall participate in all training programs identified through the QI process for system improvement and approved by the EMS Agency Medical Director.
3. EMS Providers shall ensure that all personnel who provide prehospital medical care successfully complete training programs identified through the QI process for system improvement and are approved by the EMS Agency Medical Director. Training records shall be maintained for a period of not less than four years and be available to the EMS Agency upon request.

4. All EMS personnel who provide prehospital medical care shall participate in training programs identified through the QI process for system improvement and are approved by the EMS Agency Medical Director.



Solano County Community Paramedic Pilot Program

California EMSA Pilot Site # 13

PROGRAM MANUAL



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Purpose:

To provide a mechanism for vulnerable populations to access post hospital discharge follow up, treatment and referral of patients with a confirmed diagnosis of Chronic Obstructive Pulmonary Disease (COPD), Congestive Heart Failure (CHF) or at risk of medical noncompliance or rapid decompensation.

This project will be undertaken by the approved Medic Ambulance – Solano Division (Medic) Community Paramedic (CP) personnel as part of the California State EMS Authority Community Paramedicine Pilot Project.

The goals of the Medic Community Paramedicine Pilot Project include:

A. Ensure that patients receive the following:

- Understanding of their hospital discharge instructions.
- Coordination of necessary follow up care.
- Coordination of necessary/appropriate transportation.
- Medications reconciliation.

B. Allow CP personnel to make post hospital discharge home visits when necessary.

C. Allow CP personnel to utilize referrals to a licensed healthcare provider when an intervention by could prevent an exacerbation of a medical condition.

Regulatory Authority:

- California Code of Regulations, Title 22, Division 9, Chapter 4.
- California Code of Regulations, Title 22, Division 7, Chapter 6.
- Health and Safety Code, Division 2.5, Chapter 2, Section 1797.52 and Chapter 4, Section 1797.218.
- Health and Safety Code, Division 107, Part 3, Chapter 3, Article 1, commencing with Section 128125, the Health Workforce Pilot Projects Program.

Local Need:

Solano County is a HRSA-designated medically underserved area with a physician provider to population ratio of 81.1 per 100,000. Our population has a great mix of urban and rural areas, and diverse socioeconomic means and is spread across a geographic area of 907 miles. In addition, many patients have a high readmission rate. COPD / CHF patients have a 23% re-admission rate in within our participating local hospitals. The patient re-admissions cause global increased costs to our local hospitals and preventable impacts on our health care system. As a result, it is often difficult for physicians or nurses to optimally care for vulnerable patients in all parts of our county within the critical 72 hour window post-discharge period. Medic Ambulance is able to reach all parts of the county and provide this vital and critical access to timely care. The program will serve as a bridge between physicians and their patients to optimize care they would not be able to otherwise receive.

Implementation and Duration:

Medic CP Pilot Project implementation date is January 1, 2015 with an expected duration of up to 24 months. HWPP projects may be extended one year at a time if the OSHPD Director determines that continuation of the project will contribute substantially to the availability of high-quality services in the state or region.

Medical Control and Project Monitoring:

Medic CP's enrolled in this pilot will work under the direction of Medic Ambulance's Quality Assurance/Improvement program. This program is led by our Medical Director - Paul Kivela, MD, Quality Assurance/Improvement Director – Cynthia McBride, RN, BSN, Quality Assurance/Improvement Manager - Brian Meader, MICP.

Our Solano County Community Paramedic Steering Committee operates as a sub-committee of Solano County's Physicians' Forum. Physicians' Forum includes the following members: Solano County EMS Medical Director, the Solano County EMS Administrator, Medic Ambulance Medical Director, Medic Ambulance Vice President of Operations, North and South County Fire Department Medical Directors, Sutter Solano Medical Center's Medical Director, Kaiser Permanente's Medical Director, and NorthBay Hospital's Medical Director.

The purpose of this Steering Committee is to provide medical and administrative oversight for the pilot project. The Steering Committee will work in collaboration with the EMSA Community Paramedic Project Manager and Independent Evaluator. Medic's Medical Director, Paul Kivela, will act as the principal investigator and will communicate findings and recommendations associated with treatment and/or services rendered as a part of this pilot to the Solano County Medical Director, who has primary responsibility for medical control for any project in her/his jurisdiction.

Local Advisory Committee:

Local Advisory Committee:

The responsibilities of the Solano County Community Paramedicine Advisory Committee include:

- Work in collaboration with the EMSA Community Paramedicine Project Manager, Independent Evaluator and State Community Paramedicine Advisory Committee as necessary throughout the duration of the pilot project.

- Ensure appropriate medical control and oversight necessary to ensure patient safety and quality improvement through the following methods:

- *Development of CP candidate selection criteria and approval of selected CP candidates.*

- *Development of the site specific CP training curriculum, including skills testing and clinical experience.*

- *Development of Community Paramedicine Pilot Project policies, procedures and protocols.*

- *Development and monitoring of a Community Paramedicine Pilot Project QI Plan.*

- *Development, monitoring and review of Community Paramedicine Pilot Project data metrics.*

Project Manager – Oversee all aspects of Pilot, Chair Steering Committee, Liaison with EMSA.

James Pierson, VPO, Medic Ambulance Service

Project Medical Director – Oversee and approve all aspects of Pilot, review and approve all Medical Procedures and Treatments used in Pilot. Will act as the principal investigator and communicate findings and recommendations associated with treatment and/or services rendered as part of this Pilot to the Solano County EMS Medical Director.

Paul Kivela, Medical Director, Medic Ambulance Service

LEMSA Medical Director – Active member of Steering Committee. Has primary responsibility for Medical Control for any project in his jurisdiction. Will communicate and receive findings and recommendations associated with treatment and/or services rendered as part of this Pilot from the Project Medical Director.

Aaron Bair, Medical Director, Solano County EMS

LEMSA Administrator- Provide collaborative information from EMS Aspect as Active Member of Steering Committee.

Jessica Tello-Evans, EMS Administrator, Solano County EMS

Kaiser Administrator- Oversee all aspects of Kaiser Members enrolled in projects, provide hospital reporting requirements to Project Manager, and provide collaborative advisory to Pilot as Active Member of Steering Committee.

Herodia Allen, Continuum Administrator, Kaiser Permanente

Kaiser Medical Director- Oversee medical treatment and quality of care provided Kaiser Members enrolled in projects, and provide collaborative advisory to Pilot as Active Member of Steering Committee

Neil Markus, EMS Medical Director, Kaiser Permanente

Northbay Healthcare Administrator- Oversee all aspects of Northbay Healthcare patients enrolled in projects, provide hospital reporting requirements to Project Manager, and provide collaborative advisory to Pilot as Active Member of Steering Committee.

Kathy Richerson, Vice President – Chief Nursing Officer, Northbay Healthcare

Northbay Healthcare Medical Director- Oversee medical treatment and quality of care provided Northbay Healthcare Members enrolled in projects, and provide collaborative advisory to Pilot as Active Member of Steering Committee

Still Pending, Have had Physician representation at all meetings.

Sutter Solano Medical Director- Provide collaborative advisory to Pilot as Active Member of Steering Committee

Joseph Becker, Sutter Solano / SEMSC Board Member

Community Paramedic Selection Criteria:

In order to be eligible to be trained as a Community Paramedic under the proposed pilot, the paramedic must have a minimum of four (4) years' experience and a minimum of two (2) years' experience in Solano County as Paramedic. Supervisors must have a minimum eight (8) years of experience and a minimum of (2) years in Solano County. Preference will be given to individuals who have an A.A. degree or higher level of education. All Paramedics applying each shall be recommended for the training program by Medic Ambulance Quality Assurance/Improvement Department and shall be recommended by the Medic and/or Solano County Medical Director. All Paramedic applications will be reviewed by the Solano County Community Paramedic Steering Committee. Once a paramedic's application is reviewed by the CP Steering Committee ultimate decision of placement into the program will rest with Medic Ambulance and its Medical Director.

Patient Inclusion Criteria:

Patients must meet the following criteria for inclusion in the Medic CP Pilot Project:

- Confirmed Diagnosis of COPD or CHF or other mutually agreed upon disease process
- Discharged home from Kaiser Vallejo, Kaiser Vacaville, or Northbay VacaValley Hospital. .
- Agree to participate in the pilot project and complete/sign an OSHPD/HWPP required pilot project informed consent form. Informed consent must be obtained by the CP from the patient at each encounter.
- Not enrolled in Hospice
- Not enrolled in any Psychiatric Programs
- Must be at least 18 Years of age and be able to or have a caretaker that is able to consent to care

Procedures:

- A. Patients or their medical decision maker who meet the inclusion criteria will be contacted by The Facility prior to hospital discharge to explain the purpose and benefits of the Community Paramedicine Pilot Project and to obtain required initial informed consent for pilot project participation. This initial informed consent will only apply to the initial CP telephone contact described below. Further patient encounters by CP personnel will require a separate informed consent for each encounter. Patients may withdraw consent or choose to no longer participate in the pilot project at any time.
- B. Patients who agree to participate in the pilot project, will then be approved via the Facility and the Facility will enroll the patient into the Community Paramedic Program. The Facility will contact Medic Dispatch and set up the contact through dispatch. The Medic CP Coordinator will coordinate all patient demographic, history and orders with the Facility. Once all pertinent and information is obtained the CP will be scheduled.

- C. Medic CP personnel via telephone within 6-24 hours following hospital discharge. An approved standard script will be utilized by the CP for these initial patient contacts.
- D. The CP will utilize an approved algorithm to assess the patient and will take the following actions based on their assessment and patient needs:
 - 1. Ensure that the patient has a clear understanding of their hospital discharge instructions. If the patients understanding of their hospital discharge instructions is unclear, the CP will take one or more of the following actions:
 - a. Perform a home assessment to allow for further assessment.
 - b. Contact the Facility for clarification and direction.
 - c. Contact or refer the patient to their primary care provider (PCP) for clarification or direction.
 - 2. Assist the patient with scheduling or referral to their PCP.
 - 3. Assess the need for transportation. If necessary, assist the patient in arranging transportation via taxi, non-medical transport, or referral to case management.
 - 4. Medication reconciliation to ensure that the patient has obtained and is taking their medications as prescribed. The CP will attempt to resolve any minor identified medication issues with the patient. If the CP identifies any medication issues that they are unable to resolve over the telephone, the CP will take one or more of the following actions:
 - a. Perform a home visit to allow for further assessment.
 - b. Referral to case management.
 - c. Contact or refer the patient to their PCP for clarification or direction.
 - 5. Perform Integral Triage Assessment Questionnaire
 - 6. Assist in accessing the accuracy and completion of the POLST Form
 - 7. The CP, patient or their medical decision maker, and responsible parties at the Facility will all complete satisfaction surveys on all enrolled patients

Documentation:

Medic Ambulance CP's will utilize the ZOLL Data Systems Tablet ePCR for our Pilot Project. In addition, to the medical documentation the CP will do an initial needs assessment questionnaire. The sample (draft) questionnaire is show in the following pages, and will be attached to the medical documentation (chart 2). ZOLL Tablet ePCR features a close call rule program which ensures the mandated minimum medical information is answered prior to the completion. All aspects of the CP's patient contact will be recorded in the medical documentation. These closed call rules are set to the county and company standards for required medical information needed for completion. This ensures a full assessments and proper care is performed and documented. If these close call rules are not answered, the ePCR is unable to be completed. The paramedic is prompted to answer each non-completed section by the ePCR program. Once the record has been completed by the CP the patient medical record is secured within Medic Ambulance secured medical records database. The Medic CP Coordinator has immediate access to all documented ePCRs reviews and Audits 100% of all calls, as further explained in our Quality Assurance section. Once the record is completed the CP Coordinator will ensure these documents are securely transmitted via email or fax, to the Discharge Planner, ordering physician and Primary Care Physician. All calls, HIPAA compliant, will be forwarded to the Physician Members of the Steering Committee for review in protocol compliance, patient safety, and program compliance. Please see further explanation within the Quality Assurance Section. Below is a sample flow chart as to how a CP contact will be processed. (Chart 1)

Chart 1

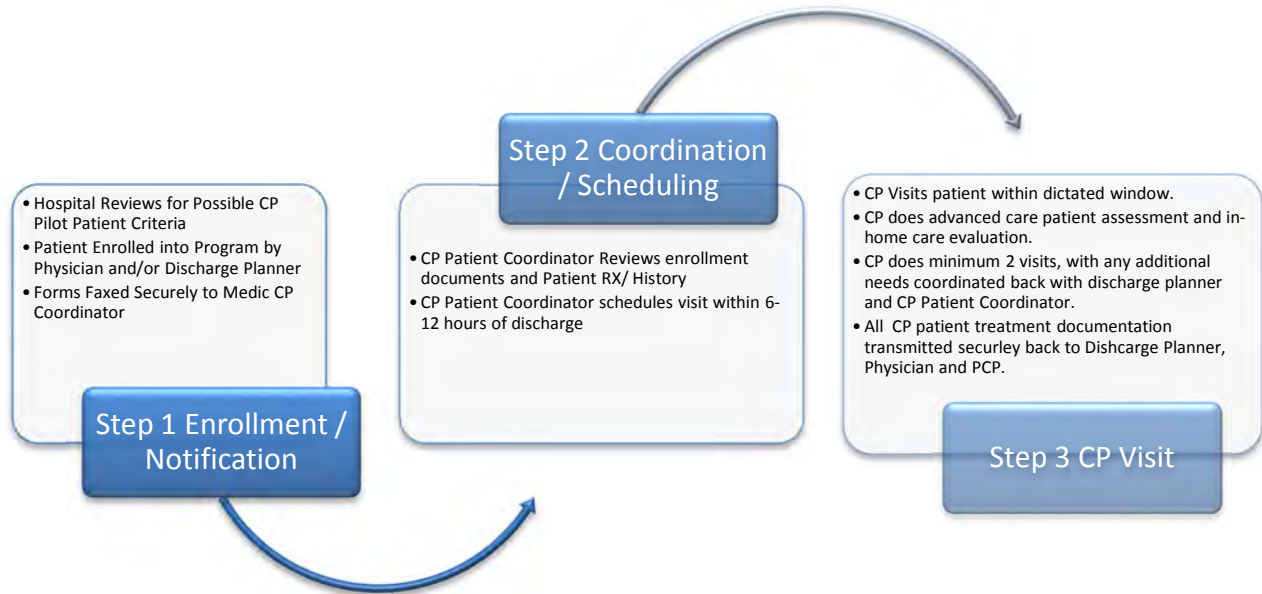


Chart 2

NEW Order of Questions	Question	Multiple Choice (Select ONE)
	Willing & able to participate in the survey? (If no, specify reason in comments)	Yes No
	In general, how would you rate your health?	Excellent Very Good Good Fair Poor No response
	Do you have chronic persistent pain?	No Response No Yes
	If you responded yes to the previous question, does your pain interfere with your daily activities?	No Response No Yes
	Do you have difficulty contacting your physician or other health care provider when you have health care needs?	No Response No Yes
	Do you have difficulty completing any of the following self-care activities by yourself?	
	Bathing?	No Response No Yes
	Dressing?	No Response No Yes
	Grooming	No Response No Yes

Toileting?	No Response No Yes
Transferring from bed to chair?	No Response No Yes
Do you have difficulty completing any of the following activities by yourself?	
Meal Preparation?	No Response No Yes
Ordinary Housework (dishes, dusting, making bed, tidying up, laundry)?	No Response No Yes
Finances (paying bills, balancing a checkbook)?	No Response No Yes
Managing medications (remembering dose schedule, taking correct dosages)?	No Response No Yes
Using the phone?	No Response No Yes
Shopping for food and household items?	No Response No Yes
Using transportation?	No Response No Yes
If yes to either of the prior 2 difficulty questions, does someone help you with these activities?	No Response No Yes
Over the last two weeks have you been bothered by any of the following?	

<p>Little interest or pleasure in doing things</p>	<p>Not at all Several days More than half the days Nearly every day No response</p>
<p>Feeling down, depressed, or hopeless</p>	<p>Not at all Several days More than half the days Nearly every day No response</p>
<p>Feeling nervous, anxious or on edge</p>	<p>Not at all Several days More than half the days Nearly every day No response</p>
<p>Not being able to stop or control worrying</p>	<p>Not at all Several days More than half the days Nearly every day No response</p>
<p>In the past two years, have you ever been worried about your housing situation?</p>	<p>No Response No Yes</p>
<p>In the past year, have you ever been unable to pay for food, housing, medications or transportation due to a lack of money?</p>	<p>No Response No Yes</p>
<p>In the past year, because of the amount you had to pay for all your medical care, did you...</p>	<p style="background-color: black; color: black;">[Redacted]</p>
<p>Are there times when you don't have enough food for your family?</p>	<p>No Response No Yes</p>
<p>Do you worry about your personal safety and security?</p>	<p>No Response No Yes</p>

During the past 6 months, have you missed health care appointments because you could not drive or did not have access to transportation?	No Response No Yes
How many times in the past year have you had X or more drinks in a day? (Where X is 5 for men and 4 for women/seniors)	<i>[Scale of 0-12+]</i> No response
How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?	<i>[Scale of 0-12+]</i> No response
On a scale from 0 -10, how well does Health Care Facilities take care of your health care needs (with 0 being not well at all and 10 being extremely well)?	<i>[Scale of 0-10]</i>
If you were looking to make a change in your health, how ready do you feel you are to make a change in your health on a scale from 0 -10 (with 0 being not ready at all and 10 being completely ready)?	<i>[Scale of 0-10]</i> No change needed
If you were looking to make a change in your health, how confident are you that you can make a change in your health on a scale from 0 -10 (with 0 being not confident at all and 10 being completely confident)?	<i>[Scale of 0-10]</i> No change needed

Quality Assurance & Performance Improvement:

QA/QI Goals and Objectives

Our first interest is ensure the delivery of optimal clinical care through our CP Pilot Program. Fostering continuous improvement for measurable and positive patient outcomes is Medic's QA/QI mission, and what are standard will be within this Pilot. To that end, Medic has recruited and selected the most competent and caring paramedics for this Pilot. The company monitors, tracks and trends clinical performance and completes its QA/QI process by rewarding clinical excellence or correcting poor performance through training and education process.

Organization, Accountability and Responsibility

In collaboration with Dr. Kivela, Cynthia McBride and Brian Meader, will oversee the following quality focused responsibilities for our Pilot—

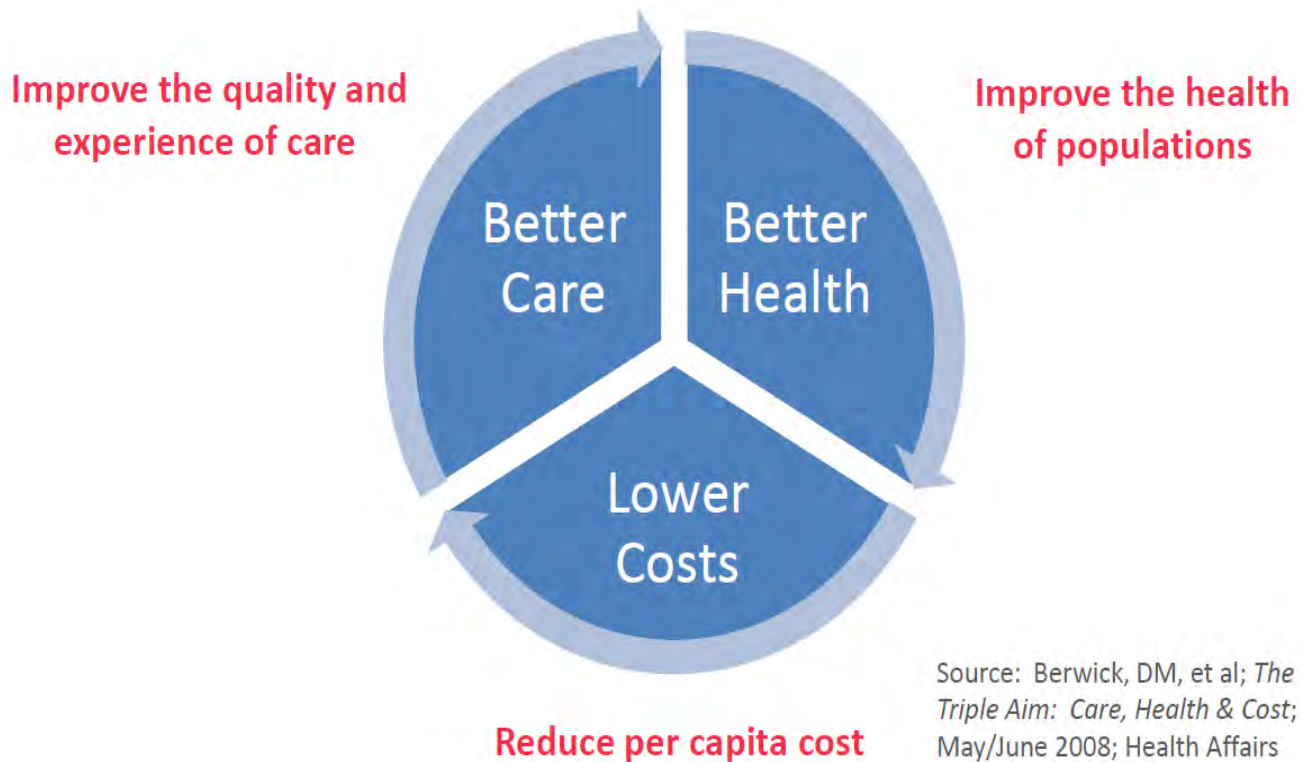
- **Acting** as primary leaders of the QA/QI program
- **Identifying** and participating in resolution of important care issues
- **Collecting** and analyzing data
- **Discovering** system issues and needs
- **Designing**, communicating, and implementing mechanisms needed for change
- **Protecting** confidential protected patient medical history and employee information
- **Leading** the QI staff, internal educators, and supervisory staff

Medic CP Pilot Quality Improvement Program Components

- **Plan** ways to improve the quality of the Pilot program
- **Gather** information from CP Pilot QI program and identify areas needing improvement
- **Act** to implement revised process, policy, or procedure based on results of the study
- **Implement** changes
- **Study** a sample of changed process

Medic CP Pilot Supports the Institute for Healthcare Improvements Triple Aim

TRIPLE AIM



Medic CP Pilot Goals

- Integrate EMS, medical, mental health and social services systems
- New, expanded services and access to early health care intervention
- Builds health care workforce to support insurance expansion
- Tailor services to meet partners unique needs
- Proof of concept: scalable, replicable, sustainable and attainable

Medic CP Pilot Measures

- Improve patient-centered care and patient satisfaction
- Reduce unnecessary ambulance responses/transport
- Reduce unnecessary emergency department visits
- Reduce unnecessary hospital readmissions/admissions
- Reduce overall health care costs

Quality Improvement Assessment

As with our current high performance EMS systems in Solano County, Medic's CP Pilot Program quality improvement assessment occurs on a *prospective, concurrent, and retrospective* basis.

Prospective — Quality Assurance and Improvement

Prospective quality improvement refers to Medic's CP knows and understands system access information, fully educated to the level needed to ensure high caliber clinical protocols and regulations are understood prior to patient contacts. A brief overview of the Local site specific training being given to the Solano County CP's providing care is listed below:

Once all CP education is completed and verified, Medic's Prospective QA doesn't end, it shifts focus on making sure the CP continually learns from the patients seen in our Pilot, and improved on the current processes. These practices are listed below:

- **Monthly CP Case Reviews** – Overview with all accredited CP's within Pilot, review of disease process, treatments, learning points from cases, feedback from Pilot Medical Directors on review of case.
- **Local Physician Continuing Education** – Provided by Partnering Facilities and/or Pilot Medical Director
- **Process review with Facilities** – Making sure process of ordering CP, and follow up of data, and whole scope of Pilot is working with partnering facilities and meeting the needs of our patients treated within the Pilot.

Concurrent QA/QI—Education and Performance Monitoring

For Medic, to conduct its concurrent QA/QI initiatives, chart audits are simply not enough. Medic has made a comprehensive commitment to monitor patient care and clinical excellence for this Pilot Project . The company’s concurrent quality assurance and improvement program implements these quality practices:

- Monitoring and evaluating clinical performance Conducting field performance evaluations through field supervisors, Quality staff and medical director
- Monitoring Personnel certifications and accreditations
- Informally and spontaneously recognizing and rewarding good performance by providing the CPs with immediate feedback.
- Conducting real-time field employee performance assessments. These assessments are the Responsibility of field supervisors, the QA staff, the medical director, and the training staff.
- Daily review of employees’ patient care reports, incident reports, and checkout sheets to ensure County protocol compliance Flagging and monitoring specific patient care reports for the purposes identifying and addressing treatment trends

Retrospective QA/QI

Retrospective is a Latin word meaning after (retro) and to look or see (spective). PCR (patient care report) review is the most familiar and commonly performed aspect of quality improvement. At Medic, our retrospective QA/QI process will be on par with National best practices. Our call retrospective process begins the moment the CP’s patient contact is complete. The QA Manager/Patient Care Coordinator will review all calls on a daily basis and can refer any PCR to Steering Committee Medical Directors for further review. Additionally, QA/QI staff will maintain 100% Audits and reviews on all aspects of the patient care reporting. The Medic QA/QI Team, communicate constantly with our Medical Director, Paul Kivela, in outcomes and findings. Should the Project Medical Director feel he would like some more professional care opinions he can use

the Physicians which are Part of the Steering Committee as additional resources. As calls are reviewed during this process any outcomes, medical opinions and findings are referred back to the Medic QA/QI staff to review with the treatment with the CP personnel. Our retrospective review does not end there. Medic QA/QI staff, along with the Project Manager, will gather data on a daily, weekly, monthly, and annual basis to help guide Medic personnel and our clinical department, as well as report data to the EMSA's third party data collector. Our Clinical Team follows CAAS and Baldrige Criteria for Performance Excellence.

Quality Metrics

The following data will be tracked by the Medic CP Pilot Project Manager/Quality Management personnel and reported to/evaluated by the CP Steering Committee on a regular basis for the duration of the pilot study:

- Pilot project metrics:
 - Number of patients contacted by a CP.
 - Percentage of patients readmitted within 30 days following a CP telephone contact.
 - Number and types of CP interventions and referrals.
 - Number of CP home visits.
- Presumptive CP patient impression vs field intervention.
- CP compliance with protocols, procedures and timelines.
- Destination determination appropriateness.
- CP referral request and/or request for additional visits

The Patient Safety/Quality Assurance Review Committee will perform patient safety reviews of 100% of cases in which care is provided by the CPs. Any unusual occurrences related to the pilot project will be reported to the Local & EMSA Project Manager within 24 hours of occurrence for in-depth review by the project Medical Director.

Solano County Site Specific CP Training:

Our Pilot site CP training will be a collaborative training effort by our Medical Director and our Local Partner facilities, Kaiser Permanente and Northbay Healthcare. Our local partners have offered Physician and Nurse Educators to teach in both didactic and clinical portion of the training. This training will begin with forty (40) Hours additional Didactic Training, done by Physicians, Nurses and the Medical Director for Pilot. The training topics to be included are the following:

- Local Protocols
- Local Procedures
- Disease Types
- Expected Physical Assessments
- Review of Documentation
- Review of Patient and Crew Safety Practices
- Medical Control
- Goals of Pilot
- 144 – 160 Hours of Clinical Hours
 - 16 Hours Hospitalist Shadowing
 - 24 Hours with Hospital Respiratory Therapy
 - 24 Hours Emergency Physician Shadowing
 - 56 Hours with Physicians / Staff in CHF / COPD Clinics
 - 40 Hours with in home CCOP Training

Goal

The Community Paramedic will demonstrate competence to provide the clinical care of the identified population through local didactic training, skills testing and clinical experience. The student will attend an estimated 200 hours of local training to achieve competence. The community Paramedic (CP) candidates will be teamed with hospitalist physicians, emergency physicians, cardiologist, pulmonologists, Mid-level practitioners and nurses of our local partners to complete the clinical rotation objectives outlined.

Objectives & Summary

1. The student will understand his or her role in the pilot program and be able to demonstrate knowledge of the following:
 - a. Introduction to leadership
 - b. Local pilot project advisory committee
 - c. Current scope
 - d. Projected state scope
 - e. Pilot project parameters
 - f. Patient informed consent requirements
 - g. Pilot project QA/QI processes
 - h. Local Community Paramedic roles and responsibilities
 - i. Approved local pilot project policies, protocols and procedures

2. Demonstrate in skills labs and scenarios how to manage patients that will be encountered in the pre-hospital setting, utilizing standard pilot project procedures.
 - a. Detailed Assessment including recent and post discharge history.

3. Demonstrate in skills labs and scenarios how to manage patients with common, chronic conditions that will be encountered in the community, utilizing standard pilot project procedures.

4. Demonstrate in skills labs and scenarios how to manage patients within various situations that will be encountered in the community, utilizing standard pilot project procedures.
 - a. Medication Reconciliation
 - b. Social Service Resource Needs
 - c. Home Safety/Fall Prevention
 - d. Caregiver Problems
 - e. Welfare Check
 - f. Assessment of Nutrition, Hydration, and Weight
 - g. Transportation Issues

5. Demonstrate in skills labs and scenarios how to provide education to patients that will be encountered in the community, utilizing standard pilot project procedures.

- a. Discharge Follow-up and Instructions
- b. COPD
- c. CHF

6. Demonstrate in skills labs and scenarios how to document and communicate care to patients utilizing ePCR capability and other methods of communication with healthcare partners, utilizing standard pilot project procedures.

- a. Complete Data Entry
- b. Pilot Project Forms
- . Communication with Physicians
- d. Communication with Hospitals and Health Facilities
- e. Health Information Exchange
- f. ePCR and Local Documentation Software

7. The Community Paramedic will demonstrate competency in multiple procedures through supervised experience with patients in a Hospital and Clinic setting. The minimum number of procedures are included in the following table and shall be documented by clinical preceptors for each identified skill.

Community Paramedic Clinical Procedures – ED and Hospitalist Clinical Rotation	
Procedures	Minimum Number Performed
Blood Pressure Checks	2
Medical Equipment	
Otoscope	10
Home Medication	
Compliance	7
Reconciliation	7
Patient Documentation	
SOAP Notes	5
Chart Review	15
History & Physical	20
Assessment	20
Results From Tests /Diagnostic Tools	15
Identifying Red Flags	5
Identifying Further Testing Needs	5
Chronic Illness Management	
Acute MI	5
Heart Failure	5
Provide Patient Education	5