



Community Paramedicine Pilot Project

HWPP #173

February 6, 2014

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I. APPLICATION FACT SHEETS (92201)

Healthcare Workforce Development Division
HWPP

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
HEALTH WORKFORCE PILOT PROJECTS
APPLICATION

1. Title of Project: Community Paramedice Pilot Project

2. Sponsoring Agency: California Emergency Medical Services Authority

(a) Name Howard Backer, MD, MPH, FACEP

(b) Address 10901 Gold Center Drive, Suite 400 Rancho Cordova, California 95670
(City) (County) (Zip)

(c) Name and Title of Administrative Officer signing for Applicant:
(Name) (Title)
Howard Backer, MD, MPH, FACEP EMS Authority Director

(d) Facility Type: (Check one)
 Non-profit education institution.
 Community hospital or clinic.
 Governmental agency engaged in health or education activities.

3. Purpose of Project: (Check one and expand in narrative)
 Teaches new skills to existing categories of health care personnel.
 Develops new categories of health care personnel.
 Accelerates the training of existing categories of health care personnel.
 Teaches new health care roles to previously untrained persons.

4. Type of Project: (Check one)
 Expanded role medical auxiliaries.
 Expanded role nursing.
 Expanded role dental auxiliaries.
 Maternal child care personnel.
 Pharmacy personnel.
 Mental health personnel.
Other health care personnel (Check one)
 chiropractic
 podiatry
 geriatric
 therapy
 veterinary
 health care technician
 EXPANDED ROLE PARAMEDICS

Division Name Revised 2/2003
Program Name Changed 1/1/07
OSHPD

**Healthcare Workforce Development Division
HWPP**

Authority cited: Section 1285125, 128130, 128135, and 128160 of Article 1, Chapter 3, Part 3, Division 107, Health and Safety Code.

5. Project Director:

a. Name Meyer Louis K
(Last) (First) (Middle Initial)

b. Degree(s) _____

c. Mailing Address 10901 Gold Center Drive, Suite 400 Rancho Cordova, CA

d. Telephone (916) 431-3709 (Organization) _____ (Ext) _____

e. Department, Service, or Equivalent EMS Authority

6. Training Supervisor(s) [If same as above, indicate]

a. Name (Same as above) _____
(Last) (First) (Middle Initial)

b. Degree(s) _____

c. Field in which licensed or certified _____

Provide information a, b, and c for all training supervisors. (Add additional pages, as needed.)

7. Date of Project Period:
From September 2014 Through December 2016

8. Project Sites (expand in narrative.)
List where education and training will be conducted.

9. List where graduates of training program will be employed.

10. Source of funding (if known.)

California HealthCare Foundation Grant, Local Grants, In-Kind Contributions

11. Provide the proposed annual budget (use of funds) for project implementation. (See Appendix A.)

CERTIFICATION AND ACCEPTANCE

We, the undersigned certify that the statements herein are true and complete to the best of our knowledge and we accept the obligations to comply with the terms and conditions set forth in the Health and Safety Code, commencing with Section 128125, et seq., and Title 22 of the California Code of Regulations, Section 92001 et seq.

We hereby certify that we will not discriminate on the basis of age, sex, creed, disability, race or ethnic origin, in the selection of participants for Health Workforce Pilot Projects.

We agree to submit a quarterly report to the Office of Statewide Health Planning and Development that includes, but is not limited to, information on the following:

- 1) Trainee competency;
- 2) Supervisor's fulfillment of roles and responsibilities;
- 3) Employment/utilization site compliance with selection criteria.

We agree to promptly inform the Office of Statewide Health Planning and Development as to the:

- 1) Starting and completion dates of training cycles;
- 2) Starting and completion dates of preceptorship or employment/utilization (E/U) periods;
- 3) Proposed changes or modifications in the project or project personnel;
- 4) And, changes in the names of participating trainees.

On-site visits, for program evaluation purposes, by program staff may be scheduled on less than twenty-four (24) hours notice when questions of patient or trainee safety necessitates (pursuant to Section 92603 (g), Division 7, Title 22, California Code of Regulations).

Signatures: _____

(Signature of Project Sponsor)

Date: _____

12/18/13

Signatures: _____

(Signature of Project Director)

Date: _____

12/18/13

NOTE: Describe **how** the applicant/sponsor proposes to provide for each of the sub-sections (a) through (h) listed below.

Minimum Standards (92101)

Each pilot project shall:

- (a) Provide for patient safety.
- (b) Provide qualified instructors to prepare trainees. **(Document instructors credentials and experience.)**
- (c) Assure that trainees have achieved a minimal level of competence before they entered the employment/utilization phase.
- (d) Inform trainees that there is no assurance of a future change in law or regulations to legalize their role. **(Provide a trainee agreement form for trainee signature.)**
- (e) Demonstrate that the project has sufficient staff to monitor trainee performance and to monitor trainee supervision during the employment/utilization phase. **(Indicate trainee/instructor and trainee/supervision ratios.)**
- (f) Possess the potential for developing new or alternative roles for health care personnel or for developing a reallocation of health care tasks, which would improve the effectiveness of health care delivery systems. **(Provide a market study or job analysis etc.)**
- (g) Demonstrate the feasibility of achieving the project objectives.
- (h) Comply with the requirements of the Health Workforce Pilot Project statutes and regulations.
- (i) Comply with at least one of the eligibility criteria provided in Sections 128130, 128135 and 128160 of Article 1, Chapter 3, Part 3, Division 107, of the Health and Safety Code.

II. Abstract (92301)

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 and, thus, are varied in nature. 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.

The California Emergency Medical Services Authority's (EMSA) proposes to sponsor a Community Paramedicine (CP) pilot project that is intended 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. This project will not displace other healthcare providers, but will fill unmet local needs utilizing paramedic skills and availability.

Utilizing paramedics in expanded roles is attractive because they are already trained to perform patient assessments and to recognize and manage life-threatening conditions in out-of-hospital settings. They are accustomed to providing care in home and community settings under relatively austere medical care conditions; are available 24/7/365; and are widely trusted and respected by the public. Further, paramedics are accustomed to collaborating with other health care providers in a variety of settings.

The establishment of a Health Workforce Pilot Project (HWPP) through the Office of Statewide Planning and Development (OSHPD) will allow for the temporary waiver of sections of the Health and Safety code (HSC 1797.52, 1797.218) that limit the destination of patients transported by paramedics and that specify the limited emergency settings where paramedics can provide services.

The Pilot Project is sponsored at the State level by the Emergency Medical Services Authority (EMSA), and includes 13 pilot sites that vary in protocol to address local health care needs. The project sites will be monitored at the State level and executed at the local level by collaboration and partnership between Local EMS Agencies (LEMSA), EMS provider agencies, and appropriate health care partners.

Increased medical control and oversight will be necessary to ensure patient safety and for quality improvement. The LEMSAs Medical Director or their designee 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 will be established for each pilot site that 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.

The Pilot Project will allow the State to generate, collect and analyze data that will examine the practice of community paramedicine and serve as a basis to recommend changes to existing statutes and regulations in the following general project areas:

- a. Transport patients with specified conditions to alternate locations that can be managed in health care settings other than an acute care emergency department, such as an urgent care or general medical clinic.
- b. Address the needs of frequent 9-1-1 callers or frequent visitors to emergency departments by helping them access primary care and other social or psychological services.
- c. Provide short-term home follow-up care for persons recently discharged from the hospital and at increased risk of a return visit to the emergency department or readmission to the hospital with referral from the hospital, clinic, or medical provider.
- d. Provide short-term home support for persons with diabetes, asthma, congestive heart failure, or multiple chronic conditions with referral and under protocol from the medical home clinic or provider.
- e. Partner with public health, community health workers and primary care providers in underserved areas to provide preventive care.

Patient Safety and Quality Assurance/Improvement

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) For the purposes of this project, a 100% retrospective review of all patients treated by a Community Paramedic will be conducted.

Community Paramedic Trainee Eligibility

Individuals eligible to be trained as a Community Paramedic will have a minimum of 4 years' experience as a Paramedic. Preference will be given to individuals who have an A.A. Degree or higher level of education, and each shall be recommended for the training program by the Medical Director of the agency or LEMSA based on their record

of patient care, compatible interest, and interpersonal skills.

Community Paramedicine Curriculum

The CP training curriculum has been adapted from the North Central EMS Institute Community Paramedic Curriculum, and will be standardized among the pilot programs. Training will include both didactic and clinical components. In addition to Core Training, each CP will be trained to meet the competencies required for the site specific areas of focus of his or her pilot site.

This training is estimated to be approximately 150-200 hours, in excess of the 1400 hours of standard paramedic training, depending upon the pilot projects area of focus.

At the conclusion of training, a student will be required to successfully pass a written and practical examination to demonstrate competency.

Evaluation/Measurement

The California HealthCare Foundation (CHCF), has engaged the University of California San Francisco, Phillip R. Lee Institute for Health Policy Studies and Center for the Health Professions to fulfill the role of Independent Evaluator for this project as required under the California Code of Regulations

Project Funding

A California HealthCare Foundation (CHCF) grant of up to \$750,000 supports the state program manager, the independent evaluator, development of training programs, and a stipend to assist in pilot site data collection.

Funding for Operational Implementation and staffing will be the responsibility of each pilot site. Projects will be supported through local grants, identified cost savings, partnerships with healthcare systems and local operational in-kind contributions.

Expected Outcomes

This Pilot Project seeks to generate data from carefully controlled clinical settings and interventions demonstrating that Paramedics can safely and effectively work in expanded roles in a community-based healthcare system to improve health care efficacy, cost effectiveness, patient-centered care, and integration of health system resources while reducing unnecessary ambulance transports to emergency departments and hospital readmissions.

III. Narrative

1. Title

Community Paramedicine Pilot Project

2. Purpose and Objectives (92302)

a) Purpose

The California Emergency Medical Services Authority's (EMSA) sponsored Community Paramedicine (CP) pilot projects are intended 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 establishment of a Health Workforce Pilot Project (HWPP) through the Office of Statewide Planning and Development (OSHPD) will allow for the temporary waiver of sections of the Health and Safety code (HSC 1797.52, 1797.218) that limit the destinations to which paramedics can transport patients and that specify the limited emergency settings where and when paramedics can provide services.

b) Objectives to Meet the Purpose

This Pilot Project seeks to generate data from carefully controlled clinical settings and interventions demonstrating that Paramedics can safely and effectively work in expanded roles in a community-based healthcare system to improve health care efficacy, cost effectiveness, patient-centered care, and integration of health system resources by reducing unnecessary ambulance transports to emergency departments and hospital readmissions.

- Objective 1: Provide additional training to exiting EMT-Paramedics to prepare them to practice as Community Paramedics under auspices of HWPP.
- Objective 2: Demonstrate cost-effectiveness of care provided by Community Paramedics compared to care as it is currently provided.
- Objective 3: Demonstrate that Community Paramedics can safely and effectively provide care that improves health care efficacy, patient-centered care, and integration of health system resources with reductions in both unnecessary ambulance transports to emergency departments and hospital readmissions.

c) Time Plan

The Community Paramedicine Pilot Project is expected to take up to 24 months, with Core Training beginning in June 2014, with project launch scheduled for September

2014.

Project Activity	Time Lines	Project Objective
➤ OSHPD Approval/Denial Notification	June 2014	
<ul style="list-style-type: none"> ➤ EMSA notifies selected project sites of OSHPD approval ➤ LEMSA's begin recruitment for selection of Community Paramedics 	June 2014	
➤ Regional & Local Training Classes commence	June - Aug 2014	Objective 1: Training completed by Aug. 31, 2014
➤ CP Pilot Sites become operational for evaluation purposes	Sept 2014	
➤ Baseline data reported to HWPP	Feb 2015	Objective 2: Preliminary cost-effectiveness data will be available.
➤ Independent Evaluator Draft Report Due	September 2015	Objective 3: Results of pilot project will be available.
➤ Final OSHPD Analysis Report Due	December 2015	

3. Background Information (92303)

The evolution of modern paramedicine and EMS in California began in the late 1960s commensurate with growing recognition in the state and nationally that there was an alarmingly high number of out-of-hospital deaths from trauma and cardiac arrests. A pilot project using mobile intensive care paramedics was formally launched in Los Angeles County in early 1970.

The Wedworth-Townsend Paramedic Act defining the role and scope of practice of mobile intensive care paramedics and nurses was signed into law by then California Governor Ronald Reagan on July 14, 1970, making California the first state to adopt legislation permitting paramedics to provide advanced medical life support. The LA County paramedic pilot program was expanded in 1972, and other California counties soon began to develop EMS programs.

State regulations establishing the training and other standards for paramedics were promulgated by EMSA in 1983. This was followed by statewide guidelines for local EMS

systems, standards for local trauma care systems, and training standards for other EMS providers in 1984. These standards and guidelines have been incrementally revised and updated over the years, but the regulatory framework established in the early 1980s has remained the basic foundation for the state's EMS systems.

Paramedics became a statewide *licensed* health care provider in California in 1994 function through written protocols under the Medical Control of the LEMSA Medical Director, and are not independent practitioners. Licenses are issued by EMSA and are valid statewide, but paramedics must be accredited by a local EMS agency before practicing. Licensure by EMSA must be renewed every two years. In addition, EMTs and AEMTs are *certified* by *local EMS agencies*, and they must be re-certified every two years. EMT certifications are valid statewide but EMTs can only work in areas where they are credentialed by a local EMS agency.

a) Need for Project

EMS systems are universally regarded as being an essential and integral part of the health care delivery system today, and a particularly important part of the health care safety net, guaranteeing emergency access to care. EMS operates at the intersection of health care, public health, and public safety; however, it has not been well integrated into the health care delivery system because of the divergent interests of the key stakeholders and restrictions in paramedic venue of practice and patient transport destination. The Institute of Medicine highlighted this issue in a 2006 report, noting that “local EMS systems are not well integrated with any of these groups and therefore receive inadequate support from each of them.” The incentives for care coordination and greater use of community-based care provided by the Affordable Care Act present an opportunity for greater integration of EMS into the health care delivery system through new models of care.

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 and, thus, are varied in nature. 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.

The California HealthCare Foundation funded a report entitled *Community Paramedicine: "A Promising Model for Integrated Emergency and Primary Care"*

prepared by the UC Davis Institute for Population Health Improvement (IPHI) which 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 have reported on this subject and are listed in **Appendix A**.

In recent years, community paramedicine programs have been implemented in a number of states, Colorado, Minnesota, Texas, Maine, Pennsylvania and Nevada, as well as other countries including Canada, England, New Zealand, and Australia. The implementation and operational costs of these programs in the U.S. and their outcomes are still being assessed. Few published reports of data are available at this time. There is a longer history and more literature on the outcomes of CP programs in other countries, but differences in methods of financing and delivering care in these countries makes it difficult to generalize the findings to the U.S. Interest in developing CP programs has been especially high in rural and other medically underserved areas.

Utilizing paramedics in expanded roles is attractive because they are already trained to perform patient assessments and to recognize and manage life-threatening conditions in out-of-hospital settings. They are accustomed to providing care in home and community settings under relatively austere medical care conditions; are available 24/7/365; and are widely trusted and respected by the public. Further, paramedics are accustomed to collaborating with other health care providers in a variety of settings.

b) Types of Patients Likely to be Seen

Most of the pilot sites will target adult patients who are currently underserved or who lack a usual source of health care. Each type of project will target a slightly different set of patient types, based on the protocol for that site. Following are further details on patients likely to be seen by project type:

- Post-hospital: Adult patients at increased likelihood for hospital readmissions.
- Alternate Destination: Adult patients who have experienced low acuity injuries and illnesses and meet the locally approved Triage Protocols for transport to other than the Emergency Department.
- Frequent 911 Callers: Underserved adult patients who have difficulty navigating the Healthcare System which results in the 9-1-1 System and Emergency Departments as being their primary source of receiving healthcare.
- Hospice: Adult patients that have opted for Hospice Care and who have activated the 9-1-1 system or have had the 9-1-1 system activated on their behalf.

- Tuberculosis: Adult patients who have been diagnosed with Tuberculosis and are currently enrolled in a supervised treatment plan.

c) Skills Trainees are to Learn

There are multiple definitions of community paramedicine, but most embrace three key tenets: (1) CP programs begin with a community-specific health care needs assessment, (2) community paramedics are specially trained to provide services to meet those local needs, and (3) community paramedics provide services under clear medical control (i.e., under a physician's direction and supervision).

A full Community Paramedic training curriculum approximately 200 hours in length has been developed by Community Healthcare Emergency Cooperative (a multistate and multinational collaborative) and the North Central EMS Institute in Minnesota, **Appendix C**, in order to enhance training in (1) Community healthcare networks & resources, (2) Chronic disease management and evaluation, (3) psycho social issues and determinants of patient health motivation. These and other programs across the country have demonstrated that paramedics can be trained to safely and effectively perform an expanded role.

d) Preventive Legislation

Paramedics are presently trained to provide advanced life support services in an emergency setting or during inter-facility transfers. Currently, California Health and Safety Code (HSC 1797.52, 1797.218) **Appendix B**, limits paramedic scope of practice to emergency care in the pre-hospital environment. Moreover, patients under the care of a paramedic are required to be delivered to a general acute care hospital emergency department. The paramedic scope of practice in California is somewhat unique compared to other licensed health professionals in that the statute refers to both a set of authorized skills/activities that emergency medical personnel may perform and the places and circumstances in which those skills/activities may be performed. Also relevant to paramedic practice and, in fact a benefit to CP pilot project design is the requirement that paramedics operate under medical control or protocol at all times.

The establishment of a Health Workforce Pilot Project (HWPP) through the Office of Statewide Planning and Development (OSHPD) will allow for the temporary waiver of sections of the Health and Safety code (HSC 1797.52, 1797.218) that limit the destination of patients transported by paramedics and that specify the limited emergency settings and situations where paramedics can provide services. The pilot will allow the State to generate, collect and analyze data that will examine the practice of community paramedicine and serve as a basis to recommend changes to existing statutes and regulations.

e) Employment Opportunities

The successful conclusion of the Community Paramedicine Pilot project and legislative change will create an additional step in the current State Licensed Paramedic's career ladder, expected to lead to improved job satisfaction, reducing turnover, as well as encouraging individuals to seek additional licensure, e.g. Registered Nurses, Physician Assistants and other allied healthcare fields. Should legislative change not result from the pilot project, the trainees, all of whom are currently licensed paramedics in California, will remain employed as EMT-Ps by their respective provider agencies.

f) Other Educational Programs

There is considerable interest in expanded roles for paramedics in addition to Community Paramedicine initiatives. Health care reform initially has avoided major changes to the EMS system, because the reimbursement for EMS transport is a negligible proportion of the overall national health care budget. However, there is growing understanding that the EMS system can influence much greater expenditures, since the current system design utilizes the most expensive mode of transportation (advanced life support ambulance) to take patients to the most expensive site of care, an acute care emergency department. While serving as the safety net for access to emergency medical care, EMS has also become the mode of access for unscheduled care for patients with chronic and minor conditions who lack primary care access. Various studies have determined that 15-60% of patients who access EMS via 9-1-1 services have non-emergent problems that could be more efficiently and often more effectively treated in other medical sites. **Appendix A**

Federal Department of Health and Human Services (DHHS) is also interested in evaluating new models and roles for EMS that include 9-1-1 transport to alternate destinations. DHHS has awarded several innovation grants to evaluate these concepts, as well as use of paramedics for mobile health services to assist in management of chronic disease and to prevent hospital readmission. Moreover, DHHS has recently released a white paper **Appendix A**, that evaluates potential cost savings from transporting Medicare patients to alternate destinations. Finally, there is an understanding that these alternate EMS protocols and functions will be essential in any large scale disaster that overwhelms the medical system. Therefore, development and evaluation of these projects in California through HWPP provides critical information and experience for changes that are likely to be initiated and supported as part of health care system reform.

4. Sponsor Information (92304)

a) Organizational Chart

EMS activities in California are regulated at the state level by EMSA, a department within the California State Executive Branch, pursuant to Division 2.5, California Health and Safety Code, and Division 9, Title 22, California Code of Regulations. EMSA is one of 13 departments administered by the California Health and Human Services Agency (CHHS). At the local level, day-to-day EMS activities are governed by local EMS agencies, which follow regulations and standards established by EMSA. Currently, there are 26 single county and 7 multi-county local EMS agencies in California. **Appendix E**

b) Status

EMSA has statutory authority to develop and implement regulations governing the medical training and scope of practice for emergency medical care personnel including emergency medical technicians (EMTs), public safety personnel (e.g., firefighters, law enforcement officers, lifeguards), and mobile intensive care nurses, among others. Emergency medical technicians are trained according to state standards and then licensed (paramedics) or certified (basic and advanced EMTs) to render emergency medical care in pre-hospital and inter-hospital settings.

c) Description of Function of Key Project Staff

1) Project Director

The overall project will be coordinated and managed at the state level by an EMSA Project Manager/Consultant, who has been contracted through the California HealthCare Foundation (CHCF) and is accountable to the EMSA Director in collaboration with his/her executive team (Sponsor). The Project Manager/Consultant's responsibilities include:

- a. Overseeing the development and standardized structure of an overall project plan;
- b. Assisting in solicitation, evaluation, and selection of the local project proposals and the EMSA sponsor application to OSHPD;
- c. Coordinating development of the supplemental community paramedic training program and identify and manage resources for training;
- d. Coordinating and facilitating a State Advisory Committee to oversee the review of quarterly reports and quality assurance of projects;
- e. Preparing quarterly status reports compiling results from all of the pilot sites;
- f. Participating in OSHPD'S quarterly review meetings;
- g. Conducting site visits at least semi-annually to ensure that appropriate procedures and documentation are being maintained

Prepare a final summary report at the conclusion of the pilot evaluating the impact of Community Paramedics with respect to filling identified local healthcare gaps and providing increased access to care at a lower cost than the traditional 9-1-1 EMS Response.

2) Training Program Staff

The training program's responsibilities include:

- a. Participate in curriculum development to create core competencies and evaluation of skills and abilities required of Community Paramedics.
- b. Organize multiple training sites offering standardized core training consisting of didactic and skills, and clinical competency based learning opportunities.
- c. Facilitate learning collaborative sessions to engage students in shared learning and further skill development.

3) Data Collector

The evaluation data will be collected by the LEMSA Data Analyst and forwarded to the Independent Evaluator. Each LEMSA employs a Data Analyst, whose job responsibilities will be expanded to include data collection and analysis in collaboration with the local CP Project Advisory Committee. These individuals are part of the local CP Project Advisory Committee and will be coordinated and managed at the state level by the EMSA Project Manager/Consultant.

4) Independent Evaluator

The independent evaluation will be conducted by a research team from the University of California San Francisco, Phillip R. Lee Institute for Health Policy Studies and the Center for the Health Professions. The responsibilities of the independent evaluator include:

- a. Design and execution of the evaluation plan;
- b. Identification of the measures to be used in evaluation;
- c. Communicate data collection responsibilities, timelines, and expectations to Local Pilot Program Manager;
- d. Provide collected data to HWPP in accordance with the requirements set forth in the California Code of Regulations governing the HWPP.

d) Funding Sources

A California HealthCare Foundation (CHCF) grant has been approved to support the

state project manager, an independent evaluator, training programs, and a stipend to assist in pilot site data collection. **Appendix D** Additional funding will be the responsibility of each pilot site. Projects will be supported by In-Kind Contributions, grants, identified cost savings, or partnerships with other local agencies.

e) Sponsor's Previous Experience in Preparing Health Care Workers

EMSA is well-qualified as the sponsor of this pilot project .Since its inception as a state agency more than 30 years ago, EMSA's Personnel Standards Division has developed and develops and implemented regulations for training, certification, licensing and scope of practice for emergency medical personnel, including Emergency Medical Technician, Advanced EMT, Paramedic, Firefighter, Peace Officer and Lifeguard. EMSA licenses, investigates, and disciplines paramedics in the state of California for civil and criminal violations of the California Health and Safety Code. They also approve first aid and CPR training programs that are required for child care providers and school bus drivers. EMSA has been responsible for the establishment and licensure of several "new" types of health care workers, all of whom have become intrinsic to California's health care system, including the Advanced EMT and the Paramedic.

f) Advisory Group

EMSA will establish a State CP Advisory Committee to review and oversee the individual project sites. The Advisory Committee will provide feedback, direction and monitor any program issues that arise. The Committee will include representation from EMSA and from each project site, including representatives of LEMSAs, EMS providers, and healthcare systems.

In addition a local CP Project Advisory Committee will be established for each pilot site that 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.

g) Collaborative Arrangements Other Educational Institutions and Health Care Facilities

The training curriculum will be delivered by the UCLA Center for Prehospital Care and will be coordinated and managed at the state level by the EMSA Project Manager/Consultant.

The contract with the UCLA Center for Prehospital Care for training and preparation of community paramedics are currently being developed. Executed final agreements will be submitted to HWPP at the earliest date possible, which is estimated to be mid-February 2014.

h) Description and location of facilities used in the didactic and clinical phases. Include the availability of support services such as library, equipment, etc

All training will be performed by the UCLA Center for Prehospital Care and their affiliated instructors.

A list of instructors will be provided to HWPP prior to the beginning of training,

1) Core Curriculum

The core curriculum will be taught separately in Northern and Southern California. In Southern California, the core curriculum will be taught at the UCLA Center for Prehospital Care in Los Angeles, CA. In Northern California, affiliated instructors from the UCLA Center for Prehospital Care will teach the core curriculum in satellite classroom locations which 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.

Two locations, in Northern and Southern California respectively, have been tentatively selected for provision of the core curriculum. Contracts for use of these locations are currently being developed. The HWPP will be notified of the executed contracts at the earliest date possible, which is expected to be no later than May 1, 2014.

2) Site-specific Curricula

The site-specific approved curricula will be taught locally 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. All of the local sites have identified the locations that they intend to use for the delivery of their local curricula. In collaboration with the Project Director, contracts for use of these locations are currently being developed. The HWPP will be notified of the executed contracts at the earliest date possible, which is expected to be no later than May 1, 2014.

5. Participant Selection Information (92305)

a) Trainee Information

EMSA has provided provisional approval of 13 Pilot Sites **Appendix E** involving approximately 100 CP Trainees, for inclusion within this application. These pilots were selected from 27 proposals EMSA received from local EMS Administrative agencies and EMS and healthcare providers throughout the state, in response to an EMSA Letter of Interest request **Appendix F** to participate in CP pilots involving the following general

project areas:

- a. Transport patients with specified conditions that can be managed in health care settings other than an acute care emergency department, such as an urgent care or general medical clinic to alternate locations.
- b. Address the needs of frequent 9-1-1 callers or frequent visitors to emergency departments by helping them access primary care and other social or psychological services.
- c. Provide short-term home follow-up care for persons recently discharged from the hospital and at increased risk of a return visit to the emergency department or readmission to the hospital with referral from the hospital, clinic, or medical provider.
- d. Provide short-term home support for persons with diabetes, asthma, congestive heart failure, or multiple chronic conditions with referral and under protocol from the medical home clinic or provider.
- e. Partner with public health, community health workers and primary care providers in underserved areas to provide preventive care.

1) Criteria Used in Selecting Trainees

In order to be eligible to be trained as a Community Paramedic, individuals will be required to have a minimum of 4 years' experience as a California Licensed Paramedic. Preference will be given to individuals who have an A.A. degree or higher level of education. CPs will be selected through an interview process with the final determination resting on the decision of the Local EMS Medical Director. Qualified Paramedics must be in good standing and must have demonstrated the humanistic and professional skills required to perform this job, which include:

- a) Integrity—the presence of congruence between one's stated values and actual behavior
- b) Compassion—the recognition of another's suffering coupled with a desire to relieve it
- c) Altruism—the ability to place the needs and interests of others ahead of one's own
- d) Respect—a regard for the autonomy and values of others
- e) Empathy—the ability to place oneself in another's situation
- f) Service—the willingness to share talent, time & resources beyond that which is required

- g) Intelligence—the capacity for reasoning and understanding
 - h) Versatility—the ability to embrace a variety of subjects, fields or skills
- 2) Trainee Participant Agreement

CP Trainees will be informed of their responsibilities and limitation under the Health Workforce Pilot Project statute and regulations, and will execute a Community Paramedic Trainee Agreement **Appendix G**

3) Number of Proposed Trainees

EMSA has provided provisional approval of 13 Pilot Sites **Appendix E** involving approximately 100 CP Trainees, or an average of 9 CP Trainees per site, for inclusion within this application.

b) Supervisor Information

1) Criteria Used in Selecting Supervisors

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.

2) Plan to Orient Supervisors to their Roles

Each site Project Manager will ensure that each site supervisor posses 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.

3) Number of Proposed Supervisors

EMSA anticipates that there will be at a minimum 2 Supervisors per site.

c) Criteria Used to Select an Employee/Utilization Site

In August, 2013 EMSA issued a Letter of Intent soliciting proposals from Healthcare agency's or EMS providers in collaboration with, and approval of their Local EMS Agency to develop a community paramedicine pilot project designed to test an expanded role for EMT-P's In response to this Letter of Intent, EMSA received 27 proposals from across the state.

A team of experts in California health care policy and paramedicine reviewed the proposals over a 45 day review period with multiple in-person and telephonic

convening's. A total of 13 proposals were selected based on the criteria detailed below:

- a) *Proposed concept, project management and partners (including geographic area to be served)*
- b) *Purpose and objectives*
- c) *Estimated project length*
- d) *Background Information*
 - *Need for project*
 - *Types and number of patients likely to be seen*
 - *Anticipated number of community paramedics to be trained and future anticipated employment opportunities for community paramedics*
 - *Other programs in California or other states serving as models for this project*
- e) *Program Management*
 - *Operational methodology*
 - *Local governance and medical control*
 - *Provisions for protecting patient's safety*
 - *Anticipated sources of funding*
 - *Paramedic eligibility*
 - *Local CP Training*
- f) *Evaluation and data collection (include components regarding process evaluation, qualitative evaluation, impact evaluation and utilization, estimate of healthcare cost savings, and dissemination of results)*

The cover letter from each site selected for participation in the pilot project has been included in the appendix as **Appendix O**.

6. Curriculum (92306)

The Community Paramedic training program has been adapted from the North Central EMS Institute Community Paramedic Curriculum, version 3.0, and will be standardized among the pilot programs. The curriculum has been successfully used in multiple Community Paramedicine programs across the country and modified from experience. This training contains both didactic and clinical experience and is estimated to be approximately 150-200 hours to achieve competency, depending upon the pilot projects area of focus.

Through the use of the California HealthCare Foundation Grant, EMSA proposes to engage the UCLA Center for Prehospital Care, which has extensive curriculum and training experience, to train paramedics from each program in a core curriculum that will be delivered to the Community Paramedic trainees at 4 regional sites. It is estimated that up to 100 community paramedics will be trained. Paramedics will then return to their local project site for project-specific training that will include orientation to local medical system organization and resources; medical protocols applicable to their project; and clinical experience related to their expanded role and protocols. At the end of the training, they will be tested in the approved pilot site protocols and competencies.

The total training time for the primary CP program (150-200 hours) will be approximately 2-3 months. The core didactic curriculum of approximately 100 hours will be delivered 2-3 days per week (16-24 hours). This didactic period will require about 4-6 weeks. Additionally, local training and clinical experience of between 50-100 hours can be delivered approximately 2-3 days per week (16-24 hours per week). This local training is estimated to take 4-6 weeks depending upon availability of clinical experience opportunities.

In the 4 pilot site areas that are proposing transport to alternate destinations only, Community Paramedics will complete the full training and serve as peer leaders to support implementation, protocol adherence, quality assurance and improvement, and medical partner site coordination, and data collection. Additional licensed paramedics, referred to as Alternate Destination Support Paramedics, will support the pilot project as necessary to implement the single protocol related to the transport of patients to a destination other than a general acute care hospital with a basic emergency department permit. These will have a separate curriculum that will require 8-16 hours of training and will not be considered full Community Paramedics for the purpose of any future activities. This approach was adopted from the Reno EMS project, which has implemented it and found it successful in expanding the pool of patients eligible for the study protocol.

The outlines for both curricula are found in ***Appendix C***.

All students will be required to successfully pass a written and a practical examination to demonstrate competency at the conclusion of their training. Training adequacy will also be evaluated during the implementation phase. Ongoing education is expected at the local level to augment any deficiencies noted by paramedics or the medical director.

7. Evaluation (92307)

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.

Phase I: Baseline Data Collection

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***.

Phase II: Training Evaluation

During Phase II, the CP will be trained using a standardized core curriculum and a site-specific curriculum module. These two curricula consist of didactic and clinical training and are described in the Curriculum Section of this application. 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 based on didactic training and the instructors' evaluations of EMT-P's performance in clinical practicum(s) will be used to evaluate CP training.

Phase II evaluation measures include:

- Core Curriculum
 - Documentation of hours in didactic training
 - Performance on written examinations of material presented in didactic training
- Site-Specific Curriculum

- Didactic Training
 - Documentation of hours
 - Performance on written examinations
- Clinical Training
 - Documentation of hours
 - Performance on clinical practicum

Phase III: CP Intervention Period

Data

Cost and Utilization

In Phase III, the Local Pilot Project Managers will continue to collect and report on the same measures identified as "baseline data" in **Appendix H**. Many of the measures identified in this Appendix, including all demographic data, will be collected on all patients who are eligible for the CP intervention regardless of whether they receive care from a CP or care as it has traditionally been rendered. Additional measures will be collected and reported during Phase III for patients who receive care from a CP. These measures will include cost of care based on utilization of CPs and other health care services. These measures will vary somewhat from the "baseline" data because they will measure care delivered through the new mechanism of the CP and care delivered at sites other than the ED. These additional measures of care delivery are also in **Appendix H**.

Satisfaction and Acceptance

The Local Pilot Project Managers will collect and report on the results of satisfaction and acceptance surveys during the CP Intervention Period. These surveys will be provided to patients, CPs, other health care providers, and EMS provider agencies. These surveys are standardized across the pilot sites demonstrating the same CP concept and are available in **Appendix N**. In addition, key informant qualitative interviews will be conducted with health insurers, relevant government agencies, and partner health care provider organizations to better determine perceived quality and satisfaction with the CP intervention.

Site Visits

The evaluation team will visit each pilot site two times. Each site visit will be conducted by two members of the evaluation team. The first visit will be conducted during the summer of 2014 and will focus on collection of baseline data required by OSHPD and assessment of training activities. The second visit will occur during winter or spring 2015 and will focus on collecting data on the impact of the pilot projects and assessing

whether sufficient data can be collected during the first 12 months to evaluate the projects.

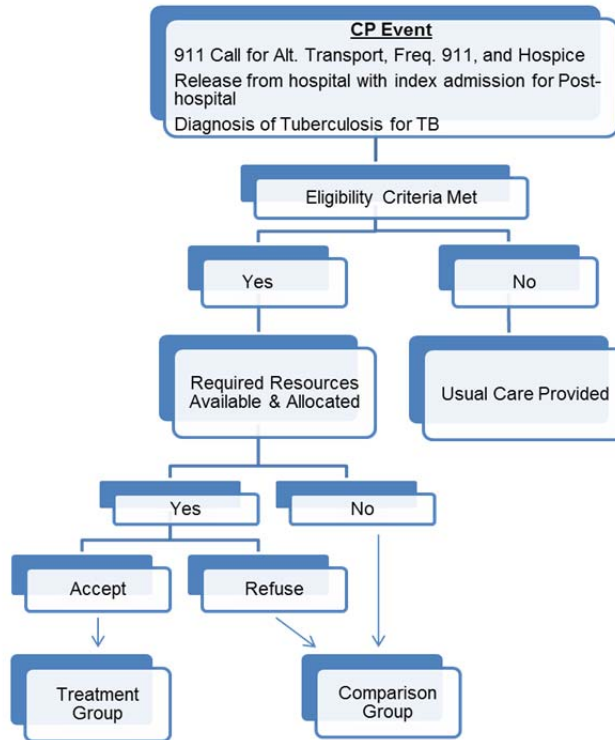
Patient Safety

In Phase III, a Patient Safety/Quality Assurance Review Committee at each pilot site will perform patient safety reviews of 100% of cases in which care is provided by CPs. The Local Pilot Project Managers will collect and report data from these committees to the evaluator, who will analyze findings from these audits to assess the impact of the pilot projects on patient safety. The data measures used to evaluate patient safety will include CP adherence to care provision protocols; adverse events resulting from the CP intervention as identified by the Patient Safety Review Committees; and patient disposition after CP intervention.

Methodology

During Phase III, the CPs will begin providing care for the clinical projects. Patients will be divided into two separate groups: patients who receive the proposed intervention and patients who do not receive the proposed intervention. All patients who receive the proposed intervention must fit the eligibility criteria defined in the treatment protocol. Patients who do not receive the proposed intervention will include those who are ineligible; those for whom resources required for the proposed intervention are unavailable; and those who refuse the proposed intervention. Resources may not be available to provide the CP intervention to all eligible patients because some pilot sites have decided to limit the number of patients they enroll. In other cases, 9-1-1 calls may be initiated at hours during which alternatives to transporting patients to an emergency department are not available.

Two analyses will be conducted using the data collected. The first will be a comparison between how care is provided during Phase I (baseline) and how care is provided by the CP during Phase III. The second analysis will compare care provided to eligible patients who do not receive the intervention in Phase III to care provided to patients who do receive the intervention in Phase III. Thus, the first analysis will compare Phase I to Phase III, and the second analysis will compare two groups of patients within Phase III. The following figure shows the process by which the treatment group and the comparison group will be identified during Phase III.



The evaluation is designed to answer the following broad questions across the pilot projects. Although some of the concepts being tested will generate more data than others, all offer a valuable opportunity to determine whether community paramedics can safely and effectively provide care that improves health care efficacy, patient-centered care, and integration of health system resources with reductions in both unnecessary ambulance transports to emergency departments and hospital readmissions. The research questions include:

- For all sites:
 - Does the project reduce monthly saturation percent (the percent of time per month that patients must be diverted to other Emergency Departments due to overcrowding) in the study Emergency Department?
 - Are fewer EMS resources (fire engine or ambulance) being absorbed by patients who do not need them?
 - Are unnecessary transports to the Emergency Department reduced?
 - Are costs of care lower compared to traditional treatment?
 - Are wait times for care reduced for patients receiving the intervention compared to patients in the baseline period?
 - What are the demographic characteristics (Age, Sex, Race/Ethnicity, Language, Zip Code, Primary Insurance Type) of patients receiving intervention?
 - Can CPs deliver the intervention safely?
 - Are patients and providers satisfied with the intervention?
 - Do patients and providers accept treatment from Community Paramedics?

- TB-specific Research Questions:
 - Does intervention reduce length time in treatment for TB?
 - Does intervention reduce the spread of TB?

Data reporting schedule

Phase I (baseline) data will be reported monthly to the evaluator by the Local Pilot Project Managers. Some measures, such as health insurance claims, will have lag times before they can be reported to the evaluator. However, all Phase I data will be reported to HWPP within 6 months of CP Intervention Period, per the Code of Regulations.

Phase II (training) data measures will be collected and reported by the Instructors to the Local Pilot Project Managers. The Local Pilot Project Managers will report findings to the evaluator within one month of the completion of each component of the training (Core Curriculum, Site-Specific Didactic, and Site-Specific Clinical). The results of the training will determine which trainees are qualified to practice as CPs during the pilot project CP intervention period. The evaluator will report Phase II findings to HWPP on or before the launch date of the CP Intervention Period, in which the CPs begin their clinical practice. During evaluator site visits and on the CP Satisfaction surveys, CPs will be asked to provide their perception of the adequacy of training in relation to the duties they perform in their expanded roles during the evaluator's site visits and on the CP Satisfaction surveys. This data will subsequently be reported to HWPP.

For each of the first three months during Phase III, the Local Pilot Project Managers will report their findings on a monthly basis to the evaluator. Beginning in the fourth month of Phase III, the Local Pilot Project Managers will report to the evaluator on a quarterly basis. Any individual pilot site that experiences difficulty in the data collection or reporting may be asked to continue reporting on a monthly basis, and any site may continue to report monthly if they prefer to do so.

SUBMISSION OF DATA TO HWPP

All Phase I data (baseline) will be reported to HWPP within the first six months of the CP Intervention period. All Phase II data (training) will be reported to HWPP on or prior to the launch date of the CP Intervention Period, currently scheduled for September 1, 2013. Those EMT-Ps who have successfully completed training and have agreed to work as CPs will be reported to HWPP as trainee participants using the modification forms provided in the HWPP Application Workbook.

Phase III data collected to evaluate the clinical patient interventions will be reported to HWPP every six months during the CP Intervention period. This data will include utilization, cost, quality, acceptance/satisfaction, and safety data based on measures

identified in **Appendix H**.

EVALUATION PLAN MODIFICATIONS

The evaluation plan will be reviewed to determine needed modifications to the projects' objectives and methodologies during the site visits conducted with each pilot site. The results of these evaluations along with any project modifications will be reported to HWPP within 30 days of the site visit.

DATA RETENTION

Each Local Pilot Project Manager is responsible for retaining all raw data about trainees and the implementation of their project(s) for a period of two years after completion of the pilot. This data may be retained electronically or in hard copy and will be made available to HWPP, relevant IRB, the evaluator, the funder, or the Sponsor Agency upon request.

8. Monitoring (92308)

The EMS Authority has developed through its regulatory authority a Patient Safety and Quality Assurance/Improvement program to be used within each Local EMS Agency. (*CCR Title 22, Div 9, Chapter 12, EMS System Quality Improvement*) **Appendix I**

Increased medical control and oversight will be necessary to ensure patient safety and for quality improvement. The LEMSA Medical Director or their designee 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 will be established for each pilot site that 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. The purpose of this Advisory Committee is to augment the Local EMS Agencies Quality Improvement program in order to provide additional medical and administrative oversight of the Community Paramedicine pilot project. This includes, but is not limited to, ensuring trainee competency, supervisor fulfillment of roles and responsibilities and employment/utilization site compliance with selection criteria. For the purposes of this project, a 100% retrospective review of all patients treated by a Community Paramedic, will be conducted in addition to the evaluation of the EMSA Project Manager, and the UCSF independent evaluation team described in Phase II & III of their plan above. In addition, any unusual occurrences will be reported to the HWPP program staff and to Local & EMSA Project Manager within 24 hours of occurrence for in-depth review by the project Medical Director. The local Advisory Committee shall work in collaboration with the State Advisory Committee, EMSA Community Paramedicine Project Manager and

Independent Evaluator.

9. Informed Consent (92309)

Two Patient Consent Forms have been included. The first is for tuberculosis patients who will receive Daily Observed Therapy from a Community Paramedic. The second is for all other demonstration sites in which the patient is either responsive or for whom a consenting adult is available. Both 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.

The Tuberculosis Patient Informed Consent states that if the patient refuses or withdraws from participation in the demonstration project, then treatment will no longer be given by the Community Paramedic. For all other pilot sites, refusal or withdrawal from the demonstration project will result in immediate transport to the closest emergency department capable of treating the patient. In addition, the Tuberculosis Project form provides patient informed consent for the duration of Daily Observed Therapy, while all of the other sites must consent patients at each encounter. Copies of the language of the informed consent can be found in **Appendix J**.

Patients who cannot consent due to inebriation, mental incapacity, or non-responsiveness will be treated in accordance with current regulations and local protocols governing EMT-Paramedics.

All patients will be provided with the informed consent in a language in which the patient is fluent. Additionally, all written and oral informed consents will be witnessed in writing by a third party. Currently, EMT-Ps are required to obtain witness signatures in the event that a patient declines transportation to an ED against medical advice. Obtaining signed consent is part of the normal course of duties for EMT-Ps.

All documentation of informed consent will be retained by the EMT-P's provider organization as well as being part of the patient's medical records which will be maintained by other healthcare providers.

10. Costs (92310)

The cost of preparing the EMT-Paramedics to practice as Community Paramedics during the pilot project will be determined based on the cost of each of the following elements:

Cost Input	Estimated total cost
Curriculum Development/Planning*	\$ 10,000 (in-kind)
Core Instructors	42,000
Guest Lecturers**	11,000 (in-kind)
Per diem for instructors & guest lecturers (travel, accommodations, etc. for instructors)*	18,500
Classroom space	17,500
Materials	20,000
Trainee Wages*	325,185
Misc office supplies, break refreshments	2,000
Total	446,185
Per student	\$ 3,948.54

*Indicates cost that would likely not be part of total cost of training after legislative change.

**Indicates cost that may be part of total cost of training after legislative change.

Site Specific	Estimated total cost
Core Didactic Instructors	\$ 21,600
Core Clinical Instructors	32,400
Classroom space (at pilot site)**	no cost
Clinical Rounds**	10,000 (in-kind)
Trainee Wages*	325,185
Total	389,185
Per student	\$ 3,444.12

*Indicates cost that would likely not be part of total cost of training after legislative change.

**Indicates cost that may be part of total cost of training after legislative change.

Alternative Destination (4 sites, 247 trainees)	Estimated total cost
Core Instructors	\$ 1,500
Classroom space (at pilot site)**	no cost
Student Wages*	48,320
Total	49,820
Per student	\$ 201.70

*Indicates cost that would likely not be part of total cost of training after legislative change.

**Indicates cost that may be part of total cost of training after legislative change.

During the pilot project EMT-Paramedics will be paid as part of their normal working hours for attending training. Should the pilot projects result in a legislative change authorizing the practice of Community Paramedicine, EMT-Paramedics would be expected to pay for this advanced training of their own volition, or through their employer in accordance with any Collective Bargaining Agreements, as they currently do to move from certification as EMT to certification as Advanced EMT (AEMT) and eventually to licensure as EMT-Paramedic. The cost of this additional training and certification or licensure would be determined largely by EMSA during the first year of project implementation. Cost would be expected to decrease as more programs develop and the number of trainees increases.

The current baseline data collection plan includes collection of data to demonstrate the cost of care as it is currently being delivered. These measures are shown separate from other measures for which baseline data will be collected. (*See Appendix H Baseline Cost Data.*)

Predicted average cost per patient visit for the care rendered by CP will be determined by multiplying average salary and benefits costs for CPs by the average length of time spent in client encounters, excluding an estimate of the average time spent per patient encounter in obtaining informed consent, administering satisfaction questionnaires, and other tasks that will not occur if the CP is authorized by legislative change. Predicted average cost per patient visit for care provided by a current provider will also be calculated.

Objective 2 of the pilot project's purpose is to determine the cost-effectiveness of care provided by CPs compared to care as it is currently provided. Prior to Baseline Data collection and project implementation, data estimating the cost of care as it is now provided and the cost of care as it will be provided by CPS is not available. Preliminary data on cost is expected to be available and reported to HWPP program staff as a

component of Baseline Data, which will be reported in February 2015. Specific information in reference to these estimated or projected costs shall be provided to HWPP program staff when baseline data are submitted and at the time of annual renewal or as otherwise requested

11. Trainee Information (92311)

The EMSA Project Manager will be responsible for providing information to program staff regarding trainees in the employment/utilization phase and will include the following:

- (a) Name, work address and telephone number of the CP Trainee,
- (b) Name, work address and telephone number and license number of the supervisor, and
- (c) This information will be submitted in writing to program staff within five (5) days of the date the CP Trainee enters the employment/utilization phase.

12. Modifications (92312)

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 (does not require prior approval).

13. Legal Liability (92313)

Per the Code of Regulations, the Sponsor has ascertained the legal liability of the project, and participants will be advised of this liability in the course of the training curriculum.

IV. Appendices

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|-----|-----------------------------------------|------------|
| 1. | Needs Assessment Reports | Appendix A |
| 2. | Title 22 California Code of Regulations | Appendix B |
| 3. | Curriculum and Course Outline | Appendix C |
| 4. | Budget | Appendix D |
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Community Paramedicine: A Promising Model for Integrating Emergency and Primary Care

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Introduction

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.¹ CP programs have been independently developed in a number of states and countries, and thus are varied in nature. These programs typically have been designed to address specific local problems and to take advantage of locally developed collaborations between and among emergency medical services (EMS) and other health care and social service providers. Interest in this model of care has grown substantially in recent years in the belief that it may improve access to and quality of care while also reducing costs.

Historically, EMS has focused on providing emergency treatment for persons suffering acute medical problems in community settings, while transporting such persons to a hospital emergency department (ED), and when needed, in the ED until care is taken over by hospital staff. EMS personnel also have been utilized to transport ill or injured persons between hospitals.

The inherent nature of emergency care makes it more expensive than many other types of health care services. EMS systems and hospital EDs must be prepared to handle a wide array of routine and unusual problems that occur unexpectedly and often require a rapid response with specialized skills and equipment because the problems are serious and sometimes life threatening. Consequently, the fixed costs associated with operating and maintaining emergency care services are high.

As concern about rising health care costs has grown in recent years, increased efforts have been directed at ensuring that expensive emergency care resources are optimally utilized. Also, because the overwhelming majority of EMS systems rely on fire departments and other publicly funded agencies to provide at least some services, and because most local governments are under significant financial strain, local EMS providers have increasingly sought to secure additional sources of financial support. Early experiences with CP programs suggest that they may lead to more optimal use of EMS assets and offer some potential for diversification of the EMS funding base. In particular, CP programs may result in:

1. **More appropriate use of emergency care services.**

Perhaps the best demonstrated benefit of CP programs has been in getting persons who have accessed the EMS system, but do not have a medically emergent condition, to more appropriate destinations than a hospital ED. This may yield financial savings and, in some cases, improve the coordination and continuity of care.

2. **Increased access to primary care for medically underserved populations.**

Some CP programs have provided solutions to primary care problems that were otherwise not being well addressed. For example, some CP programs provide short-term (e.g., within 72 hours of discharge) follow-up home visits for patients who have just been discharged from a hospital or ED until other providers are able to provide the home visits or other follow-up care. Such follow-up care may help prevent ED or hospital readmissions.

3. **Enhanced opportunities for EMS personnel skills development and maintenance.**

CP programs aimed at providing primary care for medically underserved populations may also provide opportunities for EMS personnel in low-call-volume settings (e.g., rural areas) to further develop patient assessment skills, as well as more frequently utilize their basic skills. This helps them maintain their skills and expand their clinical experience.

Recognizing the widening gap between the demand for health care services and California's supply of health care workers, and of the need for health care resources to be optimally utilized, including providers working as much as possible at the top of their skills, the California HealthCare Foundation and California Emergency Medical Services Authority (EMSA) asked the Institute for Population Health Improvement (IPHI), University of California Davis Health System, to assess the feasibility of developing community paramedicine programs in California.² They asked IPHI to explore whether use of paramedics in expanded roles might be a practical option for California communities to consider when addressing health care needs in coming years.

This report provides a brief history of EMS systems and paramedicine in California, a broad overview of the development

of community paramedicine in other states and countries, a summary of current perspectives on CP in the state based on interviews with key stakeholders, and a discussion of the barriers to implementing CP programs in California. We conclude the report with several recommendations for further exploration of the role of community paramedicine in California.

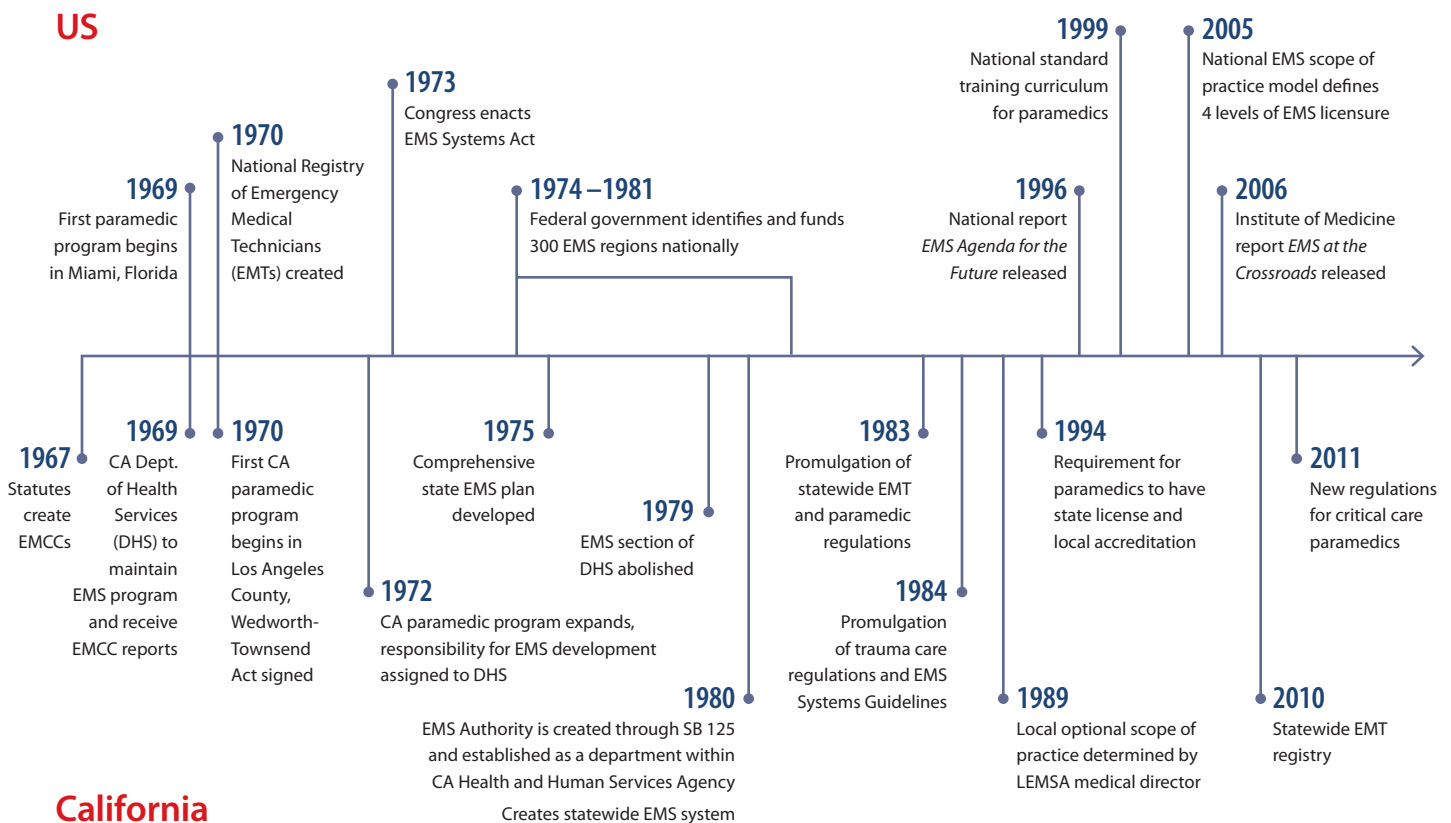
The Evolution of Emergency Medical Services in California

The term paramedicine refers to public health or health care-related activities performed by nonphysicians working as adjuncts or assistants to doctors. Paramedicine has been used most often to refer to emergency medical care provided outside of hospitals, although it is by no means limited to emergency care. The history of emergency care paramedicine is especially linked to military medicine and dates back to the Roman legions, when aging centurions no longer able to fight were used to provide aid to and remove wounded warriors from the battlefield.

The evolution of modern paramedicine and EMS in California began in the late 1960s, concomitant with the growing awareness in the state and nation of the alarmingly high number of out-of-hospital deaths from trauma and cardiac arrest.³ A pilot project using mobile intensive care paramedics was formally launched in Los Angeles County in early 1970. The Wedworth-Townsend Paramedic Act, which defined the role and scope of practice of mobile intensive care paramedics and nurses, was signed into law by then governor Ronald Reagan on July 14, 1970. It made California the first state to adopt legislation permitting paramedics to provide advanced medical life support.⁴ The LA County paramedic pilot program was expanded in 1972, and other California counties soon began to develop EMS programs.

Responsibility for coordinating EMS development in the state was initially assigned to the EMS Section of the then California Department of Health Services (DHS). However, the department did not place a high priority on EMS and found itself increasingly at odds with the state's growing EMS community. DHS abolished

FIGURE 1. Timeline of EMS Milestones in the US and California



Note: EMCC = emergency medical care committee, LEMSA = local EMS agency.

its EMS Section in 1979, resulting in counties becoming the focal point of EMS systems development and leading to enactment of legislation in 1980 creating a new standalone EMS Authority within the then California Health and Welfare Agency.⁵ EMSA was charged with being the lead state agency for emergency and disaster medical services, although DHS retained responsibility for many aspects of emergency and disaster public health and medical response.

State regulations establishing training and other standards for paramedics were promulgated by EMSA in 1983. These were followed in 1984 by statewide guidelines for local EMS systems, standards for local trauma care systems, and training standards for other EMS providers.⁶ These standards and guidelines have been incrementally revised and updated over the years, but the regulatory framework established in the early 1980s has remained the basic foundation for the state’s EMS systems. Figure 1 (page 3) provides a timeline of key EMS milestones in the US and California.

EMS activities in California are regulated at the state level by EMSA pursuant to Division 2.5, California Health and Safety Code, and Division 9, Title 22, California Code of Regulations. EMSA is one of 13 departments administered by the California Health and Human Services Agency. Day-to-day EMS activities are

governed by local EMS agencies, which follow state regulations and standards established by EMSA. Currently, there are 25 single-county and 7 multicounty local EMS agencies in California (see Appendix A).

EMSA is statutorily authorized to develop and implement regulations governing the medical training and scope of practice for emergency medical care personnel, including emergency medical technicians (EMTs), public safety personnel (e.g., firefighters, law enforcement officers, lifeguards), and mobile intensive care nurses, among others. EMTs are trained according to state standards and then licensed (paramedics) or certified (basic and advanced EMTs) to render emergency medical care in pre- and inter-hospital settings.⁷

There are three levels of EMTs in California: basic (EMT), advanced (A-EMT), and paramedic (EMT-P). Paramedics are trained and licensed in advanced life support skills, including endotracheal intubation and selected other invasive procedures, as well as the intravenous and intramuscular administration of medications. They are typically employed by public safety agencies (e.g., fire departments) or private ambulance companies. Requirements for EMT and paramedic initial training and continuing education are listed in Figure 2, and the skills and activities in the scope of practice for EMTs and paramedics is summarized in Figure 3.

FIGURE 2. Education and Training Requirements for California EMTs

	Emergency Medical Technician (EMT)	Advanced EMT	Paramedic
Minimum Requirements	18 years of age	18 years of age, high school diploma or equivalent, EMT certification, CPR card	18 years of age, high school diploma or equivalent, EMT certification
Training	160 hours of training: <ul style="list-style-type: none"> • 136 didactic • 24 clinical 	160 hours of training: <ul style="list-style-type: none"> • 80 didactic and skills lab • 40 clinical • 40 field internship 15 Advanced Life Support patient contacts (minimum)	1,090 hours of training: <ul style="list-style-type: none"> • 450 didactic and skills lab • 160 clinical • 480 field internship 40 Advanced Life Support patient contacts (minimum)
Exams	National Registry of EMTs, written and skills	Local EMS agency, written and skills	National Registry of EMTs, written and skills
Certification / License	Certified by local EMS agency or public safety agency, recognized statewide	Certified by local EMS agency, only valid locally	Licensed by EMS Authority, recognized statewide Accreditation by local EMS agency
Renewal	Recertification every 2 years by: <ul style="list-style-type: none"> • 24-hour refresher course, or • 24 hours continuing education units and 10 skill competencies 	Recertification every 2 years by: <ul style="list-style-type: none"> • 36 hours continuing education units and 6 skills competencies 	License renewal every 2 years by: <ul style="list-style-type: none"> • 48 hours continuing education units <small>Note: Certified paramedics in other states or counties or NREMT registries must provide documentation and fill out an application to become a licensed California paramedic</small>

Source: EMSA, 2013.

Services by EMTs and paramedics are provided under medical control (typically by an emergency physician) through pre-established, locally approved medical policies and protocols and through direct linkage to locally designated hospital EDs (base hospitals). These services are typically initiated by a telephone call to 911 or other emergency telephone number. See Appendix B for a depiction of the current typical EMS response to a 911 call for emergency assistance.

Paramedics became a statewide *licensed* health care practitioner in California in 1994. Licenses are issued by EMSA and are valid statewide, but paramedics must be accredited by a local EMS agency before practicing. Licensure by EMSA must be renewed every two years. In contrast, EMTs and A-EMTs are *certified* by local EMS agencies, and they must be recertified every two years. EMT certifications are valid statewide, but EMTs can only work in areas after they are certified by a local EMS agency.

Paramedics are now widely distributed throughout California but are more prevalent in urban areas. In 2010, there were approximately 19,000 licensed paramedics and nearly 60,000 EMTs in California.⁸ There were approximately 3 million prehospital emergency ambulance responses in California in

2011.⁹ Nationally, there were approximately 826,000 credentialed EMS professionals in 2011, including EMTs (64%), advanced EMTs (6%), and paramedics (24%).¹⁰

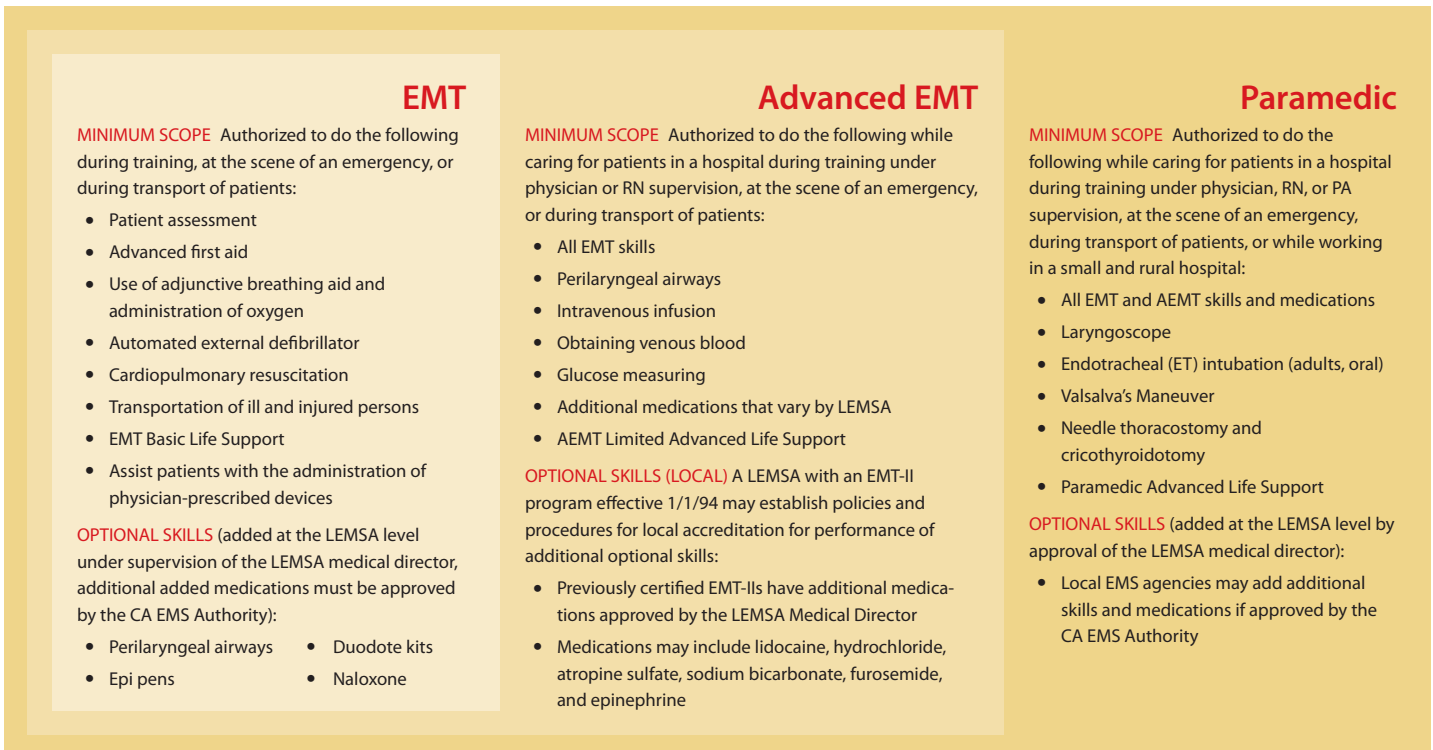
EMS systems are universally regarded as being an essential part of the health care delivery system today. However, they operate at the intersection of health care, public health, and public safety and generally have not been well integrated into the

DEFINITION: SCOPE OF PRACTICE

Refers to the “defined parameters of various duties or services that may be provided by an individual with specific credentials. Whether regulated by rule, statute, or court decision, it represents the limits of services an individual may legally perform.”

— NHTSA REPORT:
NATIONAL EMS SCOPE OF PRACTICE MODEL (2005)

FIGURE 3. Skills and Activities Included in the Scope of Practice for California EMTs



health care delivery system because of their overlapping roles and responsibilities. The Institute of Medicine highlighted this problem in a 2006 report, noting that “local EMS systems are not well integrated with any of these groups and therefore receive inadequate support from each of them.”¹¹ The incentives for care coordination and greater use of community-based care provided by the Affordable Care Act present an opportunity for greater integration of EMS into the health care delivery system through new models of care such as community paramedicine.

Funding for Local EMS Services

Funding to support local EMS services comes from diverse public and private sources, including state and municipal taxes, state and federal grants, philanthropic and charitable donations, in-kind contributions, subscription programs, individual self-payment, and fee-for-service payments from Medicare, Medicaid, and private health insurance. In addition to the above sources, California counties may designate a portion of traffic fines to support EMS services for uninsured persons — known as the Maddy EMS fund.¹² Funding for local EMS agencies is often derived primarily from revenues generated from patient transport, and is therefore dependent on the number of transports and the payer mix. One national estimate of funding sources indicated that “an average EMS agency receives 42% of its operating budget from Medicare fees, 19% from commercial insurers, 12% from Medicaid, and 4% from private pay; it requires approximately 23% in additional subsidization, most often provided by local taxes.”¹³ There is no central data source that tracks funding sources for California’s local EMS agencies, so California-specific data are not readily available.

Payments from commercial payers, and to a lesser extent Medicare, have historically been used to subsidize the costs of treating Medicaid and uninsured patients. Medicare plays a significant role both in revenues for local EMS agencies and in payment policy. Because individuals age 65 and over are four times more likely to use EMS services than younger individuals, Medicare represents a large proportion of utilization and revenues for local EMS agencies.¹⁴ In California, for example, Medicare patients account for about 35% of all ambulance transports and 25% of reimbursements. Medi-Cal patients account for about 21% of ambulance transports and only 5% of reimbursements. Much of the cross-subsidization in California comes from commercial health plans, whose patients represent

18% of transports and 38% of reimbursements.¹⁵ Medicare has shaped the provision of EMS through policies requiring patient transport for payment, a practice other payers have followed.

“At the very broadest level, the health care system is ill-equipped to take care of the volume of patients and provide the care needed. We have to deliver health care and bring about health in new ways.”

— STATE AGENCY OFFICIAL

Changing EMS and Health Care Environments in California

The overall health care environment of California and the state’s health care delivery system are rapidly changing due to efforts to control health care costs, improve care quality and service, deploy health information and advanced telecommunication technologies, and implement the Affordable Care Act, among other reasons. A description of the myriad activities in this regard is beyond the scope of this report; however, the widening gap between the demand for health care services and the supply of physicians and other health care workers to provide such services is especially pertinent to the consideration of community paramedicine.¹⁶

California has experienced and for the next few years will continue to experience a significantly increased demand for health care services. This increased demand is being driven primarily by population growth and aging, the rising prevalence of chronic diseases, and increased health insurance coverage consequent to the Affordable Care Act. An additional 3.4 million Californians are expected to be covered by health insurance by 2016.¹⁷ At the same time that the demand for health care services is sharply rising, the workforce to supply those services is shrinking due to aging, health care cost control strategies, and growing dissatisfaction with private practice among physicians,

among other causes. The number of physicians graduating from the state's eight medical schools has not materially increased in recent years, and about a third of California's physicians are age 60 or over.¹⁸ Some counties are anticipating that a quarter or more of currently practicing physicians will retire in the next five years. The gap between health care service demand and health care provider supply is widening the most in rural and other medically underserved communities.¹⁹ This growing gap raises the specter of an impending health care access crisis. Ironically, instead of being driven by the lack of health insurance, this impending access crisis is due in significant part to the increased availability of insurance.

To mitigate the gap between the demand for services and the workforce available to provide those services, it is essential to optimally utilize all caregivers. This will require that all providers work at the top of their training and skills. In addition, more needs to be done to coordinate and integrate services across the continuum of care and to increase the number of caregivers. Using paramedics in expanded roles to address locally determined community health needs may be a promising opportunity to leverage an existing caregiver resource to address identified needs and provide overall greater value.

History and Development of Community Paramedicine

In recent years, a number of community-based programs have been developed that utilize paramedics in roles or settings outside their traditional emergency response and transport roles. These CP programs have been implemented in a number of states in the US (e.g., Colorado, Minnesota, Texas) and other countries, including Canada, England, and Australia. The implementation, operational costs, and outcomes of these programs in the US are still being assessed, and little data is available at this time.²⁰ There is a longer history and more literature on the outcomes of CP programs in other countries, but differences in methods of financing and delivering care in these countries make it difficult to generalize the findings to the US. Interest in developing CP programs has been especially high in rural and other medically underserved areas.²¹

Utilizing paramedics in expanded roles is attractive because they are already trained to perform patient assessments and to recognize and manage life-threatening conditions in out-of-hospital settings. They are accustomed to providing care

in home and community settings under relatively austere medical care conditions, are available 24/7/365, and are widely trusted and respected by the public. Further, paramedics are accustomed to collaborating with other health care providers in a variety of settings.

There are multiple definitions of community paramedicine, but most embrace three key tenets:²²

1. CP programs begin with a community-specific health care needs assessment.
2. Community paramedics are specially trained to provide services to meet those local needs.
3. Community paramedics provide services under clear medical control (i.e., under a physician's direction and supervision).

DEFINITION: MEDICAL CONTROL

Physician direction over prehospital activities to ensure efficient and proficient trauma triage, transportation, and care, as well as ongoing quality management

— NHTSA REPORT:
TRAUMA SYSTEM AGENDA FOR THE FUTURE (2002)

In this report, the following working definitions are used:

- **Community paramedicine** is a locally designed, community-based, collaborative model of care that leverages the skills of paramedics and EMS systems to address care gaps identified through a community-specific health care needs assessment.
- A **community paramedic** is a paramedic with additional standardized training who works within a designated community paramedicine program under local medical control as part of a community-based team of health and social services providers.

*“EMS should be doing more in health care;
we should be part of the solution.”*

— EMS PROVIDER

A number of principles underlie the structure and goals of CP programs. These principles are briefly described below:

- Community paramedicine programs are *not intended to duplicate or compete with other community health care services*, but rather are intended to fill identified gaps in care working in collaboration and partnership with existing health care providers.
- Community paramedics would be licensed, as are all paramedics in California. *They would not be independent practitioners*, but rather would work under approved protocols and a physician’s direction (i.e., under “medical control”).
- Community paramedics would *undergo additional education and training*, the exact requirements of which would depend, in part, on the objectives and scope of the CP program. At least one standardized curriculum for community paramedics is publicly available.²³ Communities also could tailor additional education to address local needs. Training would occur in the various settings in which community paramedics would potentially work with collaborating providers, including primary care clinics, physician offices, nursing homes and other long term care facilities, substance abuse treatment programs, and mental health facilities, among others.
- It is expected that the *additional training will provide community paramedics with enhanced decision-making skills to prepare them for expanded clinical decision-making responsibilities*. When they are providing services in the community, they would be supported through protocols, and direct online (telephone or video) medical control would be available.

- It is likely that *only a small percentage of more experienced paramedics would become community paramedics*.
- Medical control for community paramedics may involve other types of physicians (e.g., general internists, family practitioners, pediatricians, geriatricians) in addition to emergency medicine physicians, depending on the type of services being provided in the CP program.
- The goal of CP programs would be to *get the patient to the right care, delivered by the right provider, at the right time, resulting in the best outcomes and most efficient use of the region’s health care resources*, as specified in the Affordable Care Act.

Components of Community Paramedicine Programs

A variety of services and activities have been included in CP programs in other states and countries. Six services have been selected for this report, and these can be divided between prehospital and post-hospital or community health services (see Figure 4). Each is described in detail in Figures 5–10.

FIGURE 4. Potential Community Paramedicine Services

Prehospital Services

- Transport patients with specified conditions not needing emergency care to alternate, non-emergency department locations.
- After assessing and treating as needed, determine whether it is appropriate to refer or release an individual at the scene of an emergency response rather than transporting them to a hospital emergency department.
- Address the needs of frequent 911 callers or frequent visitors to emergency departments by helping them access primary care and other social services.

Post-Hospital or Community Health Services

- Provide follow-up care for persons recently discharged from the hospital and at increased risk of a return visit to the emergency department or readmission to the hospital.
- Provide support for persons with diabetes, asthma, congestive heart failure, or multiple chronic conditions.
- Partner with community health workers and primary care providers in underserved areas to provide preventive care.

Prehospital Services

1. Transport patients with specified conditions not needing emergency care to non-ED locations

(“alternate locations”) such as a mental health facility, sobering center, urgent care clinic, or primary care physician’s office. A program in San Francisco to address the needs of chronic inebriates is described in Case Study 1 (page 14). Figure 5 summarizes the opportunities and challenges associated with this activity.

2. After assessing and treating as needed, determine whether it is appropriate to refer or release an individual at the scene of an emergency response rather than transport the person to a hospital ED.

In the 1990s, the Orange County EMS agency in North Carolina had a treat-and-release policy, so for situations not requiring emergency care, patients could either be treated at home and follow up with their doctor, or the paramedics would arrange for alternative care. Current

FIGURE 5. Community Paramedics (CPs) Transporting Patients to Locations Other Than the Hospital Emergency Department

Opportunities

OVERARCHING: *Method for getting right level of care to patients in an efficient, effective, and timely manner. May reduce crowding in some emergency rooms.*

- Many patients may be treated appropriately in a location other than a hospital emergency department (e.g., patients with minor upper respiratory infections, chronic inebriates).
- Means of getting patients to services they need more quickly and efficiently. Reduction and/or elimination of secondary transfers or referrals if the individual is taken to the most appropriate treatment facility initially.
- May reduce overcrowding in EDs if fewer patients with non-emergent conditions are there, potentially reducing costs and making more efficient use of ED resources. May also reduce ED diversion rates and EMS wait times.
- CPs would be connected to other community resources where appropriate treatment could be obtained by patients not needing ED level of care.
- Use of technology such as telehealth consultations could help to ensure accurate assessment of patients, particularly in rural, underserved areas.
- Patients may prefer being taken to a facility where they can immediately obtain the appropriate level and type of care, and they may perceive improvements in the quality of service.

Challenges

OVERARCHING: *CPs must be well trained to assess patients in the field using protocols and must have access to online medical experts, and state regulations must be changed.*

- CPs will need additional training and protocols for patient assessment, along with greater online medical control for consultation on patients, since potential for error is greater than current practice of transporting all patients to EDs, where they are evaluated by ED staff.
- Need for viable alternate locations for patients to be transported to; often, there are limited resources in communities for mental health care, substance abuse treatment, urgent care, and primary care. Need exchange of data with all providers and quality assurance/improvement processes in place.
- Need appropriate medical condition evaluation prior to transport to an alternate facility.
- Difficult to accurately assess complex patients (e.g., those with psychological or substance abuse issues) with the potential of underlying medical conditions.
- Because the current system takes everybody to a hospital ED, transport to alternate locations may be seen by patients as lower-quality care. Appropriate education is needed so the public accepts that this approach is beneficial.
- May result in overutilization of transportation resources by patients.
- Need to change statute and regulations to allow transport of patients to non-ED locations and to allow community paramedics to practice in locations other than those currently specified.

EMS practice at times involves a form of treat and release where 911 callers decline transport against medical advice, sometimes apparently at the informal suggestion of emergency responders. However, adequate records are not kept to indicate how widespread this practice is. See Figure 6 for the opportunities and challenges associated with this activity.

3. Assist frequent 911 callers or frequent visitors to EDs to access primary care and other social services, as this will improve the efficiency of 911 service. A program in San Diego that leverages technology to help connect frequent 911 callers to health care and social services is described in Case Study 2 (page 14). See Figure 7 (page 11) for the opportunities and challenges associated with this activity.

Post-Hospital or Community Health Services

4. Provide support for persons who have been recently discharged from the hospital and are at increased risk of a return visit to the ED or readmission to the hospital. Some recently discharged patients may have difficulty following their medical care regimen and for various reasons do not have family or other social services support. These patients may suffer from congestive heart failure, diabetes, asthma, or multiple chronic conditions and would benefit from close monitoring to prevent readmission or need for emergency intervention. See Figure 8 (page 11) for the opportunities and challenges associated with this activity.

FIGURE 6. Assess, Treat as Needed, and Refer or Release by Community Paramedics

Opportunities

OVERARCHING: Improve patient care by treating at home or at incident site, and then releasing patient or referring for additional care in non-ED setting; potential for systemwide cost savings when patient is not transported to an emergency department.

- Ambulances are often sent in response to nonemergency situations; community paramedics could assess patients, treat and release them if appropriate, or if needed, refer patients to providers other than the ED.
- For nonemergency situations, care may be administered appropriately in settings other than the ED that are less expensive. There would potentially be lower costs for patients, insurers, and the health care system overall.
- Frees up resources for patients in the ED who need emergency care.
- CPs would be connected to other community resources where they could refer patients not needing ED level of care for appropriate treatment.
- Provides formal policy and protocols with training and accountability for CPs working with patients in nonemergency situations, versus current informal suggestions that these patients decline transport against medical advice (AMA).

Challenges

OVERARCHING: Risk and liability associated with inaccurate evaluations by CPs. Need for protocols to ensure that all patients are treated equally and that none are denied care.

- CPs will need protocols for patient assessment, along with greater online medical control for consultation on patients, since potential for error is greater than current practice of transporting all patients to EDs, where they are evaluated by ED staff.
- Can be challenging to make accurate patient assessment with incomplete information about patient's condition. Electronic transfer of health information would help improve decision-making related to patient assessment.
- Necessary for CPs to be sufficiently trained and know limitations of decision-making and liability. Medical directors may incur extra liability.
- Patients and families could think care is being inappropriately denied, potentially based on patient characteristics. CPs will need to be alert to equity in patient care.
- Need to change statute and regulations to allow community paramedics to treat and release or refer and to change policies to allow payment for care that does not involve transport of patients to EDs.

FIGURE 7. Community Paramedics Addressing Needs of Frequent 911 Callers

Opportunities

OVERARCHING: *Potential to improve patient care and reduce inappropriate use of EMS resources.*

- Paramedics are often very familiar with frequent 911 callers, who in addition to their medical conditions, often have mental health or substance abuse issues, are homeless, or are in need of other social services.
- CPs would be connected to other community resources where patients could obtain assistance to address basic needs such as housing, food, and utilities, as well as to obtain care for their medical, mental health, or substance abuse conditions.
- Patients whose basic needs are met would potentially be better able to interact with the health care system and to manage their own care. Lower and more appropriate use of EMS resources, through fewer 911 calls and fewer ED visits, could result.

Challenges

OVERARCHING: *Assessment and treatment of patients with complex social and medical care needs requires additional training and collaboration with a wide variety of providers.*

- CPs will need additional training with protocols for patient assessment, and greater online medical control will be needed for consultations on patients with complex social and medical care needs.
- Extensive coordination will be required so that assessment, treatment, and referral efforts by CPs, hospital discharge planners/ social workers, and social service employees are complementary and not duplicative. Electronic systems to allow for identification of frequent users and for exchange of medical records will be needed.
- These services should be structured so as to not detract or interfere with rapid response to 911 calls.
- Need to change statute and regulations to allow community paramedics to determine to transport 911 callers to alternative destinations and to refer them to other providers, and change policies to allow payment for care that does not involve transport of patients to EDs.

FIGURE 8. Community Paramedics Providing Follow-Up Care for Patients Recently Discharged from the Hospital

Opportunities

OVERARCHING: *Potential to improve patient care and reduce hospital readmissions by bridging gaps in care.*

- 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 regular scheduled follow-up care in understanding post-discharge instructions, medications, self-care, and the timing and importance of follow-up appointments. CPs could review these with patients and, if applicable, their families. The CP could ensure there is a safe home environment for the patient to recover in, and could provide feedback to primary care and emergency care providers about the patient's function at home. These types of activities could improve patient follow-up and integration in the health care system and overall quality of patient care, and may reduce 911 calls, ED visits, and hospital readmissions.
- Patients and their families would have a resource (CP or 911) for any immediate needs.
- Care provided by CPs would be ordered by the discharging physician and designed to complement care from other health care providers, with the goal of improved communication and coordination among providers, leading to better patient care.

Challenges

OVERARCHING: *Management of patients with complex medical conditions requires extensive collaboration and communication with other providers.*

- CPs will need additional training with protocols for patient assessment, and there will need to be greater, and potentially additional types of online medical control (i.e., emergency physicians and primary care physicians or other specialists) for consultation on patients with complex medical conditions.
- Electronic systems to allow for exchange of records and other information between CPs and other primary care, specialty care, and emergency care providers will be needed. Exchange of information across state lines may be challenging.
- Need to change statute and regulations allowing community paramedics to provide services in additional situations, and change policies to allow payment for care that does not involve transport of patients to EDs.

5. Provide support for persons with congestive heart failure, diabetes, asthma, or multiple chronic conditions by making periodic checks and providing education about how to proactively manage the conditions when regular home health services are not available. A program in Ft. Worth, Texas, to address the needs of patients with congestive heart failure is described in Case Study 3 (page 15). See Figure 9 for the opportunities and challenges associated with this activity.

6. Partner with community health workers and primary care providers in underserved areas to provide preventive care such as flu vaccines, blood pressure monitoring, selected disease screening tests, and basic education about illness, injury prevention, and disease risk reduction. See Figure 10 (page 13) for the opportunities and challenges associated with this activity.

FIGURE 9. **Community Paramedics Providing Care for Patients with Chronic Conditions**

Opportunities

OVERARCHING: Potential to bridge gaps between primary care and emergency care, reduce volume of 911 calls, and reduce readmissions.

- Could be a new resource for people with serious chronic conditions who have limited access to primary care, and for patients newly diagnosed with a chronic condition who may need additional help with care management, and could serve as a bridge between emergency and follow-up care.
- CPs could evaluate patients with chronic conditions and review medications and care instructions to ensure that patients and, if applicable, their families, understand them. CPs could also consult with a patient’s physician to address any needs identified during a visit (e.g., to adjust medication).
- Effective care management could reduce 911 calls, ambulance transport, ED visits, hospitalizations, and rapid ED returns/rehospitalizations. CPs could serve as provider extenders in underserved areas.
- Quality of care may be higher through enhanced one-on-one care, coordination of care, and communication about care with other health care providers. Care could be more timely if complications are detected early that require additional primary or emergency care.
- Cost-effective way to integrate EMS assets into the health care delivery system. Should be designed so that care provided by CPs is complementary to and does not supplant services provided by the broader medical community.
- In some jurisdictions, may increase operational efficiency of paramedics by providing a beneficial community service between calls and allowing paramedics to maintain and improve their skills.

Challenges

OVERARCHING: Need rules and guidelines for this type of care provided by CPs. Costs will need to be offset by savings in ED and hospital readmissions.

- CPs will need additional training to learn about care for people with chronic conditions. Because this type of care is different from emergency care, it may require a different or additional type of medical supervision (i.e., by emergency physicians and primary care physicians or other specialists).
- Need rules and guidelines regarding the types of chronic care CPs provide.
- Need electronic systems to allow for exchange of records and other information between CPs and other primary care, specialty care, and emergency care providers.
- Patients may perceive there are tiers of care or lower levels of care being provided by the CP if the patient is accustomed to receiving care from doctors or nurses.
- May increase health care costs depending on the amount of time spent with patients, extra travel costs, etc.
- These services should be structured so as to not detract or interfere with rapid response to 911 calls.
- Need to change statute and regulations allowing community paramedics to provide services in additional situations, and change policies to allow payment for care that does not involve transport of patients to EDs.

FIGURE 10. Community Paramedics Providing Preventive Care for Patients

Opportunities

OVERARCHING: *Uses skills paramedics already have and increases ability to reach communities that have little access to health care.*

- Paramedics already provide services in a variety of home and community settings, including high-risk neighborhoods and medically challenged settings (e.g., streets and businesses).
- Paramedics currently give injections, check blood pressure, and assess home environments for safety, so very little additional training will be required for CPs to provide preventive services such as administering flu shots, screening for diseases, and educating patients about how to avoid asthma triggers or prevent falls.
- These types of services would be particularly beneficial to medically underserved communities that are not reached by standard health care resources.
- May be especially useful in rural areas and could be provided when doing follow-up care after patient is discharged from ED or hospital.

Challenges

OVERARCHING: *Nontraditional role for paramedics. CPs will need additional training to learn about preventive care and need to exchange information with other providers to ensure patient safety.*

- Because this type of care is divergent from the primary mission of EMS, it may require a different or additional type of medical supervision (e.g., by primary care physicians, extended practice nurses).
- Preventive care services should be structured so as to not detract or interfere with rapid response to 911 calls.
- Systems to allow for exchange of records and other information between CPs and other primary care, specialty care, and emergency care providers will be needed.
- Need to address organizational issues of when and where these services would be provided (e.g., at doctor's request vs. regularly scheduled, at patient's home vs. at fire station).
- Costs will need to be offset by health care savings or assumed as part of basic primary care.
- Need to change statute and regulations allowing community paramedics to provide services in additional situations, and change policies to allow payment for care that does not involve transport of patients to EDs.

CASE STUDY 1

San Francisco Program to Address the Needs of Chronic Inebriates

San Francisco developed a program to appropriately address the needs of chronic inebriates — The San Francisco Fire Department (SFFD) Homeless Outreach & Medical Emergency (HOME) Team. The program was developed in response to a small number of individuals who were chronic inebriates that frequently called 911, had extensive ED use, and incurred high uncompensated health care costs.

The San Francisco HOME Team was designed to connect at-risk individuals with a system of care to better serve their needs and to stop the unproductive cycle of ambulance transports and hospital stays. Analysis by the HOME Team found that heavy EMS system users are typically 40- to 60-year-old homeless male chronic inebriates who have comorbid mental illness and medical conditions, and high mortality rates. Prior to this program, San Francisco General Hospital estimated a total of \$12.9 million in annual uncompensated charges associated with 225 frequent users.

The HOME Team program started in October 2004 under the SFFD EMS through a joint effort of SFFD, San Francisco Department of Public Health, and San Francisco Human Services Agency. The team was led by one paramedic captain and included intensive case managers or outreach workers as well as nurse practitioners. Typical response involved outreach to find all frequent users, connect them to community-based care (typically, substance abuse treatment and medical detoxification), and advocate for long term care when necessary. The program was able to develop a web of resources and partners including case workers, mental health professionals, primary care providers, housing resources, substance abuse treatment programs, and law enforcement. These partners came together to create and evaluate systems of care for the frequent users. This clinical planning brought forth new long term care placement options for dual-diagnosis patients with both mental health and substance abuse conditions, including locked programs and boarding programs with care management. Over an 18-month period, there were reductions in ambulance activity for high users and a decrease in ED diversion rates at local hospitals. The HOME Team was funded by the San Francisco Department of Public Health at approximately \$150,000 annually; however, funding was rescinded due to the department having other budget priorities, and the program has been on hiatus since June 2009.

Source: *The San Francisco Fire Department HOME Team: An Urban Community Paramedic Pilot Project*, presentation by Captain Niels Tangherlini, June 27, 2012.

CASE STUDY 2

San Diego Program Leveraging Technology to Better Serve Frequent 911 Callers

A program designed to address the needs of individuals who repeatedly call 911 in San Diego began in 2008 as a collaboration between the San Diego Fire-Rescue Department and Rural/Metro Ambulance. The San Diego Resource Access Program (RAP) is coordinated by a paramedic and integrates health information technology with real-time EMS and computer-aided device surveillance.

A unique element of San Diego's approach is its integration of technology into the RAP program. As part of the San Diego region's \$15-million Beacon Community grant for health information exchange (HIE) development from the Office of the National Coordinator, there is information exchange between EMS and hospitals. This exchange facilitates detection of abnormal patterns of activity, both by repeat users of 911 and by equally vulnerable but less noticeable individuals. Algorithms are used to identify frequent users of the EMS system and to engage them through a patient-centered case management system involving RAP and other social and judicial systems.

Essential for RAP's success are the partnerships with related stakeholders including law enforcement, the courts, homeless outreach teams, social workers, and housing providers.

An evaluation involving 51 individuals enrolled in RAP over a 31-month period from 2006 to 2009 found several positive outcomes, most notably in EMS and ED use:

- EMS encounters decreased by 38%, EMS charges by 32%, EMS task time by 40%, and EMS mileage by 48%.
- ED encounters at the participating hospital decreased by 28%, and ED charges decreased 12%.
- The number of inpatient admissions decreased by 9%, and inpatient charges decreased by 6%.
- Hospital length of stay decreased by 28%.
- Across all services, charges declined by over \$314,000.

One of RAP's goals is to create bidirectional data sharing with all stakeholders and to link to the HIE being developed as part of the Beacon grant. With such a system, RAP will be able to move beyond serving its most frequent users to help others in the community with disproportionate health burdens.

Sources: Jensen, AM, and Dunford, J, "Putting the 'RAP' in 'Rapport,'" *JEMS*, January 2013; and Tadros, AS, et al., "Effects of an Emergency Medical Services-Based Resource Access Program on Frequent Users of Health Services," *Prehospital Emergency Care*, October/December 2012, 16(4):541–7.

CASE STUDY 3

MedStar EMS Community Health Program, Fort Worth, Texas

MedStar, a private EMS provider in Fort Worth, serves about 880,000 residents and has about 112,000 EMS responses annually. In 2009, MedStar began an EMS Community Health Program (CHP), with an initial focus on individuals who use EMS frequently and as a health care safety net. MedStar developed the program after an analysis showed that 21 patients had been transported to a local ED over 800 times in a 12-month period, generating almost \$1 million in ambulance charges and even larger ED expenses. The main goals of the CHP are to navigate patients toward more appropriate non-ED health care options, to reduce unnecessary 911 responses and EMS transports that strain an already-overloaded EMS system, and to reduce overall health care costs.

As the CHP evolved, MedStar began using advance practice paramedics who work with congestive heart failure (CHF) patients referred to the program by cardiac care case managers. CHP paramedics provide routine home visits to educate patients, conduct an overall assessment of the patient and their environment, provide a nonemergency access number for episodic care, and refer patients to their primary care physician as needed.

For 23 patients enrolled in a CHF program over a 12-month period, it was determined that 44 hospital admissions were prevented (a 47% decrease), and there was a substantial decrease in use of ambulance transports to the ED — a 44% decrease during the program and 56% after graduation from the program. MedStar estimated a savings of over \$16,000 per patient enrolled in the program. Using a new enrollment protocol beginning in June 2012, MedStar enrolled 10 patients at risk of CHF-related readmissions in a program; over an 8-month period, there were no 30-day readmissions and only one cardiac-related ED visit. Savings were estimated at almost \$39,000 per patient enrolled in this program.

All of MedStar's CHP activities focus on "patient navigation" (i.e., getting the patient connected with the right resource — a patient-centered medical home that can provide coordinated care) in an effort to meet the Triple Aim of better care, better patient experience, at reduced cost.

Sources: *Trained Paramedics Provide Ongoing Support to Frequent 911 Callers, Reducing Use of Ambulance and Emergency Department Services*, AHRQ Health Care Innovations Exchange Snapshot, 2012; *EMS Systems of the Future*, MedStar presentation in San Francisco, CA, December 2012; MedStar website, 2013.

Perspectives on Community Paramedicine: Findings from Stakeholder Interviews

As part of this project, interviews were conducted with stakeholders from 37 organizations, including EMS associations (e.g., firefighters and paramedics), health care providers, health plans, and payers. Using a combination of predetermined and situation-specific questions, interviewees were asked about their knowledge of community paramedicine and their thoughts about its potential for use in the six specific health care situations described above. See Appendix C for a list of organizations represented in the interviews. Several themes emerged:

- **There is limited understanding of community paramedicine.** CP is a largely unknown model of care in California. There was a wide range of familiarity with the concept among interviewees, ranging from none at all to extensive. A few interviewees had substantial personal experience in implementing and evaluating CP programs. Several interviewees expressed uncertainty about what community paramedics might actually do, and some expressed concern about how community paramedics would interface or interact with the existing health care delivery system.
- **There is limited understanding of the EMS system.** Some interviewees noted that relatively few physicians and nurses (other than emergency physicians and nurses) have significant understanding of how the EMS system operates (and, in turn, what paramedics do and how they work) or how the EMS system interacts with the health care delivery system generally. Attitudes about how well the EMS system and paramedics function appear to be substantially influenced by the extent and quality of an individual practitioner's experience with EMS providers.
- **EMS is essential to the health care system but is not well integrated.** While the EMS system is generally perceived to be an important part of the health care delivery system, it is not perceived to be an integrated part of the system, since EMTs and paramedics currently work closely with only a small subset of health care providers and in a small subset of environments. EMS has been on the periphery of the health care reform conversation, and some interviewees expressed the belief, or assumption, that EMS would just keep doing what it

has always done despite the myriad changes in the health care system at large.

- **There is support for specific CP activities.** When asked about specific services that community paramedics could potentially provide, interviewees said the need for additional training, protocols to guide decision-making, increased availability of physicians or nurses to consult with paramedics in the field, and increased electronic information exchange were essential. With these elements in place, many interviewees expressed enthusiasm for specific CP activities, to be delivered in accordance with the needs of individual communities.
- **Additional payment is needed for CP services.** Commonly voiced was the sentiment that there will need to be additional payment for any additional services provided by CPs. While it is unclear who will pay, there seemed to be a shared belief that payment should be apportioned among all the entities that may benefit from the provision of these services.
- **It is essential to measure CP program outcomes and to ensure that high-quality care is delivered.** Most interviewees opined that if CP programs were to be implemented, it would be important to measure quality and cost outcomes. This would influence future investment in such programs. It was noted that there is much variation in quality assurance (QA) and relatively few quality improvement (QI) activities within EMS today; it will be important to incorporate enhanced QA and QI activities for community paramedics to ensure that they are providing high-quality care.
- **There may be different needs and solutions for urban versus rural areas.** Concern was expressed about the different roles and capacities of paramedics in rural versus urban areas and the different logistics that might be involved in developing and implementing CP programs in these settings. It was noted that there are relatively fewer paramedics practicing in rural California.
- **There is a need for better and ideally electronic exchange of information.** Some concern was expressed that paramedics would need to be more involved in patient information exchange with other health care providers in order to provide more services than

paramedics currently do. Several interviewees indicated that electronic systems would best support timely and complete exchange of data.

- **There are concerns about paramedic skills and training.** Several interviewees expressed uncertainty and concern about paramedics having the skills to provide nonemergency services, despite being told that paramedics would have additional training before practicing as community paramedics.
- **There are concerns about paramedic capacity.** Some concern was expressed about the capacity of EMS providers to do more than what they already do. Some interviewees felt that paramedics are already working at or near maximum capacity, particularly in urban areas, and that they probably could not do any more. A number of stakeholders expressed that they would not want any new roles to distract paramedics from performing their basic first responder and other lifesaving functions.²⁴
- **There are alternatives to supporting development of CP.** A few stakeholders who did not offer much support for the proposed CP services cited concerns over quality of care, decision-making authority of community paramedics, fragmentation of care, and the potential additional liability for those providing medical control, and opined that it may be better to put more resources into the existing non-EMS delivery system.
- **Vigilance must be maintained for possible unintended consequences, especially for safety-net providers.** Some interviewees expressed that, to minimize unintended consequences, care should be taken to anticipate what effects any changes to the EMS system would have on both emergency services and other components of the health care system. It was noted that the EMS system is part of the health care safety net, and the safety net must be preserved. Some interviewees emphasized that all patients should be treated equally by the EMS system, regardless of their ability to pay, and this principle should apply to any new activities that fall under the CP umbrella.

EMS Regulations, Statutes, and Other Barriers to CP Program Implementation

Three aspects of California's current EMS statutes and regulations preclude the development and implementation of CP programs:

1. The requirement that callers to 911 must be taken to an acute care hospital having a basic or comprehensive ED (Health & Safety Code Division 2.5, section 1797.52).
2. The locations where paramedics can practice — i.e., at the scene of a medical emergency, during transport to an acute care hospital with a basic or comprehensive emergency department, during interfacility transfer, while in the ED of an acute care hospital until responsibility is assumed by hospital staff, or while working in a small and rural hospital pursuant to sections 1797.52, 1797.195, and 1797.218 (California Code of Regulations [CCR], title 22, section 100145, and Health & Safety Code 2.5, section 1797).
3. The specification of the paramedic scope of practice. Specific procedures and medications approved for use are contained in regulation (CCR, title 22, section 100145 and Health & Safety Code 2.5, section 1797).

“Significant portions of 911 calls — 30% to 40% — are nonemergency calls. In rural communities, people call an ambulance for only serious things, but in urban areas, people will call for anything.”

—EMS PROVIDER

It is important to note that the paramedic scope of practice in California is explicitly defined in both statute and regulation as referring to a set of authorized skills and activities that emergency medical personnel may perform *and* the places in which those skills and activities may be performed.²⁵ This is unusual in that most scope of practice definitions specify skills and activities but not location. California's dual definition means that any of the potential CP scenarios described in this report would require a statutory change to one or more aspects of the paramedic scope of practice. This is further discussed below.

Prehospital Services

- **Transport to alternate destinations.** Regulations and statutes would need to be changed to allow community paramedics to: 1) transport patients to a destination other than a general acute care hospital with a basic or comprehensive ED, and 2) practice in locations other than those currently specified (assuming community paramedics would continue to care for patients at an alternate destination prior to responsibility being assumed by staff at the alternate destination). Medical specialists other than emergency physicians would likely need to become involved in medical control.
- **Assess, treat as needed, and refer or release.** Additional training and protocols would need to be developed. Medical control would always be required. A change in regulations and statutes would be required to allow community paramedics to refer or release patients instead of transporting them to an ED.
- **Addressing the needs of frequent 911 callers.** Since community paramedics may transport these patients to non-ED destinations, may coordinate their care with other social service providers, or may not transport the patients, regulatory and statutory changes would be needed. Additional medical specialists other than those in emergency medicine would likely become involved in medical control and care coordination.

Post-Hospital or Community Health Services

Because paramedics are currently authorized to function only in prehospital emergency and other specified settings, post-hospital services such as chronic care management, provision of preventive services, and conducting home visits

post-hospitalization are prohibited, so regulatory and statutory changes would be needed. Also, changes in scope of practice regarding specific skills and activities may be necessary for new diagnostic or therapeutic interventions. Increased or additional types of medical control also may be necessary.

Payment for Emergency Medical Services

Another potential barrier to the implementation of CP programs in California relates to the current EMS payment structure, which revolves around patient transport. EMS providers receive payment for advanced life support or basic life support transport to a hospital ED. This payment structure reimburses paramedics for responding to 911 calls and transporting the patient to an ED, and it encourages return to service as quickly as possible. A payment model for CP programs would likely need to separate payments for components such as assessment, treatment, and transport. Payment models such as those used by accountable care organizations (ACOs) that put a premium on efficient use of health care resources merit exploration as a source of revenue for CP programs.

Conclusion and Policy Options

Community paramedicine offers a potentially promising solution for addressing some types of health care gaps in California, and based on comments voiced at a February 2013 stakeholder meeting and a subsequent survey of local EMS agencies, there appears to be substantial support for exploring this new model of community-based care.²⁶ However, CP involves a number of complicated issues and is currently precluded by statute.

Widespread development of community paramedicine in California will require more clarity about a number of issues, including CP program purpose and the associated need for education, training, scope of practice, and medical supervision. CP programs developed in other states and countries have had varied purposes, typically being developed to address specific local needs and unique collaborations, partnerships, and other circumstances. As there is heterogeneity in the design and purpose of these other CP programs, California will need to specify a standardized CP training curriculum, scope of practice, and prescription for appropriate medical supervision.

While at their core these programs all leverage the training and experience that paramedics already possess, they vary in how

they do so. This is in contrast to current EMS systems, for which there is a more singular goal (i.e., to bring potentially lifesaving care to an ill or injured person in the prehospital setting and to transport the person to a hospital ED) and a more defined portfolio of needed skills and commensurate training for EMS personnel. Some of the potential CP program scenarios would require little additional training and a change in scope of practice only with regard to where the patient might be transported (e.g., to allow transport of certain types of patients to destinations other than an ED), while other scenarios might require substantially more education and training for enhanced decisionmaking and more significant changes in scope of practice (e.g., for primary care outreach activities). Some of the potential CP scenarios also raise a question about the utility of developing an EMT- or paramedic-like primary care technician as a new type of health care worker that would function within a formally designed primary care system much the way that paramedics function in an EMS system. However, this possibility is not the subject of this report and was not examined in detail.

For the above reasons, we recommend that further development of community paramedicine in California be done through pilot or demonstration projects so that issues related to education and training, medical supervision, scope of practice, and impact on local EMS systems, among others, can be further evaluated. To this end, two alternative pathways are available. Pilot projects could be undertaken consequent to new legislation authorizing a CP demonstration program, or pilot projects could be undertaken pursuant to the Office of Statewide Health Planning and Development's (OSHPD's) Health Workforce Pilot Projects Program (HWPP).^{27,28} The latter would be the most expedient.

We do not recommend changing California's EMS-related statutes and regulations to broadly authorize CP programs at this time. While we believe that CP has considerable promise, we also believe that more information is needed to determine the appropriate role of these programs in California and how best to operationalize them.

If CP pilot projects were to be undertaken, we believe that as many as 10 to 12 would be needed to provide sufficient diversity of program focus, geography, demography, and community partnerships to answer the many outstanding questions about these programs. If pilots were implemented, we further

recommend that EMSA and an advisory board composed of experts in emergency medicine, primary care, public health, behavioral health, and nursing, among other areas of expertise, be involved in the review, approval, monitoring, and evaluation of the projects.

Pilot projects would need to address a number of issues in the project proposal, including:

- A description of the specific need that the pilot project would address, how this need was selected, and exactly how the project would address the identified need
- A detailed explanation about how the community paramedics would be trained and would maintain their skills
- A description of how appropriate medical supervision would be assured
- A description of how data to evaluate quality assurance and quality improvement activities would be obtained and monitored
- An evaluation plan for assessing the impacts on quality and cost of care, and how the local EMS agency will ensure that all patients are treated equally regardless of insurance status and health condition, among other factors
- A plan for integrating the CP program with other community-based health care and social service programs and for analyzing the potential impacts of the CP program on these providers, including safety-net providers
- Funding sources and financial sustainability
- The role of health information exchange (HIE), telehealth, and possibly mobile-health technologies
- How to leverage the potential of electronic health records (EHRs) and HIE to facilitate communication between community paramedics and other health care providers

“Emergency medical services (EMS) of the future will be community-based health management that is fully integrated with the overall health care system. It will . . . provide acute illness and injury care and follow-up, and contribute to treatment of chronic conditions and community health monitoring. . . . It will improve community health and result in more appropriate use of acute health care resources. EMS will remain the public’s emergency medical safety net.”

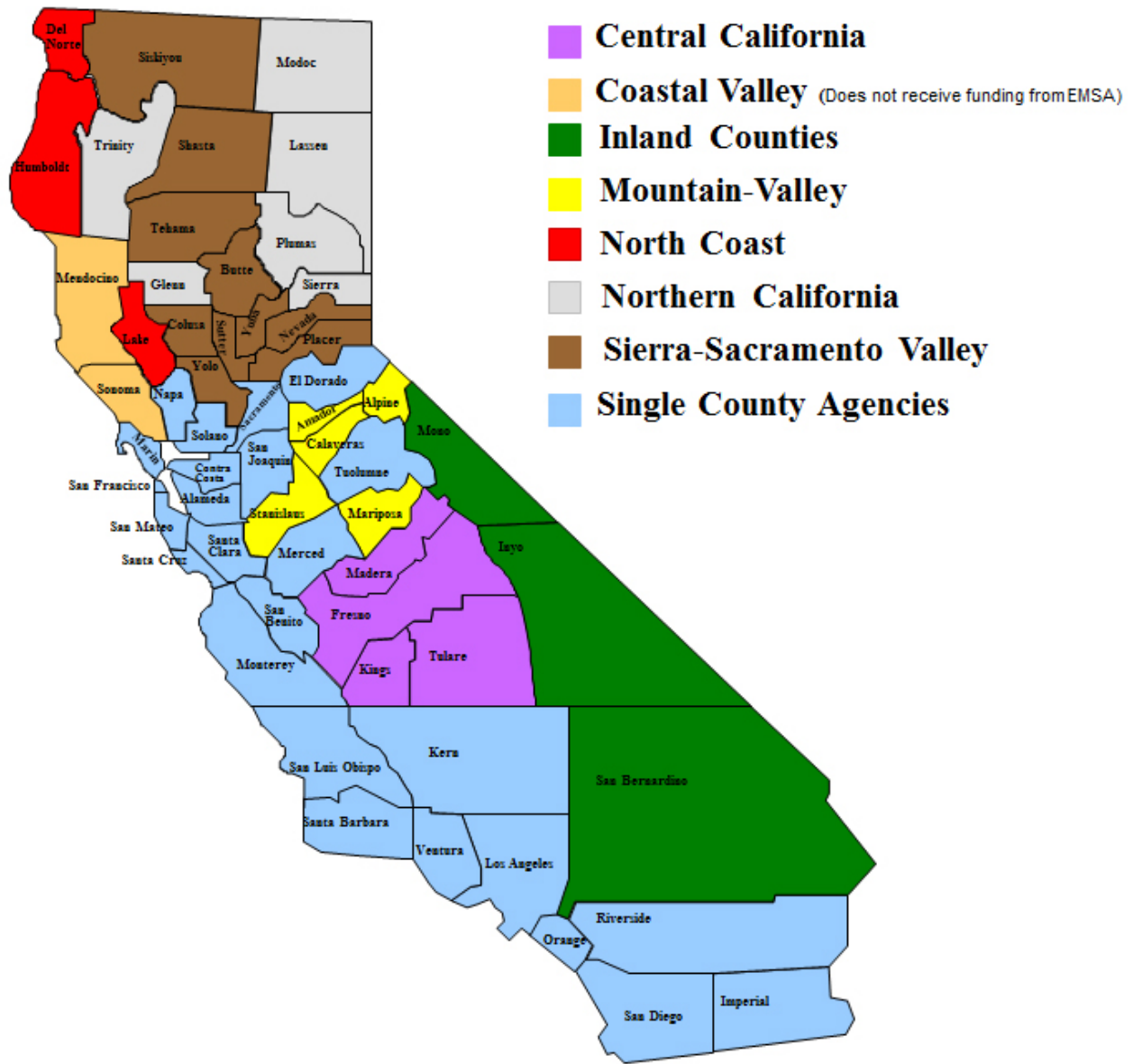
— EMS AGENDA FOR THE FUTURE, NHTSA, 1996

ENDNOTES

1. The commonly used term “paramedic” technically refers to an emergency medical technician-paramedic (EMT-P), the most highly trained category of emergency medical technician (EMT). The three levels of EMTs in California are described on page 4, and their training and scopes of practice are shown in Figures 2 and 3.
2. Green LV, Savin S, Lu Y. “Primary Care Physician Shortages Could Be Eliminated through Use of Teams, Nonphysicians, and Electronic Communication.” *Health Affairs* 2013(32):11–19.
3. Committee on Trauma and Committee on Shock. *Accidental Death and Disability: The Neglected Disease of Modern Society*. Washington, DC. National Academy of Sciences-National Research Council. 1966.
4. California Health & Safety Code, Article 3, Sections 1480–85. Wedworth-Townsend Paramedic Act of 1970.
5. California Health & Safety Code, Chapter 2.5, Sections 1797 et seq. Garamendi-Torres EMS System Act of 1980.
6. Kizer KW, Moorhead GV, McNeil M. *Emergency Medical Services Systems Standards and Guidelines*. Sacramento, CA. Emergency Medical Services Authority, State of California. 1984.
7. All ambulance attendants are required by California law to be trained and certified to the EMT level (basic life support, or BLS), and many fire agencies require firefighters to be EMT certified.
8. EMSA. 2013.
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16. *Fewer and More Specialized: A New Assessment of Physician Supply in California*, California HealthCare Foundation. 2009.
17. Long P, Gruber J. “Projecting the Impact of the Affordable Care Act on California.” *Health Affairs* 2011(30):63–70.
18. California HealthCare Foundation Center for Health Reporting. Los Angeles. USC Annenberg School for Communication & Journalism. 2011.
19. The shortage of primary care physicians contrasts with an oversupply of specialists in California, particularly in urban areas, although there are distribution issues with both primary care physicians and specialists.
20. Ross DW, Schullek JR, Homan MB. “EMS Triage and Transport of Intoxicated Individuals to a Detoxification Facility Instead of an Emergency Department.” *Ann Emerg Med* 2013; 61(2):175–184. Tadros AS, Castillo EM, Chan TC, et al. “Effects of an Emergency Medical Services–Based Resource Access Program on Frequent Users of Health Services.” *Prehospital Emergency Care*, October/December 2012; 16(4):541–7.
21. *Western Eagle County Ambulance District: Evaluation of the Community Paramedic Program, September 2010–June 2012*. Western Eagle County Health Services District. September 2012. Crawford CZ. *The Feasibility and Role of Community Paramedicine in Nebraska*. Nebraska EMS/Trauma Program. May 2011.
22. From, for example, the DHHS Human Resources and Services Administration (HRSA), Rural and Frontier EMS Agenda for the Future, International Roundtable of Community Paramedicine, and Minnesota Community Healthcare and Emergency Cooperative.
23. The Community Healthcare and Emergency Cooperative developed a standardized curriculum that colleges in any state, province, or nation can customize for their own certification programs. The curriculum has two phases: Phase 1 — Foundational Skills (approximately 100 hours based on prior experience), comprehensive didactic instruction in advocacy, outreach and public health, performing community assessments, and developing strategies for care and prevention; and Phase 2 — Clinical Skills (15 to 146 hours based on prior experience), supervised training by medical director, nurse practitioner, physician assistant, and/or public health provider.

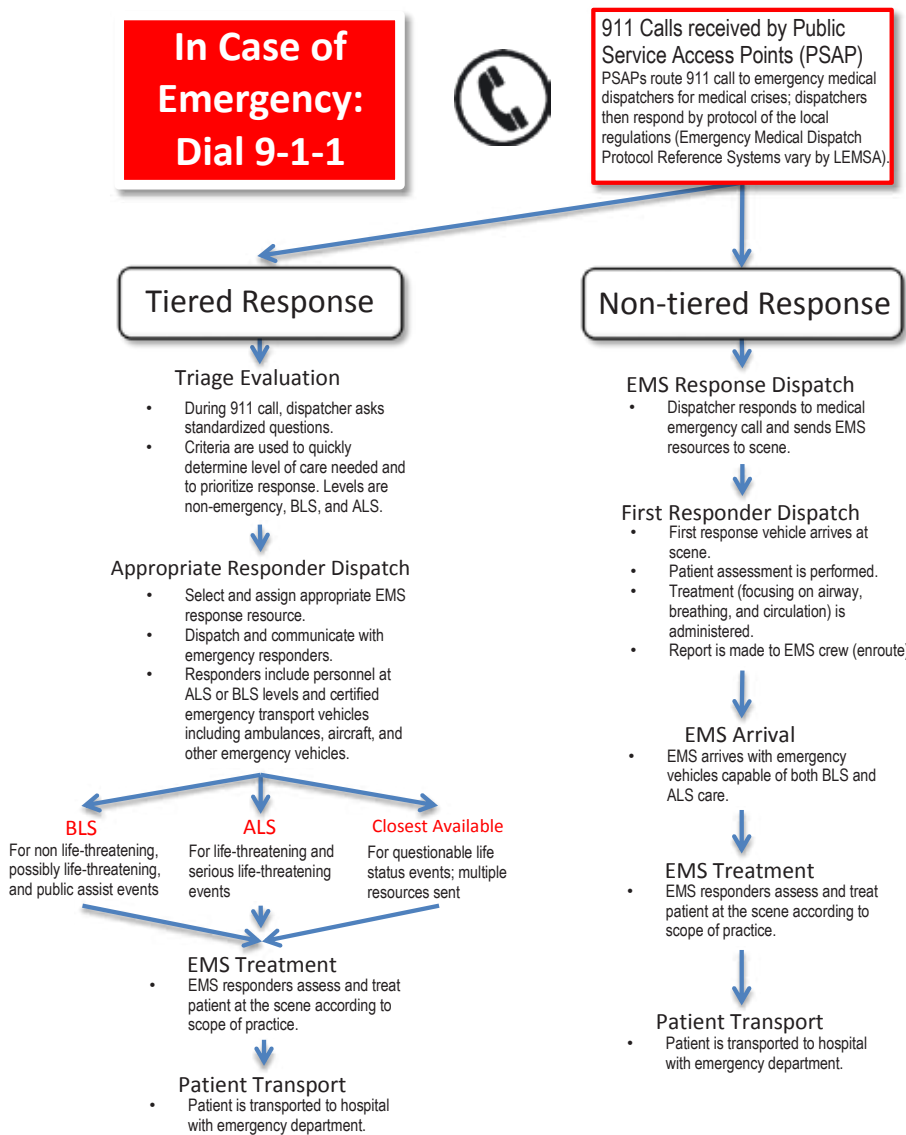
24. Most 911 contracts have clauses requiring certain staffing and response times. If unmet, the provider agency can be fined.
25. California Health & Safety Code, Chapter 2, Sections 1797.52, 1797.84, and 1797.194e, and California Code of Regulations, Title 22, Division 9, Chapter 4, Sections 100139 and 100145.
26. Eleven of 15 respondents to this EMSA-conducted survey expressed interest in participating in a CP pilot or demonstration project.
27. Maine has adopted this approach, allowing for up to 12 pilot projects that develop and evaluate a community paramedicine program.
28. OSHPD's HWPP program allows organizations to test, demonstrate, and evaluate new or expanded roles for health care professionals or new health care delivery alternatives before changes in licensing laws are made by the Legislature. Various organizations use HWPP to study the potential expansion of a profession's scope of practice to facilitate better access to health care; to expand and encourage workforce development; to demonstrate, test, and evaluate new or expanded roles for health care professionals or new health care delivery alternatives; and to help inform the Legislature when considering changes to existing legislation in the Business and Professions code.

APPENDIX A. California Local Emergency Medical Services Agencies



Source: EMSA, 2013.

APPENDIX B. 911 Emergency Response in California




Emergency Medical Dispatchers

Trained dispatcher who processes emergency medical 911 calls, determines severity and prioritizes response, and coordinates sending appropriate emergency responders to the scene.




First Responders

Dispatched to scene first, by closest/most available; member of local certified first-response agency (fire department, police, private ambulance, EMS, industrial emergency team, etc.) able to provide BLS and sometimes ALS.



EMS Responders/Transport

Emergency and non-emergency vehicles, must have BLS or ALS capabilities when appropriate; certified EMT, A-EMT, or licensed paramedic responder (LEMSA approved private or county ambulance or emergency transport vehicle)



APPENDIX C. Organizations with Representatives Participating in Stakeholder Interviews

1. Alameda County EMS Agency
2. Alameda County Health Care Services Agency
3. AMR
4. Association of State and Territorial Health Officials
5. California Ambulance Association
6. California Association for Health Services at Home
7. California Chapter of ACEP (Cal/ACEP)
8. California Conference of Local Health Officers (CCLHO)
9. California Department of Health Care Services
10. California Department of Public Health
11. California Fire Chiefs Association, EMS Section
12. California Hospital Association
13. California Medical Association
14. California Nurses Association
15. California Professional Firefighters
16. California Rescue and Paramedic Association
17. Centers for Medicare & Medicaid Services, Region 9,
Department of Health and Human Services
18. El Dorado EMS Agency
19. Emergency Nurses Association
20. Kaiser Permanente
21. Los Angeles County Department of Health Services
22. Los Angeles County EMS Agency
23. Mayo Clinic Medical Transport
24. MedStar
25. National Association of State EMS Officials
26. NorCal EMS Agency
27. North Coast EMS Agency
28. Orange County EMS Agency
29. Regional Emergency Medical Services Authority, Reno
30. Santa Clara EMS Agency
31. San Diego City EMS Agency
32. San Diego County EMS Agency
33. San Francisco EMS Agency
34. San Francisco Fire Department
35. Sierra/Sacramento Valley EMS Agency
36. WellPoint
37. Western Eagle County Ambulance District



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National Consensus Conference on Community Paramedicine: Summary of an Expert Meeting

October 1-2, 2012
Atlanta Airport Hilton Hotel
Atlanta, Georgia, USA



North Central
EMS Institute



prepared by

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Joint Committee on Rural Emergency Care of the National Association of State Emergency Medical Services Officials and the National Organization of State Offices of Rural Health

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National Consensus Conference on Community Paramedicine: Summary of an Expert Meeting

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INTRODUCTION

Community paramedicine (CP) is an emerging healthcare delivery model that increases access to basic services through the use of specially trained emergency medical service (EMS) providers in an expanded role. CP providers care for patients at home or in other non-urgent settings outside of a hospital under the supervision of a physician or advanced practice provider. CP can expand the reach of primary care and public health services by using EMS personnel to perform patient assessments and procedures that are already in their skill set. Over the past decade, local healthcare gaps around the U.S. and internationally have been filled through CP programs that use EMS personnel to treat non-acute illness in community settings.

In 2010, the Joint Committee on Rural Emergency Care (JCREC), comprised of members from the National Association of State Emergency Medical Services Officials and the National Organization of State Offices of Rural Health, issued a discussion paper that identified both opportunities and challenges for CP in the areas of training, practice, regulation, medical oversight, reimbursement, integration, and

evaluation.¹ Though CP program successes have been reported,² objective, systematic research on the outcomes of these programs is lacking.

The North Central EMS Institute, in collaboration with the JCREC, convened a National Consensus Conference on Community Paramedicine on October 1 and 2, 2012, in Atlanta, Georgia. The meeting was sponsored by the Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services. The purpose was to identify areas of consensus on important policy and practice issues and to clarify the role of research in advancing CP. Meeting goals included encouraging wider adoption of CP, networking among interested stakeholders, sharing best practices, and setting an agenda to further the field nationally.

Ninety invited conference attendees (see Appendix B for a list) represented state EMS directors, state rural health offices, EMS professional organizations, local CP programs, several healthcare professions, government agencies involved in healthcare, healthcare economists, and other stakeholders. The meeting was also broadcast via webcast, with more than 350 views online during the two days from the U.S. and other countries. Meeting sessions were organized in six key areas (see Appendix C for a complete meeting agenda, including expert panelists):

- Education and Expanded Practice Roles.
- Integration of CP Providers with Other Health Providers.
- Medical Direction and Regulation.
- Funding and Reimbursement.
- Data, Performance Improvement, and Outcome Evaluation.
- Community Paramedicine Research Agenda.

Expert panels addressed the first five key areas, which were identified in the JCREC discussion paper. Following panel presentations, panelists and attendees discussed the current best practices and models related to each CP area, gaps to address in the development of CP, areas for further examination through research and other activities, and next steps for action.

In the sixth and final session, investigators from the WWAMI Rural Health Research Center³ solicited attendee input to inform the development of a national agenda for research on CP, using the Interview Design Process,⁴ a technique where attendees interviewed each other in pairs about three key research-related questions, followed by full group discussion. The questions and process are further described in the resulting research agenda document, “A National Agenda for Community Paramedicine Research” (Appendix A).

Nomenclature is evolving along with the CP field and there is not consensus on the most appropriate name or names for CP providers. CP providers can include emergency medical technicians (EMTs) as well as paramedics. Depending on their level of training, type of CP preparation, and local naming conventions, CP providers have been variously called advanced practice paramedics, extended role paramedics, and community paramedics, among other labels. This report uses the term “CP providers” to refer to the full range of EMS professionals that deliver CP services. “EMS” refers specifically to out-of-hospital EMS.

For each of the key agenda topics this report summarizes consensus themes related to current CP practices and resources, gaps to address for further development of the field, and opportunities for future collaboration and promotion of best CP practices.

EDUCATION AND EXPANDED PRACTICE ROLES

The discussion of education and expanded practice roles focused on what CP providers' expanded roles should encompass and how best to educate CP providers to fulfill these new roles, resulting in the following consensus themes and issues for further exploration.

CURRENT PRACTICES AND RESOURCES

- While not yet widely implemented, the concept of CP has a long history, with some notable early examples, such as the Red River, New Mexico, program in the early 1990s.⁵ A number of CP models currently exist and more are in development. CP programs have tended to develop from the grassroots level to fill community healthcare gaps, in an integrated fashion with public health agencies, home health providers, hospitals, and others.
- CP programs address the following healthcare needs: wellness, prevention, and primary care for the chronically ill; post discharge care; connecting patients with social, community, and faith community support mechanisms; and compliance (e.g., to help patients adhere to medication schedules).
- The Community Healthcare and Emergency Cooperative (CHEC) has developed a CP curriculum, provided free of charge to colleges.⁶ The curriculum covers CP roles in public health and healthcare; social determinants of health; cultural competency; community roles, including health assessment and community resources; personal safety; and professional boundaries. The clinical component addresses sub-acute, semi-chronic patient needs. Individual CP programs have also developed curricula tailored to their local needs.
- CP providers have expanded roles beyond their usual EMS practice that are generally performed without any change in their scope of practice. CP skills generally involve improved interpersonal communication skills and understanding of and integration with systems of healthcare and public health. With some exceptions, CP programs generally do not expand providers' scope of practice (e.g., providers do not usually exercise new psychomotor skills).

GAPS TO ADDRESS

- The public and other healthcare providers currently lack understanding of the range of activities EMTs and paramedics perform.
- There is no single definition or understanding of what CP providers do and no unified vision of what CP strives to accomplish. Specifying desired outcomes for CP is a necessary initial step for development of standards, curricula, and research agendas.
- Research to demonstrate value and impact and inform guidelines is lacking. Patient acceptance of and satisfaction with care from CP providers are unknown. Research is needed to address all areas of CP, including practice, education needs and modalities (including distance learning), and medical direction, as well as how CP functions in different contexts, such as fire department, municipal, and hospital based EMS systems.
- CP can be relevant to both rural and urban areas, but these communities have different capabilities and different needs.
- There is a tension between the desire for standards—in education, credentialing, practice, and outcomes—and the ability for CP to evolve and adapt to local circumstances. Establishment of core competencies and consistent education standards allows for accreditation of education programs and

certification or licensure of providers. Defining standards now may inhibit innovation. Establishing standards will also require more of an evidence base than currently exists.

- The creation of standards will need to consider who is qualified and suitable to be a CP provider: not all EMS personnel are suited to the expanded roles, and it is not clear whether EMTs have or can obtain the necessary training.
- For all of the above reasons, some think that curricula should be flexible to address diverse needs. Curricula that exist have not been fully vetted and accepted nationally, for example, as part of the *Emergency Medical Services Education Agenda for the Future*.⁷ Others advocate strongly for baccalaureate or more advanced education, which will raise the value of the profession and create loyalty. There is concern about a danger of “degree creep” as seen in other professions (increasing education requirements for credentialing and licensing). Increasing requirements makes it more difficult for remote populations to access education resources. It may be possible to design a national core curriculum that also includes elective modules to address a variety of needs.
- A different approach is to allow educational institutions to develop their own curriculum to meet proficiency or accreditation standards, as is done in other healthcare professions (e.g., nursing), and instead specify standard proficiencies that can be demonstrated via testing. This allows curricula to meet local needs while maintaining quality standards.
- Education needs to address the needs of medical directors and other community providers, including hospitals, public health, home health, and healthcare payors.
- As CP evolves, the roles of local and state regulators in medical direction, quality assurance, and licensure must be considered. Likewise, the role of the National Highway Traffic Safety Administration (NHTSA), particularly as sponsor of the *Emergency Medical Services Education Agenda for the Future*, must be determined. If CP is incorporated into the NHTSA agenda, then it will need to be decided whether the CP role should be a specialty certification, a subset of skills in an existing license, or some other kind of credential. State EMS offices and licensing bodies will also need to consider how to authorize practice for this provider type.
- EMTs and paramedics who are not trained or designated as CP providers also have a role to play in public and community health, especially since many EMS personnel already perform these kinds of services whether formally or informally. It is important to consider how non-CP EMS personnel can best be deployed as health systems evolve.
- A central repository of information about CP educational programs, certifications, and credentials would help inform the discussion of education and expanded roles.

OPPORTUNITIES

- The current emphasis on achieving the “Triple Aim” of decreasing healthcare costs, improving health outcomes, and improving patient experiences offers an unprecedented opportunity for an innovation such as CP.
- Examination of practice and supervision requirements for advanced practice nurses and physician assistants offers possible models for creating an advanced paramedic provider with a degree of autonomy.
- As broadband access becomes more widely available, technology can help reduce some of the need for additional CP provider training by allowing CP providers to serve as mediators for telemedicine consultation.

- Rural communities often rely on volunteer EMS personnel. CP may offer a more sustainable model for rural EMS through reimbursement of services and increased integration with the healthcare system. CP also offers an expanded career ladder within EMS.
- Of great concern to payors, an increasing segment of EMS call volume is non-emergent patients with low acuity illness. CP offers a potential solution to managing this population, and payors should be part of this discussion.

INTEGRATION OF COMMUNITY PARAMEDICINE WITH OTHER HEALTH PROVIDERS

The discussion of integration of CP with public health and other healthcare providers focused on (1) designing services to fill gaps and perform complementary, rather than duplicative, roles and (2) sharing of information for effective, coordinated patient care, resulting in the following consensus themes and issues for further exploration.

CURRENT PRACTICES AND RESOURCES

- Emergency care is the primary mission of EMS. CP can be developed in a way that does not compromise that mission.
- Identifying needs that CP providers can fill without encroaching on other providers' roles or scopes of practice can facilitate integration with other health providers.

GAPS TO ADDRESS

- Other health providers often do not fully understand the skills and expertise of EMS personnel, a barrier that must be overcome before introducing the concept of CP.
- Appropriate roles for CP providers, based on what they can do best, must be identified in discussion and partnership with local populations and officials as well as the health and medical communities.
- CP has been promoted by emphasizing that CP providers can expand their roles to offer services within the existing scope of EMS practice, but some of the activities suggested by the JCREC may involve an expanded scope of practice.¹ More clarity about the proposed range of services to be performed by CP providers is necessary when educating others.
- Some types of health professionals may be more receptive to CP than others if there are concerns about overlapping roles and scopes. Physicians, for example, are more likely to be receptive because CP providers can be used as physician extenders.
- State agencies and liability companies may resist recognizing CP providers due to concerns that the model is untested.
- CP providers can play an important role in care coordination. In this process, patients' perspectives—their wants, needs, and experiences of receiving services CP from providers—must be considered.
- Research is needed on how CP providers can work most effectively with other professionals, such as with frontline hospital providers, investigating both positive and negative impacts of CP on other providers. Evidence on the efficacy and cost effectiveness of CP is needed to establish credibility with other providers.
- As standards of care and protocols evolve with increasingly interdependent roles between CP providers and others in the healthcare system, it will be necessary to determine the specific aspects of care for which CP providers will be held accountable.
- Data sharing between prehospital EMS and other providers remains a challenge. Federal health information technology (HIT) initiatives should incorporate EMS as an integral part of the healthcare system.
- With dozens of different definitions of EMS providers in the U.S., adding a new CP provider type has the potential to increase confusion, particularly if each community or state creates its own CP

provider definition. A standardized approach across jurisdictions may help CP providers to attain recognition more easily if they can be deployed in a way that addresses unique local needs.

- Before integration with other providers is possible, CP needs to address the “six C’s”:
 - Community: addressing a current unfulfilled need.
 - Complementary: enhancement without duplication.
 - Collaborative: interdisciplinary practice.
 - Competence: qualified practitioners.
 - Compassion: respect for individuals.
 - Credentialed: legal authorization to function.

OPPORTUNITIES

- As primary care extenders, EMS can function as “eyes and ears” in patients’ homes, an untapped resource that can benefit the entire healthcare system. Other healthcare providers and community members may become more receptive through education about what CP can offer.
- AHRQ has tools such as TeamSTEPPS®⁸ that EMS and CP programs can use to foster safe, effective team-based care.
- Spurred on in part by changes related to healthcare reform, scope of practice boundaries are becoming more permeable, such that no single provider type has exclusive ownership of a particular skill or activity.
- CP providers can overcome resistance from other providers by offering complementary services that fill healthcare gaps. For example, CP providers can offer services to patients who are not eligible for reimbursed home healthcare services, or they can assess patients for referral to other providers, with appropriate memoranda of understanding.
- New patient data repositories, such as through quality health networks, offer the possibility for near real-time patient data sharing among providers. Technology can also aid integration with other providers.
- The history of advanced practice nursing offers lessons for CP about the challenges of building national consensus on standards, education, and practice and the confusion that a fragmented approach causes patients.
- Primary care medical homes (PCMHs) and Accountable Care Organizations (ACOs) offer opportunities for integrating CP with other providers. Hospitals need more education on the potential value of CP, since they will typically be the lead entities in establishing ACOs.

MEDICAL DIRECTION AND REGULATION

The discussion of medical direction and regulation focused on how CP programs can gain regulatory approval, if necessary, and effective medical oversight, resulting in the following consensus themes and issues for further exploration.

CURRENT PRACTICES AND RESOURCES

- Regulatory approval for an expanded role outside of 9-1-1 response may require legislative action in some jurisdictions, for example, if CP activities, such as treating patients at home or transport to a lower acuity facility, are interpreted to be an expansion of Medicaid services.
- In a state with a regulatory framework that does not support expansion of EMS roles, CP programs may lack access to ordinary reimbursement mechanisms and need to find other funding sources.

GAPS TO ADDRESS

- CMS is concerned about cost, duplication, supervision, and definitions of services for new provider types. To obtain regulatory approval, it is necessary to define carefully what services CP programs will perform and to clarify that CP providers operate under physician orders, with strong medical oversight. Medical direction under a primary care physician can help ensure coordination of care.
- Active medical oversight to ensure patient safety is important, particularly as a CP program becomes established. Adverse outcomes can threaten a new program before it has the chance to prove itself. Expectations must be managed carefully in the developmental phase.
- Medical directors will need education specific to the CP model.
- Medical direction requires bidirectional sharing of information between providers for patient follow-up and for building an evidence base that connects specific CP practices to more distal patient outcomes.
- Ensuring medical oversight is especially challenging in rural communities, where medical directors are more often volunteers and less often available for 24/7 real-time consultation.
- Other healthcare organizations have made more progress than EMS organizations in reporting quality metrics. CP programs need to define appropriate quality metrics in collaboration with partners and create systems for capturing and reporting quality data.

OPPORTUNITIES

- If CP providers can operate under their current EMS scopes of practice, it may be possible in some places to implement this model without additional approval from state EMS offices or physician boards.
- Federal reimbursement for CP through Medicaid is under consideration in Minnesota for health assessment, chronic disease monitoring and education, medication compliance, immunizations and vaccinations, lab specimen collection, hospital discharge follow-up care, and minor medical procedures approved by a medical director. These do not represent a scope of practice change, but rather a change to the list of Medicaid-approved services. This approach may offer a model for other states.
- Assigning responsibility for care that CP providers deliver to medical directors will allow greater flexibility to experiment and learn what works best in terms of safety and effectiveness.

- Regionalization of medical direction can ensure that CP programs with fewer resources have consistent oversight and access to specialty providers.
- The Health Resources and Services Administration (HRSA, U.S. Department of Health and Human Services) has developed the “Community Paramedicine Evaluation Tool” to assist with planning for CP implementation and quality assurance, including topics such as medical direction and regulation.⁹

FUNDING AND REIMBURSEMENT

The discussion of funding and reimbursement focused on how CP programs can demonstrate their value to justify short- and long-term financing, resulting in the following consensus themes and issues for further exploration.

CURRENT PRACTICES AND RESOURCES

- “Funding” is a short-term mechanism to support innovation, while “reimbursement” is long-term financing for successful practices.
- Value-based purchasing is gradually replacing fee-for-service reimbursement.
- Public and private grants and partnerships can help fund CP innovations. The federal government is spurring innovation through pilot funding (e.g., Centers for Medicare and Medicaid Innovation awards).
- EMS and other unscheduled care account for a quarter of downstream health expenditures in an environment where EMS calls are decreasing for most emergent conditions and increasing for low acuity calls.
- Most EMS agencies get fee-for-service reimbursement and municipal tax support, in varying proportions, with a small portion from donations and fundraising. Both municipal tax support and fee-for-service payments may decrease in the next decade.

GAPS TO ADDRESS

- Healthcare payor territories are larger than EMS service territories. CP programs need to target payors, not patients. An assessment of local market conditions needs to identify competitors offering similar services, costs, populations and services that CP programs can target to prove added value, and the market potential to cover program costs.
- Rural EMS providers may need to form regional partnerships to feasibly establish CP programs. Factors to consider include the minimum agency size needed to persuade payors to implement a program, and the availability and interest of other small agencies for partnering. Rural CP programs must demonstrate their monetary value to rural communities.
- In a fiercely competitive funding environment, evidence is needed to justify funding. CP finds itself in a vicious cycle whereby it needs evidence to demonstrate value but cannot collect evidence until programs are operational with funding.
- Changing the transport-based EMS reimbursement system will be challenging because it is defined in statute. There is also concern that decoupling EMS transport and reimbursement moves EMS in the wrong direction, toward a fee-for-service model. Response volume will continue to increase while transport volumes decrease. This will force EMS systems either to absorb costs or to convince payors that they can save payors money and provide value by providing safe care to patients in the home through CP, as an extension of the healthcare system. Meanwhile, some hospitals are interested in reducing hospital admissions for non-paying patients, but not for all patients.
- Research studies on CP costs should use a classification system for different service lines such as chronic care, home health, emergency, mental health, oral health, and public health and prevention. Breaking CP services into “departments,” as hospitals do, allows comparison of the costs of CP

services vs. current services delivery models. This method also provides benchmarks for modeling new programs and services. Outcomes can then be examined in the context of costs.

- As Medicare Health Maintenance Organizations use risk adjustment based on illness severity to calculate capitated payments, CP programs will also have to use risk adjustment for detailed cost comparisons. These analyses are data and time intensive.
- CP does not have its own professional organization to influence reimbursement policies. Further deliberations about creating a formal CP organization need to consider the great number of EMS organizations that already exist and whether CP interests can be served through existing channels.

OPPORTUNITIES

- Healthcare market players can benefit from CP programs, and these opportunities should be emphasized. It is important to target each with an appropriate message about what CP programs can do:
 - Hospitals are currently incentivized to reduce uncompensated care visits and readmissions. They will increasingly be encouraged to reduce all avoidable admissions.
 - Insurance companies are increasingly promoting wellness to keep patients out of the highest cost areas of healthcare, hospitals and skilled nursing facilities.
 - Governments want to improve the quality of care, reduce costs, and ensure appropriate access to care.
 - Out-of-pocket markets, such as parents with newborns, may be willing to pay.
- CP programs that help healthcare systems reach targets may share in the resulting incentives. For example, by 2015, a third of hospital reimbursement incentives will be based on patient satisfaction, an area where CP programs may be able to help hospitals improve.
- Larger municipal EMS agencies may be able to fund CP themselves by increasing productivity and reducing workload to increase response time.
- It may be possible to change Medicaid reimbursement through regulation, without legislation.
- In addition to increasing patient access to cost effective, high quality healthcare, CP can bolster community resilience in preparation for public health disasters and emergencies.
- The healthcare system will shift away from fee-for-service models over the next decade, aligning incentives for the kind of optimal patient care that CP is intended to achieve. CP programs will need to know their detailed costs for services to be able to negotiate in the bundled payment systems that result from this realignment.
- Rural programs may need to consider completely new models to be cost effective, such as having patients visit the CP provider so that the provider can spend more time seeing patients instead of driving great distances.
- Logical partners for CP programs in rural areas include Critical Access Hospitals, Rural Health Clinics, and Federally Qualified Health Centers (FQHCs, in urban areas as well), particularly since FQHCs are being expanded to increase primary care access.

DATA, PERFORMANCE IMPROVEMENT, AND OUTCOME EVALUATION

The discussion of data, performance improvement, and outcome evaluation focused on the identification and development of data resources and metrics to improve quality and build the evidence base on CP, resulting in the following consensus themes and issues for further exploration.

CURRENT PRACTICES AND RESOURCES

- A number of sophisticated pilot studies of CP services are underway in communities around the country.
- Sources such as the Physician Quality Reporting System, AHRQ's Prevention Quality Indicators, and others can provide measures of effective, safe, coordinated, and patient-centered care, as well as access, timeliness, and efficiency.

GAPS TO ADDRESS

- The quality and patient safety movement means that reimbursement will be increasingly linked to quality indicators in stages, starting with extra pay for quality data reporting, followed by quality reporting requirements (with penalties for failure to report), and finally pay for performance. This is the process for established organizations, but new ones, such as CP programs, will begin with pay for performance.
- CP providers will have to demonstrate why they, rather than hospitals or clinics, should perform the services they offer. Data collection and performance assessment will need to address the advantages of CP providers' community knowledge and access to patients in their homes.
- Collecting comparable data across CP pilot studies and using common pre-existing measures that are meaningful to other healthcare providers is important for demonstrating impact in formats that others can understand. Data comparability is also encouraged across state and national systems, such as State Health Information Exchanges (HIEs) and the National EMS Information System (NEMSIS).
- Evaluation can be premature. It is important to ensure that programs are ready for evaluation—the right evaluation of the right program at the right time.
- Assessment should include carefully selected quantitative and qualitative measures of structure, process, and outcomes, including workforce variables such as levels and types of education and experience, impacts on CP providers, and impacts on patient satisfaction. It is also important to investigate unintended consequences and the real costs and safety implications of CP.
- Sparsely populated rural areas will exhibit a high degree of variance.
- Distal outcomes such as hospital readmissions must be linked to CP programs to show who and what was responsible for results.
- EMS has struggled with taxonomies, and CP adds another variation. Definitions are necessary to collect purposeful data for measurement, analysis, and improvement.
- Reporting to NEMSIS is inconsistent, resulting in a substantial amount of missing data. EMS organizations need to contribute data more consistently. Likewise, few EMS organizations always require EMTs and paramedics to record a complete quality record in the emergency department

before leaving. Perhaps EMS could benefit from an “EMS Compare” public quality reporting system like CMS’ Hospital Compare.

- CP programs could benefit from a clearinghouse of definitions, measures, and findings.

OPPORTUNITIES

- CP measures could be added to NEMESIS, though records still follow the patient through transitions of care, making tracking difficult.
- State health information exchanges (HIEs) will offer opportunities for data sharing through a central repository of patient encounters, so it will be important to ensure that EMS and CP are included.
- A software vendor could help facilitate building data collection systems.
- Academic researchers can help guide pilot research and conduct systematic reviews across all programs.
- College consortia can collaborate in education and assessment of CP professionals in needed skills and competencies.
- The federal government can assist with formative evaluation, creation of a data clearinghouse, and other evaluative activities, as HRSA has already done with the Community Paramedicine Evaluation Tool.⁹ Federal funding for future conferences is needed to further develop data and metrics that can build the evidence base.

GLOBAL THEMES

Some global themes emerged over the course of the two-day meeting, most of which focused on next steps to advance CP:

- Meeting attendees showed great interest in continuing collaboration to advance CP, including a future meeting to follow up on action items and opportunities identified in this meeting.
- With transformations occurring in healthcare, particularly with implementation of the Affordable Care Act and attention to patient-centered care, now is the right time for the innovations offered by CP. Momentum around CP is growing, and at the same time, the window of opportunity to establish CP as a critical part of the healthcare system may be limited.
- CP has the potential to foster more cooperation and regionalization as a way of (1) sustaining small and rural EMS and healthcare organizations while improving patient outcomes and (2) organizing systems around patient needs rather than EMS providers' need to transport patients for reimbursement.
- Now is the time to identify a leadership entity to assume the responsibility of advancing CP. The Joint National Leadership Forum, facilitated by the National Association of EMS Officials, along with the Joint Committee on Rural Emergency Care (sponsored by the National Association of State Emergency Medical Services Officials and the National Organization of State Offices of Rural Health), may be a natural group to spearhead these efforts. It is important not to isolate these efforts under an exclusively rural umbrella.
- CP is beginning to make inroads into policy discussions, but more education and marketing are needed. Public and stakeholder education efforts need to do more than describe CP; it is clear that greater understanding is needed of the role of EMS more generally in the healthcare system.
- Planning should involve careful stakeholder engagement that describes important participants and audiences, their interests, and the intersections between their interests and the interests of CP. Using this information, an action plan to address education, public relations, and communication about CP with these groups can be devised. Future national CP meetings and educational activities to achieve these goals should include, but not be limited to, representatives from health plans and payors, firefighters, medical directors of medical homes, and organizations such as the American Public Health Association, Centers for Disease Control and Prevention, Association of State and Territorial Health Officials, and National Association of City and County Health Officials.
- Standard nomenclature and definitions are needed relating to types of CP providers and their training. Standardization efforts should be sensitive to the fact that CP programs and providers must respond to local healthcare needs.
- While funding of CP programs is primarily a local activity, and early adopters are finding ways to begin CP programs, national funding is needed for larger development of CP as a field. National funding sources can include federal and foundation support (e.g., Centers for Disease Control and Prevention, HRSA, AHRQ, Macy Foundation). Funding for future meetings to advance on these fronts should be pursued through the current meeting sponsor, AHRQ, as well as other funders with an interest in healthcare delivery innovations.

- Creation of a national and international clearinghouse on CP programs would promote the dissemination of information about program policies and practices, materials, research and evaluation findings, and best practices.
- Venues to publicize this work include AHRQ's "Research Activities" online newsletter, journals such as *Prehospital Emergency Care* and the *Journal of Rural Health*, and web sites hosted by the Rural Assistance Center and Health Workforce Information Center.

National Consensus Conference on Community Paramedicine

Appendix A: A National Agenda for Community Paramedicine Research

October 1-2, 2012
Atlanta Airport Hilton Hotel
Atlanta, Georgia, USA



North Central
EMS Institute



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APPENDIX A: A NATIONAL AGENDA FOR COMMUNITY PARAMEDICINE RESEARCH

At the National Consensus Conference on Community Paramedicine on October 1 and 2, 2012 in Atlanta, Georgia, sponsored by the Agency for Healthcare Research and Quality, investigators from the WWAMI Rural Health Research Center³ facilitated a session to inform the development of a national agenda for research on community paramedicine (CP). This appendix presents the findings from that session, including research-related content and comments offered throughout the two-day meeting.

The facilitators began the research agenda session with a brief presentation to orient attendees to the similarities and differences between quality improvement, program evaluation, and research. The goal was to focus discussion on ways to foster rigorous evaluation and research on community paramedicine. After the presentation, 60 meeting participants¹⁰ interviewed each other in pairs using a structured round robin format (called the Interview Design Process⁴) so that each person had the opportunity to respond to three questions about research on community paramedicine. Interview partners recorded each other's responses on paper, which WWAMI investigators later compiled. This technique allowed for rapid collection of a large amount of information with all meeting attendees contributing their perspectives. A group discussion followed to elicit any additional comments arising from the paired interview process, concluding the session.

Here we summarize the collective comments of the community paramedicine stakeholders at the meeting, including research-related topics mentioned in the five prior panel sessions. The summary is organized by the three Interview Design Process discussion topics: (1) research priorities, (2) research challenges, and (3) research resources and opportunities. The findings reported here represent a first step to stimulate continued discussion and collaboration aimed at building a national evidence base on community paramedicine.

1. RESEARCH PRIORITIES

Meeting attendees identified an extensive list of research priorities in response to the following questions. This list also incorporates topics mentioned over the course of the two-day meeting. Further work with stakeholders will be needed to refine and prioritize this list.

For community paramedicine services to gain widespread acceptance and qualify for reimbursement, evidence of impact is needed.

What are the **top priority research questions** about community paramedicine that will demonstrate its impact on healthcare processes and outcomes in terms of...

- ...effectiveness (does it produce the desired effect)?
- ...value (does it reduce costs with comparable or better outcomes)?
- ...safety (does it reduce patients' risks)?
- ...access (does it connect patients to needed care)?

Program Development

- Survey current CP programs on basic program descriptors (geographic and organizational settings), objectives, interventions/services provided, resource and equipment needs, workforce, finance, promising practices, and program leader opinions on how CP should develop nationally.

- Inventory state regulations to identify factors that facilitate or discourage development of CP.
- Create a central repository of detailed data CP program data for development and implementation evaluation and research.
- Create a national and international clearinghouse for sharing information about CP program policies and practices, materials, best practices, and research and evaluation findings.
- Conduct research to develop CP program definitions and create a typology of program models.
- Determine CP program models that are most appropriate for various geographies (rural, urban, suburban, regional), organizations (fire-departments, hospitals, stand-alone or “third service” EMS agencies), and types of staffing (volunteer, career/paid).
- Identify sustainable funding models for different reimbursement and regulatory environments.
- Identify best practices for effective stakeholder engagement.

Technology

- Identify appropriate existing and emerging technologies for communications, mobile telemedicine and remote diagnostics, and health information management and data sharing.
- Identify information sharing needs between CP programs and other healthcare entities, and ways to promote collaboration.

Workforce: Education and Competencies

- Create an information clearinghouse on CP educational programs, curricula, certifications, and credentials to inform decisions about education and expanded roles.
- Identify needed knowledge and competencies for CP providers in various settings and with varying levels of pre-existing EMS credentials (e.g., EMT or paramedic). Is there a core set of content in primary care and public health that all CP providers need? What content should be optional and customized to local needs?
- Investigate the effectiveness and potential reach of different educational modalities for CP providers, such as distance learning and patient simulation.

Workforce: Supply

- Identify the characteristics of EMS personnel that may facilitate recruitment into CP, such as interest in primary care or public health, appropriate career stage, background in EMS or other healthcare experience, and other factors that may make CP a desirable career path.
- As the CP workforce expands, track educational and professional trajectories into CP and identify potential recruitment opportunities, such as military veterans.
- Study the effect of CP on provider job satisfaction, retention, and career aspirations, and compare with that of similarly situated personnel in EMS organizations without CP programs.
- Identify and track CP provider safety hazards and reductions, both direct and indirect. For example, do fewer 9-1-1 responses improve safety for EMS personnel and the public through reduced EMS driving accidents?
- Model the impacts of recruiting EMS providers into CP on overall EMS personnel supply.

Workforce: Demand and Utilization

- Analyze CP provider utilization in EMS organizations to understand relative percentage effort devoted to CP versus traditional EMS response roles. Examine variation in utilization by type of service provided across different types of agencies (e.g., volunteer or career staffing models) and practice settings (e.g., rural/suburban/urban?).
- Study the impact of introducing a CP program on overall community EMS demand, and identify CP services that reduce demand.

Medical Oversight

- Identify appropriate models for providing medical direction with varied CP settings and services provided, and link to patient safety and quality outcomes.

Team Approaches and Integration with Other Providers

- Conduct organizational research on how best to integrate CP providers with other healthcare and public health providers and effective team care approaches in support of Primary Care Medical Homes, Accountable Care Organizations, and other systems of care.
- Document both positive and negative impacts of CP on other care providers, including their perceptions of CP provider roles and satisfaction with CP providers.
- Investigate acceptance of CP providers and whether or not hospitals and other providers make appropriate referrals to CP programs.

System Impacts and Value

- Design studies to compare current (baseline) patient care and disease management practices performed by other providers, costs, and patient outcomes with changes that result from implementation of CP. Examine impacts in rural and urban settings.
- Identify target patient populations, conditions, and care settings where the use of CP providers can yield the greatest cost savings. Potential cost savings to investigate include reduction of:
 - Urgent care and emergency department visits and hospitalizations.
 - Length of hospital stays.
 - Total hospital readmissions or early readmissions for conditions such as congestive heart failure or pneumonia.
 - Clinic visits.
 - 9-1-1 calls for preventable conditions and acute episodic care.
 - Avoidable or inappropriate referrals.
 - Unnecessary treatments.
- Identify services that CP providers can provide to add value in public health systems including:
 - Improving immunization rates.
 - Conducting health promotion.
 - Provide health screenings.
- Document unintended consequences (positive or negative) to EMS systems, other health system organizations, patients, and communities.

Patient Access and Satisfaction

- Identify patient populations and conditions for which CP providers can improve access to timely, appropriate care, such as the uninsured, underinsured, and high risk populations.

- Identify CP services that result in improvements in access (e.g., via reduced wait times to receive care) to primary care, chronic disease management, pain management, referrals to other providers, and receipt of other healthcare and supportive services.
- Study patient expectations, perceptions, and satisfaction with CP services compared with other care from other providers and in other settings.

Patient Safety and Health Outcomes

- Conduct comparative studies of patient safety and risk (e.g., medical errors, adverse events) and health outcomes for patients. Compare usual sources of care, including traditional EMS response, with CP provider care, including (1) treatment at home (treat without transport), (2) transport to the hospital, and (3) transport to alternative destinations. Can CP providers properly triage patients to distinguish those who need a higher level of care? Are patients at home safer by avoiding the risks of hospitalizations, such as hospital acquired infections?
- Identify patient populations and conditions for which CP can improve safety and those for which CP can cause greater harm compared with usual care.
- Identify short- and long-term patient outcomes that are appropriate for measuring the success of a variety of CP interventions, including:
 - Home assessments (e.g., safety).
 - Patient resource need assessments (e.g., food).
 - Chronic disease management (diabetes, CHF).
 - Assisting patients to manage their own healthcare.
 - Acute care response to reduce hospitalizations.
 - Supportive care for assisted living populations.
 - Support for family caregivers.
 - Post-discharge follow-up to prevent readmissions.
 - Medication reconciliation and compliance.
 - Behavioral health follow-up to increase attendance at appointments.
 - Assessment with triage and referral.
 - Vaccinations.

Data and Methods for Research and Evaluation

- Determine appropriate definitions, measures, and instruments—using existing ones wherever possible—for studying CP impacts on patient access, safety, health outcomes, satisfaction, and overall healthcare costs.
- Evaluate CP programs in terms of structure, process, and outcomes to understand program development, functioning, and impacts.
- Carefully define appropriate comparison services (e.g., no intervention, other care delivery models) and patient populations for cost/benefit analyses.
- Refine methods to identify the causal connections from specific CP interventions to intermediate and distal patient outcomes, and to assess resource utilization and costs.
- Develop a classification system for CP service lines such as chronic care, home health, emergency care, mental health, and prevention. Compare the relative value, in terms of outcomes and costs, of these service lines with that of current services provided. Use risk adjustment based on patient characteristics for relative cost comparisons.

2. RESEARCH CHALLENGES

Meeting attendees identified barriers to research in response to the following questions. This list also incorporates topics mentioned over the course of the two-day meeting.

Research requires funding sources, topics of interest to funders, research expertise, collaborators, study sites, data, and appropriate methods.

What are the **top barriers to conducting research** on Community Paramedicine? To enable research to happen, what specific resource needs must be addressed?

Identifying Research Priorities

- Challenges in formulating feasible research questions that will provide the information needed to advance clinical knowledge and shape policy.
- No single lead EMS or CP organization to set priorities and marshal resources.

Research Funding, Infrastructure, and Human Resources

- Lack of research funding CP in the context of scant funding for EMS research generally.
- Lack of EMS research infrastructure, including academic research centers, analytical resources, and study sites, upon which to build CP research.
- Lack of research expertise among EMS practitioners and insufficient training opportunities.
- Lack of health researcher expertise in EMS and CP.
- Lack of CP program staff time for conducting research.
- Differences in priorities between funders and researchers.

Stakeholder Support and Involvement

- Lack of awareness, understanding, respect among patients, healthcare providers, and public health providers regarding the EMS profession and the potential benefits of CP.
- Lack of EMS and CP research support from essential collaborators including insurance companies, healthcare system partners, and community stakeholders.
- Lack of EMS agency participation as research study sites; competition and lack of trust between EMS agencies; lack of communication between researchers and EMS practitioners.
- Resistance or competition from other health professions and interest groups that may feel threatened by the development of CP, such as nursing, home health, and unions.
- Lack of quality reporting systems to engage the public in holding EMS accountable for outcomes (e.g., an “EMS Compare” system like CMS’ Hospital Compare).

Data

- Lack of accessible information documenting the basic characteristics of existing CP programs.
- Lack of data and data coordination on patients, interventions, costs, and outcomes to track patients across systems of care and compare CP care with usual care.
- Lack of systems to capture essential data (e.g., EMS data collection is focused on patient transport).

- Inconsistent reporting and missing data in existing systems such as NEMESIS.
- Lack of access to existing data that is proprietary or protected by the Health Insurance Portability and Accountability Act (HIPAA).
- Lack of central data repositories or comparable data elements for CP pilot studies.
- Inability to distinguish services performed by CP providers from those performed by supervising physicians in healthcare claims data.

Methods

- Diverse CP programs and settings that have not been well described for the purposes of identifying research study goals, populations, and program dimensions that may influence outcomes.
- Difficulty demonstrating causal connections between CP interventions and outcomes.
- Identification of appropriate and validated measures to show impact on quality of care and cost.
- Lack of standard definitions of CP program models, data elements.
- Sampling challenges: small numbers of programs and patient sample sizes (especially for specific conditions and rural areas), identifying appropriate comparison groups, selection biases and generalizability.

Government and Regulatory Issues

- Government regulatory and quality assurance requirements that discourage piloting new CP programs and, by extension, CP research.
- Demonstrating to legislators the need for CP programs and research funding.
- HIPAA restrictions on sharing patient data.
- Difficulty of obtaining institutional review board (IRB) approval for experimental or quasi-experimental research in a non-traditional medical setting.

3. RESEARCH RESOURCES AND OPPORTUNITIES

Meeting attendees identified examples of research resources and opportunities in response to the following questions. This list also incorporates topics mentioned over the course of the two-day meeting.

What **resources and opportunities** are available now that could be used to advance Community Paramedicine research? Where can we find funding sources, research expertise, collaborators, study sites, data (in addition to NEMESIS), methods, or other important resources?

Academic Resources

- Academic researchers (universities, academic medical centers) can seek CP research grants, conduct or guide pilot studies, and conduct systematic reviews across all CP programs. Promising candidates include institutions with EMS or rural health research expertise, or a rural healthcare mission. A partial list of academic institutions and centers mentioned by attendees in this area includes:
 - University of Minnesota School of Public Health.
 - University of North Texas.
 - University of New Mexico.

- University of Tennessee.
 - Louisiana State University.
 - EMS Performance Improvement Center (University of North Carolina, Chapel Hill).
 - EMS Agency Research Network (University of Pittsburgh).
 - Center for Research on Emergency Medical Services (University of Pittsburgh and Center for Emergency Medical Services of Western Pennsylvania, Inc.).
 - Rural Health Research Centers (e.g., WWAMI RHRC), which are federally funded by the Office of Rural Health Policy.
- Academic EMS journals.

Government Institutions

- Potential state and local government partners with interest in CP and research expertise (e.g., epidemiologists) include:
 - Departments of health and public health.
 - State EMS offices, including state EMS for Children programs, injury prevention programs, and trauma registries.
 - State offices of rural health.
 - 9-1-1 systems.
- The federal government can sponsor and encourage formative evaluation, creation of a data clearinghouse, and other CP evaluative activities. Federal funding can provide support for meetings to further develop data and methods to build the CP evidence base. Federal partners include the U.S. Departments of Health and Human Services (HHS), Homeland Security (DHS), and Transportation (DOT). A partial list of interested federal agencies and initiatives includes:
 - Agency for Healthcare Research and Quality (HHS/ARHQ):
 - Patient-Centered Outcomes Research Institute (PCORI).
 - Comparative Effectiveness Research (CER).
 - “Research Activities” online newsletter.
 - Health Resources and Services Administration (HHS/HRSA):
 - Office of Rural Health Policy (ORHP).
 - Centers for Disease Control and Prevention (HHS/CDC).
 - Centers for Medicare and Medicaid Services (HHS/CMS):
 - Innovation Grants.
 - Healthcare claims data.
 - Assistant Secretary for Preparedness and Response (HHS/ASPR).
 - National Institutes of Health (HHS/NIH).
 - National Highway Traffic Safety Administration (DOT/NHTSA).
 - Office of Health Affairs (DHS/OHA).

EMS Organizations

- Center for Leadership, Innovation and Research in EMS (CLIR).
- Emergency Medical Services for Children (EMSC) National Resource Center:
 - National EMSC Data Analysis Resource Center (NEDARC).
- International Roundtable on Community Paramedicine (IRCP).
- Joint Committee on Rural Emergency Care (JCREC).
- National Association of EMS Officials (NASEMSO).

- National Association of EMS Physicians (NAEMSP) (EMS Fellowship Curriculum).
- National EMS Management Association (NEMSMA).
- National Registry of EMTs (NREMT).
- North Central EMS Institute (NCEMSI).
- EMS agencies.
- Existing CP programs, both U.S. and international, for study sites, data, models, and, benchmarks. Consortia of EMS agencies can partner to sponsor research. A partial list of examples includes:
 - Ada County Paramedics, Idaho.
 - MedStar Mobile Healthcare, Fort Worth, Texas.
 - North Memorial Healthcare, Minnesota.
 - Regional Emergency Medical Services Authority (REMSA), Reno, Nevada.
 - Western Eagle County Ambulance District (WECAD), Colorado.

Other Healthcare Organizations

- Health systems, including hospitals (e.g., Critical Access Hospitals, teaching hospitals), Accountable Care Organizations (e.g., CMS' Pioneer ACO Model), Level I trauma centers, and system-affiliated EMS agencies (Allina Health EMS).
- Home health, telehealth, behavioral health, long term care, and hospice providers.
- National Quality Forum (NQF).
- National Organization of State Offices of Rural Health (NOSORH) and National Rural Health Association (NRHA).
- Health Workforce Information Center (<http://www.hwic.org/>).
- American Hospital Association and state hospital associations.
- Health professional associations (e.g., American Nurses Association).
- Healthcare payors.
- Private industry partners:
 - Pharmaceutical companies.
 - Durable goods suppliers.
 - Health information technology (HIT) vendors.
 - Software vendors to build CP data collection systems.
 - FISDAP®.
 - Medicare and Medicaid contractors.

Other Interested Organizations

- Rural Assistance Center (<http://www.raconline.org/>).
- International Association of Fire Chiefs (IAFC).
- EMS unions.

- Non-profit organizations and foundations (e.g., the Robert Wood Johnson Foundation, Bill and Melinda Gates Foundation), including those not historically involved with EMS that have related interests.
- AARP.

Data and Methods Resources

- Potential data sources:
 - Health departments.
 - Electronic Patient Care Reporting (ePCR) and Computer Aided Dispatch (CAD) data.
 - Electronic Medical Records/Electronic Health Records (EMRs/EHRs).
 - Emergency departments.
 - Patient data repositories, such as through quality health networks, state health information exchanges (HIEs).
 - Discharge mapping data.
 - State and local health statistics databases and linked patient registries.
 - Council on Library and Information Resources.
 - CMS healthcare claims data.
 - National EMS Information System (NEMSIS), with addition of CP-related measures.
- Develop research collaborations among multiple CP programs and partners to increase quantity and quality of available data, including creating a national CP data repository.
- Use existing measures of effective, safe, coordinated, and patient-centered care, and measures of access, timeliness, and efficiency from sources such as the Physician Quality Reporting System or AHRQ's Prevention Quality Indicators.
- Use independent evaluators to conduct objective internal clinical reviews and audits and compare with non-CP systems/communities.
- Explore the feasibility of innovative methods, such as tracking lawsuits to measure patient satisfaction as compared with traditional patient surveys.

Resources Within Community Paramedicine

- Community Paramedic website (<http://www.communityparamedic.org/>).
- International Roundtable on Community Paramedicine (<http://www.ircp.info/>).
- Community Paramedicine Evaluation Tool.⁹
- Future stakeholder meetings to collaborate and build consensus.

National Consensus Conference on Community Paramedicine

Appendix B: Conference Attendee List

October 1-2, 2012
Atlanta Airport Hilton Hotel
Atlanta, Georgia, USA



North Central
EMS Institute



prepared by

Davis G. Patterson, PhD
Susan M. Skillman, MS

UNIVERSITY OF WASHINGTON
SCHOOL OF MEDICINE
DEPARTMENT OF FAMILY MEDICINE

APPENDIX B: CONFERENCE ATTENDEE LIST

STEERING COMMITTEE

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Dia Gainor, MPA, Executive Director
National Association of State EMS Officials
Falls Church, VA

Troy Hagen, Director
Ada County Paramedics
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Director, Division of Health Systems and Health
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National Consensus Conference on Community Paramedicine

Appendix C: Conference Agenda

October 1-2, 2012
Atlanta Airport Hilton Hotel
Atlanta, Georgia, USA



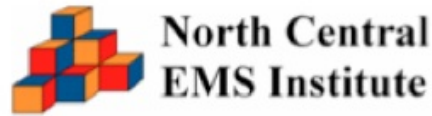
North Central
EMS Institute



prepared by

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UNIVERSITY OF WASHINGTON
SCHOOL OF MEDICINE
DEPARTMENT OF FAMILY MEDICINE



National Consensus Conference on Community Paramedicine

Atlanta Airport Hilton Hotel, Atlanta, Georgia, USA

Agenda

Monday, October 1, 2012

0800-0830 WELCOME

Gary Wingrove, President, North Central EMS Institute

INTRODUCTIONS AND OVERVIEW

Jim DeTienne, NASEMSO President, Co-Chair, Joint Committee on Rural Emergency Care (JCREC), Matt Womble, Associate member of NOSORH, past co-chair of JCREC, and Douglas Kupas, MD, Principal Investigator

Overview: Nationally, the historical structure and philosophy of Emergency Medical Services (EMS) has been built around the idea of rapid response, stabilization, treatment and transport of patients with life threatening illnesses and injuries. Community Paramedicine represents one of the most progressive evolutions in the delivery of community-based healthcare by using EMS providers within their current scope of practice in an expanded role. While this expansion in focus has been trialed in many different settings over many years, relatively little evidence exists that can be used to understand all the nuances of how this model can improve the quality of care, health of patients and decrease the overall cost of care.

It is critical for the purveyors of the Community Paramedic models to track, assess, monitor and constantly improve care, not only to ensure that the benefits are maximized, but also that the risks of *not* taking *all* patients to the hospital are mitigated. The purpose of this session is to disseminate the current knowledge, practice and tools used to improve the outcomes, quality, access to and cost and utilization of health care services. Conference objectives will also be examined including the need to identify metrics and rigorous methodologies that will effect positive change.

0830-1015 PANEL 1: EXPANDED ROLE (PRACTICE)/EDUCATION

Facilitator: Matt Womble

Panel members:

- *Drew Dawson, Director, National Highway Traffic Safety Administration, Office of Emergency Medical Services, Washington DC*
- *William Raynovich, NREMT-P, EdD, MPH, BS, Associate Professor and Director, EMS Education, Creighton University, Omaha, NE*
- *Anne Robinson, RN, BSN, Public Health and Community Paramedic Nursing Consultant, Eagle, CO*
- *Johnathan Smith, Chief, Community Paramedic, Brighton Volunteer Ambulance, Rochester, NY*
- *Michael Wilcox, MD, Medical Director, Scott County Public Health Dept., Shakopee, MN*

Areas of Examination:

- a. **Current practices:** What is the current state of education and training of Community Paramedics in the areas of medical care, referral practice and documentation (including overview of national curriculum and status of receiving college credit)
- b. **Discussion of gaps:** How should the expanded role of the community paramedic be defined (skill sets, practice setting, medical oversight, paramedicine specialty)? What type of education is needed to support this skill set? What are the CP educational needs considering clinical, social, physical and emotional demands of the CP patient population? How can additional education and training use current models to assure patient satisfaction (HCAHPS model), incorporate the provider perspective (AHRQ provider safety survey, employee satisfaction) and teach assessment of integration with family and other social support structures? How can rural areas have reasonable access to education and training?
- c. **Research questions/Identification of metrics and methodologies:** What are the standards for community paramedic training and education? What methodology should be used to evaluate and, if necessary, credential the curriculum? What are the competencies of a community paramedic and how should individuals be evaluated?
- d. **Documentation/dissemination of results** (Who, What, When, Where, How)

1015-1030 BREAK

1030-1215 PANEL 2: INTEGRATION WITH OTHER MEDICAL PROFESSIONS

Facilitator: Douglas Kupas, MD

Panel members:

- *Debbie Dawson Hatmaker, PhD, RN-BC, SANE-A, Chief Programs Officer, Georgia Nurses Association, Atlanta, GE*

- *Ann Marie Papa, DNP, RN, CEN, NE-BC, FAEN, Clinical Director, Emergency Nursing, Hospital of the University of Pennsylvania & Penn Presbyterian Medical Center, PA*
- *Jim Parrish, FACHE, FACMPE, CEO/Administrator, Humboldt General Hospital, Winnemucca, NV*
- *Anne Robinson RN, BSN, Public Health and Community Paramedic Nursing Consultant, Eagle, CO*
- *Kathy Robinson, RN, EMT-P, Program Manager, National Association of State EMS Officials and President, Danville Ambulance Service, Danville, PA*
- *Drew Werner, MD, Medical Director, Western Eagle County Health Services District, Community Paramedic Program, Eagle, CO*

Areas of Examination:

- a. **Best Practices:** Where is service integration already occurring and what are the elements that make it successful?
- b. **Discussion of gaps:** How to approach the integration of community paramedics, so that services are a community benefit and not competition to other providers such as: 1) Defining roles, responsibilities, relationships and data sharing issues (e.g., referrals, protected health information and electronic health records/health information exchange) with other community-based providers and services (primary care, public health, hospitals, home health, etc.); and 2) How to improve the sharing of outcomes, quality metrics and integrated quality improvement processes?
- c. **Research questions/Identification of additional metrics and methodologies:** What is needed in terms of guidance or standards to assure that community paramedics are filling gaps and not duplicating services?
- d. **Documentation/Dissemination of results** (Who, What, When, Where, How)

1215-1330 LUNCH (on your own)

1330-1515 PANEL 3: MEDICAL DIRECTION/REGULATION

Facilitator: Douglas Kupas, MD

Panel members:

- *Mike Bachman: Program Director, Wake County EMS, NC*
- *Troy Hagen, Director, Ada County Paramedics, Boise, ID*
- *Drew Werner, MD, Medical Director, Western Eagle County Health Services District Community Paramedic Program, Eagle, CO*
- *Michael Wilcox, MD, Medical Director, Mdewanketon Sioux Tribal EMS/Fire Department, Shakopee, MN*
- *Will Wilson, MPP, Grant Supervisor, Minnesota Department of Health, Office of Rural Health and Primary Care, MN*

Areas of Examination:

- a. **Current practices:** What types of medical oversight, quality assessment, performance improvement and outcome evaluation (clinical and financial) are medical directors using? How are states currently regulating these programs? Is

there a state regulatory model in existence that could be the standard for replication?

- b. Discussion of gaps:** What processes are needed to facilitate provider oversight of clinical quality assessment, error reporting, clinical handoffs, etc.? How can medical oversight be assured in rural communities that lack provider resources? How can states prepare to sufficiently provide for or allow the regulatory oversight and support necessary for the expanded role that community paramedicine may practice?
- c. Research questions/Identification of metrics and methodologies:** What are standard quality of care measures and methods for evaluation? How can state regulators use quality of care measures to help them determine how to regulate community paramedic programs?
- d. Documentation/Dissemination of results** (Who, What, When, Where, How)

1515-1630 DAY ONE WRAP-UP

The facilitators for each panel will lead discussion of key points.

Tuesday, October 2, 2012

0800-0945 PANEL 4: FUNDING/REIMBURSEMENT

Facilitator: Jim DeTienne

Panel members:

- *Gregg Margolis, PhD, NREMT-P, Director, Division of Health Systems and Health Care Policy, Office of the Assistant Secretary for Preparedness and Response, U.S. Department of Health and Human Services, Washington, DC*
- *Christopher Montera, Chief, Western Eagle County Health Services District, Community Paramedic Program, Eagle, CO*
- *Dan Swayze, DrPH, MBA, MEMS, Vice President of the Center for Emergency Medicine of Western Pennsylvania, Inc., Pittsburg, PA*
- *Ryan White, Health Economist, Eide Bailly, Lone Tree, CO*
- *Matt Zavadsky, MS-HSA, EMT, Associate Director of Operations, MedStar EMS, Fort Worth, TX*

Areas of Examination:

- a. Current practices:** What methodologies exist for tracking short-term and long-term financial impacts of Community Paramedic services (for example, comparing the costs of an acute care-driven model vs. a primary care medical home for target patient populations)?
- b. Discussion of gaps:** What could be a framework for the consistent reporting of costs/savings and measured impact by patient and by population(s), to show the value to payer systems? What are next steps toward developing systems for Medicaid and Medicare reimbursement of services?

- c. **Research questions/Identification of additional metrics and methodologies:**
How to rigorously evaluate and document the cost-savings of community paramedic programs, in order to leverage payment from payer sources?
- d. **Documentation/Dissemination of results** (Who, What, When, Where, How)

0945-1000 BREAK

1000-1145 PANEL 5: DATA, PERFORMANCE IMPROVEMENT AND OUTCOME EVALUATION

Facilitator: Gary Wingrove

Panel members:

- *Dia Gainor, MPA, Executive Director, National Association of EMS Officials*
- *Gregg Margolis, PhD, NREMT-P, Director, Division of Health Systems and Health Care Policy, Office of the Assistant Secretary for Preparedness and Response, U.S. Department of Health and Human Services, Washington, DC*
- *Kevin McGinnis, MPS, WEMT-P, Chief, CEO, North East Mobile Health Services, Scarborough, ME*
- *Lori Spencer, RN, CCEMT-P, Captain, Baraboo District Ambulance Service, Baraboo, WI*
- *Ryan White, Health Economist, Eide Bailly, Lone Tree, CO*

Areas of Examination:

- a. **Current practices:** What scientific data already exists to inform the implementation, operations, outcomes, and quality assurance/performance improvement of community paramedic programs?
- b. **Discussion of gaps:** What type of empirical research is still needed to inform the field? Given the expanded role of EMS programs, what standard types of data should programs be collecting?
- c. **Research Questions/Identification of metrics and methodologies:** In building a national research framework, what types of methodologies and standard metrics are still needed to measure health outcomes, program outcomes, cost savings, performance improvement and systems review? What are feasible methodologies to provide rigorous evidence that can link community paramedic programs to improved health outcomes, efficiencies, and cost savings?
- d. **Documentation/Dissemination of results** (Who, What, When, Where, How)

1145-1300 LUNCH (on your own)

1300-1430 Community Paramedicine Research Agenda

Facilitators:

- *Davis Patterson, PhD, Research Scientist, WWAMI Rural Health Research Center/Center for Health Workforce Studies, University of Washington*
- *Sue Skillman, MS, Deputy Director, WWAMI Rural Health Research Center/Center for Health Workforce Studies, University of Washington*

Pre-hospital EMS research: What is research vs. evaluation vs. quality improvement?
Insights from the 2012 International Roundtable on Community Paramedicine.

Identifying fundable research topics to advance community paramedicine:
Potential research questions and priorities (quality, effectiveness, value)
Collaborators
Study sites
Design issues
Data sources
Feasibility considerations
Dissemination/publication

Next steps: Drafting a Community Paramedicine Research Agenda, building consensus
on top research priorities based on need/impact and feasibility

1430-1500 WRAP-UP/CLOSING REMARKS

Speaker: Douglas Kupas, MD, Principal Investigator

POST MEETING DISCUSSION: *Steering committee members and researchers will meet to
develop a paper to identify a national research agenda on community paramedicine.*

Conference Documents



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NOTES

1. Joint Committee on Rural Emergency Care, National Association of State Emergency Medical Services Officials, National Organization of State Offices of Rural Health. State perspectives discussion paper on development of community paramedic programs. <http://www.ruralcenter.org/tasc/resources/state-perspectives-discussion-paper-development-community-paramedic-programs>. Accessed February 8, 2012.
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Innovation Opportunities for Emergency Medical Services:

A Draft White Paper from the

**National Highway
Traffic Safety
Administration
(DOT)**

**Office of the
Assistant Secretary
for Preparedness
and Response
(HHS)**

**Health Resources
and Services
Administration
(HHS)**

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Foreword

The Departments of Health and Human Services (Assistant Secretary for Preparedness and Response and Health Resources and Services Administration) and Transportation (National Highway Traffic Safety Administration) have jointly collaborated on the development of this *draft white paper that presents one example of an analysis and model* (Model) along with background materials of the potential for cost savings if emergency medical services (EMS) systems adopted protocols and strategies to innovatively triage and treat patients. Ideally this Model or others, could be pilot-tested in various local and regional jurisdictions throughout the United States. There are many ways for EMS systems to more appropriately care for their patients while maintaining financial sustainability.

It is anticipated this draft White Paper and Model could be helpful as local, regional and state EMS and health system planners prepare frameworks, options and funding strategies/proposals for innovative collaboration among EMS systems, primary care providers, hospitals, public safety answering points, public health and others. Readers are encouraged to review this White Paper and to provide the agencies with comments, suggestions or additional data.

Applying the Model – a Practical Summary for EMS Stakeholders

The following are steps that an EMS agency could take to “operationalize” the Model in Figure 3 for an individual community:

- Using the Model in Figure 3 (page 11) conduct an analysis of the data in an EMS jurisdiction to calculate the percent of low acuity patients that could be safely and appropriately managed in a non-emergency department setting if available. The example analysis used the 5 percent CMS standard analytic file (SAF) but potential local data sources may include:
 - EMS data linked with local emergency department (ED) data to determine the percent of EMS transports that are discharged from the ED within 24 hours: depending on the sophistication of the agency’s data systems, one can either calculate patient acuity by applying the Billings algorithm (page 9) to electronically available data or conduct a chart review to determine the percent of low acuity patients.
 - State Medicaid data to conduct an analysis similar to what is proposed in the SAF example.
 - **NOTE:** the national example used in this paper found that approximately 15 percent of all Medicare ED transports could be safely treated outside of the ED if other options existed. Your numbers may be similar.
- Based on the dynamics in your community, determine how many of the patients treatable outside of the ED can be safely treated in clinics or urgent care, and how many can be treated and released by EMS providers.

Considerations for your system might include:

- The level of service (Basic Life Support-BLS versus Advanced Life Support-ALS) available and the education, skill and scope of practice of the clinicians.
 - The availability of clinic-based services: in many cases, you may need to contract with providers to incentivize them to take unscheduled patients or extend hours.
 - The culture of the urgent care centers and their willingness to accept patients, particularly those with Medicaid.
 - The presence of Accountable Care Organizations (ACO) in your area and their willingness to partner with you since they are already incentivized to reduce ED visits and total cost of care.
- Develop a theoretical framework for how to appropriately triage patients away from the ED and how it will work in your community. Then, design a demonstration for your community that may, for example, include:
 - Expanding the fee for service model to reimburse EMS providers for assessment and treatment (including transportation) provided on site or for transport to a non-ED location.
 - Design an evidence-driven protocol for appropriate disposition of patients who call 911 (this requires broad-based community input and support).
 - A shared savings model where EMS providers are incentivized to avoid unnecessary ED transports.
 - Utilize available mobile resources in your community to treat non-acute patients and reduce readmission or further use of hospital resources: partner with public health agencies, social service providers, hospitals and ACOs to provide mobile medical services in underserved communities.
 - Develop a robust evaluation strategy to ensure the quality of patient care and patient safety is maintained or enhanced, and to assess other system impacts of the implementation of the new protocols/system changes including patient satisfaction.

Introduction

In 2009, there were over 136 million emergency department (ED) visits in the United States and 15.8 percent of them arrived by a 911-response ambulance.¹ ED overcrowding is a well-documented problem that results in costly, delayed, and often sub-optimal care. Emergency medical services (EMS) contributes to this problem by unnecessarily transporting non-acutely ill or injured patients to EDs when more appropriate and less costly care settings, including the home, may be available. Since Medicare was established in 1965, ambulance suppliers have been reimbursed for the transport of beneficiaries to and between hospitals, dialysis clinics, and skilled nursing facilities (SNF). As the scope of practice of the emergency medical technician expanded, CMS updated the reimbursement policy to account for the level of care provided while en route. Though the current rule includes eight separate levels of service, the model still requires the *transport* of a beneficiary to one of the aforementioned locations to qualify for reimbursement. When someone calls 911 for a non-acute event, there is a financial incentive for suppliers to transport them to an ED when alternative care by EMS providers may result in higher quality patient-centered care at a significantly lower cost.

An analysis funded by the HHS Office of the Assistant Secretary for Preparedness and Response (ASPR) indicates that approximately 15 percent of Medicare patients transported to the ED by ambulance can be safely cared for in other settings if available in a community. National models suggest that if these patients were transported to a physician's office, Medicare could save \$559.871 million per year and if they were treated at home it is expected the savings would be significantly higher. Cost data for Medicaid are not available but expected to be even greater. In 2006, Medicare and Medicaid paid 20 percent and 21 percent respectively of ED charges.

The pre-hospital EMS system is uniquely positioned to care for 911 patients and assist less-emergent patients with transport to the most appropriate care setting based on medical and social needs. Such an approach may reduce the total cost of care, provide more patient-centered care and may reduce the burden on EDs, thus enhancing the quality of care received by all patients.

As the nation faces the possibility of increasing healthcare costs, there is significant opportunity for EMS systems to be *part of the solution* and help reduce the incidence of costly care for unscheduled patients. One could demonstrate that EMS services can reduce downstream emergency department and hospitalization costs while increasing patient care quality and safety by changing their service delivery. New initiatives may allow EMS systems to demonstrate several innovative strategies to reduce total cost of care and increase health outcomes, including: the triage of patients calling 911 without dispatch of an ambulance, treatment of patients without transport, transport of patients to a clinic or other provider for an unscheduled visit, and scheduled non-acute assessments and treatments, to name a few. Innovative financial models may include an expanded Fee-For-Service (FFS) system or an innovative model designed by the emergency care system.

Problem Statement and Background

ED overcrowding is a well-documented healthcare crisis that results in delayed and sub-optimal acute care.^{ii iii iv v} There are several causes of ED overcrowding, though one actionable concern is the fee-for-service payment model for 911-based emergency medical services (EMS) that currently requires the transport of a patient to a hospital in order to qualify for reimbursement. The Medicare program spends \$5.2 billion on 16.6 million ambulance transports annually and payments per beneficiary increased 19.1 percent from 2007 to 2010.^{vi} Of those, approximately seven million beneficiaries were transported to EDs. In 2006, the HHS Office of the Inspector General found that 25 percent of ambulance transports were either unnecessary or inappropriate, while other research has found that between 11 and 61 percent of ambulance transports to EDs could have been safely treated elsewhere.^{vii viii ix x xi xii} *The Medicare transport requirement incentivizes ambulance suppliers to deliver non-acutely ill or injured beneficiaries to EDs, one of the most expensive sites of care^{xiii}.*

In 2009, there were over 136 million ED visits in the United States and 15.8 percent of them arrived by a 911-response ambulance. Among patients aged 65 and older, there were close to 20 million ED visits with 38.6 percent arriving by ambulance.^{xiv} Among Medicare beneficiaries arriving by ambulance, 45 percent were not admitted to the hospital, but cost CMS \$1.98 billion (with an additional 20 percent out-of-pocket costs to the beneficiary). Medicare and Medicaid beneficiaries account for a disproportionately high utilization rate of EDs.^{xv xvi} Recent studies from the CDC reinforce conclusions that people utilize EDs more often because of a lack of access to other providers as opposed to the seriousness of their complaints.^{xvii} Almost 60 percent of non-elderly adults surveyed on public healthcare plans cited that a “doctor’s office or clinic was not open” and 40 percent of privately insured non-elderly adults cited “no other place to go.” *EMS contributes to ED crowding and high system costs by transporting some patients to EDs when more appropriate and less costly care settings, including the home, may be adequate and available.*

EMS is an essential component of the United States healthcare system.^{xviii} Ambulance transport to a hospital’s emergency department is often the first and only access point to the healthcare system for many Americans. Medicare reimburses ambulances through a fee-for-service (FFS) transportation benefit, as defined in Part B. Regulations require that a patient is transported from the scene of injury or illness to a hospital in order to be reimbursed. However a recently released study from the RAND Corporation indicates that the role of the emergency department in determining admissions and downstream costs is rising dramatically and that EDs account for almost half of all hospital admissions.^{xix} *There exists no financial incentive to treat a patient at the scene of their illness or injury or to transport them to a provider other than an emergency department.*

Given the low-acuity nature of many patients being transported, one may anticipate a better patient care experience when patients are either treated at the scene by EMS or taken to a clinic-based provider with shorter wait times than in the ED. Studies of patient-centered medical homes (PCMH) have found significant reductions in ED use, hospitalizations, and readmissions due to strong care coordination as well as increased quality of care.^{xx xxi} One PCMH pilot program in Seattle realized a 29 percent reduction in ED use and an 11 percent reduction in

ambulatory sensitive care admissions (i.e. admissions resulting from conditions that can be treated in an ambulatory care setting), resulting in \$17 per patient per year of savings.^{xxii} *Encouraging the use of medically appropriate alternative care settings can reduce both ED visits and hospitalizations.*

The Balanced Budget Act of 1997 required that CMS convene stakeholders in the ambulance community and enter a negotiated rulemaking process to set a national prospective ambulance fee schedule. The schedule was finalized in 2002 and reimbursement is currently calculated by multiplying a nationally standardized base rate (or conversion factor) with the geographic practice cost index factor (GPCI), and a relative value unit (RVU). This amount is added to a calculated mileage payment for the transport. Previously, Medicare was charged a usual and customary rate for transport. This complicated fee-for-transport model, in place since the enactment of Medicare in 1965, *incentivizes a higher utilization of emergency and in-hospital services.*

The National EMS Advisory Council (NEMSAC) found in its 2012 report on EMS Performance-based Reimbursement that the average payer-mix for an EMS agency is:^{xxiii}

Medicare:	44%
Medicaid:	14%
Private Payer:	14%
Commercial Insurance:	21%
Other:	7%

Relative to the population distribution in the U.S., Medicare was billed for more ED visits resulting in admission and Medicaid was billed for more treat-and-release ED visits.^{xxiv} Significant cost savings and increases in quality of care for acute and non-acute ED patients are possible if funding models are altered to incentivize fewer transports to EDs.^{xxv xxvi xxvii}

The NEMSAC report recommended that the federal government adopt methods to reimburse EMS systems based on performance and actual costs of 24/7 readiness as opposed to fee-for-transport. Alternative models of delivering pre-hospital emergency care could include payments to transport to urgent care centers, physician offices, or mental health facilities. Models could also include expanded services provided by EMS personnel at the site of injury or illness, referrals to specialty care, bundled payments for acute care services, or shared-savings models, to name a few.

Figure 1, below, illustrates the current trajectory of a patient who calls 911 and the costs to the Medicare program. Note: one could predict a similar pattern for Medicaid patients for whom national average cost data are not available.

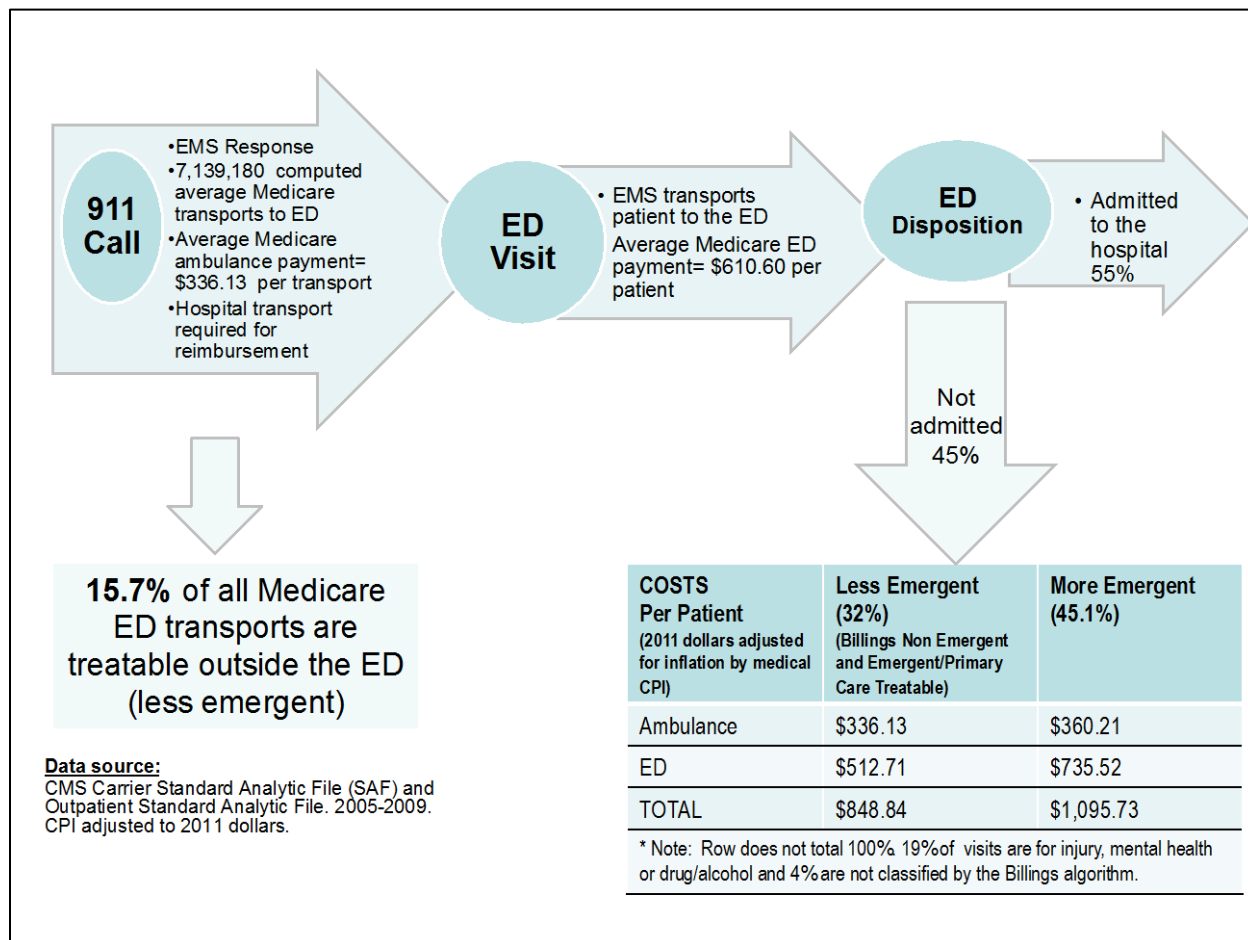


Figure 1. Disposition and Cost of Medicare Patients Accessing the 911 EMS System

As shown in figure 1, a recent analysis of the CMS data show that 45 percent of EMS transports of Medicare beneficiaries to an ED did not result in a hospitalization. Of these, 32 percent were less emergent according to the Billings criteria of non-emergency and primary care treatable visits. Note that the model excludes all injuries, mental health and alcohol related visits, and additional visits that could not be classified using the Billings algorithm. *This translates to approximately 15 percent of all Medicare ED transports that could be considered avoidable ED visits.*

More information on the Billings algorithm is available on the next page.

The Billings Algorithm Explained

The Billings algorithm classifies ED utilization of patients into the following categories:

- **Non-emergent** - The patient's initial complaint, presenting symptoms, vital signs, medical history, and age indicated that immediate medical care was not required within 12 hours;
- **Emergent/Primary Care Treatable** - Based on information in the record, treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests);
- **Emergent - ED Care Needed - Preventable/Avoidable** - Emergency department care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure, etc.); and
- **Emergent - ED Care Needed - Not Preventable/Avoidable** - Emergency department care was required and ambulatory care treatment could not have prevented the condition (e.g., trauma, appendicitis, myocardial infarction, etc.).

The algorithm was developed using a sample of 6,000 full ED records.

For more information, visit <http://wagner.nyu.edu/faculty/billings/nyued-background>

A Model for Innovation in Emergency Medical Services

It is important to demonstrate cost savings for any change to the existing delivery or reimbursement model. Unpublished research funded by the HHS Office of the Assistant Secretary for Preparedness and Response indicates that for **less emergent cases** (approximately 15 percent of Medicare transports to EDs), EMS agencies may be able to alter their service delivery model to more effectively:

- 1) Evaluate and treat the patient at the location of the 911 call,
- 2) Evaluate and transport the patient to a health care provider (physician) clinic, Federally Qualified Health Center (FQHC), or Rural Health Clinic (RHC), and
- 3) Evaluate and transport the patient to an urgent care center.

Calculations show between \$283,464,058 and \$559,871,117 in cost savings if all of the approximately 15 percent of preventable ED transports went to a physician's office (Figure 2).

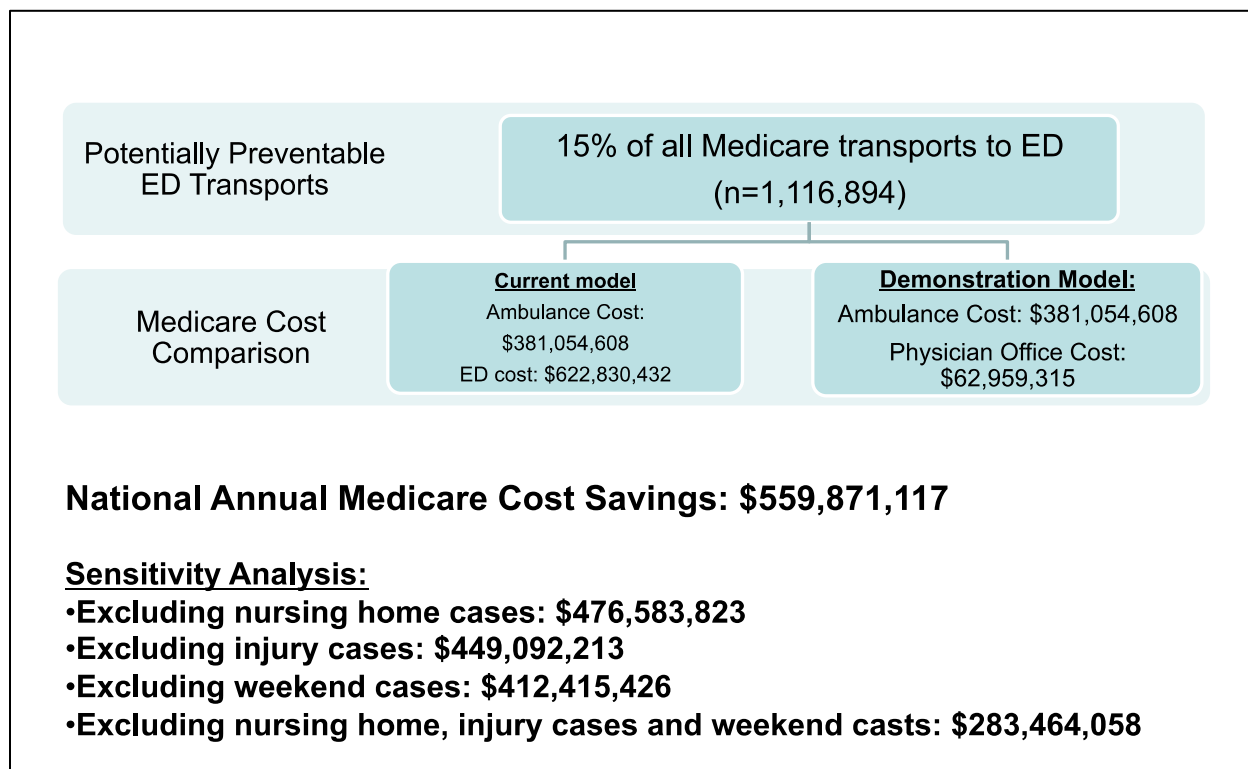


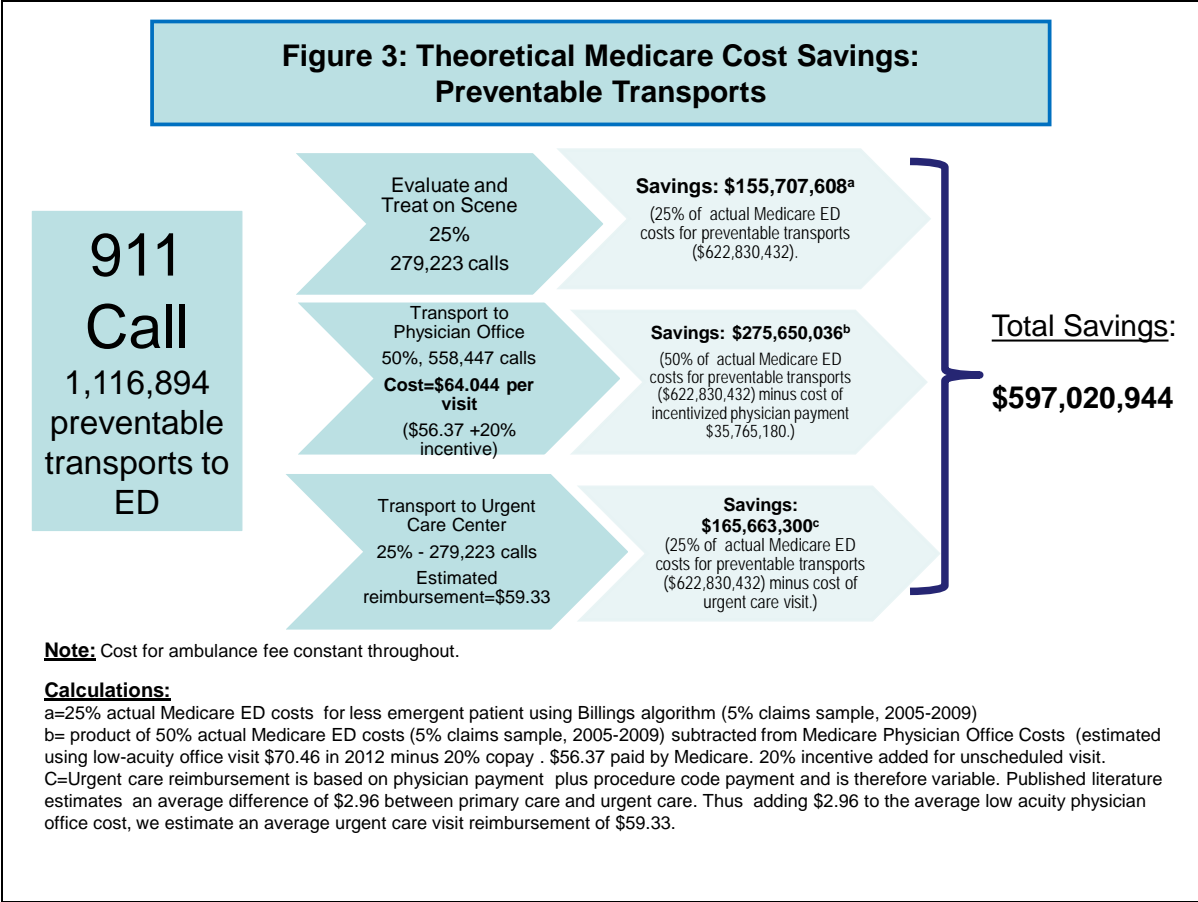
Figure 2: Calculated Cost Savings Transport to a Physician Office for Less Emergent Patients

The cost analysis in Figure 2 assumes that EMS would continue to transport all patients to a health care setting, in this case a physician’s office. However, prior experience with using trained personnel to triage patients by 911 dispatch centers and to determine the appropriate level of basic versus advanced life support has worked well.^{xxviii xxix xxx} Therefore, EMS may be able to meet the needs of callers without dispatching an ambulance or triage and treat some patients rather than transport all of them to a clinic-based practitioner.

As noted, not all preventable ED transports will require treatment or transport to a clinic. In addition, clinics are often closed on nights and weekends. For the sake of calculating cost savings for the model, it is estimated that of the preventable ED transports:

- 25 percent of patients can be evaluated and treated by EMS without transport;
- 25 percent may not have a physician available (even with incentives provided for physicians to take unscheduled patients) and would go to urgent care; and
- 50 percent of patients would be transported to an appropriately staffed clinic.

Further explanation of these estimated figures is below. Note that they may be significantly altered in different communities based on demographics and other characteristics. Figure 3 presents the projected national Medicare cost savings of \$597,020,944 annually (without a sensitivity analysis), of over 1 million preventable transports to the ED.



Based on the CMS SAF, a recent analysis shows 1,116,894 Medicare EMS transports (roughly 15 percent of transports) to the ED that are preventable (based on Billings criteria of non-urgent and primary care preventable). These translate to \$622,830,432 in Medicare ED costs. If 25 percent of these patients were treated onsite by EMS and released, Medicare would only pay the ambulance costs saving \$155,707,608 in ED costs.

It is reasonable that clinic based providers would need to be incentivized to accept unscheduled patients. Physician incentives range from 1 to 20 percent of a physician’s total compensation with many incentives in the 5 percent range.^{xxxix} Medicare pays \$56.37 for a low acuity office visit. Adding 20 percent to this fee would yield a \$64.04 incentivized payment. If 50 percent of ED preventable EMS calls were transported to clinical based providers, Medicare would save \$275,650,036 in ED costs after subtracting an incentivized payment of \$64.04 to the office.

Lastly, EMS may need to transport 25 percent of the avoidable transports to an urgent care center because a clinic-based provider is not available to accept the patient. Reimbursement for urgent care centers is based on procedure codes and therefore an exact fee is not available. However, a study of the average charges for urgent care centers when compared to primary care across all payers showed a \$2.96 difference in payment.^{xxxix} This analysis added \$2.96 to the low acuity physician reimbursement of \$56.37 to calculate an urgent care center payment of \$59.33 for an urgent care visit. Accounting for these costs, Medicare saves \$165,663,300 in ED costs.

While this overall Model shifts costs from ED’s to clinic based providers and urgent care centers, there are demonstrable cost savings from Medicare beneficiaries alone. If the entire Model is successful with all of the avoidable ED transports triaged to more appropriate care, Medicare alone can save \$597 million annually. Note: due to the lack of data, there is no analysis of savings for Medicaid but a similar theoretical model is projected for Medicaid beneficiaries.

Program Design Considerations

Currently when a 911 call is initiated, the responding ambulance generally transports the patient to the ED and care is provided en-route. A demonstration project could allow an EMS system to develop alternative treatment and triage protocol options that may include:

- Triage or self care instructions by call-taker without dispatching an EMS unit.
- Treatment provided in the home or location of patient.
- Transport to an appropriate clinic based health care provider.
- Transport to an urgent care center.
- Transport to an Emergency Department.
- Referral to an appropriate community service.
- Other community specific treatment or transport protocols.

Figure 4, below, illustrates the logic model for a possible demonstration project with the goal of improving health care safety, effectiveness, patient-centeredness, timeliness and efficiency by reducing unnecessary ambulance transports to the ED by 15 percent.

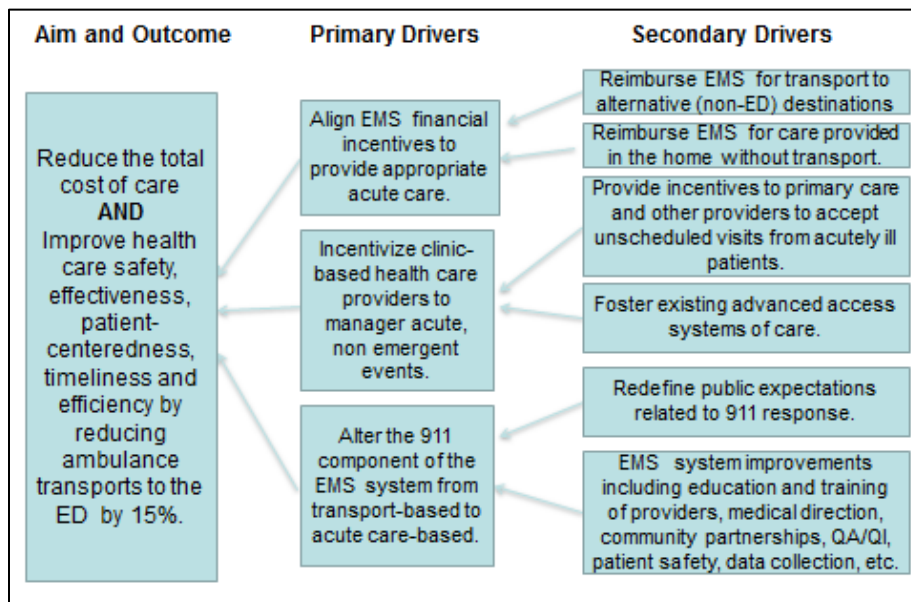


Figure 4 – Primary and Secondary Drivers of Innovation

One may anticipate that the primary drivers for reducing system costs by reducing ambulance transports to the ED by 15 percent will be to align financial incentives to EMS and to clinic

based providers. By incentivizing clinic based providers to take unscheduled patients and allowing EMS to receive reimbursement for providing treatment and transporting to a clinic provider, one can reduce downstream ED costs.

Demonstration projects should consider the following when determining new delivery and finance models:

- The operational components of the EMS system.
- Scope of practice for EMS providers and state licensure and certification related to provider roles, EMS service licensure and other legal authorizations such as the authority for treat and release.
- Reimbursement for EMS to treat at the most appropriate site when available.
- Incentives for clinic-based healthcare providers to accept unscheduled visits and extend office hours.
- Reimbursement for appropriate medical direction (including any increases).
- Development of data collection systems and impact on patient care quality metrics, measured both before and after the intervention.
- Continuous quality assurance and improvement function.
- Evaluation of impact on:
 - system cost analysis (pre/post) (EMS agency, physician services, ED costs, hospital costs, public health and other costs);
 - access to primary, specialty, and emergency care;
 - patient safety, outcomes and satisfaction; and
 - education, licensure and workforce issues.

Physician medical direction is an important component of all EMS systems and is currently supplied to EMS providers through written protocols and in real time via telephone or radio. Innovative approaches may require additional physician interaction and supervision of field providers; this practice is not currently reimbursed by Medicare, but may be under a demonstration.

Possible Demonstration Approaches

Several possible approaches for local EMS demonstration projects are presented based on the national analysis above. These are not mutually exclusive, nor are they exhaustive of the myriad innovative options that may be appropriate for local EMS systems.

Incremental approach

An initial step to a more comprehensive transformation of the local EMS system might be to encourage EMS agencies, and their partners, to identify viable alternatives to transporting patients to the ED. Several short-term options may be relatively easy to manage, have a short

time to impact, and lower costs through improvements to the emergency care system. These include:

- Expand the current fee for service model for EMS agencies with reimbursement for treatments at home as well as transport to alternative care settings. The focus may be to incentivize EMS agencies and physician offices to change service delivery for less emergent patients and reduce ED utilization.
- An alternative option would maintain the current FFS structure and integrate pre-hospital emergency services into the shared-savings model of an Accountable Care Organization (ACO). The current delivery model for EMS is predicated on a single financial incentive to transport acute or non-acute patients to the hospital. If one or more EMS agencies partnered with an ACO, their incentive would be to lower the total cost of care for beneficiaries, and agencies would be able to innovate in how triage, transport, or disposition decisions are made in the field. Under the ACO model, an EMS agency would be incentivized, through shared savings, to make the most appropriate (and often least costly) treatment and transport decision with the patient. This option would require some start-up funding, mainly in order to integrate data systems, educate EMS providers, ensure more appropriate online medical direction, and prepare for a thorough evaluation.

More innovative and long-term approach

This would provide novel strategies to emergency care reimbursement or variations to current approaches for entire regions which may include a broader array of health care providers in the emergency care system and models such as bundled payments, shared savings, or patient-centered medical homes. There may be new ways to incentivize less costly emergency care for EMS agencies, hospitals, physicians, urgent care centers, and clinics.

Possible Participants and Beneficiaries

There is significant interest in health services sectors to reduce ED utilization and save money. Demonstrations may directly target the unscheduled care system as a source of overutilization and overspending. Participants could include Accountable Care Organizations or other entities that bear financial risk and are incentivized to reduce utilization of costly services. Regionalized systems of emergency care, including EMS agencies, hospitals, physician groups, home health nurses, and local public health departments could partner under a convener to execute a geographically defined model. This could also be integrated into models being developed for patient-centered medical homes. State Departments of Health may also organize regional providers.

All Medicare, Medicaid, and CHIP beneficiaries (including dual eligible beneficiaries) may realize an increase in the quality and a decrease in the total cost of their unscheduled or acute care. In addition, providers of primary care services, including Federally Qualified Health Centers and Rural Health Clinics, as well as local or regional EMS agencies will benefit financially from a shift in reimbursement policy.

The following care providers may be included in a demonstration project:

- EMS providers and medical directors.
- Primary care, emergency, and other specialty care physicians.
- Primary care, emergency, and other specialty care physician assistants and nurse practitioners.
- Urgent care centers and providers.
- Hospitals and Emergency Departments.
- Accountable Care Organizations.
- Federally Qualified Health Centers (FQHC).
- Rural Health Clinics (RHC).

Demonstrations may also choose to engage local community and other care providers such as Fire Department personnel and other health workers. It may also be important to engage state partners including regulators of medicine and emergency medical services, state Medicaid Administrators, and state Public Health Departments.

Significant Assumptions for Consideration

Factors That May Increase Cost Savings

The Model does not include data from Medicaid and CHIP where more substantial savings are anticipated, particularly since a significant portion of Medicaid patients are “treat and release” from the ED.^{xxxiii} One major assumption of the cost savings presented is that all patients that were admitted to the hospital were not emergent. However, a percentage of these admissions may be avoided if the patient is transported to a specialist physician’s office. An 11 percent reduction in ambulatory sensitive care admissions has been demonstrated in a PCMH model.^{xxxiv}

Another assumption made in the Model is that patients with injury, mental health issues, or drug/alcohol issues are excluded from the less emergent analysis. In actuality, an unknown percentage of these patients may also be safely triaged away from EDs.

Factors That May Decrease Cost Savings

Clinic provider incentives—it is anticipated that an applicant may have to provide incentives to clinic providers who do not traditionally accept unscheduled or off-hours patients. This may be in the form of a per-patient-per-month payment or a lump sum. An ACO may not require any additional incentive if they believe more access to their primary care physicians will result in fewer ED visits and overall cost savings. A traditional fee-for-service practice may be incentivized by bonus payments when seeing a patient same day or after normal office hours.

The EMS community should carefully consider the following major assumptions from the nation model:

Assumption	Impact on Cost Savings
EMS providers can triage 15 percent of Medicare ED transports away from the ED	Neutral to potential increase in savings 15 percent as a number for less emergent ED visits is a very conservative estimate. Data are not available for the Medicaid population and it is anticipated that a far greater percent of those are less emergent visits. It is anticipated that cost savings will be greater than is calculated.
Clinic based health care providers will accept unscheduled patients	Decrease cost savings While the amount of incentive that would be required to have physician offices accept unscheduled patients from EMS is estimated, there is no literature to support the exact amount of incentive that may be required. Applicants will need to negotiate the exact amount of such incentives. If greater incentives are required to induce providers to take unscheduled visits, that may decrease cost savings.
Admitted patients are emergent	Increase cost savings Due to the lack of availability of specialty consult in many ED's, it is anticipated there are a number of unnecessary hospital admissions that may be avoided if transport to a specialty physician's office is possible. This is supported by the patient centered medical home literature where as much as 11 percent of ambulance sensitive conditions avoided hospitalization.
There will be cost savings in addition to those realized by ED utilization reduction	Increase cost savings Patients are often admitted to inpatient floors from the ED because of a lack of confidence that the patient will follow up with a PCP. It is anticipated there will be a more substantial cost savings from a reduction in admissions that is not calculated in this proposal.
Injured, mental health and alcohol related visits must be seen in the ED	Increase cost savings There are low acuity calls for these groups that may be handled with a visit to the specialty provider or treatment at site of injury.

Note that the financial models presented in figures 2 and 3 assume that only those patients that were *not* admitted to the hospital were potentially avoidable. However, as shown in the patient centered medical home literature there are ambulatory sensitive hospitalizations that may be avoidable.

Conclusion

There is significant potential for innovation in healthcare systems that may transform the delivery of emergency medical services, reduce the total cost of care, and increase health for a population well beyond CMS beneficiaries. Innovations may also change the model of acute care to one that is more patient-centered as many of those experiencing an acute event can be evaluated in their home (or current location) and triaged to an appropriate care setting that is congruent with their level of severity. Encouraging clinic based health care providers to accept more unscheduled visits will ensure greater continuity of care for patients.

The provision of unscheduled care, including EMS agencies, emergency departments, physicians, and urgent care centers, has not experienced significant innovation in delivery or finance models since the establishment of Medicare. Americans deserve a full *systems approach* to transforming the unscheduled care in a patient-centered manner that will save money, reduce the burden on the emergency departments, and increase the quality of care provided to beneficiaries.

Finally, the information presented in this draft “White Paper” is a theoretical model that will serve as a stimulus to engage local, regional, and state EMS systems and health care providers to seek funding to test the model. The challenge is for interested and innovative system managers to address the details and the intricacies – develop, modify, improve, or disprove the model.

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Giving EMS Flexibility In Transporting Low-Acuity Patients Could Generate Substantial Medicare Savings

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ABSTRACT Some Medicare beneficiaries who place 911 calls to request an ambulance might safely be cared for in settings other than the emergency department (ED) at lower cost. Using 2005–09 Medicare claims data and a validated algorithm, we estimated that 12.9–16.2 percent of Medicare-covered 911 emergency medical services (EMS) transports involved conditions that were probably nonemergent or primary care treatable. Among beneficiaries not admitted to the hospital, about 34.5 percent had a low-acuity diagnosis that might have been managed outside the ED. Annual Medicare EMS and ED payments for these patients were approximately \$1 billion per year. If Medicare had the flexibility to reimburse EMS for managing selected 911 calls in ways other than transport to an ED, we estimate that the federal government could save \$283–\$560 million or more per year, while improving the continuity of patient care. If private insurance companies followed suit, overall societal savings could be twice as large.

Emergency medical services (EMS) systems in the United States transported twenty-one million adults and children to hospital emergency departments (EDs) in 2010 as a result of calls to 911.¹ EMS care is primarily oriented toward people who have life-threatening illnesses or injuries.² However, EMS providers regularly encounter patients whose complaints might be better managed in settings outside the ED.

Under the current statutory guidance for the reimbursement policies of the Centers for Medicare and Medicaid Services (CMS)—policies that are generally followed by private insurance plans—EMS units are strongly incentivized to transport 911 callers to a hospital ED to receive reimbursement.³ This discourages EMS agencies from developing alternative approaches to managing 911 callers with less-serious problems, such as transporting them to a physician's office or health center, or even treating them on the

scene. To relieve pressure on EDs and avoid unnecessary costs, several professional organizations have recommended that CMS policies be changed.^{2,4–6}

To estimate the financial implications of allowing CMS to adopt a more flexible payment approach, we calculated the savings that might be accrued if CMS reimbursed EMS providers for a wider range of transport and treatment options.

Study Data And Methods

Our study had two specific aims. First, we sought to estimate the potential impact on the number of EMS transports if CMS policy enabled EMS to manage selected Medicare beneficiaries who do not require ED services in alternative ways. Second, we sought to estimate the potential savings that this might generate for Medicare.

DATA SOURCES We obtained complete Medicare claims data from CMS for a random 5 percent sample of beneficiaries for the period 2005–

09, the most recent years for which such data were available. The unit of observation was a Medicare-covered ambulance event. Ambulance claims data were obtained from the Carrier and Outpatient Standard Analytic Files. Ambulance claims include information on the total cost of each transport, the level of service provided (for example, basic or advanced life support), the origin and destination, and the number of miles traveled. Combined, these files produced 3,974,724 unique transports billed to Medicare.

For each transport, we identified the associated Medicare claims for ED care and all other services. We linked each ambulance claim to its associated ED claims using the Medicare beneficiary's identifier and the date of service. The use of claims data allowed us to estimate with a high level of precision Medicare's aggregate costs for EMS transport and subsequent treatment in hospital EDs.

CASE DEFINITION Using the codes for the origin, destination, and service level of ambulance transports, we identified all Medicare payments to EMS for emergency responses that resulted in ground transport to an ED. We excluded pre-designated nonemergency ambulance transports (Healthcare Common Procedure Coding System [HCPCS] codes A0426 and A0428);^{7,8} hospital-to-hospital transfers; EMS transports originating from a physician's office, end-stage renal disease facility, or a diagnostic or therapeutic site other than a hospital, physician's office, or skilled nursing or assisted living facility; and air or water transports (HCPCS codes A0430, A0431, A0435, and A0436).

We also excluded all EMS transports to the patient's residence, a skilled nursing facility, or another residential or custodial facility; those that took place during the middle of an inpatient stay; those for cases with a missing service level or origin; and those with missing ED records. Appendix Table 1⁹ shows the frequency of each of these cases and the cumulative number of excluded observations.

Excluding these cases left us with 1,784,795 EMS transports to hospital EDs that were initiated with 911 calls. Because this count is based on a 5 percent sample of all Medicare claims, it implies that during the five-year study period, EMS units made an annual average of 7,139,180 Medicare-reimbursed transports to EDs. This estimate is similar to the number of EMS transports of people ages sixty-five and older (7,222,875) reported by the 2008 National Hospital Ambulatory Medical Care Survey (NHAMCS).¹

ANALYSIS Our analysis involved a three-step process. First, we excluded 973,489 Medicare EMS transports that resulted in hospital admis-

sion because few of these patients would be suitable for care in alternative settings.

Second, we applied to the remaining 45 percent of transports (811,306) a previously validated algorithm developed by John Billings and colleagues to classify ED visits into the following four categories of severity based on the primary discharge diagnosis: nonemergent; emergent and primary care treatable; emergent, ED care needed, and preventable or avoidable; and emergent, ED care needed, and not preventable or avoidable.¹⁰ Although the algorithm has been widely used by other groups to estimate the proportion of ED visits that might be preventable or treatable if primary care were more readily available, it is not intended to be used as a triage tool.¹¹

ED visits related to injuries, mental health problems, alcohol use, or drug use are not addressed by this algorithm and were classified separately. Patients with more than one primary diagnosis were categorized by their most severe condition.

Third, based on the output of the algorithm, we estimated the overall proportion of Medicare EMS transports that might be nonemergent or emergent and primary care treatable. Cases of this sort might be candidates for management in settings other than EDs.

To compute the costs associated with transporting patients with such low-acuity conditions to EDs, we summed the payments made for ambulance transport and ED facility and physician fees for each primary diagnosis, weighted by the percentage of patients that the algorithm classified as nonemergent or emergent and primary care treatable. Payments were adjusted for inflation to be presented in 2011 dollars.

LIMITATIONS Our analysis was limited in certain respects. First, the algorithm we used was originally developed by Billings and colleagues to evaluate access to primary care in communities.¹⁰ Another group used it recently to estimate the proportion of ED visits and hospitalizations of Medicare beneficiaries that might be preventable.¹¹ It is the best available tool for estimating the proportion of ED patients who might be safely managed in other settings. However, it is not intended to be used as a triage tool, as noted above, because there is little concordance between a patient's presenting complaint and the final diagnosis.^{12,13}

Second, because the algorithm was derived from a general population of ED patients, it might overestimate the percentage of Medicare beneficiaries who could be safely managed in non-ED settings and the potential savings. Also, because the algorithm was derived from ED visits in New York City, it might not be generalizable

to the nation at large.

Furthermore, it is possible—perhaps even likely—that ED costs associated with the care of patients categorized as emergent with a particular diagnosis are higher, on average, than ED costs associated with patients categorized as either nonemergent or emergent and primary care treatable. Thus, using the mean cost of treating patients with each diagnosis might overestimate, to some degree, the potential savings of managing patients with less acute conditions in alternative settings.

Third, although we excluded ED patients who were admitted to the hospital, physicians sometimes admit patients whom others might judge to be reasonable candidates for outpatient treatment. To the degree that such patients are deemed candidates for alternative management, the potential cost savings would be increased.

Fourth, EDs operate around the clock, but few outpatient facilities do.¹⁴ Because CMS claims do not record the time of day that a service was provided, we could not estimate the proportion of nonemergent patients who called 911 at times when alternative destinations were closed. In such instances, an EMS crew might transport a suitable patient to an after-hours urgent care center¹⁵ or arrange for nonemergency transport to a clinic the following morning. To the degree that no feasible alternatives exist, potential savings would be reduced.

Fifth, Medicare beneficiaries account for roughly 40 percent of EMS transports to EDs (tabulation of aggregate NHAMCS-ED survey data from 2003–08; Stephen R. Pitts, Emory University, personal communication, August 9, 2012). If other payers followed CMS's lead, the societal savings we project could be twice as large.¹⁶

Sixth, even under current CMS policies, up to 26 percent of 911 responses do not result in transport.¹⁷ If Medicare were to revise its policies to reimburse for 911 calls that currently do not result in transport, the addition of these calls might reduce the apparent savings. It is even possible that the number of nonemergency calls to 911 might increase. As patients became aware of expanded EMS services, some might call 911 to receive “house calls” or free transport to health care providers. Obviously, any change in policy would have to be carefully monitored to detect abuse.

Some private payers might be tempted to deny reimbursement for EMS responses that were retrospectively determined to be for nonemergency cases. This approach would be difficult to implement. It would also likely conflict with section 10101(b)(2)(A) of the Affordable Care Act, which requires insurers to cover emergency ser-

EMS providers regularly encounter patients whose complaints might be better managed in settings outside the ED.

vices if an average person determines that without medical attention, he or she could expect the condition to deteriorate to serious disability, injury, or death. This is often referred to as the “prudent layperson” standard.

Similarly, hospital-owned EMS units might be reluctant to embrace this approach for fear of violating the Emergency Medical Treatment and Active Labor Act (EMTALA) of 1986, which requires the treatment of patients requesting care from hospitals and is extended to hospital-owned ambulances. Requiring EMS crews to consult with online medical control—that is, to receive direction from a physician via radio or telephone—and to always accede to the patient's wishes regarding ED versus non-ED care might reduce this concern.

Given these various limitations, our estimated cost savings might be higher than what could ultimately be achieved. However, even if the actual savings were half as large as our baseline estimate, or an even smaller share of our most conservative sensitivity analysis (described below), the potential savings are still large enough to justify prospective research to assess the feasibility and safety of a change in policy. Of course, any change this consequential must be evaluated for safety before being widely adopted.

Currently, paramedics are neither trained nor equipped to identify patients with nonemergent conditions in prehospital settings.^{5,18,19} Pilot programs suggest that with supplemental training, medical oversight, and perhaps mobile forms of telemedicine, the use of alternative destination protocols might be feasible.²⁰ However, more evaluation is needed.²¹ The Center for Medicare and Medicaid Innovation and the Patient-Centered Outcomes Research Institute might consider supporting research on this topic.

EXHIBIT 1

Numbers And Costs Of Emergency Medical Services (EMS) Transports Of Medicare Beneficiaries, By Level Of Severity Of Emergency Department (ED) Discharge Diagnosis

	Level of severity ^a				ED visits related to: ^b			
	Primary care treatable		Emergent, ED care needed		Injury	Mental health	Alcohol use	Drug use
	Nonemergent	Emergent	Preventable or avoidable	Not preventable or avoidable				
Transports not admitted to hospital ^c	14.1%	20.4%	10.3%	32.5%	16.0%	2.1%	0.7%	0.1%
5% MEDICARE SAMPLE, 2005-09								
Transports	114,028	165,196	83,382	263,392	129,724	16,694	5,662	698
Out-of-pocket costs (millions)								
Ambulance	\$10.06	\$15.11	\$7.77	\$24.94	\$11.38	\$1.46	\$0.52	\$0.06
ED	18.32	30.70	15.59	61.63	23.19	1.73	0.59	0.08
Medicare costs (millions)								
Ambulance	\$38.01	\$57.25	\$29.46	\$ 94.51	\$42.65	\$5.44	\$1.91	\$0.24
ED	55.90	99.81	52.95	200.49	64.72	6.07	2.10	0.29
EXTRAPOLATED TO NATIONAL MEDICARE POPULATION, PER YEAR								
Transports	456,112	660,782	333,528	1,053,566	518,896	66,776	22,648	2,792
Out-of-pocket costs (millions)								
Ambulance	\$40.24	\$60.46	\$31.09	\$ 99.77	\$45.51	\$5.85	\$2.08	\$0.25
ED	73.29	122.79	62.36	246.52	92.76	6.93	2.37	0.33
Medicare costs (millions)								
Ambulance	\$152.06	\$229.00	\$117.85	\$ 378.04	\$170.61	\$21.77	\$ 7.63	\$0.96
ED	223.59	399.24	211.81	801.97	258.89	24.27	8.41	1.16
Total Medicare costs	375.65	628.23	329.66	1,180.01	429.51	46.04	16.04	2.12

SOURCE Authors' analysis. **NOTE** All costs are in 2011 dollars, adjusted for inflation by the medical Consumer Price Index. ^aSee Billings J, et al., Emergency department use (Note 10 in text). ^bED visits not assigned a level of severity by Billings J, et al., Emergency department use (Note 10 in text). ^cN = 811,306. Percentages do not sum to 100 because 4 percent of transports not admitted to the hospital had an unclassified severity level.

Study Results

We calculated that 34.5 percent of 911 EMS transports of Medicare beneficiaries who were not hospitalized were relatively low-acuity cases (either nonemergent or emergent and primary care treatable), which made them potential candidates for management at a site other than the ED (Exhibit 1). This represents 15.6 percent of all

Medicare-covered 911 EMS transports to EDs.

Annual payments for EMS and ED care of these patients averaged approximately \$1 billion per year. Of this amount, one-third (\$381 million) was paid to ambulance services, and the remainder (\$623 million) went to the EDs and physicians receiving these patients (Exhibits 1 and 2). Had these patients been managed in less expen-

EXHIBIT 2

Estimated Annual Medicare Costs For Potentially Preventable Emergency Medical Services (EMS) Transports To The Emergency Department

	Potentially preventable transports as percent of:		Medicare costs (\$)		
	All EMS transports	Transports not admitted to hospital	Ambulance	Emergency department	Total
Baseline	15.6%	34.5%	381,054,608	622,830,432	1,003,885,040
Excluding:					
Nursing home cases	16.2	35.0	323,750,760	529,983,264	853,734,024
Injury cases	12.9	28.3	314,711,344	500,916,816	815,628,160
Weekend cases	15.5	34.4	276,155,144	457,993,040	734,148,184
Nursing home, injury, and weekend cases	13.4	28.9	194,748,736	315,453,952	510,202,688

SOURCE Authors' analysis. **NOTES** Potentially preventable transports are cases whose level of severity was classified as nonemergent or emergent and primary care treatable (see Note 10 in text). All costs are in 2011 dollars, adjusted for inflation by the medical Consumer Price Index.

\$560 million

Saved

If low-acuity cases were managed in less expensive settings, Medicare could save roughly \$560 million per year.

sive settings, such as a doctor's office or an urgent care center, Medicare could have saved roughly \$560 million per year (Exhibit 3).

To estimate this total, we assumed that patients would be transported to their regular primary care providers. In that case, Medicare would pay the evaluation and management fee associated with an established patient (HCPCS code 99213). If patients were taken to a new outpatient provider, instead of their usual one, the fee would be higher (\$84.14 versus \$56.37 in 2012), reducing potential savings. If, however, EMS crews managed selected patients on scene with the concurrence of online medical control, the cost could be lower and the savings greater.

Some EMS providers might expect to receive an additional fee for rendering on-scene care. However, it is also possible that some providers would prefer to receive—instead of no payment at all—the same fee for on-scene care that they receive for transporting a patient to an ED, without the additional time and expense of transport.

Given the uncertainties in these projections, we performed several sensitivity analyses (see Exhibits 2 and 3 and the Appendix).⁹ In the first alternative scenario, we excluded transports originating from nursing homes, because a health care worker with some training probably initiated the call. In the second scenario, we excluded patients having any injury diagnosis, regardless of severity. In the third scenario, we excluded weekend cases, because alternative sites of care such as a physician's office are unlikely to be open on those days. When we used these more conservative assumptions, the annu-

al savings to Medicare ranged from \$283 million to \$477 million, with 12.9–16.2 percent of transports classified as low acuity.

Discussion

Because EMS is a transportation benefit, CMS does not reimburse EMS calls unless transport actually occurs, and it incentivizes transport to a hospital ED. This discourages emergency personnel from treating patients whose conditions would permit it on scene or from transporting them to less costly settings than the ED. During the past decade groups such as the American College of Emergency Physicians, the National Association of EMS Physicians, and the Institute of Medicine have noted that this policy creates a perverse incentive for EMS providers to transport all 911 callers to a hospital ED, regardless of patients' needs or willingness to consider less costly alternatives.²⁻⁵

There is widespread agreement that some percentage of 911 calls could be managed in non-ED settings, but that figure has been difficult to quantify. Previous studies have offered estimates ranging from 11 percent to 61 percent.^{4,22-25} Our estimate—15.6 percent—is in line with the lower boundary of this range.

Based on this figure, we estimate that CMS spends \$1 billion per year on Medicare beneficiaries who call 911 for conditions that are not urgent or could be treated by primary care. Two-thirds of this goes to the downstream costs of EDs and physicians treating these beneficiaries, and the remainder goes to EMS providers.

EXHIBIT 3

Estimated Annual Medicare Cost Savings For Using Alternative Care Settings For Potentially Preventable Emergency Medical Services (EMS) Transports To The Emergency Department (ED)

	Potentially preventable transports	Medicare costs (\$)		
		ED (actual)	Physician office (estimated) ^a	Medicare cost savings (\$) ^b
Baseline	1,116,894	622,830,432	62,959,315	559,871,117
Excluding:				
Nursing home cases	947,302	529,983,264	53,399,441	476,583,823
Injury cases	919,365	500,916,816	51,824,603	449,092,213
Weekend cases	808,544	457,993,040	45,577,614	412,415,426
Nursing home, injury, and weekend cases	567,499	315,453,952	31,989,894	283,464,058

SOURCE Authors' analysis of data from the following sources: (1) CMS.gov. Medicare Physician Fee Schedule: overview [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; [cited 2013 Nov 1]. Available from: <http://www.cms.gov/apps/physician-fee-schedule/overview.aspx>. (2) Medicare Payment Advisory Commission. Physician and other health professionals payment system [Internet]. Washington (DC): MedPAC; 2012 Oct [cited 2013 Nov 6]. Available from: http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_Physician.pdf. ^aThe Medicare cost of a low-acuity physician office visit is estimated to be \$70.46 in 2012, assuming a nonfacility setting such as a physician's office, an established patient, and a visit for the patient's evaluation or management that includes the following three components: a detailed history, a detailed examination, and low-complexity medical decision making. The beneficiary pays 20 percent of this cost, and Medicare pays the remaining \$56.37. To estimate the total costs to Medicare for these visits, we multiplied 56.37 by the number of potentially preventable transports. ^bMedicare ED costs minus Medicare physician office costs.

Bringing patients unnecessarily to the ED places needless demands on an already overburdened system.

generate annual savings of \$283–\$560 million or more. If private insurance companies followed suit, the societal savings would be greater still.

High costs are but one consequence of CMS's current approach. Bringing patients unnecessarily to the ED places needless demands on an already overburdened emergency care system. It can worsen ED crowding, exacerbate delays in treatment, prompt needless diagnostic testing, and potentially increase the risk of medical errors.^{12,26–28}

Conclusion

Giving CMS the flexibility to reimburse EMS services for alternative handling of 911 callers could save Medicare \$283–\$560 million or more per year. If private third-party payers followed suit, the societal savings could be twice as large. If prospective research confirms that EMS providers can safely identify patients with low-acuity conditions and manage them in non-ED settings, they should be encouraged to do so. ■

The Affordable Care Act realigned many incentives in the provision of health care. However, it did not address payment issues related to EMS. If Congress gave CMS the statutory authority to allow EMS a wider range of treatment and transport options, the agency could promote patient-centered EMS care.³ Simultaneously, CMS could

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Should Payment Policy Be Changed to Allow a Wider Range of EMS Transport Options?

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The Institute of Medicine and other national organizations have asserted that current payment policies strongly discourage emergency medical services (EMS) providers from transporting selected patients who call 911 to non-ED settings (eg, primary care clinics, mental health centers, dialysis centers) or from treating patients on scene. The limited literature available is consistent with the view that current payment policies incentivize transport of all 911 callers to a hospital ED, even those who might be better managed elsewhere. However, the potential benefits and risks of altering existing policy have not been adequately explored. There are theoretical benefits to encouraging EMS personnel to transport selected patients to alternate settings or even to provide definitive treatment on scene; however, existing evidence is insufficient to confirm the feasibility or safety of such a policy. In light of growing concerns about the high cost of emergency care and heavy use of EDs, assessing EMS transport options should be a high-priority topic for outcomes research. [Ann Emerg Med. 2013;■:1-17.]

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INTRODUCTION

Emergency medical services (EMS) are a core element of our nation's emergency care system.¹ According to the Centers for Disease Control and Prevention, EMS units made approximately 19 million 911 transports to emergency departments (EDs) in 2008.² EMS personnel are usually the first health care professionals to reach the scene of an emergency call, whether it involves an individual or multiple casualties. The primary purpose of EMS is to assess, stabilize, and safely transport patients with serious or potentially life-threatening conditions. However, EMS providers regularly encounter patients with a much wider range of problems.¹

Background

The majority of patients who call 911 to request an ambulance need evaluation and treatment in an ED. However, many EMS experts believe a minority of 911 callers might be better managed in non-ED settings—eg, primary care clinics, mental health centers, dialysis centers—or even definitively treated on scene, if these options were allowed.^{1,3,4} But existing payment policies strongly discourage alternative courses of action. In a recent editorial, Munjal and Carr⁴ noted that “Medicare and other payers provide no reimbursement for out-of-hospital care including response, triage, and patient assessment and treatment unless the patient is transported to an emergency department.”

During the past decade, several national organizations, including the Institute of Medicine, have urged that payment policies be modified to enable EMS crews to transport selected patients to the destination best suited to their needs.^{1,5-7} To gain a clearer understanding of what is known about the feasibility and safety of

a potential change in policy, the US Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response asked the RAND Corporation to examine this topic.

Sources

To inform our analysis, we conducted an augmented PubMed search of relevant English-language articles published from January 1, 2001, to May 31, 2013. Primary search terms included “emergency medical services” or “ems” or “paramedic.” These were combined with the following additional search terms: “treat and release,” “non-emergency department,” “non-ED,” “non-emergent,” “transport,” “alternative transport,” “low acuity,” “community paramedic,” or “transportation of patients.” A second PubMed search identified all related articles from 2 particularly relevant studies.^{8,9} All extracted titles and abstracts were screened by a RAND reference librarian for relevance and duplication before being independently evaluated by 2 experienced team members.

To identify articles in the gray literature, we conducted additional searches, using Google Scholar and Google. We also queried the Web sites of the Institute of Medicine, the National Association of EMS Physicians, the American College of Emergency Physicians, the Department of Health and Human Services, and the Centers for Medicare & Medicaid Services (CMS). To familiarize ourselves with current CMS Policy on Ambulance Service Payment and Rules, we examined the agency's Web site, <http://www.cms.gov>. We also cross-indexed bibliographies and reference lists to identify any articles we might otherwise miss. Finally, we consulted with 3 EMS experts at United States Department of Health and Human Services

(HHS), as well as 9 EMS medical directors, to ensure that we did not overlook a relevant study.

To be as inclusive as possible, we did not filter studies according to methodological criteria. Rather, we sought to identify as many relevant articles as possible from what we anticipated would be a sparse literature. Therefore, this synthesis is not a systematic review.

Analysis

Our PubMed search identified 1,116 candidate references. Preliminary screening reduced the total to 229 potentially relevant articles. Dual-researcher review further narrowed the list to 41 articles. Twenty-two additional references were identified through the alternate search methods described above. After a second round of dual-researcher review, our final list contained 61 titles (Appendix E1, available at www.annemergmed.com). A brief synthesis of this literature follows, organized around 3 themes: (1) what is CMS' current EMS reimbursement policy? (2) what proportion of EMS transports might be safely managed in alternate care settings? and (3) can EMS providers accurately identify patients who can be safely managed in non-ED settings?

What Is CMS' Current EMS Reimbursement Policy?

Medicare payment for ambulance service is primarily covered under Medicare Part B (Supplemental Medical Insurance).¹⁰ (Section 1861(s) (7) of the Social Security Act establishes an ambulance service as a Medicare Part B service.) Because Medicare's ambulance benefit is considered a transportation benefit, there is no payable service unless transport occurs.^{3,7,10} To be reimbursed, transport must be determined to be both "reasonable" and "medically necessary."¹⁰ In most cases, Medicare defines "medically necessary" as a condition sufficiently serious to require care in an ED.¹⁰ Medical necessity for ambulance services is established, by statute, when the patient's condition is such that any other method of transportation is contraindicated. Medicare regulations allow ambulance transport to several destinations, including a hospital, critical access hospital, or skilled nursing facility and also allow taking an acutely ill dialysis patient to and from a dialysis center.¹⁰ However, in practice the majority of Medicare-reimbursed 911 ambulance calls involve transport to an ED.⁷

In 2002, Medicare's approach to EMS reimbursement transitioned to a fee schedule.¹⁰ Payment rules are specified at 42 CFR Part 414, Subpart H. The revised fee schedule was the product of a negotiated rulemaking process consistent with the Federal Advisory Committee Act and the Negotiated Rulemaking Act of 1990.^{10,11} Under this approach, payment for traditional 911-initiated EMS ground transport is based on one of 5 possible levels of service: specialty care transport, plus 4 others: (1) basic life support; (2) advanced life support, level 1; (3) advanced life support, level 2; and (4) paramedic advanced life support Intercept.¹⁰ Subsequent regulations (42 CFR 414.610[c][1] [Ground ambulance service levels]) expanded the list to 7 levels. Currently, payment for EMS

ground services is determined by a base payment set by the level of service, plus a separate payment for mileage and applicable adjustment factors.^{11,12} Mileage payments and certain adjustment factors were added to provide additional support for EMS services that originate in rural settings, in which the closest receiving facility may be miles away.¹³

EMS experts have criticized this payment methodology for more than a decade. The "Emergency Medical Services Agenda for the Future," a 1996 consensus report sponsored by the National Highway Traffic Safety Administration, made the following recommendations:

"The Health Care Finance Administration (HCFA) [predecessor to CMS], and others responsible for establishing policy with regard to EMS payment, must eliminate patient transport as a requirement for compensating EMS systems. Patient assessment and care delivered, regardless of whether or not transport occurred, must be recognized and compensated appropriately. Additionally, the cost of system preparedness (eg, readiness costs) should be recognized. Alternative models for determining rates of reimbursement must be developed."¹⁴

In 2001, the National Association of EMS Physicians and the American College of Emergency Physicians jointly issued a statement: "EMS systems may encounter patients who do not need advanced life support care or evaluation at an emergency department. In these circumstances, transportation by alternate means or to an alternate destination may be appropriate."¹⁵

In 2007, the Institute of Medicine Committee on the Future of Emergency Care in the US Health System noted that existing EMS payment policies "...are suspected of adding unnecessary costs to the health care system and burdening already overburdened hospital-based providers."¹ Believing that existing policy discourages EMS agencies from providing the most appropriate care to each patient, the Institute of Medicine recommended that CMS "investigate whether Medicare and Medicaid payment methodologies should be revised to support payment for emergency care services in the most appropriate setting (including treat and release)."¹

In 2011, the National Association of EMS Physicians reaffirmed its earlier statement, noting that "...there may be potential for emergency medical services (EMS) providers to avert unnecessary emergency department visits by providing a medical assessment to determine whether patients can safely be managed without emergency transport to an acute care facility."¹⁶

The decision to transport a 911 caller to the ED is based on a wide array of clinical, logistic, and medicolegal considerations that may have little or nothing to do with reimbursement. Nevertheless, the position statements of these organizations and the literature published to date suggest that Medicare's current approach to reimbursement incentivizes EMS units to transport 911 callers to EDs, irrespective of the severity of the patient's condition. Because state Medicaid programs and private insurers often follow Medicare's lead, the effect of CMS policy as currently defined by federal law reaches far beyond the Medicare population.⁴

What Proportion of EMS Transports Might Be Safely Managed in Alternate Care Settings?

EMS is intended to provide out-of-hospital care and transportation to severely ill or injured patients.¹ However, experience has shown that patients call 911 for a wider range of complaints, some less serious than others.¹⁷ Published reports estimate that between 11% and 61% of ambulance transports may not require immediate care in an ED.^{8,15,18-22} Among Medicare beneficiaries, retrospective studies estimate that between 7% and 34% of 911 callers might be safely managed in alternate settings.^{1,4,22} In 2011, Weaver et al,²⁰ analyzing nationally representative data from the National Center for Health Statistics, concluded that the proportion of EMS transports that are medically unnecessary appears to be increasing. Although these reports suggest that some fraction of 911 callers could be managed in alternate settings, none of them described their methods in sufficient detail to support a firm conclusion. Furthermore, the wide range of estimates raises questions about the reliability of these figures.

Can EMS Providers Accurately Identify Patients Who Can Be Safely Managed in Non-ED Settings?

In theory, alternate destination decisions could be made at any of 3 points in the continuum of EMS care: during dispatch, when the 911 call taker determines the initial course of action; on scene, as transport options are being considered; and during transport, the point at which a patient's destination is ultimately determined.²³ Our review focused on on-scene and transport decisions because they are made by emergency medical technicians (EMTs) or paramedics who have had an opportunity to evaluate the patient in person.

A few EMS agencies have implemented protocols that either allows their EMS providers to transport selected 911 patients to alternate care settings or to treat on scene without subsequent transport. Two articles, both published in the 1990s, noted that between 23% and 30% of the reporting agency's EMS responses resulted in the patient being evaluated and treated on scene, but not transported to an ED.^{23,24}

EMS agencies like these are the exception rather than the norm; most agencies expect their EMTs and paramedics to transport patients to an ED.^{7,18} According to one survey, only 10% of EMS agencies serving the 200 largest US cities have written protocols allowing EMS providers to discuss health care options with patients who may not require ambulance transport to an ED.¹⁹ Only 7% of services serving the 200 largest US cities allow their EMS providers to deny ambulance transport to a patient they believe does not need it.⁹

All of these articles presuppose that EMS professionals can safely determine nonemergency patients. But this has not been clearly established. The potential for undertriage is real if a responding EMT or paramedic fails to recognize the severity of a patient's problem.^{15,24,25}

To date, most of the studies examining this question have focused on the ability of paramedics and EMTs to determine

the need for transport to an ED. We identified 13 such studies (Table 1). A representative example is the study published by Pointer et al²⁶ in 2001. Paramedics were asked to use explicit transport and treatment guidelines to make their triage determination, based on the presumption that they would render treatment on scene or transport selected patients to alternate destinations. To ensure patient safety, all patients were in fact transported to an ED. Ultimately, the paramedics' presumptive plan was compared to the ED criterion standard evaluation to determine the accuracy of assessments. The authors found that about 10% of patients assessed as "not requiring ED care" would have been undertriaged. More than half of undertriaged cases represented violations of the agency's newly adopted guidelines. The authors concluded that "more extensive education of paramedics might have prevented [the] errors...when paramedics incorrectly used the guidelines."²⁶ However, the authors did not comment on the quality of the guidelines themselves.

Nearly all the studies published to date have found significant rates of undertriage by EMS personnel, ranging from a low of 3% to a high of 32%. Because the triage methods varied, we could not aggregate the data for analysis. In addition, different studies use different approaches to assess the accuracy of paramedic triage decisions. Some compared their paramedics' decisions to expert physician opinion. Others used explicit criteria to identify necessary visits, such as performance of ED-specific clinical procedures, the occurrence of critical events, or other short-term outcomes. The lack of a consistent approach makes it difficult to assess the accuracy of field triage or benchmark services against one another.^{15,17,27}

A few EMS systems have gone beyond assessing the accuracy of out-of-hospital triage to examine how alternate destination protocols affect outcomes. Management options examined include on-scene treatment without subsequent transport, referral of patients to non-ED settings, or transport to an alternate destination such as the patient's primary care clinic.^{3,5,6,28-43} Table 2 lists the EMS systems that have reported on such programs. Unfortunately, few described or evaluated their efforts with sufficient rigor to support confident conclusions about the accuracy, safety, and effectiveness of the options used.

Ideally, the outcomes achieved by EMS agencies using alternate destination protocols should be comparable to or better than those achieved by transporting these patients to an ED.⁴⁴ Two studies conducted in Sheffield, England, followed up on patients managed by community paramedics to assess how using alternate destination protocols affected outcomes.^{30,35} The authors reported that "paramedics with extended skills can provide a clinically effective alternative to standard ambulance transfer and treatment in an emergency department for elderly patients with acute minor conditions."³⁰ They also noted that using paramedics with extended skills to treat older patients with minor health conditions was as safe as the current community standard: EMS transport for evaluation and treatment in an ED.³⁰

Table 1. Comparison of triage decisions.

Study	Study Population	Triage Decision Point	Methods	Results
Brown et al, 2009 ⁵⁴	A meta-analysis of 5 studies evaluating the ability of US paramedics to determine medical necessity of ambulance transport.	Treatment and transport options	Reference standards included physician opinion (n=3), hospital admission (n=1), and a composite of physician opinion and patient clinical circumstances (n=1). NPV was reported in all studies reviewed and was the basis for the meta-analysis primary results.	The NPV of the paramedic determinations ranged from 0.610 to 0.997. The aggregate NPV (calculated from the random effects meta-analysis) is 0.91 (95% Confidence Interval (CI) 0.71–0.98). The data do not support the practice of paramedics' determining whether patients require ambulance transport.
Silvestri et al, 2002 ⁵⁵	The study of 313 patients transported by a private EMS agency to a large ED during 14 days in an urban county.	Treatment and transport options	Paramedics completed a survey detailing the necessity for transport to an ED for each patient. Patients were identified as requiring ED care if they (1) were admitted; (2) required surgical, surgical subspecialty, obstetric, or gynecologic consultation; or (3) required advanced radiologic procedures (excluding radiographs).	In predicting the requirement for ED, the paramedic assessment was 81% sensitive (95% CI is equal to 72%–88%) and 34% specific (95% CI 28%–41%). Paramedics thought ED transport was unnecessary in 85 cases; of these, 27 patients (32%) met criteria for ED treatment, including 15 who were admitted and 5 who were admitted to an ICU.
Gratton et al, 2003 ^{19*}	Paramedics prospectively assessed 825 adult patients transported to an ED during a 6-week period. The setting was an urban, all advanced life support, public utility model EMS system with 58,000 transports per year.	Treatment and transport options	Paramedics determined medical necessity of patient transport according to 5 criteria: (1) need for out-of-hospital intervention; (2) need for expedient transport; (3) potential for self-harm; (4) severe pain; and (5) other. An emergency physician used the same criteria to make a blinded determination on patient arrival in the ED.	Paramedics determined 236 (29%) transports were not necessary compared with 248 (30%) by emergency physicians; however, agreement on the patients not needing transport was only 76.2% (Kappa=0.42). As a result of this discrepancy, paramedics undertriaged 92 patients (11%).
Schmidt et al, 2000 ⁵⁶	A prospective study of 1,300 determinations of transport options made by EMTs using developed protocols. After education on the protocols, first responders and ambulance EMTs categorized patients (at the scene before transport) as (1) needs ambulance; (2) go to the ED by alternative means; (3) contact primary care provider; or (4) treat and release. Using the protocols did not modify current practice.	Treatment and transport options	Ambulance reports were reviewed with a predetermined list of critical events that signified the need for an ambulance. Categorizations by a first responder and the transporting EMT were compared for 209 patients.	Collapsing the 4 categories into a binary response, "need ambulance/do not need ambulance," showed a fair concordance (Kappa=0.51) between the 209 patients assessed by both the EMT and first responder. Results indicate that 7 (3%) patients determined to not need an ambulance had critical events in the ambulance warranting ambulance transport.

Table 1. Continued.

Study	Study Population	Triage Decision Point	Methods	Results
Schmidt et al, 2001 ⁵⁷	EMTs used protocols to categorize 1,300 patients as (1) needs ambulance; (2) may go to ED by alternative means; (3) contact primary care provider; or (4) treat and release. EMTs categorized patients at the scene before transport but did not change current practice.	Treatment and transport options	Using hospital outcomes, this study evaluated EMTs' ability to use protocols to determine appropriate transport options. Hospital charts for 140 (51%) patients categorized as not needing ambulance transport were reviewed to determine outcome of patients whom EMTs categorized as not needing an ambulance.	Thirteen of 140 (9%) patients were considered to be undertriaged.
Knapp et al, 2009 ⁵⁸	A prospective study conducted by Norfolk Fire-Rescue (Norfolk, VA). Participating paramedics used criteria to identify patients who were deemed safe for taxi (vs ambulance) transport to the nearest ED. Transport inclusion guidelines and exclusion criteria were created with reference to published literature and alternative transport policies in other EMS agencies; 93 enrolled subjects were provided with prepaid taxi vouchers to the closest ED.	Treatment and transport options	Researchers reviewed patient hospital and emergency dispatch records to collect predetermined outcome criteria.	93 subjects in the study were transported to the ED by taxi; 9 were subsequently admitted to the hospital. Three patients were determined to be improperly enrolled by EMS because they met the exclusion criteria. The study suggests that EMS providers underestimate the potential severity of illness.
Pointer et al, 2001 ^{26*}	A prospective study in an urban county EMS system and county hospital. Study included 1,180 911 patients who were subsequently transported. Using study transport and treatment guidelines, paramedics triaged patients to one of 4 categories: (1) needed to come to the ED by advanced life support transport; (2) needed to come to ED by any transport; (3) needed to see physician within 24 hours; or (4) did not need further evaluation. Paramedics scored 80% or above on a test of their knowledge of transport and treatment guidelines.	Treatment and transport options and destination options	After a completed ED evaluation, an emergency physician review panel reviewed medical records. The panel was blinded to the paramedic's selection and determined which of the 4 categories was most appropriate.	The review panel determined that 113 (9.6%) patients were undertriaged: 22 (19.6%) were admitted, 86 (76.1%) were discharged, and 4 (3.5%) were transferred. Causes of undertriage included the following: 55 (48.7%) patients were misclassified because the paramedics misused the guidelines, 32 (28.3%) patients were undertriaged because there was no appropriate guideline instruction, and 27 (23.9%) patients were misclassified because the guidelines themselves undertriaged. The review panel determined that 99 patients (8.4% of the total sample) were incorrectly classified as not needing to come to the ED.

Table 1. Continued.

Study	Study Population	Triage Decision Point	Methods	Results
Dunne et al, 2003 ¹⁸	A prospective study in which EMS personnel assessed patient's need for urgent (within 6 h) transport by ambulance, using a yes/no rating. No new protocols or training was undertaken. All patients were transported to the nearest system hospital, and EMS personnel rated the patients as needing emergency treatment transport before hospital transport. The study included 277 patients who were transported to an ED by ambulance.	Treatment and transport options	Physician reviewers were blinded to the paramedics' classification of the need for ambulance transport. Using predefined criteria, they determined eligibility for nonambulance transport. Patients were determined to need ED care if any of the following occurred during their out-of-hospital or ED course: admission or transfer to a hospital, an observation unit, or a psychiatric crisis center; IV treatment in ED; or death in the ED.	EMS personnel identified 220 (79.4%) of 277 low-risk patients as eligible for nonambulance alternative transport to the hospital. Compared with that of the physician reviewers, the EMS personnel's results yielded a sensitivity of 22.1% and a specificity of 80.5%. A majority of the patients included in the study were not in need of immediate ambulance transport. A major finding is that paramedics (unaided by triage protocols or specific training) could not adequately identify patients in need of emergency treatment.
Hauswald, 2002 ^{47*}	A prospective study in which paramedics completed a brief questionnaire for each patient they transported to a university hospital ED during a 1-month period. Questions included (1) could this patient have been safely transported by a nonmedical transport service? and (2) could this patient have been safely transported to a clinic or urgent care center? Paramedics completed 236 forms; 183 corresponding ED charts were reviewed.	Treatment and transport options and destination options	A faculty emergency physician blinded to the paramedic's survey responses reviewed hospital records for study patients. Ambulance transport was defined as needed if the differential diagnosis was prospectively determined to benefit from a treatment available during transport. ED care was defined as "needed" if treatment of the diagnoses would require resources not available in local urgent care centers.	Paramedics reported that 97 pts (53%) were appropriate for alternative transport, 23 (24%) of whom "needed" ambulance transport. Additionally, paramedics reported that 71 (38%) patients were appropriate for transport to an alternative care site, 32 (45%) of whom "needed" ED care.
Richards and Ferrall, 1999 ⁵⁹	A prospective, cross-sectional study of 887 patients arriving by ambulance at an urban, university hospital ED.	Destination options	EMS providers completed a questionnaire predicting admission to the hospital. Predictions were compared to actual patient disposition.	EMS providers accurately predicted hospital admissions 79% of the time, with a sensitivity of 72% and specificity of 83% (Kappa=0.56).
Levine et al, 2006 ⁶⁰	A prospective, cross-sectional study at an urban hospital of consecutive EMS transport patients. Paramedics were asked to predict whether the patient they were transporting would require admission to the hospital, and, if so, whether that patient would be admitted to a ward bed or require an ICU bed. Questionnaires and complete data were available for 952 patients.	Destination options	Paramedic predictions were compared with actual patient disposition.	Paramedics predicted that 202 (22%) patients would be admitted to the hospital, of whom 124 (61%) would go the ward and 78 (39%) would require intensive care. The actual overall admission rate was 21%, although the sensitivity of predicting any admission was 62%, with a PPV of 59%. Further, the paramedics were able to predict admission to intensive care with a sensitivity of 68% and PPV of 50%.

Table 1. Continued.

Study	Study Population	Triage Decision Point	Methods	Results
Price et al, 2005 ⁶¹	A prospective study of patients being transported by a local EMS service. A total of 411 patient transports analyzed. EMS providers were asked to predict disposition of the patient according to 3 categories: (1) discharged to home; (2) admitted to a floor bed; and (3) admitted to a critical care bed.	Destination options	ED personnel provided the data on the actual disposition of the patient.	The EMS providers correctly identified most patients who were discharged to home: 209 of 253, 85% (95% CI 79.7%–89.1%). They also did well at predicting patients who would not need a critical care bed: NPV 96.2% (95% CI 93.4%–97.9%).
Sasser et al, 1998 ⁶²	A survey about the need for ED evaluation was completed by paramedics after patient transport and by emergency physicians after initial examination. Both groups were blinded. The study population was 3,347 patients and surveys were completed by both paramedics and emergency physicians for 509 (15%) of the patients. These were evaluated for concordance.	Destination options	Paramedics and emergency physicians were asked whether the patient needed to be seen in the ED. Agreement was defined as the same answer (“yes,” “no,” or “don’t know”).	Agreement was 68% (345/509; Kappa=0.30). In the 173 cases in which paramedics indicated that no ED evaluation was necessary, emergency physicians disagreed in 91 (52%) of the cases.

EMT, emergency medical technician; NPV, Negative predictive value; PPV, positive prediction value.

*Included in the meta-analysis conducted by Brown et al (2009).

DISCUSSION

In the United States, most EMS agencies derive the bulk of their revenue from fee-for-service payments collected from public and private insurance carriers.^{1,45} Although some rely on other sources of support such as state funding or local tax revenue, Medicare accounts for approximately one third of payments. A few EMS agencies derive as much as 80% of their revenue from Medicare.⁴⁵ Because private insurance companies generally follow Medicare’s lead in determining payment policy, coverage restrictions are critical determinants of the fiscal health of EMS systems nationwide.¹

According to CMS’ interpretation of its statutory authority under federal law, EMS agencies are reimbursed only when a patient is transported to a destination recognized in regulations.^{10,11,12} In most cases, this is an ED. As a result, EMS systems that transport patients to alternative destinations stand to lose a substantial amount of revenue.

CMS’ current policy is intended to discourage fraud and ensure the appropriate use of EMS resources. However, many EMS experts assert that it has the unintended effect of promoting unnecessary transports to EDs. If it were shown that some fraction of these patients could be safely transported to alternate settings or managed appropriately on scene, Medicare and other payers might be able to reduce spending for ED care without producing adverse consequences to patients.^{8,46} At the moment, such benefits are only theoretical, not established by strong studies.

The lack of rigorous research on this topic may be one reason Congress has not altered the statute that guides CMS policy on EMS. The Patient Protection and Affordable Care Act contained several provisions designed to change delivery of hospital services and primary care, but it made no changes to delivery of EMS. The recently established Center for Medicare and Medicaid Innovation is exploring a variety of innovative approaches to care, but EMS has largely been excluded from this conversation.

In theory, enabling EMS personnel to treat selected patients on scene or to transport them to alternate destinations could reduce pressure on overburdened EDs, much as retail clinics and urgent care centers have provided consumers with less costly options for treating minor illnesses and injuries.⁴⁶ Giving EMS crews this option might enable them to return to service more quickly, increasing their availability for the next 911 call. Transporting selected EMS patients to their physician or a community health center might promote continuity of care while generating savings for Medicare and other third-party payers.^{15,26,47} To date, such benefits are hypothetical; verifying them will require better evidence than what has been compiled to date.

There is also a possibility that a change in policy could trigger adverse consequences for EMS patients. This is more than a theoretical concern. Shifting the care of ED patients to outpatient or office-based care is appealing in concept but difficult to accomplish in practice.⁴⁸ Even experienced emergency nurses have difficulty determining which patients are really sick

Table 2. Examples from other EMS systems.

EMS System or Location	Description
Idaho's Medicaid program	Idaho's Medicaid program was the first to create new coverage levels for "respond and evaluate" and "treat and release," thus providing payment for EMS services that do not result in transport to the ED. ³ In cases in which the patient is transported but the transport is judged not medically necessary, the Idaho Medicaid Ambulance Review may penalize the EMS provider by downgrading a claim to "respond and evaluate" or "treat and release." Under House Bill #663 passed by the 2006 Idaho legislature, a \$3.00 co-payment is also levied on patients if the medical condition did not require emergency ambulance transportation. ³¹ The new coverage levels were introduced in 1997 and continue today. We found no reports of the policy's effect.
Orange County, NC	In 1996, Orange County, NC, introduced a program that allows paramedics with additional training to make determinations about the most appropriate disposition for emergency care. Patients with less severe presentations can be treated on site and then referred to a primary care provider for follow-up or transported to a physician's office or primary care clinic by ambulance or alternative mode of transportation (eg, personal vehicle, taxi). ^{3,32} Outcome data are not available.
Wake County, NC	In 2009, Wake County, NC, initiated an APP program. ^{3*} One program aim is to transport patients with mental health or substance abuse crises to non-ED facilities when no other medical emergency exists. APPs evaluate a patient alongside paramedics to help make determinations about whether the patient would be more appropriately cared for at another care destination. The APP determines the best alternative destination and arranges for the patient's transportation and admission. APPs also provide close medical monitoring for frequent EMS users (eg, diabetic patients, high blood pressure patients with congestive heart failure, those with increased risk of falls, some substance abusers, and children with asthma) to prevent future EMS use. APPs receive additional training through an in-house education program consisting of more than 200 didactic hours and 128 clinical hours. Outcome data have not yet been reported.
King County, WA	Between August 2000 and January 2001, 2 fire-based EMS agencies in King County, WA, participated in an alternate care destination pilot program. ³³ In the first phase, EMS responders received training, potential alternative destinations were identified (eg, urgent care, walk-in clinics, office-based practices), and inclusion criteria were validated without altering patients' destination of care. In the second phase, qualified patients were offered transport to an alternative non-ED destination according to paramedics' assessments. Formal evaluation found that the program reduced the proportion of patients receiving ED care by 15%. A follow-up of patients who went to alternative destinations suggested that they were satisfied with their care; cost data were not provided.
Grady EMS	Recently, Grady EMS, the sole 911 ambulance service serving Atlanta, GA, began allowing paramedics with additional training the option to transport low-acuity patients to one of the Grady Health Systems' clinics rather than to the ED. ⁴⁵ Although specific impact and safety data have not yet been reported, the medical director of Grady EMS estimates large cost savings from the new program because "Grady clinics charge between \$20 and \$75 per visit, depending on patient income and [Grady's ED] charges non-urgent patients at least \$220 to be evaluated and treated by a doctor." ⁶ Because the Grady Health System is Atlanta's principal provider of indigent health care under contract with 2 county governments, these cost savings will be internalized by the Grady Health system.
MedStar Alternative Destination/ Alternative Transport Program, Fort Worth, TX	In Fort Worth, TX, the MedStar Alternative Destination/Alternative Transport Program trains selected paramedics to the level of APP. The APP is dispatched along with paramedics for cases that are potentially low acuity. The APP can assess and treat the patient without transport in certain cases or arrange transport to an alternative destination. The system has not reported outcome data on the program's safety or cost savings.
London, England	London, England, is currently implementing a program to dispatch CAUs—a solo paramedic in a nontransport vehicle—to assess the appropriate clinical pathway for likely low-acuity patients. After the CAU's assessment, the paramedic can perform on-scene treatment if appropriate; refer the patient to a primary care clinic, walk-in clinic, or another facility; or call an ambulance for transport. The CAUs were first trialed in 2010 in Barnehurst and are expanding to other sites. Paramedics in London have 24-hour access to online medical control (physicians or senior paramedics) and APPs and paramedic consultants may soon be introduced. ³⁴ Presumably, follow-up evaluations of this program are in progress, but the data are not yet publicly available.

and which are not.⁴⁹ A recent analysis of data from the National Hospital Ambulatory Medical Care Survey—ED subsample found that many patients who come to EDs with the same presenting complaints as patients generally thought to represent "inappropriate" ED visits turned out to require immediate emergency care or hospital admission.⁵⁰ In our view, if it is difficult for experienced emergency nurses to accurately identify nonurgent patients, is it reasonable to ask whether paramedics working in the field can do better? At present, there is insufficient evidence to address this question.⁴⁷

An EMT or paramedic decision to transport a patient hinges on multiple considerations, including clinical, logistic,

medicolegal, and even social concerns. But the role of reimbursement cannot be ignored. Several organizations, including the American College of Emergency Physicians, National Association of EMS Physicians, National Highway Traffic Safety Administration, and the Institute of Medicine, have noted that Medicare's existing policy encourages transport of patients who might not require ED services, a practice that increases ED workload, increases costs, and restricts options to provide more patient-centered care.⁴

A change in Medicare's existing policy toward EMS reimbursement might produce significant benefits; however, it could also entail risks. Therefore, any change contemplated

Table 2. Continued.

EMS System or Location	Description
Sheffield, England	In 2002, Sheffield, England, introduced a program to triage transports for elderly patients who call EMS with minor acute conditions such as falls, limb, or head injuries. PPs are sent to the scene if the advanced medical priority dispatch system or dispatched paramedics find that the incident meets certain criteria. Patients are assessed by the PP and treated on site when possible, or the PP arranges for transport to the ED or other care destination. PPs receive additional training at the emergency nurse practitioner level. ^{28,29} A cluster randomized controlled trial was undertaken of PP compared with usual care. Results include the following: (1) the intervention group received more PP contact time; (2) the intervention group reduced the proportion of ED attendances (53.3% vs 84.0%) and time in the ED (126.6 vs 211.3 minutes); (3) there was some evidence of increased use of health services in the days after the incident for patients in the intervention group; and (4) total costs in the intervention group were 140 UK pounds (approximately US \$218 [†]) lower when routine data were considered ($P=.63$). ³⁵ In a similar evaluation, Mason et al ³⁰ found that patients in the intervention group were less likely to attend an ED (relative risk 0.72; 95% CI 0.68–0.75) or require hospital admission within 28 days (relative risk 0.87; 95% CI 0.81–0.94) and experienced a shorter total episode time (235 vs 278 minutes; 95% CI for difference –60 to –25 minutes). Patients in the intervention group were more likely to report being highly satisfied with their health care episode (relative risk 1.16; 95% CI 1.09 to 1.23). There was no significant difference in 28-day mortality (relative risk 0.87; 95% CI 0.63–1.21). Mason et al ³⁰ concluded that “paramedics with extended skills can provide a clinically effective alternative to standard ambulance transfer and treatment in an ED for elderly patients with acute minor conditions.” ³⁰ In another study evaluating the safety of clinical decisions made by PPs, researchers used a cluster-randomized controlled trial for patients aged >60 years and contacting the EMS with a minor injury or illness. The safety of the new PP intervention was compared with standard practice of EMS transfer and ED treatment. Clinical records were rated independently by 2 senior ED clinicians to identify related episodes, avoidable subsequent episodes, and suboptimal care. Of the 2,025 patients included in this analysis, 219 (10.9%) went on to have an unplanned ED attendance within 7 days. Of these, 162 (74.0%) represented with a condition related to their index episode. The independent raters agreed on suboptimal care 83.4% of the time. There were 16 agreed-on episodes related to suboptimal care (0.80%). No significant differences were found between intervention and control groups related to re-presentation at hospital within 7 days for a related condition or rates of assessed suboptimal care. The authors concluded that appropriately trained paramedics with extended skills treating older people with minor acute conditions in the community are as safe as standard EMS transfer and treatment within the ED. ³⁰
Winnipeg, Canada	In Winnipeg, Canada, paramedics evaluate and triage patients at the scene of the incident. If medically appropriate, transport can be arranged for non-ED destinations such as urgent care clinics, primary care physicians, and other sites. The paramedic can also choose whether to transport the patient by ambulance, paramedic response vehicle, or taxi. ³⁶ Data on program effect have not yet been published.
Ontario, Canada	Ontario, Canada, has experimented with pilots for alternative destination EMS transports ³⁷ ; British Columbia, Canada, is planning to implement a program called Expanded Care Paramedics (based on the UK model) to provide treat-and-release care for appropriate patients or to arrange follow-up care. ³⁷
New South Wales, Australia	New South Wales, Australia, uses the CARE program to triage patients for “see and treat” or direct referral to non-ED destinations. New South Wales is considering making CARE training a component of core paramedic training. ECPs have been introduced in New South Wales to provide a higher level of care and determinations for low-acuity patients. ³⁶
Scotland	In 2004, Scotland rolled out the Clinical Care Pathways Program nationwide. It allows paramedics to not transport patients to the ED when they have 4 specific conditions (nosebleed, mild seizures, mild asthma, and hypoglycemia), instead providing a referral to a nonhospital destination. ³⁹ Over time, the number of conditions eligible for nontransport has been expanded.
New Zealand	In 2009, the Kapiti Coast District of New Zealand implemented a model of care called UCC. This program sends paramedics with additional training (ECPs) to the scene to assess the appropriate clinical pathway: provide on-scene treatment without subsequent transport, referral to a primary care physician, or transport to the ED or another facility. ⁴⁰⁻⁴² An additional service, trialed by Levin St John, encourages the treatment of patients by paramedics at the scene, rather than having them transported to Palmerston North Hospital. In the program’s first 8 mo, the 5 trained paramedics had seen 2,390 patients; 1,221 of them avoided a trip to the hospital. The paramedics in the trial all had at least 10 y of experience and had undergone a further 6 week of training. The UCC was used in cases that were “relatively minor” but that would traditionally require a hospital visit. ⁴³

APP, Advanced Practice Paramedic; CAU, clinical assessment unit; PP, paramedic practitioner; CARE, Clinical Assessment and Referral; ECP, extended care paramedic; UCC, Urgent Community Care.

*<http://www.wakegov.com/ems/about/staff/Pages/advancedpracticeparamedics.aspx>.

[†]Calculated with a conversion rate of 0.641503 British pounds to US \$1.

should be prospectively evaluated before it is implemented. Rigorous studies are needed, ideally using randomization with blinded outcome assessment, with measures such as those selected by EMS experts at the Neely Conference.⁵¹ Studies

this sophisticated require a more substantive commitment of support than local EMS agencies can provide on their own. That makes the question an ideal topic for funding by the Center for Medicare and Medicaid Innovation, the Patient Centered

Outcomes Research Institute, or the Agency for Healthcare Research and Quality.

Some work is already going forward. Among the 107 recently funded Center for Medicare and Medicaid Innovation Health Care Innovation Awards are 3 projects that are testing innovative approaches to delivering EMS.⁵² In Washoe County, NV, a Community Health Early Intervention Team is assessing a new nonemergency number that lower-acuity and chronic disease patients can use to access care without triggering a full EMS response.^{52,53} In Washington State, the Prosser Public Hospital District is testing a program that allows local physicians to send community paramedics to visit at-risk patients, provide in-home medical monitoring, conduct follow-up examinations, collect laboratory specimens, and provide patient education.⁵² In southwest Colorado, the Upper San Juan Health Service District is assessing a care delivery model that enables specially trained members of its EMS Division to provide in-home follow-up care to more than 3,400 patients in medically underserved areas.⁵² It is hoped that the Center for Medicare and Medicaid Innovation and other federal agencies will continue to assess innovative approaches to EMS.

CONCLUSION

Under current Medicare reimbursement policy, EMS agencies have a strong incentive to transport 911 patients to an ED, regardless of where the patient might be best served.⁴ Although there are potential benefits to allowing EMS personnel to treat carefully selected patients on scene or transport them to alternate destinations, there are unanswered questions about the strategy's feasibility and safety. The few evaluations conducted to date are interesting but inconclusive.^{5,30,33,35} Given the potential implications of a change in policy, carefully designed demonstration projects are needed to prospectively assess the potential influence and cost-effectiveness of allowing EMS agencies to use a wider range of transport options. In light of growing concern about the high cost of emergency care and heavy use of EDs, this issue should be a high-priority topic for outcomes research.

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California Code of Regulations
Title 22. Social Security
Division 9. Pre-Hospital Emergency Medical Services
Chapter 4. Paramedic

Article 1. Definitions

§ 100135. Approved Testing Agency.

"Approved Testing Agency" means an agency approved by the Emergency Medical Services Authority (Authority) to administer the licensure examination.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.185, Health and Safety Code. Reference: Sections 1797.172 and 1797.185, Health and Safety Code.

§ 100136. Emergency Medical Services System Quality Improvement Program.

"Emergency Medical Services System Quality Improvement Program" or "EMSQIP" means methods of evaluation that are composed of structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process and recognize excellence in performance and delivery of care, pursuant to the provisions of Chapter 12 of this Division. This is a model program which will develop over time and is to be tailored to the individual organization's quality improvement needs and is to be based on available resources for the EMSQIP.

Note: Authority cited: Sections 1797.107, 1797.172, 1797.185, Health and Safety Code. Reference: Sections 1797.172 and 1797.204 Health and Safety Code.

§ 100137. Paramedic Training Program Approving Authority.

"Paramedic training program approving authority" means an agency or person authorized by this Chapter to approve a Paramedic training program and/or a Critical Care Paramedic (CCP) training program, as follows:

(a) The approving authority for a Paramedic training program and/or a Critical Care Paramedic (CCP) training program conducted by a qualified statewide public safety agency shall be the director of the Authority.

(b) The approving authority for any other Paramedic training program and/or a Critical Care Paramedic (CCP) training program not included in subsection (a) shall be the local EMS agency (LEMSA) which has jurisdiction in the area in which the training program is headquartered.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Sections 1797.172, 1797.200 and 1797.208, Health and Safety Code.

§ 100138. Paramedic Licensing Authority.

"Paramedic Licensing Authority" means the director of the Authority.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.194, Health and Safety Code. Reference: Sections 1797.172, 1797.194 and 1797.210, Health and Safety Code.

§ 100139. Paramedic.

"Paramedic" or "EMT-P" or "mobile intensive care paramedic" means an individual who is educated and trained in all elements of prehospital advanced life support (ALS); whose scope of practice to provide ALS is in accordance with the standards prescribed by this Chapter, and who has a valid license issued pursuant to this Chapter.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.194, Health and Safety Code. Reference: Sections 1797.84, 1797.172 and 1797.194, Health and Safety Code.

§ 100140. Licensure Skills Examination.

"Skills or practical examination" means the National Registry of Emergency Medical Technicians (NREMT) EMT-Paramedic Practical Examination to test the skills of an individual applying for licensure as a paramedic. Examination results shall be valid for application purposes for two (2) years from the date of examination.

NOTE: Authority cited: Sections 1797.107, 1797.172, 1797.175, 1797.185 and 1797.194, Health and Safety Code. Reference: Sections 1797.172, 1797.175, 1797.185 and 1797.194, Health and Safety Code.

§ 100141. Licensure Written Examination.

"Licensure Written Examination" means the NREMT EMT-Paramedic Written Examination to test an individual applying for licensure as a paramedic. Examination results shall be valid for application purposes for two (2) years from date of examination.

NOTE: Authority cited: Sections 1797.107, 1797.172, 1797.175, 1797.185 and 1797.194, Health and Safety Code. Reference: Sections 1797.63, 1797.172, 1797.175, 1797.185, 1797.194 and 1797.210, Health and Safety Code.

§ 100142. Local Accreditation.

"Local Accreditation" or "accreditation" or "accreditation to practice" means authorization by the LEMSA to practice as a paramedic within that jurisdiction. Such authorization indicates that the paramedic has completed the requirements of Section 100165 of this Chapter.

NOTE: Authority cited: Sections 1797.7, 1797.107, 1797.172 and 1797.185, Health and Safety Code. Reference: Sections 1797.172, 1797.178, 1797.185, 1797.194 and 1797.210, Health and Safety Code.

§ 100143. State Paramedic Application.

"State Paramedic Application" or "state application" means an application form provided by the Authority to be completed by an individual applying for a license or renewal of license, as identified in Section 100163.

NOTE: Authority cited: Sections 1797.107, 1797.172, 1797.185 and 1797.194, Health and Safety Code. Reference: Sections 1797.63, 1797.172, 1797.185 and 1797.194, Health and Safety Code.

§ 100144. Critical Care Paramedic.

A “Critical Care Paramedic” (CCP) is an individual who is educated and trained in critical care transport, whose scope of practice is in accordance to the standards prescribed by this Chapter, holds a current certification as a CCP by the Board for Critical Care Transport Paramedic Certification (BCCTPC), who has a valid license issued pursuant to this Chapter, and is accredited by a LEMSA.

NOTE: Authority cited: 1797.107, 1797.172 and 1797.194, Health and Safety Code. Reference: Sections 1797.84, 1797.172 and 1797.194, Health and Safety Code.

Article 2. General Provisions

§ 100145. Application of Chapter.

(a) Any LEMSA that authorizes a paramedic training program or an ALS service that provides services utilizing paramedic personnel as part of an organized EMS system, shall be responsible for approving paramedic training programs, paramedic service providers, paramedic base hospitals, and for developing and enforcing standards, regulations, policies and procedures in accordance with this chapter to provide an EMS system quality improvement program, appropriate medical control, and coordination of paramedic personnel and training program(s) within an EMS system.

(b) No person or organization shall offer a paramedic training program, or hold themselves out as offering a paramedic training program, or hold themselves out as providing ALS services utilizing paramedics for the delivery of emergency medical care unless that person or organization is authorized by the LEMSA.

(c) A paramedic who is not licensed in California may temporarily perform his/her scope of practice in California on a mutual aid response, on routine patient transports from out of state into California, or during a special event, when approved by the medical director of the LEMSA, if the following conditions are met:

(1) The paramedic is licensed or certified in another state/country or under the jurisdiction of the federal government.

(2) The paramedic restricts his/her scope of practice to that for which s/he is licensed or certified.

(3) Medical control as specified in Section 1798 of the Health and Safety Code is maintained in accordance with policies and procedures established by the medical director of the LEMSA.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.195, Health and Safety Code. Reference: Sections 1797.172, 1797.178, 1797.185, 1797.195, 1797.200, 1797.204, 1797.206, 1797.208, 1797.218, 1797.220, 1798 and 1798.100, Health and Safety Code.

§ 100146. Scope of Practice of Paramedic.

- (a) A paramedic may perform any activity identified in the scope of practice of an EMT in Chapter 2 of this Division, or any activity identified in the scope of practice of an Advanced EMT (AEMT) in Chapter 3 of this Division.
- (b) A paramedic shall be affiliated with an approved paramedic service provider in order to perform the scope of practice specified in this Chapter.
- (c) A paramedic student or a licensed paramedic, as part of an organized EMS system, while caring for patients in a hospital as part of his/her training or continuing education (CE) under the direct supervision of a physician, registered nurse, or physician assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, or while working in a small and rural hospital pursuant to Section 1797.195 of the Health and Safety Code, may perform the following procedures or administer the following medications when such are approved by the medical director of the LEMSA and are included in the written policies and procedures of the LEMSA.

(1) Basic Scope of Practice:

- (A) Utilize electrocardiographic devices and monitor electrocardiograms, including 12-lead electrocardiograms (ECG).
- (B) Perform defibrillation, synchronized cardioversion, and external cardiac pacing.
- (C) Visualize the airway by use of the laryngoscope and remove foreign body(-ies) with Magill forceps.
- (D) Perform pulmonary ventilation by use of lower airway multi-lumen adjuncts, the esophageal airway, perilaryngeal airways, stomal intubation, and adult oral endotracheal intubation.
- (E) Utilize mechanical ventilation devices for continuous positive airway pressure (CPAP)/ bi-level positive airway pressure (BPAP) and positive end expiratory pressure (PEEP) in the spontaneously breathing patient.
- (F) Institute intravenous (IV) catheters, saline locks, needles, or other cannulae (IV lines), in peripheral veins and monitor and administer medications through pre-existing vascular access.
- (G) Institute intraosseous (IO) needles or catheters.
- (H) Administer IV or IO glucose solutions or isotonic balanced salt solutions, including Ringer's lactate solution.
- (I) Obtain venous blood samples.
- (J) Use laboratory devices, including point of care testing, for pre-hospital screening use to measure lab values including, but not limited to: glucose, capnometry, capnography, and carbon monoxide when appropriate authorization is obtained from State and Federal agencies, including from the Centers for Medicare and Medicaid Services pursuant to the Clinical Laboratory Improvement Amendments (CLIA).
- (K) Utilize Valsalva maneuver.
- (L) Perform percutaneous needle cricothyroidotomy.
- (M) Perform needle thoracostomy.
- (N) Perform nasogastric and orogastric tube insertion and suction.

(O) Monitor thoracostomy tubes.

(P) Monitor and adjust IV solutions containing potassium, equal to or less than 40 mEq/L.

(Q) Administer approved medications by the following routes: IV, IO, intramuscular, subcutaneous, inhalation, transcutaneous, rectal, sublingual, endotracheal, intranasal, oral or topical.

(R) Administer, using prepackaged products when available, the following medications:

1. 10%, 25% and 50% dextrose;
2. activated charcoal;
3. adenosine;
4. aerosolized or nebulized beta-2 specific bronchodilators;
5. amiodarone;
6. aspirin;
7. atropine sulfate;
8. pralidoxime chloride;
9. calcium chloride;
10. diazepam;
11. diphenhydramine hydrochloride;
12. dopamine hydrochloride;
13. epinephrine;
14. fentanyl;
15. glucagon;
16. ipratropium bromide;
17. lorazepam;
18. midazolam;
19. lidocaine hydrochloride;
20. magnesium sulfate;
21. morphine sulfate;
22. naloxone hydrochloride;
23. nitroglycerin preparations, except IV, unless permitted under (c)(2)(A) of this section;
24. ondansetron;
25. sodium bicarbonate.

(S) In addition to the approved paramedic scope of practice, the CCP may perform the following procedures and administer medications, as part of the basic scope of practice for interfacility transports, when a licensed and accredited paramedic has completed a Critical Care Paramedic (CCP) training program as specified in Section 100160(b) and successfully completed competency testing, holds a current certification as a CCP from the BCCTPC, and other requirements as determined by the medical director of the LEMSA.

1. set up and maintain thoracic drainage systems;
2. set up and maintain mechanical ventilators;
3. set up and maintain IV fluid delivery pumps and devices;

4. blood and blood products;
5. glycoprotein IIB/IIIA inhibitors;
6. heparin IV;
7. nitroglycerin IV;
8. norepinephrine;
9. thrombolytic agents;
10. maintain total parenteral nutrition;

(2) Local Optional Scope of Practice:

(A) Perform or monitor other procedure(s) or administer any other medication(s) determined to be appropriate for paramedic use, in the professional judgment of the medical director of the LEMSA, that have been approved by the Director of the Authority when the paramedic has been trained and tested to demonstrate competence in performing the additional procedures and administering the additional medications.

(B) The medical director of the LEMSA shall submit Form #EMSA-0391, Revised 03/18/03 to, and obtain approval from, the Director of the Authority in accordance with Section 1797.172 (b) of the Health and Safety Code for any procedures or medications proposed for use pursuant to this subsection prior to implementation of these medication(s) and or procedure(s).

(C) The Authority shall, within fourteen (14) days of receiving the request, notify the medical director of the LEMSA submitting request Form #EMSA-0391 that the request form has been received, and shall specify what information, if any, is missing.

(D) The Director of the Authority, in consultation with the Emergency Medical Directors Association of California's Scope of Practice Committee, shall approve or disapprove the request for additional procedures and/or medications and notify the LEMSA medical director of the decision within ninety (90) days of receipt of the completed request. Approval is for a three (3) year period and may be renewed for another three (3) year period, based on evidence from a written request that includes at a minimum the utilization of the procedure(s) or medication(s), beneficial effects, adverse reactions or complications, appropriate statistical evaluation, and general conclusion.

(E) The Director of the Authority, in consultation with a committee of the LEMSA medical directors named by the Emergency Medical Directors Association of California, may suspend or revoke approval of any previously approved additional procedure(s) or medication(s) for cause.

(d) The medical director of the LEMSA may develop policies and procedures or establish standing orders allowing the paramedic to initiate any paramedic activity in the approved scope of practice without voice contact for medical direction from a physician or mobile intensive care nurse (MICN), provided that an EMSQIP, as specified in Chapter 12 of this Division, is in place.

NOTE: Authority cited: Sections 1797.107, 1797.172, 1797.185, 1797.192, 1797.195 and 1797.214, Health and Safety Code. Reference: Sections 1797.172 and 1797.185, Health and Safety Code.

§ 100147. Paramedic Trial Studies.

A paramedic may 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 LEMSA and the Director of the Authority.

(a) The medical director of the LEMSA shall review a trial study plan, which at a minimum shall include the following:

(1) A description of the procedure(s) or medication(s) proposed, the medical conditions for which they can be utilized, and the patient population that will benefit.

(2) A compendium of relevant studies and material from the medical literature.

(3) A description of the proposed study design including the scope of the study and method of evaluating the effectiveness of the procedure(s) or medication(s), and expected outcome.

(4) Recommended policies and procedures to be instituted by the LEMSA regarding the use and medical control of the procedure(s) or medication(s) used in the study.

(5) A description of the training and competency testing required to implement the study.

(b) The medical director of the LEMSA shall appoint a local medical advisory committee to assist with the evaluation and approval of trial studies. The membership of the committee shall be determined by the medical director of the LEMSA, but shall include individuals with knowledge and experience in research and the effect of the proposed study on the EMS system.

(c) The medical director of the LEMSA shall submit the proposed study and send a copy of the proposed trial study plan at least forty-five (45) days prior to the proposed initiation of the study to the Director of the Authority for approval in accordance with the provisions of section 1797.172 of the Health & Safety Code. The Authority shall inform the Commission on EMS (Commission) of studies being initiated.

(d) The Authority shall notify, within fourteen (14) days of receiving the request, the medical director of the LEMSA submitting its request for approval of a trial study that the request has been received, and shall specify what information, if any, is missing.

(e) The Director of the Authority shall render the decision to approve or disapprove the trial study within forty-five (45) days of receipt of all materials specified in subsections (a) and (b) of this section.

(f) The medical director of the LEMSA within eighteen (18) months of initiation of the procedure(s) or medication(s), shall submit a written report to the Commission which includes at a minimum the progress of the study, number of patients studied, beneficial effects, adverse reactions or complications, appropriate statistical evaluation, and general conclusion.

(g) The Commission shall review the above report within two (2) meetings and advise the Authority to do one of the following:

(1) Recommend termination of the study if there are adverse effects or no benefit from the study is shown.

(2) Recommend continuation of the study for a maximum of eighteen (18) additional months if potential but inconclusive benefit is shown.

(3) Recommend the procedure, or medication, be added to the paramedic basic or local optional scope of practice.

(h) If option (g)(2) is selected, the Commission may advise continuation of the study as structured or alteration of the study to increase the validity of the results.

(i) At the end of the additional eighteen (18) month period, a final report shall be submitted to the Commission with the same format as described in (f) above.

(j) The Commission shall review the final report and advise the Authority to do one of the following:

(1) Recommend termination or further extension of the study.

(2) Recommend the procedure or medication be added to the paramedic basic or local optional scope of practice.

(k) The Authority may require the trial study(ies) to cease after thirty-six (36) months.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Sections 1797.3, 1797.172 and 1797.221, Health and Safety Code.

§ 100148. Responsibility of the LEMSA.

The LEMSA that authorizes an ALS program shall establish policies and procedures approved by the medical director of the LEMSA that shall include:

(a) Approval, denial, revocation of approval, suspension, and monitoring of training programs, base hospitals or alternative base stations, and paramedic service providers.

(b) Assurance of compliance with provisions of this Chapter by the paramedic program and the EMS system.

(c) Submission to the Authority, as changes occur, of the following information on the approved paramedic training programs:

(1) Name of program director and/or program contact;

(2) Address, phone number, and facsimile number;

(3) Date of approval, date classes will initially begin, and date of expiration.

(d) Development or approval, implementation and enforcement of policies for medical control, medical accountability, and an EMSQIP of the paramedic services, including:

(1) Treatment and triage protocols.

(2) Patient care record and reporting requirements.

(3) Medical care audit system.

(4) Role and responsibility of the base hospital and paramedic service provider.

(e) System data collection and evaluation.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Sections 1797.172, 1797.178, 1797.200, 1797.202, 1797.204, 1797.208, 1797.220, 1798 and 1798.100, Health and Safety Code.

Article 3. Program Requirements for Paramedic Training Programs

§ 100149. Approved Training Programs.

(a) An approved paramedic training program or an institution eligible for paramedic training program approval, as defined in Section 100149(i) of this Chapter, may provide

CCP training upon approval by the paramedic training program approving authority.

The purpose of a paramedic training program shall be:

(1) to prepare individuals to render prehospital ALS within an organized EMS system;
and

(2) to prepare individuals to render critical care transport within an organized EMS system

(b) By January 1, 2004, all paramedic training programs approved by a paramedic training program approving authority prior to January 1, 2000, shall be accredited and maintain current accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP), in order to continue to operate as an approved paramedic training program.

(c) All paramedic training programs approved by a paramedic training program approving authority January 1, 2000, or thereafter shall submit their application, fee, and self study to CoAEMSP for accreditation within twelve (12) months of the start up of classes and receive and maintain CAAHEP accreditation no later than two (2) years from the date of application to CoAEMSP for accreditation in order to continue to operate as an approved paramedic training program.

(d) Paramedic training programs approved according to the provisions of this Chapter shall provide the following information to all their paramedic training program applicants prior to the applicants' enrollment in the paramedic training program:

(1) The date by which the paramedic training program must submit their application and self study for initial accreditation or their application for accreditation renewal to CoAEMSP.

(2) The date by which the paramedic training program must be initially accredited or have their accreditation renewed by CAAHEP.

(3) Failure of the paramedic training program to submit their application and self study or their accreditation renewal to CoAEMSP by the date specified will result in closure of the paramedic training program by their respective paramedic training program approving authority, unless the paramedic training program approving authority has approved a plan for meeting compliance as provided in Section 100157 of this Chapter. When a paramedic training program approval is revoked under this provision, the paramedic training program course director must demonstrate to the satisfaction of their respective paramedic training program approving authority that the deficiency for which the paramedic training program approval was revoked has been rectified before submitting a new application for paramedic training program approval.

(4) Failure of the paramedic training program to obtain or maintain CAAHEP accreditation by the required date will result in closure of the paramedic training program by their respective paramedic training program approving authority, unless the paramedic training program approving authority has approved a plan for meeting compliance as provided in Section 100157 of this Chapter. When a paramedic training program approval has been revoked under this provision, the paramedic training

program course director must demonstrate to the satisfaction of their respective paramedic training program approving authority that the deficiency for which the paramedic training program approval was revoked has been rectified before submitting a new application for paramedic training program approval.

(5) Students graduating from a paramedic training program that fails to apply for accreditation with, receive accreditation from, or maintain accreditation with, CAAHEP by the dates required will not be eligible for state licensure as a paramedic.

(e) Paramedic training programs shall submit to their respective paramedic training program approving authority all documents submitted to, and received from, CoAEMSP and CAAHEP for accreditation, including but not limited to, the initial application and self study for accreditation and the documents required for maintaining accreditation.

(f) Paramedic training programs shall submit to the Authority the date their initial application was submitted to CoAEMSP and copies of documentation from CoAEMSP and/or CAAHEP verifying accreditation.

(g) Paramedic training program approving authorities shall revoke approval, in accordance with Section 100157 of this Chapter, of any paramedic training program which fails to comply with subsections (b) through (e) of this Section.

(h) Approved paramedic training programs shall participate in the EMSQIP of their respective paramedic training program approving authority. In addition, an approved paramedic training program, which is conducting a paramedic training program outside the jurisdiction of their approving authority, shall also agree to participate in the EMSQIP of the LEMSA which has jurisdiction where the paramedic training program is being conducted.

(i) Eligibility for program approval shall be limited to the following institutions:

(1) Accredited universities, colleges, including junior and community colleges, and private post-secondary schools as approved by the State of California, Department of Consumer Affairs, Bureau of Private Postsecondary Education.

(2) Medical training units of a branch of the Armed Forces or Coast Guard of the United States.

(3) Licensed general acute care hospitals which meet the following criteria:

(A) Hold a special permit to operate a basic or comprehensive emergency medical service pursuant to the provisions of Division 5;

(B) Provide continuing education (CE) to other health care professionals; and

(C) are accredited by a Centers for Medicare and Medicaid Services approved deeming authority.

(4) Agencies of government.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.173, Health and Safety Code. Reference: Sections 1797.172, 1797.173, 1797.208 and 1797.213, Health and Safety Code.

§ 100150. Teaching Staff.

(a) Each training program shall have an approved program medical director who shall be a physician currently licensed in the State of California, who has two (2) years

experience in prehospital care in the last five (5) years, and who is qualified by education or experience in methods of instruction. Duties of the program medical director shall include, but not be limited to:

(1) Review and approve educational content of the program curriculum, including training objectives for the clinical and field instruction, to certify its ongoing appropriateness and medical accuracy.

(2) Review and approve the quality of medical instruction, supervision, and evaluation of the students in all areas of the program.

(3) Approval of provision for hospital clinical and field internship experiences.

(4) Approval of principal instructor(s).

(b) Each training program shall have an approved course director who shall be licensed in California as a physician, a registered nurse who has a baccalaureate degree or a paramedic who has a baccalaureate degree, or shall be an individual who holds a baccalaureate degree in a related health field or in education. The course director shall be qualified by education and experience in methods, materials, and evaluation of instruction, and shall have a minimum of one (1) year experience in an administrative or management level position and have a minimum of three (3) years academic or clinical experience in prehospital care education within the last five (5) years. Duties of the course director shall include, but not be limited to:

(1) Administration, organization and supervision of the educational program.

(2) In coordination with the program medical director, approve the principal instructor, teaching assistants, field and hospital clinical preceptors, clinical and internship assignments, and coordinate the development of curriculum, including instructional objectives, and approve all methods of evaluation.

(3) Ensure training program compliance with this chapter and other related laws.

(4) Sign all course completion records.

(5) Ensure that the preceptor(s) are trained according to the curriculum in subsection (e)(4).

(c) Each training program shall have a principal instructor(s), who may also be the program medical director or course director if the qualifications in subsections (a) and (b) are met, who shall:

(1) Be a physician, registered nurse, physician assistant, or paramedic, currently certified or licensed in the State of California.

(2) Be knowledgeable in the course content of the United States Department of Transportation (U.S. DOT) National Emergency Medical Services Education Standards DOT HS 811 077A, January 2009, herein incorporated by reference; and

(3) Have six years (6) experience in an allied health field and an associate degree or two (2) years experience in an allied health field and a baccalaureate degree.

(4) Be responsible for areas including, but not limited to, curriculum development, course coordination, and instruction.

(5) Be qualified by education and experience in methods, materials, and evaluation of instruction, which shall be documented by at least forty (40) hours of instruction in

teaching methodology. Following, but not limited to, are examples of courses that meet the required instruction in teaching methodology:

- (A) California State Fire Marshal (CSFM) “Training Instructor 1A, 1B, and 1C”,
- (B) National Fire Academy (NFA) “Fire Service Instructional Methodology” course, and
- (C) A course that meets the U. S. Department of Transportation/National Highway Traffic Safety Administration 2002 Guidelines for Educating EMS Instructors, such as the National Association of EMS Educators’ EMS Educator Course.
- (d) Each CCP training program shall have a principal instructor(s) who shall be licensed in California as a physician and knowledgeable in the subject matter, a registered nurse knowledgeable in the subject matter, or a paramedic with current CCP certification or FP certification from the BCCTPC.
- (e) Each training program may have a teaching assistant(s) who shall be an individual(s) qualified by training and experience to assist with teaching of the course. A teaching assistant shall be supervised by a principal instructor, the course director and/or the program medical director.
- (f) Each paramedic training program shall have a field preceptor(s) who shall:
 - (1) Be a certified or licensed paramedic; and
 - (2) Be working in the field as a certified or licensed paramedic for the last two (2) years; and
 - (3) Be under the supervision of a principal instructor, the course director and/or the program medical director.
 - (4) Have completed field preceptor training approved by the LEMSA and/or comply with the field preceptor guidelines approved by the LEMSA. Training shall include a curriculum that will result in the preceptor being competent to evaluate the paramedic student during the internship phase of the training program, and how to do the following in cooperation with the paramedic training program:
 - (A) Conduct a daily field evaluation of students.
 - (B) Conduct cumulative and final field evaluations of all students.
 - (C) Rate students for evaluation using written field criteria.
 - (D) Identify ALS contacts and requirements for graduation.
 - (E) Identify the importance of documenting student performance.
 - (F) Review field preceptor requirements contained in this Chapter.
 - (G) Assess student behaviors using cognitive, psychomotor, and affective domains.
 - (H) Create a positive and supportive learning environment.
 - (I) Measure students against the standard of entry level paramedics.
 - (J) Identify appropriate student progress.
 - (K) Counsel the student who is not progressing.
 - (L) Identify training program support services available to the student and the preceptor.
 - (M) Provide guidance and applicable procedures for dealing with an injured student or student who has had an exposure to illness, communicable disease or hazardous material.
- (g) Each training program shall have a hospital clinical preceptor(s) who shall:

- (1) Be a physician, registered nurse or physician assistant currently licensed in the State of California.
- (2) Have worked in emergency medical care for the last two (2) years.
- (3) Be under the supervision of a principal instructor, the course director, and/or the program medical director.
- (4) Receive instruction in evaluating paramedic students in the clinical setting. Means of instruction may include, but need not be limited to, educational brochures, orientation, training programs, or training videos, and shall include how to do the following in cooperation with the paramedic training program:
 - (A) Evaluate a student's ability to safely administer medications and perform assessments.
 - (B) Document a student's performance.
 - (C) Review clinical preceptor requirements contained in this Chapter.
 - (D) Assess student behaviors using cognitive, psychomotor, and affective domains.
 - (E) Create a positive and supportive learning environment.
 - (F) Identify appropriate student progress.
 - (G) Counsel the student who is not progressing.
 - (H) Provide guidance and applicable procedures for dealing with an injured student or student who has had an exposure to illness, communicable disease or hazardous material.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.
Reference: Sections 1797.172 and 1797.208, Health and Safety Code.

§ 100151. Didactic and Skills Laboratory.

An approved paramedic training program and/or CCP training program shall assure that no more than six (6) students are assigned to one instructor/teaching assistant during skills practice/laboratory.

NOTE: Authority cited: 1797.107, 1797.172 and 1797.173, Health and Safety Code.
Reference: Sections 1797.172, 1797.173 and 1797.208, Health and Safety Code.

§ 100152. Hospital Clinical Education and Training for Paramedic.

(a) An approved paramedic training program shall provide for and monitor a supervised clinical experience at a hospital(s) that is licensed as a general acute care hospital and holds a permit to operate a basic or comprehensive emergency medical service. The clinical setting may be expanded to include areas commensurate with the skills experience needed. Such settings may include surgicenters, clinics, jails or any other areas deemed appropriate by the LEMSA. The maximum number of hours in the expanded clinical setting shall not exceed forty (40) hours of the total clinical hours specified in Section 100159(a)(2).

(b) Hospital clinical training, for an approved CCP training program, should consist of no less than ninety-four hours (94) in the following areas:

- (1) Labor & Delivery (8 hours),
- (2) Neonatal Intensive Care (16 hours),

- (3) Pediatric Intensive Care (16 hours),
- (4) Adult Cardiac Care (16 hours),
- (5) Adult Intensive Care (24 hours),
- (6) Adult Respiratory Care (6 hours), and
- (7) Emergency/ Trauma Care (8 hours).

(c) An approved paramedic training program and/or CCP training program shall not enroll any more students than the training program can commit to providing a clinical internship to begin no later than thirty (30) days after a student's completion of the didactic and skills instruction portion of the training program. The paramedic training program course director and/or CCP training program course director and a student may mutually agree to a later date for the clinical internship to begin in the event of special circumstances (e.g., student or preceptor illness or injury, student's military duty, etc.).

(d) Training programs, both paramedic and CCP, in nonhospital institutions shall enter into a written agreement(s) with a licensed general acute care hospital(s) that holds a permit to operate a basic or comprehensive emergency medical service for the purpose of providing this supervised clinical experience.

(e) Paramedic clinical training hospital(s) and other expanded settings shall provide clinical experience, supervised by a clinical preceptor(s). The clinical preceptor may assign the student to another health professional for selected clinical experience. No more than two (2) students shall be assigned to one preceptor or health professional during the supervised clinical experience at any one time. Clinical experience shall be monitored by the training program staff and shall include direct patient care responsibilities, which may include the administration of any additional medications, approved by the LEMSA medical director and the director of the Authority, to result in competency. Clinical assignments shall include, but are not to be limited to, emergency, cardiac, surgical, obstetric, and pediatric patients.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.173, Health and Safety Code. Reference: Sections 1797.172, 1797.173 and 1797.208, Health and Safety Code.

§ 100153. Field Internship.

(a) A field internship shall provide emergency medical care experience supervised at all times by an authorized field preceptor to result in the paramedic student being competent to provide the medical procedures, techniques, and medications specified in Section 100146, in the prehospital emergency setting within an organized EMS system.

(b) An approved paramedic training program shall enter into a written agreement with a paramedic service provider(s) to provide for field internship, as well as for a field preceptor(s) to directly supervise, instruct, and evaluate the students. The assignment of a student to a field preceptor shall be a collaborative effort between the training program and the provider agency. If the paramedic service provider is located outside the jurisdiction of the paramedic training program approving authority, then the training program shall do the following:

(1) in collaboration with the LEMSA in which the field internship will occur, ensure that the student has been oriented to that LEMSA, including local policies and procedures and treatment protocols,

(2) contact the LEMSA where the paramedic service provider is located and report to that LEMSA the name of the paramedic intern in their jurisdiction, the name of the EMS provider, and the name of the preceptor. The paramedic intern shall be under the medical control of the medical director of the LEMSA in which the internship occurs.

(c) The training program shall be responsible for ensuring that the field preceptor has the experience and training as required in Section 100150(g)(1)-(4).

(d) The paramedic training program shall not enroll any more students than the training program can commit to providing a field internship to begin no later than ninety (90) days after a student's completion of the hospital clinical education and training portion of the training program. The training program director and a student may mutually agree to a later date for the field internship to begin in the event of special circumstances (e.g., student or preceptor illness or injury, student's military duty, etc.).

(e) For at least half of the ALS patient contacts specified in Section 100159(b), the paramedic student shall be required to provide the full continuum of care of the patient beginning with the initial contact with the patient upon arrival at the scene through release of the patient to a receiving hospital or medical care facility.

(f) All interns shall be continuously monitored by the training program, in collaboration with the assigned field preceptor, regardless of the location of the internship, as described in written agreements between the training program and the internship provider. The training program shall document a student's progress, based on the assigned field preceptor's input, and identify specific weaknesses of the student, if any, and/or problems encountered by, or with, the student. Documentation of the student's progress, including any identified weaknesses or problems, shall be provided to the student at least twice during the student's field internship.

(g) No more than one (1) EMT trainee, of any level, shall be assigned to a response vehicle at any one time during the paramedic student's field internship.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.173, Health and Safety Code. Reference: Sections 1797.172, 1797.173 and 1797.208, Health and Safety Code.

§ 100154. Procedure for Training Program Approval.

(a) Eligible training institutions shall submit a written request for training program approval to the paramedic training program approving authority. A paramedic training program approving authority may deem a training program approved that has been accredited by the CAAHEP upon submission of proof of such accreditation, without requiring the paramedic training program to submit for review the information required in subsections (b) and (c) of this section.

(b) The paramedic training program approving authority shall receive and review the following prior to program approval:

- (1) A statement verifying that the course content meets the requirements contain in the U. S. DOT National Education Standards DOT HS 811 077A January 2009.
 - (2) A statement verifying that the CCP training program course content meets the requirements contained in Section 100160(b) of this Chapter. The CCP training program must also verify compliance with Subsections (b)(3)-(b)(6) and (b)(8)-(b)(9) of this Section.
 - (3) An outline of course objectives.
 - (4) Performance objectives for each skill.
 - (5) The name and qualifications of the training program course director, program medical director, and principal instructors.
 - (6) Provisions for supervised hospital clinical training including student evaluation criteria and standardized forms for evaluating paramedic students; and monitoring of preceptors by the training program.
 - (7) Provisions for supervised field internship including student evaluation criteria and standardized forms for evaluating paramedic students; and monitoring of preceptors by the training program.
 - (8) The location at which the courses are to be offered and their proposed dates.
 - (9) Written agreements between the paramedic training program and a hospital(s) and other clinical setting(s), if applicable, for student placement for clinical education and training.
 - (10) Written contracts or agreements between the paramedic training program and a provider agency(ies) for student placement for field internship training.
- (c) The paramedic training program approving authority shall review the following prior to program approval:
- (1) Samples of written and skills examinations administered by the training program for periodic testing.
 - (2) A final written examination administered by the training program.
 - (3) Evidence that the training program provides adequate facilities, equipment, examination security, and student record keeping.
- (d) The paramedic training program approving authority shall submit to the Authority an outline of program objectives and eligibility on each training program being proposed for approval in order to allow the Authority to make the determination required by section 1797.173 of the Health and Safety Code. Upon request by the Authority, any or all materials submitted by the training program shall be submitted to the Authority.
- NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.
Reference: Sections 1797.172, 1797.173 and 1797.208, Health and Safety Code.

§ 100155. Paramedic Training Program Approval.

- (a) The paramedic training program approving authority shall, within thirty (30) working days of receiving a request for training program approval, notify the requesting training program that the request has been received, and shall specify what information, if any, is missing.
- (b) Paramedic training program approval or disapproval shall be made in writing by the

paramedic training program approving authority to the requesting training program after receipt of all required documentation. This time period shall not exceed three (3) months.

(c) The paramedic training program approving authority shall establish the effective date of program approval in writing upon satisfactory documentation of compliance with all program requirements.

(d) Paramedic training program approval shall be for four (4) years following the effective date of approval and may be renewed every four (4) years subject to the procedure for program approval specified in this chapter.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Sections 1797.172, 1797.173 and 1797.208, Health and Safety Code; and section 15376, Government Code.

§ 100156. Program Review and Reporting.

(a) All program materials specified in this Chapter shall be subject to periodic review by the paramedic training program approving authority and may also be reviewed upon request by the Authority.

(b) All programs shall be subject to periodic on-site evaluation by the paramedic approving authority and may also be evaluated by the Authority.

(c) Any person or agency conducting a training program shall notify the paramedic training program approving authority in writing, in advance when possible, and in all cases within thirty (30) days of any change in course objectives, hours of instruction, course director, program medical director, principal instructor, provisions for hospital clinical experience, or field internship.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Sections 1797.172 and 1797.208, Health and Safety Code.

§ 100157. Withdrawal of Program Approval.

(a) Noncompliance with any criterion required for program approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of this Chapter may result in denial, probation, suspension or revocation of program approval by the paramedic training program approving authority. Notification of noncompliance and action to place on probation, suspend or revoke shall be done as follows:

(1) A paramedic training program approving authority shall notify the approved training program course director in writing, by certified mail, of the provisions of this Chapter with which the paramedic training program is not in compliance.

(2) Within fifteen (15) days of receipt of the notification of noncompliance, the approved training program shall submit in writing, by certified mail, to the paramedic training program approving authority one of the following:

(A) Evidence of compliance with the provisions of this Chapter, or

(B) A plan for meeting compliance with the provisions of this Chapter within sixty (60) days from the day of receipt of the notification of noncompliance.

(3) Within fifteen (15) days of receipt of the response from the approved training program, or within thirty (30) days from the mailing date of the noncompliance notification if no response is received from the approved training program, the paramedic training program approving authority shall notify the Authority and the approved training program in writing, by certified mail, of the decision to accept the evidence of compliance, accept the plan for meeting compliance, place on probation, suspend or revoke the training program approval.

(4) If the paramedic training program approving authority decides to suspend or revoke the training program approval, the notification specified in subsection (a)(3) of this section shall include the beginning and ending dates of the probation or suspension and the terms and conditions for lifting of the probation or suspension or the effective date of the revocation, which may not be less than sixty (60) days from the date of the paramedic training program approving authority's letter of decision to the Authority and the training program.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.
Reference: Sections 1797.172, 1797.208 and 1798.202, Health and Safety Code.

§ 100158. Student Eligibility.

(a) To be eligible to enter a paramedic training program an individual shall meet the following requirements:

- (1) Possess a high school diploma or general education equivalent; and
- (2) possess a current basic cardiac life support (CPR) card equivalent to the current American Heart Association's Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the healthcare provider level; and
- (3) possess a current EMT certificate or NREMT-Basic registration; or
- (4) possess a current AEMT certificate in the State of California; or
- (5) be currently registered as an EMT-Intermediate with the NREMT.

(b) To be eligible to enter a CCP training program an individual shall be currently licensed, and accredited, in California as a paramedic with three (3) years of basic paramedic practice.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.
Reference: Sections 1797.172 and 1797.208, Health and Safety Code.

§ 100159. Required Course Hours.

(a) The total paramedic training program shall consist of not less than one thousand and ninety (1090) hours. These training hours shall be divided into:

- (1) A minimum of four-hundred and fifty (450) hours of didactic instruction and skills laboratories;
- (2) The hospital clinical training shall consist of no less than one-hundred and sixty (160) hours and the field internship shall consist of no less than four-hundred and eighty (480) hours.

(b) The student shall have a minimum of forty (40) ALS patient contacts during the field internship as specified in Section 100153. An ALS patient contact shall be defined as

the student performance of one or more ALS skills, except cardiac monitoring and CPR, on a patient.

(c) The minimum hours shall not include the following:

(1) Course material designed to teach or test exclusively EMT knowledge or skills including CPR.

(2) Examination for student eligibility.

(3) The teaching of any material not prescribed in section 100160 of this Chapter.

(4) Examination for paramedic licensure.

(d) The total CCP training program shall consist of not less than two-hundred and two (202) hours. These training hours shall be divided into:

(1) A minimum of one-hundred and eight (108) hours of didactic and skills laboratories; and

(2) No less than ninety-four (94) hours of hospital clinical training as prescribed in Section 100152(b) of this Chapter.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Section 1797.172, Health and Safety Code.

§ 100160. Required Course Content.

(a) The content of a paramedic course shall meet the objectives contained in the U. S. Department of Transportation (DOT) National Emergency Medical Services Education Standards, DOT HS 811 077A, January 2009, to result in the paramedic being competent in the paramedic basic scope of practice specified in Section 100146(a) of this Chapter. The DOT HS 811 077A, can be accessed through the U.S. DOT National Highway Traffic Safety Administration at the following website address:

<http://www.ems.gov/education/nationalstandardandnecs.html>

(b) The content of the CCP course shall include:

1. Role of interfacility transport paramedic:

(A) Healthcare system

(B) Critical care vs. 9-1-1 system

(C) Integration and cooperation with other health professionals

(D) Hospital documentation and charts

(E) Physician orders vs. ALS protocols

2. Medical – legal issues:

(A) Emergency Medical Treatment and Active Labor Act (EMTALA)

(B) Health Insurance Portability and Accountability Act (HIPAA)

(C) Review of California paramedic scope of practice

(D) Consent issues

(E) Do Not Resuscitate (DNR) and Physicians Orders for Life-Sustaining Treatment (POLST)

3. Transport Fundamentals, Safety and Survival

(A) Safety of the work environment

(B) Transport vehicle integrity checks

(C) Equipment functionality checks

- (D) Transport mode evaluation, indications for critical care transport and policies
- (E) Aircraft Fundamentals and Safety
- (F) Flight Physiology
- (G) Mission safety decisions
- (H) Scene Safety and Post-accident duties at a crash site
- (I) Patient Packaging for transport
- (J) Crew Resource Management (CRM) & Air Medical Resource Management (AMRM)
- (K) Use of safety equipment while in transport
- (L) Passenger safety procedures (e.g., specialty teams, family, law enforcement, observer)
- (M) Hazard observation and correction during transport vehicle operation
- (N) Stressors related to transport (e.g., thermal, humidity, noise, vibration, or fatigue related conditions)
- (O) Corrective actions for patient stressors related to transport
- (P) Operational procedures:
 - (1) Dispatching and deployment
 - (2) Recognition of patients who require a higher level of care
 - a. What to do if you are not comfortable with a transport/ patient.
 - b. When a patient's needs exceed the staffing available on the unit.
 - (3) Review of specific county policies
 - (4) Obtaining and receiving reports from sending/ receiving facilities
 - (5) Re-calculating hanging dose prior to accepting patient
 - (6) Notification to receiving hospital while en route (cell phone)
 - a. Patient status
 - b. Estimated time of arrival (ETA)
 - (7) What to do if the patient deteriorates
 - (8) Diversion issues
 - (9) Wait and return calls – continuity of care issues
 - (10) Documentation
 - a. Patient consent forms
 - b. Physician order sheets
 - c. Critical care flow sheets

4 Shock and multi-system organ failure

- (A) Pathophysiology of shock
- (B) Types of shock
- (C) Shock management
- (D) Multi-system organ failure
 - 1. Recognition and management of sepsis
 - 2. Recognition and management of disseminated intravascular coagulation (DIC)

5. Basic Physiology for Critical Care Transport and Laboratory and Diagnostic Analysis Laboratory values:

- (A) Arterial blood gases
 - 1. The potential hydrogen (pH) scale
 - 2. Bodily regulation of acid-base balance
 - 3. Practical evaluation of arterial blood gas results
- (B) Review of the following to include normal and abnormal values and implications
 - 1. Urinalysis
 - a. Normal output
 - b. Specific gravity
 - c. pH range
 - 2. Complete blood count (CBC)
 - a. Hematocrit and Hemoglobin (H&H)
 - b. Red blood cell (RBC)
 - c. White blood cell (WBC) with differential
 - d. Platelets
 - 3. Other
 - a. Albumin
 - b. Alkaline phosphate
 - c. Alanine transaminase (ALT)
 - d. Aspartate transaminase (AST)
 - e. Bilirubin
 - f. Calcium
 - g. Chloride
 - h. Creatine Kinase (CK) (total and fractions)
 - i. Creatinine
 - j. Glucose
 - k. Lactate
 - l. Lactic dehydrogenase (LDH)
 - m. Lipase
 - 4. Magnesium
 - 5. Phosphate
 - 6. Potassium
 - 7. Procalcitonin
 - 8. Protein, total
 - 9. Prothrombin Time (PT) and Activated Partial Thromboplastin Time (PTT)
 - 10. Sodium
 - 11. Troponin
 - 12. Urea nitrogen
- (C) Practical application of laboratory values to patient presentations
- (D) Use of laboratory devices for point of care testing (eg: ISTAT)
- (E) Radiographic Interpretation
- (F) Wherever appropriate, the above education should include information regarding radiographic findings, pertinent laboratory and bedside testing, and pharmacological interventions

6. Critical Care Pharmacology and Infusion Therapy

Pharmacology and infusion therapies:

(A) Review of common medications encountered in the critical care environment to include those in the following categories:

1. Analgesics
2. Antianginals
3. Antiarrhythmics
4. Antibiotics
5. Anticoagulants
6. Antiemetics
7. Anti-inflammatory agents
8. Antihypertensives
9. Antiplatelets
10. Antitoxins
11. Benzodiazepines
12. Bronchodilators
13. Glucocorticoids
14. Glycoprotein IIb/IIIa inhibitors
15. Histamine Blockers (1 and 2)
16. Induction agents
17. Neuroleptics
18. Osmotic diuretics
19. Paralytics
20. Proton Pump Inhibitors
21. Sedatives
22. Thrombolytics
23. Total Parenteral Nutrition
24. Vasopressors
25. Volume expanders

(B) Review of drug calculation mathematics

1. IV bolus medication
2. IV infusion rates
 - a. By volume
 - b. By rate

(C) Detailed instruction (drug action and indications, dosages, IV calculation, adverse reactions, contraindications and precautions) on following medications:

1. IV nitroglycerin (NTG)
2. Heparin
3. Potassium chloride (KCl) infusion
4. Lidocaine

(D) Blood and blood products

1. Blood components and their uses in therapy
2. Administrative procedures

3. Administration of blood products
4. Transfusion reactions – recognition, management
- (E) Infusion pumps:
 1. Set up and maintain IV fluid and medication delivery pumps and devices
 2. Discussion of various pumps that may be encountered
 3. Discussion of prevention of “run-away” IV lines while transitioning
 4. Practical application of transfer of IV infusions, setting drip rates and troubleshooting
- (F) Procedures to be used when re-establishing IV lines
 1. Hemodynamic monitoring and invasive lines:
 - a. Non-invasive monitoring
 - 1) Non-invasive blood pressure (NIBP)
 - 2) Pulse oximetry
 - 3) Capnography
 - 4) Heart and bowel sound auscultation
 - b. Intraosseous (IO) access and infusion - the student must demonstrate competency in the skill of IO infusion
 - c. Central Venous Access
 - 1) Subclavian - the student must demonstrate competency in the skill of subclavian access.
 - 2). Internal jugular - the student must demonstrate competency in the skill of internal jugular access.
 - 3) Femoral approach - the student must demonstrate competency in the skill of femoral access.
6. Respiratory Patient Management
 - (A) Pulmonary anatomy and physiology
 1. Upper and lower airway anatomy
 2. Mechanics of ventilation and oxygenation
 3. Gas Exchange
 4. Oxyhemoglobin dissociation
 - (B) Detailed assessment of the respiratory patient
 1. Obtaining a relevant history
 2. Physical exam
 3. Breath sounds
 4. Percussion
 - (C) Causes, pathophysiology, and stages of respiratory failure
 - (D) Assessment and management of patients with respiratory compromise
 1. Respiratory failure
 2. Atelectasis
 3. Pneumonia
 4. Pulmonary embolism
 5. Pneumothorax
 6. Spontaneous pneumothorax

- 7. Hemothorax
- 6. Pleural effusion
- 7. Pulmonary edema
- 8. Chronic obstructive pulmonary disease
- 9. Adult respiratory distress syndrome (ARDS)
- (E) Differential diagnosis of acute and chronic conditions
- (F) Management of patient status using
 - 1. Laboratory values, to include but not limited to,
 - a. Blood gas values,
 - b. Use of ISTAT
 - 2. Diagnostic equipment
 - a. Pulse oximetry,
 - b. Capnography
 - c. Chest radiography
 - d. CO-Oximetry (carbon monoxide measurement)
- (G) Application of pharmacologic agents for the respiratory patient
- (H) Management of complications during transport of the respiratory patient
- 7. Advanced Airway and Breathing Management Techniques
 - (A) Indications for basic and advanced airway management
 - 1. Crash airway assessment and management
 - 2. Deteriorating airway assessment and management
 - (B) Indications, contraindications, complications, and management for specific airway and breathing interventions
 - 1. Needle Cricothyroidotomy
 - 2. Surgical Cricothyroidotomy - the student must demonstrate competency in the skill of surgical cricothyroidotomy.
 - 3. Tracheostomies
 - a. Types of tracheostomies
 - b. Tracheostomy care
 - 4. Endotracheal intubation – adult, pediatric, and neonatal
 - a. Nasotracheal intubation
 - b. Rapid Sequence Intubation (RSI) – the student must demonstrate competency in the skill of RSI.
 - c. Perilaryngeal airway devices
 - 1) Combitube
 - 2) King Airway
 - 3) Supraglottic airway devices
 - 4) Laryngeal mask airway devices
 - 5. Pleural decompression
 - 6. Chest tubes
 - a. Set up and maintain thoracic drainage systems
 - b. Operation of and troubleshooting
 - c. Indications for and positioning of dependent tubing

- d. Varieties available
- e. Gravity drainage
- f. Suction drainage
- g. On-going assessments of drainage amount and color
- 7. Portable ventilators
 - a. Principles of ventilator operation
 - b. Set-up and maintain mechanical ventilation devices
 - c. Procedures for transferring ventilator patients
 - d. Complications of ventilator management
 - e. Troubleshooting and practical application
- C. Perform advanced airway and breathing management techniques
 - 1. Endotracheal intubation – adult, pediatric, and neonatal
 - 2. Nasotracheal intubation
 - 3. Rapid Sequence Intubation (RSI)
 - 4. Pleural decompression
- D. Failed airway management and algorithms
- E. Perform alternative airway management techniques
 - 1. Needle Cricothyroidotomy
 - 2. Surgical Cricothyroidotomy
 - 3. Retrograde intubation
 - 4. Perilaryngeal airway devices
 - 5. Supraglottic airway devices
 - 6. Laryngeal mask airway devices
- F. Airway management and ventilation monitoring techniques during transport
- G. Use of mechanical ventilation
- H. Administer pharmacology agent for continued airway management
- 8. Cardiac Patient Management
 - (A) Cardiac Anatomy and Physiology and Pathophysiology
 - (B) Detailed Assessment of the Cardiac Patient
 - (C) Assessment and Management of patients with cardiac events
 - 1. Acute coronary syndromes,
 - 2. Heart failure,
 - 3. Cardiogenic shock,
 - 4. Primary arrhythmias,
 - 5. Hemodynamic instability
 - 6. Vascular Emergencies
 - (D) Invasive monitoring (use, care, and complication management)
 - 1. Arterial
 - 2. Central venous pressure (CVP)
 - (E) Vascular access devices usage and maintenance
 - (F) Dressing and site care
 - (G) Management of complications
 - (H) Manage patient's status using

1. laboratory values (e.g., blood gas values, ISTAT)
2. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
3. 12-lead EKG interpretation:
 - a. Essential 12-lead interpretation
 - b. Acquisition and transmission
 - c. Acute coronary syndromes
 - d. The high acuity patient
 - e. Bundle branch block and the imitators of acute coronary syndrome (ACS)
 - f. Theory and Use of cardiopulmonary support devices as part of patient management
 - 1) Ventricular assist devices,
 - 2) Transvenous pacer,
 - 3) Intra-aortic balloon pump
 - g. Application of Pharmacologic agents in Cardiac Emergencies
 - h. Management of complications of cardiac patients
 - i. Implanted cardioverter defibrillators:
 - 1) Eligible populations
 - 2) Mechanism
 - 3) Complications and patient management
 - j. Cardiac pacemakers
 - 1) Normal operations, troubleshooting and loss of capture
 - a). Implanted devices
 - b). Unipolar and bipolar
 - (2) Temporary pacemakers
 - (3) Transcutaneous pacing
9. Trauma Patient Management
 - (A) Differentiate injury patterns associated with specific mechanisms of injury
 - (B) Rate a trauma victim using the Trauma Score, to include but not be limited to glasgow coma score, injury severity score, and revised trauma score
 - (C) Identify patients who meet trauma center criteria
 - (D) Perform a comprehensive assessment of the trauma patient
 - (E) Initiate the critical interventions for the management of the trauma patient
 1. Manage the patient with life-threatening thoracic injuries
 - a. Tension pneumothorax,
 - b. Pneumothorax,
 - c. Hemothorax,
 - d. Flail chest,
 - e. Cardiac tamponade,
 - f. Myocardial rupture
 2. Manage the patient with abdominal injuries
 - a. diaphragm,
 - b. liver,
 - c. spleen

3. Manage the patient with orthopedic injuries (e.g. pelvic, femur, spinal)
 4. Manage the patient with neurologic injuries
 - a. Subdural,
 - b. Epidural,
 - c. Increased ICP
 - (F) Manage patient's status using
 1. laboratory values (e.g., blood gas values, ISTAT)
 2. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
 - (G) Application of pharmacologic agents for trauma management
 - (H) Manage trauma patient emergencies and complications
 1. the student must demonstrate competency in the skill of chest tube thoracostomy.
 2. The student must demonstrate competency in the skill of pericardiocentesis,
 - (I) Administer blood and blood products
 - (J) Trauma considerations:
 1. Trauma assessment,
 2. Adult thoracic & abdominal trauma,
 3. Vascular trauma,
 4. Musculoskeletal trauma,
 5. Burns,
 6. Ocular trauma,
 7. Maxillofacial trauma,
 8. Penetrating & blunt trauma,
 9. Distributive & hypovolemic shock states,
 - 10 Trauma Systems & Trauma Scoring, and
 11. Kinematics of trauma & injury patterns.
10. Neurologic Patient Management
- (A) Perform an assessment of the patient
 - (B) Conduct differential diagnosis of patients with coma
 - (C) Manage patients with seizures
 - (D) Manage patients with cerebral ischemia
 - (E) Initiate the critical interventions for the management of a patient with a neurologic emergency
 - (F) Provide care for a patient with a neurologic emergency
 1. Trauma neurological emergencies
 2. Medical neurological emergencies
 3. Cerebrovascular Accidents,
 4. Neurological shock states
 - (G) Assess a patient using the Glasgow coma scale
 - (H) Manage patients with head injuries
 - (I) Manage patients with spinal cord injuries
 - (J). Manage patient's status using
 1. laboratory values (e.g., blood gas values, ISTAT)

- 2. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
- (K) Intracranial Pressure monitoring.
- (L) Application of pharmacologic agents for neurologic patients
- (M). Manage neurologic patient complications
- 11. Toxic Exposure and Environmental Patient Management
 - (A) Toxic Exposure Patient
 - 1. Perform a detailed assessment of the patient
 - 2. Decontaminate toxicological patients (e.g., chemical/biological/radiological exposure)
 - 3. Administer poison antidotes
 - 4. Provide care for victims of envenomation
 - a. Snake bite,
 - b. Scorpion sting,
 - c. Spider bite
 - 5. Manage patient's status using
 - a. Laboratory values (e.g., blood gas values, ISTAT)
 - b. Diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
 - 6. Administer pharmacologic agents
 - 7. Manage toxicological patients
 - a. Medication overdose,
 - b. Chemical/biological/radiological exposure
 - 8. Manage toxicological patient complications
 - (B) Environmental Patient
 - 1. Perform an assessment of the patient
 - 2. Manage the patient experiencing a cold-related illness
 - a. Frostbite,
 - b. Hypothermia,
 - c. Cold water submersion
 - 3. Manage the patient experiencing a heat-related illness
 - a. Heat stroke,
 - b. Heat exhaustion,
 - c. Heat cramps
 - 4. Manage the patient experiencing a diving-related illness
 - a. Decompression sickness,
 - b. Arterial gas emboli,
 - c. Near drowning
 - 5. Manage the patient experiencing altitude-related illness
 - 6. Manage patient's status using
 - a. laboratory values (e.g., blood gas values, ISTAT)
 - b. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
 - 7. Application for pharmacologic agents for toxic exposure and environmental

- patients
- 8. Treat patient with environmental complications
- (C) Toxicology:
 - 1. Toxic exposures,
 - 2. Poisonings,
 - 3. Overdoses,
 - 4. Envenomations,
 - 5. Anaphylactic shock, and
 - 6. Infectious diseases.
- 12. Obstetrical Patient Management
 - (A) Perform a detailed assessment of the patient
 - (B) Assess and Manage fetal distress
 - (C) Manage obstetrical patients
 - (D) Assess uterine contraction pattern
 - (E) Conduct interventions for obstetrical emergencies and complications
 - 1. Pregnancy induced hypertension,
 - 2. Hypertonic or titanic contractions,
 - 3. Cord prolapse,
 - 4. Placental abruption
 - 5. Severe preeclampsia involving hemolysis, elevated liver function, and low platelets (HELLP) syndrome.
 - (F) Determine if transport can safely be attempted or if delivery should be accomplished at the referring facility
 - (G) Manage patient's status using
 - 1. laboratory values (e.g., blood gas values, ISTAT)
 - 2. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
 - (H) Application of pharmacologic agents for obstetrical patient management
 - (I) Manage emergent delivery and post-partum complications
 - (J) Special Considerations in Obstetrics (OB)/ Gynecology (GYN) Patients
 - 1. Trauma in pregnancy,
 - 2. Renal disorders,
 - 3. Reproductive system disorders
- 13. Neonatal and Pediatric Patient Management
 - (A) Neonatal Patient
 - 1. Perform a detailed assessment of the neonatal patient
 - a. Management & delivery of the full-term or pre-term newborn,
 - b. Management of the complications of delivery
 - 2. Manage the resuscitation of the neonate, including
 - a. Umbilical artery catheterization – the student must demonstrate the skill of umbilical catheterization.
 - b. Neonatal Resuscitation Program & Pediatric Advanced Life Support.
 - 3. Manage patient's status using diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)

4. Application of pharmacologic agents for neonatal patient management
5. Manage neonatal patient complications
- (B) Pediatric Patient
 1. Perform a detailed assessment of the pediatric patient
 2. Manage the pediatric patient experiencing a medical event
 - a. Respiratory
 - b. Toxicity
 - c. Cardiac
 - d. Environmental
 - e. Gastrointestinal (GI)
 - f. Endocrine/Metabolic
 - f. Neurological
 - g. Infectious processes
 3. Manage the pediatric patient experiencing a traumatic event
 - a. Single vs. multiple system
 - b. Burns
 - c. Non-accidental trauma
 4. Manage patient's status using
 - a. laboratory values (e.g., blood gas values, ISTAT)
 - b. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
 - c. Application of pharmacologic agents for pediatric patient management
 - d. Treat patient with pediatric complications
 5. Considerations for Special needs children.
14. Burn Patient Management
 - (A) Perform a detailed assessment of the patient
 - (B) Calculate the percentage of total body surface area burned
 - (C) Manage fluid replacement therapy
 - (D) Manage inhalation injuries in burn injury patients
 - (E) Manage patient's status using
 1. laboratory values (e.g., blood gas values, ISTAT)
 2. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
 - (F) Application of pharmacologic agents for burn patient management
 - (G) Provide treatment of burn complications - the student must demonstrate competency in the skill of escharotomy.
15. General Medical Patient Management
 - (A) Perform an assessment of the patient
 - (B). Manage patients experiencing a medical condition
 1. Abdominal aortic aneurysm (AAA),
 2. GI bleed,
 3. Bowel obstruction,
 4. Hyperosmolar Hyperglycemic Non-Ketotic Coma (HHNC)
 5. Septic shock,

6. Neurologic emergencies
 7. Hypertensive emergencies,
 8. Environmental emergencies,
 9. Coagulopathies,
 10. Endocrine emergencies,
- (C) Use of invasive monitoring for the purpose of clinical management
- (D) Manage patient's status using
1. laboratory values (e.g., blood gas values, ISTAT)
 2. diagnostic equipment (e.g., pulse oximetry, chest radiography, capnography)
- (E) Application of pharmacologic agents for general medical patient management
- (F) Treat patient with general medical complications
- (G). Transport considerations of patients with renal or peritoneal dialysis
- (H) Transport of Patients with Infection Diseases:
- 1 Pathogens
 - a. Human immunodeficiency virus (HIV)
 - b. Hepatitis
 - c. Vancomycin resistant enterococcus (VRE)
 - d. Multiple-antibiotic resistant bacteria (MRSA)
 - e. Tuberculosis (TB)
 - f. Immunocompromised
 - g. Others as appropriate
- (I) Transport and Management of Patients with Indwelling tubes
1. Urinary
 - a. Foleys
 - b. Suprapubic
 2. Nasogastric (NG)
 3. Percutaneous endoscopic gastric (PEG)
 4. Dobhoff tube

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.
 Reference: Sections 1797.172, 1797.173, 1797.185 and 1797.213, Health and Safety Code.

§ 100161. Required Testing.

(a) Approved paramedic and CCP training programs shall include periodic examinations and final comprehensive competency-based examinations to test the knowledge and skills specified in this Chapter.

(b) Successful performance in the clinical and field setting shall be required prior to course completion.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.185, Health and Safety Code. Reference: Sections 1797.172, 1797.185, 1797.208, 1797.210 and 1797.213, Health and Safety Code.

§ 100162. Course Completion Record.

- (a) Approved paramedic training program and/or CCP training program shall issue a tamper resistant course completion record to each person who has successfully completed the paramedic training program and/or CCP training program. The course completion record shall be issued no later than ten (10) working days from the date of the student's successful completion of the paramedic training program and/or CCP training program.
- (b) The course completion record shall contain the following:
- (1) The name of the individual.
 - (2) The date of completion.
 - (3) The following statement:
 - (A) "The individual named on this record has successfully completed an approved paramedic training program", or
 - (B) "The individual named on this record has successfully completed an approved Critical Care Paramedic training program"
 - (4) The name of the paramedic training program or CCP training program approving authority, depending on the training program being taught.
 - (5) The signature of the course director.
 - (6) The name and location of the training program issuing the record.
 - (7) The following statement in bold print: **"This is not a paramedic license."**
 - (8) For paramedic training, a list of optional scope of practice procedures and/or medications approved pursuant to subsection (c) (2)(A)-(D) of Section 100146 taught in the course.
 - (9) For CCP training, a list of procedures and medications approved pursuant to subsection (c)(1)(S)(1-10) of Section 100146 taught in the course.
- NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.
Reference: Section 1797.172, Health and Safety Code.

Article 4. Applications and Examinations

§ 100163. Date and Filing of Applications.

- (a) The Authority shall notify the applicant within thirty (30) days of receipt of the state application that the application was received and shall specify what information, if any, is missing. The types of applications which may be required to be submitted by the applicant are as follows:
- (1) Application for Initial License (California Graduate), Form #L-01, Revised 7/2011, herein incorporated by reference.
 - (2) Application for Initial License of Out-of-State Candidates who are registered with the National Registry of Emergency Medical Technicians, Form #L-01A, Revised 7/2011, herein incorporated by reference.
 - (3) Application for License Renewal, Form #RL-01, Revised 6/2011, herein incorporated by reference.
 - (4) Application for Lapsed License Reinstatement:

(A) Lapsed Less than One Year, Form #RLL-01A, Revised 06/2012, herein incorporated by reference.

(B) Lapse of One Year or More, Form #RLL-01B, Revised 06/2012, herein incorporated by reference.

(5) Application for Challenge, Form #C L-01A, Revised 06/2012, herein incorporated by reference.

(6) Applicant fingerprint card, FD-258 dated 5/11/99 or a Request for Live Scan Applicant Submission Form, BCII 8016 (Rev 06/09), submitted to the California Department of Justice (DOJ), for a state and federal criminal history summary provided by the Department of Justice in accordance with the provisions of section 11105 et seq. of the Penal Code.

(7) Statement of Citizenship, Alienage, and Immigration Status For State Paramedic License Application /Renewal Form IS-01 (8/11), herein incorporated by reference.

(b) Applications for renewal of license shall be postmarked, hand delivered, or otherwise received by the Authority at least thirty (30) calendar days prior to expiration of current license. Applications postmarked, hand delivered or otherwise received by the Authority less than thirty (30) days prior to the expiration date of the current license will not cause the license to lapse but will require the applicant to pay a \$50 late fee, as specified in Section 100172(b)(4) of this Chapter.

(c) Eligible out-of-state applicants defined in section 100165(b) and eligible applicants defined in section 100165(c) of this Chapter who have applied to challenge the paramedic licensure process shall be notified by the Authority within forty-five (45) working days of receiving the application. Notification shall advise the applicant that the application has been received, and shall specify what information, if any, is missing.

(d) An application shall be denied without prejudice when an applicant does not complete the application, furnish additional information or documents requested by the Authority or fails to pay any required fees. An applicant shall be deemed to have abandoned an application if the applicant does not complete the requirements for licensure within one (1) year from the date on which the application was filed. An application submitted subsequent to an abandoned application shall be treated as a new application.

(e) A complete state application is a signed application submitted to the Authority that provides the requested information and is accompanied by the appropriate application fee(s). All statements submitted by or on behalf of an applicant shall be made under penalty of perjury.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Section 1797.172, Health and Safety Code.

§ 100164. Written and Skills Examination.

(a) Applicants shall comply with the procedures for examination established by the Authority and the NREMT and shall not violate or breach the security of the examination. Applicants found to have violated the security of the examination or

examination process as specified in section 1798.207 of the Health and Safety Code shall be subject to the penalties specified therein.

(b) Students enrolled in an accredited paramedic training program, or a paramedic training program with a current Letter of Review on file with the NREMT, shall be eligible to take the practical examination specified in Sections 100140 of this chapter upon successful completion of didactic and skills laboratory, and shall be eligible to take the written examination specified in Section 100141 when they have successfully completed the didactic, clinical, and field training and have met all the provisions of the approved paramedic training program.

NOTE: Authority cited: Sections 1797.7, 1797.107, 1797.172, 1797.174 and 1797.185, Health and Safety Code. Reference: Sections 1797.7, 1797.172, 1797.185, 1797.214 and 1798.207, Health and Safety Code.

Article 5. Licensure

§ 100165. Licensure.

(a) In order to be eligible for initial paramedic licensure an individual shall meet the following requirements.

(1) Have a paramedic training program course completion record as specified in Section 100162 of this Chapter or other documented proof of successful completion of an approved paramedic training program within the last two years from the date of application to the Authority for paramedic licensure.

(2) Complete and submit the appropriate state application forms as specified in Section 100163.

(3) Provide documentation of successful completion of the paramedic licensure written and practical examinations specified in sections 100140, 100141, and 100164.

(4) Pay the established fees pursuant to Section 100172.

(b) An individual who possesses a current paramedic registration issued by the NREMT, shall be eligible for licensure when that individual fulfills the requirements of subsection (a)(2) and (4) of this section and successfully completes a field internship as defined in Sections 100153 and 100159(b).

(c) A physician, registered nurse or physician assistant currently licensed shall be eligible for paramedic licensure upon:

(1) providing documentation that their training is equivalent to the DOT HS 811 077A specified in Section 100160;

(2) successfully completing a field internship as defined in Sections 100153(a) and 100159(b); and,

(3) fulfilling the requirements of subsection (a)(2) through (a)(4) of this section.

(d) All documentation submitted in a language other than English shall be accompanied by a translation into English certified by a translator who is in the business of providing certified translations and who shall attest to the accuracy of such translation under penalty of perjury.

(e) The Authority shall issue within forty-five (45) calendar days of receipt of a complete application as specified in Section 100163(e) a wallet-sized license to eligible individuals who apply for a license and successfully complete the licensure requirements.

(f) The effective date of the initial license shall be the day the license is issued. The license shall be valid for two (2) years from the last day of the month in which it was issued.

(g) The paramedic shall be responsible for notifying the ~~EMS~~ Authority of her/his proper and current mailing address and shall notify the Authority in writing within thirty (30) calendar days of any and all changes of the mailing address, giving both the old and the new address, and paramedic license number.

(h) A paramedic may request a duplicate license if the individual submits a request in writing certifying to the loss or destruction of the original license, or the individual has changed his/her name. If the request for a duplicate card is due to a name change, the request shall also include documentation of the name change. The duplicate license shall bear the same number and date of expiration as the replaced license.

(i) An individual currently licensed as a paramedic by the provision of this section is deemed to be certified as an EMT and an AEMT, except when the paramedic license is under suspension, with no further testing required. If certificates are issued, the expiration date of the EMT or AEMT certification shall be the same expiration date as the paramedic license, unless the individual follows the EMT, or AEMT certification/recertification process as specified in Chapters 2 and 3 of this Division.

(j) An individual currently licensed as a paramedic by the provisions of this section may voluntarily deactivate his/her paramedic license if the individual is not under investigation or disciplinary action by the Authority for violations of Health and Safety Code Section 1798.200. If a paramedic license is voluntarily deactivated, the individual shall not engage in any practice for which a paramedic license is required, shall return his/her paramedic license to the Authority, and shall notify any LEMSA with which he/she is accredited as a paramedic or with which he/she is certified as an EMT-I or AEMT that the paramedic license is no longer valid. Reactivation of the paramedic license shall be done in accordance with the provisions of Section 100167(b) of this Chapter.

NOTE: Authority cited: Sections 1797.107, 1797.172, 1797.175, 1797.185, 1797.194, 1798.200 and 1798.202, Health and Safety Code. Reference: Sections 1797.63, 1797.172, 1797.175, 1797.177, 1797.185, 1797.194 and 1798.200, Health and Safety Code and section 15376, Government Code.

§ 100166. Accreditation to Practice.

(a) In order to be accredited an individual shall:

(1) Possess a current California paramedic license.

(2) Apply to the LEMSA for accreditation.

(3) Successfully complete an orientation of the local EMS system as prescribed by the LEMSA which shall include policies and procedures, treatment protocols, radio

communications, hospital/facility destination policies, and other unique system features. The orientation shall not exceed eight (8) classroom hours, except when additional hours are needed to accomplish subsection (a)(4) of this section, and shall not include any further testing of the paramedic basic scope of practice. Testing shall be limited to local policies and treatment protocols provided in the orientation.

(4) Successfully complete training in any basic and/or local optional scope of practice for which the paramedic has not been trained and tested.

(5) Pay the established local fee pursuant to Section 100172.

(6) In order for an individual to be eligible for accreditation, in the LEMSA's CCP scope of practice, the individual must obtain and maintain CCP certification from the BCCTPC by July 1, 2015.

(b) If the LEMSA requires a supervised field evaluation as part of the local accreditation process, the field evaluation shall consist of no more than ten (10) ALS patient contacts. The field evaluation shall only be used to determine if the paramedic is knowledgeable to begin functioning under the local policies and procedures.

(1) The paramedic accreditation applicant may practice in the basic scope of practice as a second paramedic until s/he is accredited.

(2) The paramedic accreditation applicant may only perform the local optional scope of practice while in the presence of the field evaluator who is ultimately responsible for patient care.

(c) The LEMSA medical director shall evaluate any candidate who fails to successfully complete the field evaluation and may recommend further evaluation or training as required to ensure the paramedic is competent. If, after several failed remediation attempts, the medical director has reason to believe that the paramedic's competency to practice is questionable, then the medical director shall notify the Authority.

(d) If the paramedic accreditation applicant does not complete accreditation requirements within thirty (30) calendar days, then the applicant may be required to complete a new application and pay a new fee to begin another thirty (30) day period.

(e) A LEMSA may limit the number of times that a paramedic applies for initial accreditation to no more than three (3) times per year.

(f) The LEMSA shall notify the individual applying for accreditation of the decision whether or not to grant accreditation within thirty (30) calendar days of submission of a complete application.

(g) Accreditation to practice shall be continuous as long as licensure is maintained and the paramedic continues to meet local requirements for updates in local policy, procedure, protocol and local optional scope of practice, and continues to meet requirements of the system-wide EMSQIP pursuant to Section 100168.

(h) An application and fee may only be required once for ongoing accreditation. An application and fee can only be required to renew accreditation when an accreditation has lapsed.

(i) The medical director of the LEMSA may suspend or revoke accreditation if the paramedic does not maintain current licensure or meet local accreditation requirements and the following requirements are met:

(1) The paramedic has been granted due process in accordance with local policies and procedures.

(2) The local policies and procedures provide a process for appeal or reconsideration.

(j) The LEMSA shall submit to the Authority the names and dates of accreditation for those individuals it accredits within twenty (20) working days of accreditation.

(k) During an interfacility transfer, a paramedic may utilize the scope of practice for which s/he is trained and accredited.

(l) During a mutual aid response into another jurisdiction, a paramedic may utilize the scope of practice for which s/he is trained and accredited according to the policies and procedures established by his/her accrediting LEMSA.

NOTE: Authority cited: Sections 1797.7, 1797.107, 1797.172, 1797.185 and 1797.192, Health and Safety Code. Reference: Sections 1797.7, 1797.172, 1797.185 and 1797.214, Health and Safety Code.

Article 6. License Renewal

§ 100167. License Renewal

(a) In order to be eligible for renewal of a non-lapsed paramedic license, an individual shall comply with the following requirements:

(1) Possess a current paramedic license issued in California.

(2) Complete forty-eight (48) hours of CE pursuant to the provisions of Chapter 11 of this Division.

(3) Complete and submit the state Paramedic Application for License Renewal, Form #RL-01, Revised 07/2011 including the Statement of Continuing Education located on the back of the license renewal application. EMSA will notify the paramedic, by mail, approximately six (6) months prior to their paramedic license expiration date on how to renew their license.

(4) Pay the appropriate fees as specified on the application in accordance with Section 100172 of this Chapter.

(b) In order for an individual whose license has lapsed to be eligible for license renewal, the following requirements shall apply:

(1) For a lapse of less than six (6) months, the individual shall comply with (a) (2), and (a)(4) of this section and complete and submit the state Paramedic Application specified in Section 100163(a)(4), including the Statement of Continuing Education located on the back of the lapsed license renewal application.

(2) For a lapse of six months (6) or more, but less than twelve (12) months, the individual shall comply with (a)(2), and (a)(4) of this section, complete an additional twelve (12) hours of CE, for a total of sixty (60) hours of CE, and complete and submit the state Paramedic Application specified in Section 100163(a)(4), including the Statement of Continuing Education located on the back of the lapsed license renewal application.

(3) For a lapse of twelve (12) months or more, but less than twenty-four (24) months, the individual shall pass the licensure examination specified in Sections 100140,

100141, and 100164 or possess a current paramedic registration issued by the NREMT, comply with (a) (2) and (a)(4) of this section, submit to the California DOJ an applicant fingerprint card, FD-258 dated 5/11/99 or a Request for Live Scan Service Applicant Submission Form, BCII 8016 (Rev 03/07), for a state summary criminal history provided by the DOJ in accordance with the provisions of Section 11105 et seq. of the Penal Code, complete an additional twenty-four (24) hours of CE, for a total of seventy-two (72) hours of CE and complete and submit a state Paramedic Application specified in Section 100163(a)(4), including the Statement of Continuing Education located on the back of the lapsed license renewal application.

(4) For a lapse of twenty-four (24) months or more, the individual shall comply with (a)(2) and (a)(4) and (b)(3) of this section. Documentation of the seventy-two (72) hours of CE shall include completion of the following courses, or their equivalent:

- (A) Advanced Cardiac Life Support,
- (B) Pediatric Advanced Life Support,
- (C) Prehospital Trauma Life Support or International Trauma Life Support,
- (D) CPR.

(c) Renewal of a license shall be for two (2) years. If the renewal requirements are met within six months (6) prior to the expiration date of the current license, the effective date of licensure shall be the first day after the expiration of the current license. This applies only to individuals who have not had a lapse in licensure.

(d) For individuals whose license has lapsed, the licensure cycle shall be for two (2) years from the last day of the month in which all licensure requirements are completed and the license was issued.

(e) The Authority shall notify the applicant for license renewal within thirty (30) working days of receiving the application that the application has been received and shall specify what information, if any, is missing.

(f) An individual, who is a member of the reserves and is deployed for active duty with a branch of the Armed Forces of the United States, whose paramedic license expires during the time the individual is on active duty or less than six (6) months from the date the individual is deactivated/released from active duty, has an additional six (6) months to comply with the CE requirements and the late renewal fee is waived upon compliance with the following provisions:

(1) Provide documentation from the respective branch of the Armed Forces of the United States verifying the individual's dates of activation and deactivation/release from active duty.

(2) Meet the requirements of Section 100167(a)(2) through (a)(4) of this Chapter, except the individual will not be subject to the \$50 late renewal application fee specified in Section 100172(b)(4).

(3) Provide documentation showing that the CE activities submitted for the license renewal period were taken not earlier than 30 days prior to the effective date of the individual's paramedic license that was valid when the individual was activated for active duty and not later than six (6) months from the date of deactivation/release from active duty.

(A) For an individual whose active duty required him/her to use his/her paramedic skills, credit may be given for documented training that meets the requirements of Chapter 11, EMS Continuing Education Regulations (California Code of Regulations, Title 22, Division 9). The documentation shall include verification from the individual's Commanding Officer attesting to the classes attended.

NOTE: Authority cited: Sections 1797.107, 1797.172, 1797.175, 1797.185 and 1797.194, Health and Safety Code. Reference: Sections 1797.63, 1797.172, 1797.175, 1797.185, 1797.194 and 1797.210, Health and Safety Code, and Section 101, Chapter 1, Part 1, Subtitle A, Title 10, United States Code.

Article 7. System Requirements

§ 100168. Paramedic Service Provider.

(a) A LEMSA with an ALS system shall establish policies and procedures for the approval, designation, and evaluation through its EMSQIP, of all paramedic service provider(s).

(b) An approved paramedic service provider shall:

(1) Provide emergency medical service response on a continuous twenty-four (24) hours per day basis, unless otherwise specified by the LEMSA, in which case there shall be adequate justification for the exemption (e.g., lifeguards, ski patrol personnel, etc.).

(2) Utilize and maintain telecommunications as specified by the LEMSA.

(3) Maintain a drug and solution inventory as specified by the LEMSA of equipment and supplies commensurate with the basic and local optional scope of practice of the paramedic.

(A) Ensure that security mechanisms and procedures are established for controlled substances, including, but not limited to:

1. controlled substance ordering and order tracking;
2. controlled substance receipt and accountability;
3. controlled substance master supply storage, security and documentation;
4. controlled substance labeling and tracking;
5. vehicle storage and security;
6. usage procedures and documentation;
7. reverse distribution;
8. disposal;
9. re-stocking procedures.

(B) Ensure that mechanisms for investigation and mitigation of suspected tampering or diversion are established, including, but not limited to:

10. controlled substance testing;
11. discrepancy reporting;
12. tampering, theft and diversion prevention and detection;
13. usage audits.

(4) Have a written agreement with the LEMSA to participate in the EMS system and to

comply with all applicable State regulations and local policies and procedures, including participation in the LEMSA's EMSQIP as specified in Chapter 12 of this Division.

(5) Be responsible for assessing the current knowledge of their paramedics in local policies, procedures and protocols and for assessing their paramedics' skills competency.

(6) If, through the EMSQIP the employer or medical director of the LEMSA determines that a paramedic needs additional training, observation or testing, the employer and the medical director may create a specific and targeted program of remediation based upon the identified need of the paramedic. If there is disagreement between the employer and the medical director, the decision of the medical director shall prevail.

(c) No paramedic service provider shall advertise itself as providing paramedic services unless it does, in fact, routinely provide these services on a continuous twenty-four (24) hours per day basis and meets the requirements of subsection (b) of this section.

(d) No responding unit shall advertise itself as providing paramedic services unless it does, in fact, provide these services and meets the requirements of subsection (a) of this section.

(e) The LEMSA may deny, suspend, or revoke the approval of a paramedic service provider for failure to comply with applicable policies, procedures, and regulations.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1798, Health and Safety Code. Reference: Sections 1797.172, 1797.178, 1797.180, 1797.204 and 1797.218, Health and Safety Code.

§ 100169. Paramedic Base Hospital.

(a) A LEMSA with an ALS system shall designate a paramedic base hospital(s) or alternative base station, pursuant to Health and Safety Code Section 1798.105 if no qualified base hospital is available to provide medical direction, to provide medical direction and supervision of paramedic personnel.

(b) A designated paramedic base hospital shall be responsible for the provisions of subsections (b)(1) through (b)(13) of this section, and alternate base stations shall be responsible for the provisions of subsections (b)(4) through (b)(13) of this section.

(1) Be licensed by the California Department of Public Health as a general acute care hospital, or, for an out of state general acute care hospital, meet the relevant requirements for that license and the requirements of this section where applicable, as determined by the LEMSA which is utilizing the hospital in the local EMS system.

(2) Be accredited by a Centers for Medicare and Medicaid Services approved deeming authority.

(3) Have a special permit for basic or comprehensive emergency medical service pursuant to the provisions of Division 5, or have been granted approval by the Authority for utilization as a base hospital pursuant to the provisions of Section 1798.101 of the Health and Safety Code. Hospitals meeting requirements in this section shall be referenced in the EMS Plan of the approving LEMSA.

- (4) Have and agree to utilize and maintain two-way telecommunications equipment, as specified by the LEMSA, capable of direct two-way voice communication with the paramedic field units assigned to the hospital.
 - (5) Both parties shall maintain a record of all online medical direction between the service provider and base hospital or alternative base station as specified by LEMSA policy.
 - (6) Have a written agreement, which is reviewed every three (3) years, with the LEMSA indicating the concurrence of hospital administration, medical staff, and emergency department staff to meet the requirements for program participation as specified in this Chapter and by the LEMSA's policies and procedures.
 - (7) Have a physician licensed in the State of California, experienced in emergency medical care, assigned to the emergency department, available at all times to provide immediate medical direction to the MICN or paramedic personnel. This physician shall have experience in and knowledge of base hospital radio operations and LEMSA policies, procedures, and protocols.
 - (8) Assure that nurses giving medical direction to paramedic personnel are trained and authorized as MICNs by the medical director of the LEMSA.
 - (9) Designate a paramedic base hospital medical director who shall be a physician on the hospital staff, licensed in the State of California who is certified or prepared for certification by the American Board of Emergency Medicine. The requirement of board certification or prepared for certification may be waived by the medical director of the LEMSA when the medical director determines that an individual with these qualifications is not available. The base hospital medical director shall be regularly assigned to the emergency department, have experience in and knowledge of base hospital radio operations and LEMSA policies and procedures, and shall be responsible for functions of the base hospital including the EMSQIP.
 - (10) Identify a base hospital coordinator who is a currently licensed in California registered nurse with experience in and knowledge of base hospital operations and LEMSA policies and procedures. The base hospital coordinator shall serve as a liaison to the local EMS system.
 - (11) Ensure that a mechanism exists for prehospital providers to contract for the provision of medications, medical supplies and equipment used by paramedics according to policies and procedures established by the LEMSA.
 - (12) Provide for CE in accordance with the policies and procedures of the LEMSA.
 - (13) Agree to participate in the LEMSA's EMSQIP which may include making available all relevant records for program monitoring and evaluation.
- (c) The LEMSA may deny, suspend, or revoke the approval of a base hospital or alternative base station for failure to comply with any applicable policies, procedures, and regulations.

NOTE: Authority cited: Sections 1797.107 and 1797.172, Health and Safety Code.

Reference: Sections 1797.56, 1797.58, 1797.59, 1797.172, 1797.178, 1798, 1798.2, 1798.100, 1798.101, 1798.102 and 1798.104, Health and Safety Code.

§ 100170. Medical Control.

The medical director of the LEMSA shall establish and maintain medical control in the following manner:

- (a) Prospectively, by assuring the development of written medical policies and procedures, to include at a minimum:
 - (1) Treatment protocols that encompass the paramedic scope of practice.
 - (2) Local medical control policies and procedures as they pertain to the paramedic base hospitals, alternative base stations, paramedic service providers, paramedic personnel, patient destination, and the LEMSA.
 - (3) Criteria for initiating specified emergency treatments on standing orders or for use in the event of communication failure that is consistent with this Chapter.
 - (4) Criteria for initiating specified emergency treatments, prior to voice contact, that are consistent with this Chapter.
 - (5) Requirements to be followed when it is determined that the patient will not require transport to the hospital by ambulance or when the patient refuses transport.
 - (6) Requirements for the initiation, completion, review, evaluation, and retention of a patient care record as specified in this Chapter. These requirements shall address but not be limited to:
 - (A) Initiation of a record for every patient response.
 - (B) Responsibilities for record completion.
 - (C) Record distribution to include LEMSA, receiving hospital, paramedic base hospital, alternative base station, and paramedic service provider.
 - (D) Responsibilities for record review and evaluation.
 - (E) Responsibilities for record retention.
- (b) Establish policies which provide for direct voice communication between a paramedic and a base hospital physician or MICN, as needed.
- (c) Retrospectively, by providing for organized evaluation and CE for paramedic personnel. This shall include, but not be limited to:
 - (1) Review by a base hospital physician or MICN of the appropriateness and adequacy of paramedic procedures initiated and decisions regarding transport.
 - (2) Maintenance of records of communications between the service provider(s) and the base hospital through tape recordings and through emergency department communication logs sufficient to allow for medical control and CE of the paramedic.
 - (3) Organized field care audit(s).
 - (4) Organized opportunities for CE including maintenance and proficiency of skills as specified in this Chapter.
- (d) In circumstances where use of a base hospital as defined in Section 100169 is precluded, alternative arrangements for complying with the requirements of this Section may be instituted by the medical director of the LEMSA if approved by the EMS Authority.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.176, Health and Safety Code. Reference: Sections 1797.90, 1797.172, 1797.202, 1797.220, 1798, 1798.2, 1798.3 and 1798.105, Health and Safety Code.

Article 8. Record Keeping and Fees.

§ 100171. Record Keeping.

- (a) Each paramedic approving authority shall maintain a record of approved training programs within its jurisdiction and annually provide the Authority with the name, address, and course director of each approved program. The Authority shall be notified of any changes in the list of approved training programs.
- (b) Each paramedic approving authority shall maintain a list of current paramedic program medical directors, course directors, and principal instructors within its jurisdiction.
- (c) The Authority shall maintain a record of approved training programs.
- (d) Each LEMSA shall, at a minimum, maintain a list of all paramedics accredited by them in the preceding five (5) years.
- (e) The paramedic is responsible for accurately completing the patient care record referenced in Section 100170(a)(6) which shall contain, but not be limited to, the following information when such information is available to the paramedic:
 - (1) The date and estimated time of incident.
 - (2) The time of receipt of the call (available through dispatch records).
 - (3) The time of dispatch to the scene.
 - (4) The time of arrival at the scene.
 - (5) The location of the incident.
 - (6) The patient's:
 - (A) Name;
 - (B) Age;
 - (C) Gender;
 - (D) Weight, if necessary for treatment;
 - (E) Address;
 - (F) Chief complaint; and
 - (G) Vital signs.
 - (7) Appropriate physical assessment.
 - (8) The emergency care rendered and the patient's response to such treatment.
 - (9) Patient disposition.
 - (10) The time of departure from scene.
 - (11) The time of arrival at receiving facility (if transported).
 - (12) The name of receiving facility (if transported).
 - (13) The name(s) and unique identifier number(s) of the paramedics.
 - (14) Signature(s) of the paramedic(s).
- (f) A LEMSA utilizing computer or other electronic means of collecting and storing the information specified in subsection (e) of this section shall in consultation with EMS providers establish policies for the collection, utilization and storage of such data.

NOTE: Authority cited: Sections 1797.107, 1797.172 and 1797.185, Health and Safety Code. Reference: Sections 1797.172, 1797.173, 1797.185, 1797.200, 1797.204 and 1797.208, Health and Safety Code.

§ 100172. Fees.

(a) A LEMSA may establish a schedule of fees for paramedic training program review and approval, CE provider approval, and paramedic accreditation in an amount sufficient to cover the reasonable cost of complying with the provisions of this Chapter.

(b) The following are the licensing fees established by the Authority:

(1) The fee for initial application for paramedic licensure for individuals who have completed training in California through an approved paramedic training program shall be \$50.00.

(2) The fee for initial application for paramedic licensure for individuals who have completed out-of-state paramedic training, as specified in Section 100165(b), or for individuals specified in Section 100165(c), shall be \$100.00.

(3) The fee for licensure or licensure renewal as a paramedic shall be \$195.00.

(4) The fee for failing to submit an application for renewal within the timeframe specified in Section 100163(b), or for an individual whose license has lapsed, as specified in Section 100167(b)(1), (2), (3) and (4) shall be \$50.00.

(5) The fee for state summary criminal history shall be in accordance with the schedule of fees established by the California DOJ.

(6) The fee for replacement of a license shall be \$10.00.

(7) The fee for approval and re-approval of an out-of-state CE provider shall be \$200.00.

(8) The fee for administration of the provisions of Section 17520 of the Family Code shall be \$5.00.

NOTE: Authority cited: Sections 1797.107, 1797.112, 1797.172, 1797.185 and 1797.212, Health and Safety Code. Reference: Sections 1797.172, 1797.185 and 1797.212, Health and Safety Code; and Section 11105, Penal Code.

Article 9. Discipline and Reinstatement of License

§ 100173. Proceedings.

(a) Any proceedings by the Authority to deny, suspend or revoke the license of a paramedic or place any paramedic license holder on probation pursuant to Section 1798.200 of the Health and Safety Code, or impose an administrative fine pursuant to Section 1798.210 of the Health and Safety Code, shall be conducted in accordance with this article and pursuant to the provisions of the Administrative Procedure Act, Government Code, Section 11500 et seq.

(b) Before any disciplinary proceedings are undertaken, the Authority shall evaluate all information submitted to or discovered by the Authority including, but not limited to, a recommendation for suspension or revocation from a medical director of a LEMSA, for evidence of a threat to public health and safety pursuant to Section 1798.200 of the Health and Safety Code.

(c) The Authority shall use the “EMS Authority Recommended Guidelines for Disciplinary Orders and Conditions of Probation”, dated July 26, 2008 and incorporated by reference herein, as the standard in settling disciplinary matters when a paramedic applicant or license holder is found to be in violation of Section 1798.200 of Division 2.5 of the Health and Safety Code.

(d) The administrative law judge shall use the “EMS Authority Recommended Guidelines for Disciplinary Orders and Conditions of Probation”, dated July 26, 2008, as a guide in making any recommendations to the Authority for discipline of a paramedic applicant or license holder found in violation of Section 1798.200 of Division 2.5 of the Health and Safety Code.

NOTE: Authority cited: Sections 1797.107, 1797.176, 1798.200, 1798.204 and 1798.210, Health and Safety Code. Reference: Sections 1797.172, 1797.174, 1797.176, 1797.185, 1798.200, 1798.204 and 1798.210, Health and Safety Code and Section 11500 et seq., Government Code.

§ 100174. Denial/Revocation Standards.

(a) The Authority shall deny/revoke a paramedic license if any of the following apply to the applicant:

(1) Has committed any sexually related offense specified under Section 290 of the Penal Code.

(2) Has been convicted of murder, attempted murder, or murder for hire.

(3) Has been convicted of two (2) or more felonies.

(4) Is on parole or probation for any felony.

(b) The Authority shall deny/revoke a paramedic license, if any of the following apply to the applicant:

(1) Has been convicted and released from incarceration for said offense during the preceding fifteen (15) years for the crime of manslaughter or involuntary manslaughter.

(2) Has been convicted and released from incarceration for said offense during the preceding ten (10) years for any offense punishable as a felony.

(3) Has been convicted of two (2) misdemeanors within the preceding five (5) years for any offense relating to the use, sale, possession, or transportation of narcotics or addictive or dangerous drugs.

(4) Has been convicted of two (2) misdemeanors within the preceding five (5) years for any offense relating to force, violence, threat, or intimidation.

(5) Has been convicted within the preceding five (5) years of any theft related misdemeanor.

(c) The Authority may deny/revoke a paramedic license if any of the following apply to the applicant:

(1) Has committed any act involving fraud or intentional dishonesty for personal gain within the preceding seven (7) years.

(2) Is required to register pursuant to Section 11590 of the Health & Safety Code.

(d) Subsections (a) and (b) shall not apply to convictions that have been pardoned by the governor, and shall only apply to convictions where the applicant/licensee was

prosecuted as an adult. Equivalent convictions from other states shall apply to the type of offenses listed in (a) and (b). As used in this section, "felony" or "offense punishable as a felony" refers to an offense for which the law prescribes imprisonment in the state prison as either an alternative or the sole penalty, regardless of the sentence the particular defendant received.

(e) This section shall not apply to those paramedics who obtained their California Paramedic License prior to the effective date of this Section; unless:

(1) The licensee is convicted of any misdemeanor or felony subsequent to the effective date of this Section.

(2) The licensee committed any sexually related offense specified under Section 290 of the Penal Code.

(3) The licensee failed to disclose to the Authority any prior convictions when completing his/her application for initial paramedic license or license renewal.

(f) Nothing in this section shall prevent the Authority from taking licensure action pursuant to Health & Safety Code Section 1798.200.

(g) The Director of the Authority may grant a license to anyone otherwise precluded under subsections (a) and (b) of this section if the Director of the Authority believes that extraordinary circumstances exist to warrant such an exemption.

(h) Nothing in this section shall negate an individual's right to appeal the denial of a license or petition for reinstatement of a license pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

NOTE: Authority cited: Sections 1797.107, 1797.176, 1798.200 and 1798.204, Health and Safety Code. Reference: Sections 1797.172, 1797.174, 1797.176, 1797.185, 1798.200 and 1798.204, Health and Safety Code.

§ 100175. Substantial Relationship Criteria for the Denial, Placement on Probation, Suspension, Fine, or Revocation of a License.

(a) For the purposes of denial, placement on probation, suspension, or revocation, of a license, pursuant to Section 1798.200 of the Health and Safety Code, or imposing an administrative fine pursuant to Section 1798.210 of the Health and Safety Code, a crime or act shall be substantially related to the qualifications, functions and/or duties of a person holding a paramedic license under Division 2.5 of the Health and Safety Code. A crime or act shall be considered to be substantially related to the qualifications, functions, or duties of a paramedic if to a substantial degree it evidences present or potential unfitness of a paramedic to perform the functions authorized by her/his license in a manner consistent with the public health and safety.

(b) For the purposes of a crime, the record of conviction or a certified copy of the record shall be conclusive evidence of such conviction. "Conviction" means the final judgment on a verdict or finding of guilty, a plea of guilty, or a plea of nolo contendere.

NOTE: Authority cited: Sections 1797.107, 1797.176, 1798.200, 1798.210 and 1798.204, Health and Safety Code. Reference: Sections 1797.172, 1797.174, 1797.176, 1797.185, 1798.200, 1798.204 and 1798.210, Health and Safety Code.

§ 100176. Rehabilitation Criteria for Denial, Placement on Probation, Suspension, Revocations, and Reinstatement of License.

(a) At the discretion of the Authority, the Authority may issue a license subject to specific provisional terms, conditions, and review. When considering the denial, placement on probation, suspension, or revocation of a license pursuant to Section 1798.200 of the Health and Safety Code, or a petition for reinstatement or reduction of penalty under Section 11522 of the Government Code, the Authority in evaluating the rehabilitation of the applicant and present eligibility for a license, shall consider the following criteria:

- (1) The nature and severity of the act(s) or crime(s).
- (2) Evidence of any act(s) committed subsequent to the act(s) or crime(s) under consideration as grounds for denial, placement on probation, suspension, or revocation which also could be considered grounds for denial, placement on probation, suspension, or revocation under Section 1798.200 of the Health and Safety Code.
- (3) The time that has elapsed since commission of the act(s) or crime(s) referred to in subsection (1) or (2) of this section.
- (4) The extent to which the person has complied with any terms of parole, probation, restitution, or any other sanctions lawfully imposed against the person.
- (5) If applicable, evidence of expungement proceedings pursuant to Section 1203.4 of the Penal Code.
- (6) Evidence, if any, of rehabilitation submitted by the person.

NOTE: Authority cited: Sections 1797.107, 1797.176, 1798.200 and 1798.204, Health and Safety Code. Reference: Sections 1797.172, 1797.174, 1797.176, 1797.185, 1798.200 and 1798.204, Health and Safety Code.



State of California
California Emergency
Medical Services Law

Health & Safety Code Division 2.5
Statutes in Effect as of January 1, 2013

Emergency Medical Services Authority
Health and Human Services Agency





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The attached compilation of EMS Statutes (Division 2.5 of the Health and Safety Code) has been updated for your convenience to include changes made during the first half of the 2011-12 Legislative Session. Although every effort has been made to ensure that this document is accurate and complete, no guarantee is being made or implied.

HEALTH AND SAFETY CODE

DIVISION 2.5

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HEALTH AND SAFETY CODE DIVISION 2.5. EMERGENCY MEDICAL SERVICES

[Except where noted, Division 2.5 was created by SB 125 (Ch. 1260); 1980]
[Originally, the heading "Part 1" followed the heading for Division 2.5 and a number of the sections in Division 2.5 referred to "this part". Because there was no Part 2, the "Part 1" heading was deleted and all references to "this part" were changed to "this division" in a number of sections, by SB 2451 (Ch. 248): 1986. This change will not be noted for each section.]

CHAPTER 1. GENERAL PROVISIONS

1797. This division shall be known and may be cited as the Emergency Medical Services System and the Prehospital Emergency Medical Care Personnel Act.

1797.1. The Legislature finds and declares that it is the intent of this act to provide the state with a statewide system for emergency medical services by establishing within the Health and Welfare Agency the Emergency Medical Services Authority, which is responsible for the coordination and integration of all state activities concerning emergency medical services.

[The name of the EMS Authority was technically changed from the Emergency Medical Service Authority to the Emergency Medical Services Authority in Section 1797.1 and in other sections of Division 2.5 by SB 595 (Ch. 1246; statutes of 1983) in order to be consistent with other code sections and with accepted usage. This change will not be noted for each affected section.]

1797.2. It is the intent of the Legislature to maintain and promote the development of EMT-P paramedic programs where appropriate throughout the state and to initiate EMT-II limited advanced life support programs only where geography, population density, and resources would not make the establishment of a paramedic program feasible.

1797.3. The provisions of this division do not preclude the adoption of additional training standards for EMT-II and EMT-P personnel by local EMS agencies, consistent with standards adopted pursuant to Sections 1797.171, 1797.172, and 1797.214. [Amended by AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989.]

1797.4. Any reference in any provision of law to mobile intensive care paramedics subject to former Article 3 (commencing with Section 1480) of Chapter 2.5 of Division 2 shall be deemed to be a reference to persons holding valid certificates under this division as an EMT-I, EMT-II, or EMT-P. Any reference in any provision of law to mobile intensive care nurses subject to former Article 3 (commencing with Section 1480) of Chapter 2.5 of Division 2 shall be deemed to be a reference to persons holding valid

authorization under this division as an MICN. [Original Sec. 1797.4 repealed by SB 595 (Ch. 1246) 1983. New Sec. 1797.4 added by AB 1119 (Ch. 260) 1988.]

1797.5. It is the intent of the Legislature to promote the development, accessibility, and provision of emergency medical services to the people of the State of California.

Further, it is the policy of the State of California that people shall be encouraged and trained to assist others at the scene of a medical emergency. Local governments, agencies, and other organizations shall be encouraged to offer training in cardiopulmonary resuscitation and lifesaving first aid techniques so that people may be adequately trained, prepared, and encouraged to assist others immediately. [Relocated by SB 595 (Ch. 1246) 1983. Formerly H & S Code Section 1750.]

1797.6. (a) It is the policy of the State of California to ensure the provision of effective and efficient emergency medical care. The Legislature finds and declares that achieving this policy has been hindered by the confusion and concern in the 58 counties resulting from the United States Supreme Court's holding in *Community Communications Company, Inc. v. City of Boulder, Colorado*, 455 U.S. 40, 70 L. Ed.2d810, 102 S. Ct. 835, regarding local governmental liability under federal antitrust laws.

(b) It is the intent of the Legislature in enacting this section and Sections 1797.85 and 1797.224 to prescribe and exercise the degree of state direction and supervision over emergency medical services as will provide for state action immunity under federal antitrust laws for activities undertaken by local governmental entities in carrying out their prescribed functions under this division. [Added by AB 3153 (Ch. 1349) 1984.]

1797.7. (a) The Legislature finds and declares that the ability of some prehospital emergency medical care personnel to move from the jurisdiction of one local EMS agency which issued certification and authorization to the jurisdiction of another local EMS agency which utilizes the same level of emergency medical care personnel will be unreasonably hindered if those personnel are required to be retested and recertified by each local EMS agency.

(b) It is the intent of the Legislature in enacting this section and Section 1797.185 to ensure that EMT-P personnel who have met state competency standards for their basic scope of practice, as defined in Chapter 4 (commencing with Section 100135) of Division 9 of Title 22 of the California Code of Regulations, and are currently certified are recognized statewide without having to repeat testing or certification for that same basic scope of practice.

(c) It is the intent of the Legislature that local EMS agencies may require prehospital emergency medical care personnel who were certified in another jurisdiction to be oriented to the local EMS system and receive training and demonstrate competency in any optional skills for which they have not received accreditation. It is also the intent of the Legislature that no individual who possesses a valid California EMT-P certificate shall be prevented from beginning working within the standard statewide scope of practice of an EMT-P if he or she is accompanied by an EMT-P who is currently certified in California and is accredited by the local EMS agency. It is further the intent of the Legislature that the local EMS agency provide, or arrange for the provision of, training

and accreditation testing in local EMS operational policies and procedures and any optional skills utilized in the local EMS system within 30 days of application for accreditation as an EMT-P by the local EMS agency.

(d) It is the intent of the Legislature that subdivisions (a), (b) and (c) not be construed to hinder the ability of local EMS agencies to maintain medical control within their EMS system in accordance with the requirements of this division. [Added by AB 3057 (Ch. 312) 1986. Amended by AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989.]

1797.8. (a) For purposes of this section, the following definitions apply:

(1) "EMT-I" means any person who has training and a valid certificate as prescribed by Section 1797.80.

(2) "EMT certifying authority" means the medical director of the local emergency medical services agency.

(b) Any county may, at the discretion of the county or regional medical director of emergency medical services, develop a program to certify an EMT-I to administer naloxone hydrochloride by means other than intravenous injection.

(c) Any county that chooses to implement a program to certify an EMT-I to administer naloxone hydrochloride, as specified in subdivision (b), shall approve and administer a training and testing program leading to certification consistent with guidelines established by the state Emergency Medical Services Authority.

(d) On or before July 1, 2003, the state Emergency Medical Services Authority shall develop guidelines relating to the county certification programs authorized pursuant to subdivision (b).

(e) An EMT-I may be authorized by the EMT certifying authority to administer naloxone hydrochloride by means other than intravenous injection only if the EMT-I has completed training and passed an examination administered or approved by the EMT certifying authority in the area.

(f) This section shall be operative only until the operative date of regulations that revise the regulations set forth in Chapter 3 (commencing with Section 100101) of Division 9 of Title 22 of the California Code of Regulations and that authorize an EMT-I to receive EMT-II training in administering naloxone hydrochloride without having to complete the entire EMT-II certification course. [Added by SB 1695 (Ch. 678) 2002]

1797.9. (a) This division shall not be construed to regulate or authorize state or local regulation of any nonmedical aspects of the following:

- (1) Public aircraft certification or configuration.
- (2) Public aircraft maintenance procedures and documentation.
- (3) Piloting techniques and methods of piloting public aircraft.
- (4) Public aircraft crewmember qualifications.
- (5) Pilot certification or qualifications for public aircraft.

(b) For purposes of this section, "public aircraft" has the same meaning as in Section 1.1 of Title 14 of the Code of Federal Regulations. [Added by SB 1141 (Ch. 288) 2008.]

CHAPTER 2. DEFINITIONS

1797.50. Unless the context otherwise requires, the definitions contained in this chapter shall govern the provisions of this division.

1797.52. "Advanced life support" means special services designed to provide definitive prehospital emergency medical care, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of a base hospital as part of a local EMS system at the scene of an emergency, during transport to an acute care hospital, during interfacility transfer, and while in the emergency department of an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital. [Amended by SB 1124 (Ch. 1391) 1984.]

1797.53. "Alternative base station" means a facility or service operated and directly supervised by, or directly supervised by, a physician and surgeon who is trained and qualified to issue advice and instructions to prehospital emergency medical care personnel, which has been approved by the medical director of the local EMS agency to provide medical direction to advanced life support or limited advanced life support personnel responding to a medical emergency as part of the local EMS system, when no qualified hospital is available to provide that medical direction. [Added by AB 3269 (Ch. 1390) 1988.]

1797.54. "Authority" means the Emergency Medical Services Authority established by this division.

1797.56. "Authorized registered nurse," "mobile intensive care nurse," or "MICN" means a registered nurse who is functioning pursuant to Section 2725 of the Business and Professions Code and who has been authorized by the medical director of the local EMS agency as qualified to provide prehospital advanced life support or to issue instructions to prehospital emergency medical care personnel within an EMS system according to standardized procedures developed by the local EMS agency consistent with statewide guidelines established by the authority. Nothing in this section shall be deemed to abridge or restrict the duties or functions of a registered nurse or mobile intensive care nurse as otherwise provided by law. [Amended by SB 1124 (Ch. 1391) 1984.]

1797.58. "Base hospital" means one of a limited number of hospitals which, upon designation by the local EMS agency and upon the completion of a written contractual agreement with the local EMS agency, is responsible for directing the advanced life support system or limited advanced life support system and prehospital care system assigned to it by the local EMS agency. [Amended by SB 1124 (Ch. 1391) 1984.]

1797.59. "Base hospital physician" or "BHP" means a physician and surgeon who is currently licensed in California, who is assigned to the emergency department of a base

hospital, and who has been trained to issue advice and instructions to prehospital emergency medical care personnel consistent with statewide guidelines established by the authority. Nothing in this section shall be deemed to abridge or restrict the duties or functions of a physician and surgeon as otherwise provided by law. [Added by SB 1124 (Ch. 1391) 1984.]

1797.60. "Basic life support" means emergency first aid and cardiopulmonary resuscitation procedures which, as a minimum, include recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life without invasive techniques until the victim may be transported or until advanced life support is available.

1797.61. (a) "Certificate" or "license" means a specific document issued to an individual denoting competence in the named area of prehospital service.

(b) "Certificate status" or "license status" means the active, expired, denied, suspended, revoked, or placed on probation designation applied to a certificate or license issued pursuant to this division.

[Added by AB 2917 (Ch. 274) 2008.]

1797.62. "Certifying entity" means a public safety agency or the office of the State Fire Marshal if the agency has a training program for EMT-I personnel that is approved pursuant to the standards developed pursuant to Section 1797.109, or the medical director of a local EMS agency. [Repealed and added by AB 2917 (Ch. 274) 2008.]

1797.63. "Certifying examination" or "examination for certification" means an examination designated by the authority for a specific level of prehospital emergency medical care personnel that must be satisfactorily passed prior to certification or recertification at the specific level and may include any examination or examinations designated by the authority, including, but not limited to, any of the following options determined appropriate by the authority:

(a) An examination developed either by the authority or under the auspices of the authority or approved by the authority and administered by the authority or any entity designated by the authority to administer the examination.

(b) An examination developed and administered by the National Registry of Emergency Medical Technicians.

(c) An examination developed, administered, or approved by a certifying agency pursuant to standards adopted by the authority for the certification examination. [Added by AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989, technically, as two identical sections with the same number. SB 2510 (Ch. 216) 1990, repealed the duplicate as part of a general code cleanup.]

1797.64. "Commission" means the Commission on Emergency Medical Services created pursuant to the provisions of Section 1799.

1797.66. "Competency based curriculum" means a curriculum in which specific objectives are defined for each of the separate skills taught in training programs with

integrated didactic and practical instruction and successful completion of an examination demonstrating mastery of every skill.

1797.665. [Added by SB 595 (Ch. 1246) 1983. Repealed by AB 3269 (Ch. 1390) 1988.]

1797.67. "Designated facility" means a hospital which has been designated by a local EMS agency to perform specified emergency medical services systems functions pursuant to guidelines established by the authority. [Added by SB 595 (Ch. 1246) 1983.]

1797.68. "Director" means the Director of the Emergency Medical Services Authority.

1797.70. "Emergency" means a condition or situation in which an individual has a need for immediate medical attention, or where the potential for such need is perceived by emergency medical personnel or a public safety agency.

1797.72. "Emergency medical services" means the services utilized in responding to a medical emergency.

1797.74. "Emergency medical services area" or "EMS area" means the geographical area within the jurisdiction of the designated local EMS agency. [Amended by SB 1124 (Ch. 1391) 1984.]

1797.76. "Emergency medical services plan" means a plan for the delivery of emergency medical services consistent with state guidelines addressing the components listed in Section 1797.103.

1797.78. "Emergency medical services system" or "system" means a specially organized arrangement which provides for the personnel, facilities, and equipment for the effective and coordinated delivery in an EMS area of medical care services under emergency conditions.

1797.80. "Emergency Medical Technician-I" or "EMT-I" means an individual trained in all facets of basic life support according to standards prescribed by this part and who has a valid certificate issued pursuant to this part. This definition shall include, but not be limited to, EMT-I (FS) and EMT-I-A.

1797.82. "Emergency Medical Technician-II," "EMT-II," "Advanced Emergency Medical Technician," or "Advanced EMT" means an EMT-I with additional training in limited advanced life support according to standards prescribed by this part and who has a valid certificate issued pursuant to this part. [Amended by SB 997 (Ch. 275) 2008.]

1797.84. "Emergency Medical Technician-Paramedic," "EMT-P," "paramedic" or "mobile intensive care paramedic" means an individual whose scope of practice to provide advanced life support is according to standards prescribed by this division and

who has a valid certificate issued pursuant to this division. [Amended by SB 595 (Ch. 1246) 1983.]

1797.85. "Exclusive operating area" means an EMS area or subarea defined by the emergency medical services plan for which a local EMS agency, upon the recommendation of a county, restricts operations to one or more emergency ambulance services or providers of limited advanced life support or advanced life support. [Added by AB 3153 (Ch. 1349) 1984.]

1797.86. "Health systems agency" means a health systems agency as defined in subsection (a) of Section 300(1)-1 of Title 42 of the United States Code.

1797.88. "Hospital" means an acute care hospital licensed under Chapter 2 (commencing with Section 1250) of Division 2, with a permit for basic emergency service or an out-of-state acute care hospital which substantially meets the requirements of Chapter 2 (commencing with Section 1250) of Division 2, as determined by the local EMS agency which is utilizing the hospital in the emergency medical services system, and is licensed in the state in which it is located. [Amended by SB 1791 (Ch. 1162) 1986.]

1797.90. "Medical control" means the medical management of the emergency medical services system pursuant to the provisions of Chapter 5 (commencing with Section 1798).

1797.92. "Limited advanced life support" means special service designed to provide prehospital emergency medical care limited to techniques and procedures that exceed basic life support but are less than advanced life support and are those procedures specified pursuant to Section 1797.171.

1797.94. "Local EMS agency" means the agency, department, or office having primary responsibility for administration of emergency medical services in a county and which is designated pursuant to Chapter 4 (commencing with Section 1797.200).

1797.97. "Poison control center" or "PCC" means a hospital-based facility or other facility which, as a minimum, provides information and advice regarding the management of individuals who have or may have ingested or otherwise been exposed to poisonous or possibly toxic substances, and which has been designated by the Emergency Medical Services Authority according to the standards prescribed by this division. [Added by SB 1124 (Ch. 1391) 1984. Amended by AB 580 (Ch. 972) 1987.]

CHAPTER 2.5 THE MADDY EMERGENCY MEDICAL SERVICES FUND

[Added by SB 12 (Ch. 1240) 1987.]

1797.98a. (a) The fund provided for in this chapter shall be known as the Maddy Emergency Medical Services (EMS) Fund.

(b) (1) Each county may establish an emergency medical services fund, upon the adoption of a resolution by the board of supervisors. The moneys in the fund shall be available for the reimbursements required by this chapter. The fund shall be administered by each county, except that a county electing to have the state administer its medically indigent services program may also elect to have its emergency medical services fund administered by the state.

(2) Costs of administering the fund shall be reimbursed by the fund in an amount that does not exceed the actual administrative costs or 10 percent of the amount of the fund, whichever amount is lower.

(3) All interest earned on moneys in the fund shall be deposited in the fund for disbursement as specified in this section.

(4) Each administering agency may maintain a reserve of up to 15 percent of the amount in the portions of the fund reimbursable to physicians and surgeons, pursuant to subparagraph (A) of, and to hospitals, pursuant to subparagraph (B) of, paragraph (5). Each administering agency may maintain a reserve of any amount in the portion of the fund that is distributed for other emergency medical services purposes as determined by each county, pursuant to subparagraph (C) of paragraph (5).

(5) The amount in the fund, reduced by the amount for administration and the reserve, shall be utilized to reimburse physicians and surgeons and hospitals for patients who do not make payment for emergency medical services and for other emergency medical services purposes as determined by each county according to the following schedule:

(A) Fifty-eight percent of the balance of the fund shall be distributed to physicians and surgeons for emergency services provided by all physicians and surgeons, except those physicians and surgeons employed by county hospitals, in general acute care hospitals that provide basic, comprehensive, or standby emergency services pursuant to paragraph (3) or (5) of subdivision (f) of Section 1797.98e up to the time the patient is stabilized.

(B) Twenty-five percent of the fund shall be distributed only to hospitals providing disproportionate trauma and emergency medical care services.

(C) Seventeen percent of the fund shall be distributed for other emergency medical services purposes as determined by each county, including, but not limited to, the funding of regional poison control centers. Funding may be used for purchasing equipment and for capital projects only to the extent that these expenditures support the provision of emergency services and are consistent with the intent of this chapter.

(c) The source of the moneys in the fund shall be the penalty assessment made for this purpose, as provided in Section 76000 of the Government Code.

(d) Any physician and surgeon may be reimbursed for up to 50 percent of the amount claimed pursuant to subdivision (a) of Section 1797.98c for the initial cycle of reimbursements made by the administering agency in a given year, pursuant to Section 1797.98e. All funds remaining at the end of the fiscal year in excess of any reserve held

and rolled over to the next year pursuant to paragraph (4) of subdivision (b) shall be distributed proportionally, based on the dollar amount of claims submitted and paid to all physicians and surgeons who submitted qualifying claims during that year.

(e) Of the money deposited into the fund pursuant to Section 76000.5 of the Government Code, 15 percent shall be utilized to provide funding for all pediatric trauma centers throughout the county, both publicly and privately owned and operated. The expenditure of money shall be limited to reimbursement to physicians and surgeons, and to hospitals for patients who do not make payment for emergency care services in hospitals up to the point of stabilization, or to hospitals for expanding the services provided to pediatric trauma patients at trauma centers and other hospitals providing care to pediatric trauma patients, or at pediatric trauma centers, including the purchase of equipment. Local emergency medical services (EMS) agencies may conduct a needs assessment of pediatric trauma services in the county to allocate these expenditures. Counties that do not maintain a pediatric trauma center shall utilize the money deposited into the fund pursuant to Section 76000.5 of the Government Code to improve access to, and coordination of, pediatric trauma and emergency services in the county, with preference for funding given to hospitals that specialize in services to children, and physicians and surgeons who provide emergency care for children. Funds spent for the purposes of this section, shall be known as Richie's Fund. This subdivision shall remain in effect only until January 1, 2014, and shall have no force or effect on or after that date, unless a later enacted statute, that is chaptered before January 1, 2014, deletes or extends that date.

(f) Costs of administering money deposited into the fund pursuant to Section 76000.5 of the Government Code shall be reimbursed from the money collected in an amount that does not the actual administrative costs or 10 percent of the money collected, whichever amount is lower. This subdivision shall remain in effect only until January 1, 2014, and shall have no force or effect on or after that date, unless a later enacted statute, that is chaptered before January 1, 2014, deletes or extends that date.

[Amended by SB 612 (Ch. 945) 1988; SB 2098 (Ch. 1171) 1990; SB 946 (Ch. 1169) 1991; SB 1683 (Ch. 1143) 1994; AB 2021 (Ch. 58) 1998; SB 476 (Ch. 707) 2003; SB 941 (Ch. 671) 2005, and SB 1773 (Ch. 841) 2006; SB 1236 (Ch. 60) 2008; AB 2702 (Ch. 288) 2008; and by AB 1475 (Ch. 537) 2009.]

1797.98b. (a) Each county establishing a fund, on January 1, 1989, and on each April 15 thereafter, shall report to the Legislature on the implementation and status of the Emergency Medical Services Fund. The report shall cover the preceding fiscal year, and shall include, but not be limited to, all of the following:

(1) The total amount of fines and forfeitures collected, the total amount of penalty assessments collected, and the total amount of penalty assessments deposited into the Emergency Medical Services Fund, or, if no moneys were deposited into the fund, the reason or reasons for the lack of deposits. The total amounts of penalty assessments shall be listed on the basis of each statute that provides the authority for the penalty assessment, including Sections 76000, 76000.5, and 76104 of the Government Code, and Section 42007 of the Vehicle Code.

(2) The amount of penalty assessment funds collected under Section 76000.5 of the Government Code that are used for the purposes of subdivision (e) of Section 1797.98a.

(3) The fund balance and the amount of moneys disbursed under the program to physicians and surgeons, for hospitals, and for other emergency medical services purposes, and the amount of money disbursed for actual administrative costs. If funds were disbursed for other emergency medical services, the report shall provide a description of each of those services.

(4) The number of claims paid to physicians and surgeons, and the percentage of claims paid, based on the uniform fee schedule, as adopted by the county.

(5) The amount of moneys available to be disbursed to physicians and surgeons, descriptions of the physician and surgeon claims payment methodologies, the dollar amount of the total allowable claims submitted, and the percentage at which those claims were reimbursed.

(6) A statement of the policies, procedures, and regulatory action taken to implement and run the program under this chapter.

(7) The name of the physician and surgeon and hospital administrator organization, or names of specific physicians and surgeons and hospital administrators, contacted to review claims payment methodologies.

(8) A description of the process used to solicit input from physicians and surgeons and hospitals to review payment distribution methodology as described in subdivision (a) of Section 1797.98e.

(9) An identification of the fee schedule used by the county pursuant to subdivision (e) of Section 1797.98c.

(10) (A) A description of the methodology used to disburse moneys to hospitals pursuant to subparagraph (B) of paragraph (5) of subdivision (b) of Section 1797.98a.

(B) The amount of moneys available to be disbursed to hospitals.

(C) If moneys are disbursed to hospitals on a claims basis, the dollar amount of the total allowable claims submitted and the percentage at which those claims were reimbursed to hospitals.

(11) The name and contact information of the entity responsible for each of the following:

(A) Collection of fines, forfeitures, and penalties.

(B) Distribution of penalty assessments into the Emergency Medical Services Fund.

(C) Distribution of moneys to physicians and surgeons.

(b) (1) Each county, upon request, shall make available to any member of the public the report required under subdivision (a).

(2) Each county, upon request, shall make available to any member of the public a listing of physicians and surgeons and hospitals that have received reimbursement from the Emergency Medical Services Fund and the amount of the reimbursement they have received. This listing shall be compiled on a semiannual basis. [Amended by SB 623 (Ch. 679) 1999; SB 476 (Ch. 707) 2003; and AB 1059 (Ch. 403) 2011.]

1797.98c. (a) Physicians and surgeons wishing to be reimbursed shall submit their claims for emergency services provided to patients who do not make any payment for services and for whom no responsible third party makes any payment.

(b) If, after receiving payment from the fund, a physician and surgeon is reimbursed by a patient or a responsible third party, the physician and surgeon shall do one of the following:

(1) Notify the administering agency, and, after notification, the administering agency shall reduce the physician and surgeon's future payment of claims from the fund. In the event there is not a subsequent submission of a claim for reimbursement within one year, the physician and surgeon shall reimburse the fund in an amount equal to the amount collected from the patient or third-party payer, but not more than the amount of reimbursement received from the fund.

(2) Notify the administering agency of the payment and reimburse the fund in an amount equal to the amount collected from the patient or third-party payer, but not more than the amount of the reimbursement received from the fund for that patient's care.

(c) Reimbursement of claims for emergency services provided to patients by any physician and surgeon shall be limited to services provided to a patient who does not have health insurance coverage for emergency services and care, cannot afford to pay for those services, and for whom payment will not be made through any private coverage or by any program funded in whole or in part by the federal government, with the exception of claims submitted for reimbursement through Section 1011 of the federal Medicare Prescription Drug, Improvement and Modernization Act of 2003, and where all of the following conditions have been met:

(1) The physician and surgeon has inquired if there is a responsible third-party source of payment.

(2) The physician and surgeon has billed for payment of services.

(3) Either of the following:

(A) At least three months have passed from the date the physician and surgeon billed the patient or responsible third party, during which time the physician and surgeon has made two attempts to obtain reimbursement and has not received reimbursement for any portion of the amount billed.

(B) The physician and surgeon has received actual notification from the patient or responsible third party that no payment will be made for the services rendered by the physician and surgeon.

(4) The physician and surgeon has stopped any current, and waives any future, collection efforts to obtain reimbursement from the patient, upon receipt of moneys from the fund.

(d) A listing of patient names shall accompany a physician and surgeon's submission, and those names shall be given full confidentiality protections by the administering agency.

(e) Notwithstanding any other restriction on reimbursement, a county shall adopt a fee schedule and reimbursement methodology to establish a uniform reasonable level of reimbursement from the county's emergency medical services fund for reimbursable services.

(f) For the purposes of submission and reimbursement of physician and surgeon claims, the administering agency shall adopt and use the current version of the Physicians' Current Procedural Terminology, published by the American Medical Association, or a similar procedural terminology reference.

(g) Each administering agency of a fund under this chapter shall make all reasonable efforts to notify physicians and surgeons who provide, or are likely to provide, emergency services in the county as to the availability of the fund and the process by which to submit a claim against the fund. The administering agency may satisfy this requirement by sending materials that provide information about the fund and the process to submit a claim against the fund to local medical societies, hospitals, emergency rooms, or other organizations, including materials that are prepared to be posted in visible locations. [Amended by SB 2098 (Ch. 1171) 1990; SB 946 (Ch. 1169) 1991; AB 1833 (Ch. 430) 2002; SB 476 (Ch. 707) 2003; and SB 941 (Ch. 671) 2005.]

1797.98d. [Repealed by AB 1257 (Ch. 237) 1989.]

1797.98e. (a) It is the intent of the Legislature that a simplified, cost-efficient system of administration of this chapter be developed so that the maximum amount of funds may be utilized to reimburse physicians and surgeons and for other emergency medical services purposes. The administering agency shall select an administering officer and shall establish procedures and time schedules for the submission and processing of proposed reimbursement requests submitted by physicians and surgeons. The schedule shall provide for disbursements of moneys in the Emergency Medical Services Fund on at least a quarterly basis to applicants who have submitted accurate and complete data for payment. When the administering agency determines that claims for payment for physician and surgeon services are of sufficient numbers and amounts that, if paid, the claims would exceed the total amount of funds available for payment, the administering agency shall fairly prorate, without preference, payments to each claimant at a level less than the maximum payment level. Each administering agency may encumber sufficient funds during one fiscal year to reimburse claimants for losses incurred during that fiscal year for which claims will not be received until after the fiscal year. The administering agency may, as necessary, request records and documentation to support the amounts of reimbursement requested by physicians and surgeons and the administering agency may review and audit the records for accuracy. Reimbursements requested and reimbursements made that are not supported by records may be denied to, and recouped from, physicians and surgeons. Physicians and surgeons found to submit requests for reimbursement that are inaccurate or unsupported by records may be excluded from submitting future requests for reimbursement. The administering officer shall not give preferential treatment to any facility, physician and surgeon, or category of physician and surgeon and shall not engage in practices that constitute a conflict of interest by favoring a facility or physician and surgeon with which the administering officer has an operational or financial relationship. A hospital administrator of a hospital owned or operated by a county of a population of 250,000 or more as of January 1, 1991, or a person under the direct supervision of that person, shall not be the administering officer. The board of supervisors of a county or any other county agency may serve as the administering officer. The administering officer shall solicit input from physicians and surgeons and hospitals to review payment distribution methodologies to ensure fair and timely payments. This requirement may be fulfilled through the establishment of an advisory committee with representatives comprised of local physicians and surgeons and

hospital administrators. In order to reduce the county's administrative burden, the administering officer may instead request an existing board, commission, or local medical society, or physicians and surgeons and hospital administrators, representative of the local community, to provide input and make recommendations on payment distribution methodologies.

(b) Each provider of health services that receives payment under this chapter shall keep and maintain records of the services rendered, the person to whom rendered, the date, and any additional information the administering agency may, by regulation, require, for a period of three years from the date the service was provided. The administering agency shall not require any additional information from a physician and surgeon providing emergency medical services that is not available in the patient record maintained by the entity listed in subdivision (f) where the emergency medical services are provided, nor shall the administering agency require a physician and surgeon to make eligibility determinations.

(c) During normal working hours, the administering agency may make any inspection and examination of a hospital's or physician and surgeon's books and records needed to carry out this chapter. A provider who has knowingly submitted a false request for reimbursement shall be guilty of civil fraud.

(d) Nothing in this chapter shall prevent a physician and surgeon from utilizing an agent who furnishes billing and collection services to the physician and surgeon to submit claims or receive payment for claims.

(e) All payments from the fund pursuant to Section 1797.98c to physicians and surgeons shall be limited to physicians and surgeons who, in person, provide onsite services in a clinical setting, including, but not limited to, radiology and pathology settings.

(f) All payments from the fund shall be limited to claims for care rendered by physicians and surgeons to patients who are initially medically screened, evaluated, treated, or stabilized in any of the following:

(1) A basic or comprehensive emergency department of a licensed general acute care hospital.

(2) A site that was approved by a county prior to January 1, 1990, as a paramedic receiving station for the treatment of emergency patients.

(3) A standby emergency department that was in existence on January 1, 1989, in a hospital specified in Section 124840.

(4) For the 1991-92 fiscal year and each fiscal year thereafter, a facility which contracted prior to January 1, 1990, with the National Park Service to provide emergency medical services.

(5) A standby emergency room in existence on January 1, 2007, in a hospital located in Los Angeles County that meets all of the following requirements:

(A) The requirements of subdivision (m) of Section 70413 and Sections 70415 and 70417 of Title 22 of the California Code of Regulations.

(B) Reported at least 18,000 emergency department patient encounters to the Office of Statewide Health Planning and Development in 2007 and continues to report at least 18,000 emergency department patient encounters to the Office of Statewide Health Planning and Development in each year thereafter.

(C) A hospital with a standby emergency department meeting the requirements of this paragraph shall do both of the following:

(i) Annually provide the State Department of Public Health and the local emergency medical services agency with certification that it meets the requirements of subparagraph (A). The department shall confirm the hospital's compliance with subparagraph (A).

(ii) Annually provide to the State Department of Public Health and the local emergency medical services agency the emergency department patient encounters it reports to the Office of Statewide Health Planning and Development to establish that it meets the requirement of subparagraph (B).

(g) Payments shall be made only for emergency medical services provided on the calendar day on which emergency medical services are first provided and on the immediately following two calendar days.

(h) Notwithstanding subdivision (g), if it is necessary to transfer the patient to a second facility providing a higher level of care for the treatment of the emergency condition, reimbursement shall be available for services provided at the facility to which the patient was transferred on the calendar day of transfer and on the immediately following two calendar days.

(i) Payment shall be made for medical screening examinations required by law to determine whether an emergency condition exists, notwithstanding the determination after the examination that a medical emergency does not exist. Payment shall not be denied solely because a patient was not admitted to an acute care facility. Payment shall be made for services to an inpatient only when the inpatient has been admitted to a hospital from an entity specified in subdivision (f).

(j) The administering agency shall compile a quarterly and yearend summary of reimbursements paid to facilities and physicians and surgeons. The summary shall include, but shall not be limited to, the total number of claims submitted by physicians and surgeons in aggregate from each facility and the amount paid to each physician and surgeon. The administering agency shall provide copies of the summary and forms and instructions relating to making claims for reimbursement to the public, and may charge a fee not to exceed the reasonable costs of duplication.

(k) Each county shall establish an equitable and efficient mechanism for resolving disputes relating to claims for reimbursements from the fund. The mechanism shall include a requirement that disputes be submitted either to binding arbitration conducted pursuant to arbitration procedures set forth in Chapter 3 (commencing with Section 1282) and Chapter 4 (commencing with Section 1285) of Part 3 of Title 9 of the Code of Civil Procedure, or to a local medical society for resolution by neutral parties.

(l) Physicians and surgeons shall be eligible to receive payment for patient care services provided by, or in conjunction with, a properly credentialed nurse practitioner or physician's assistant for care rendered under the direct supervision of a physician and surgeon who is present in the facility where the patient is being treated and who is available for immediate consultation. Payment shall be limited to those claims that are substantiated by a medical record and that have been reviewed and countersigned by the supervising physician and surgeon in accordance with regulations established for the supervision of nurse practitioners and physician assistants in California.

SEC. 3. Section 16953 of the Welfare and Institutions Code is amended to read:

16953. (a) For purposes of this chapter "emergency services" means physician services in one of the following:

(1) A general acute care hospital which provides basic or comprehensive emergency services for emergency medical conditions.

(2) A site which was approved by a county prior to January 1, 1990, as a paramedic receiving station for the treatment of emergency patients, for emergency medical conditions.

(3) Beginning in the 1991-92 fiscal year and each fiscal year thereafter, in a facility which contracted prior to January 1, 1990, with the National Park Service to provide emergency medical services, for emergency medical conditions.

(4) A standby emergency room in a hospital specified in Section 124840 of the Health and Safety Code, for emergency medical conditions.

(5) A standby emergency room in a hospital in existence on January 1, 2007, located in Los Angeles County that meets all of the following requirements:

(A) The requirements of subdivision (m) of Section 70413 and Sections 70415 and 70417 of Title 22 of the California Code of Regulations.

(B) Reported at least 18,000 emergency department patient encounters to the Office of Statewide Health Planning and Development in 2007 and continues to report at least 18,000 emergency department patient encounters to the Office of Statewide Health Planning and Development in each year thereafter.

(C) A hospital with a standby emergency department meeting the requirements of this paragraph shall do both of the following:

(i) Annually provide the State Department of Public Health and the local emergency medical services agency with certification that it meets the requirements of subparagraph (A). The department shall confirm the hospital's compliance with subparagraph (A).

(ii) Annually provide to the State Department of Public Health and the local emergency medical services agency the emergency department patient encounters it reports to the Office of Statewide Health Planning and Development to establish that it meets the requirement of subparagraph (B).

(b) For purposes of this chapter, "emergency medical condition" means a medical condition manifesting itself by acute symptoms of sufficient severity, including severe pain, which in the absence of immediate medical attention could reasonably be expected to result in any of the following:

(1) Placing the patient's health in serious jeopardy.

(2) Serious impairment to bodily functions.

(3) Serious dysfunction to any bodily organ or part.

(c) It is the intent of this section to allow reimbursement for all inpatient and outpatient services which are necessary for the treatment of an emergency medical condition as certified by the attending physician or other appropriate provider. [Amended by SB 2098 (Ch. 1171) 1990; SB 946 (Ch. 1169) 1991; SB 1497 (Ch. 1023) 1996; AB 1833 (Ch. 430) 2002; SB 476 (Ch. 707) 2003; SB 635 (Ch. 524) 2004; SB 941 (Ch. 671) 2005; and AB 2702 (Ch. 288) 2008.] [Section 1797.98e of the Health and Safety Code, as added by Section 3 of Chapter 524 of the Statutes of 2004, was repealed by SB 941 (Ch. 671) of 2005.]

1797.98f. Notwithstanding any other provision of this chapter, an emergency physician and surgeon, or an emergency physician group, with a gross billings arrangement with a hospital shall be entitled to receive reimbursement from the Emergency Medical Services Fund for services provided in that hospital, if all of the following conditions are met:

(a) The services are provided in a basic or comprehensive general acute care hospital emergency department or in a standby emergency department in a small and rural hospital as defined in Section 124840.

(b) The physician and surgeon is not an employee of the hospital.

(c) All provisions of Section 1797.98c are satisfied, except that payment to the emergency physician and surgeon, or an emergency physician group, by a hospital pursuant to a gross billings arrangement shall not be interpreted to mean that payment for a patient is made by a responsible third party.

(d) Reimbursement from the Emergency Medical Services Fund is sought by the hospital or the hospital's designee, as the billing and collection agent for the emergency physician and surgeon, or an emergency physician group.

For purposes of this section, a "gross billings arrangement" is an arrangement whereby a hospital serves as the billing and collection agent for the emergency physician and surgeon, or an emergency physician group, and pays the emergency physician and surgeon, or emergency physician group, a percentage of the emergency physician and surgeon's or group's gross billings for all patients. [Added by SB 2098 (Ch. 1171) 1990. Amended by SB 277 (Ch. 1016) 1998.]

1797.98g. The moneys contained in an Emergency Medical Services Fund, other than moneys contained in a Physician Services Account within the fund pursuant to Section 16952 of the Welfare and Institutions Code, shall not be subject to Article 3.5 (commencing with Section 16951) of Chapter 5 of Part 4.7 of Division 9 of the Welfare and Institutions Code. [Added by SB 946 (Ch. 1169) 1991.]

1797.98h. [Automatically repealed on January 1, 2000 as stated in SB 1683 (Ch. 1143) 1994.]

CHAPTER 3. STATE ADMINISTRATION

Article 1. The Emergency Medical Services Authority

1797.100. There is in the state government in the Health and Welfare Agency, the Emergency Medical Services Authority. [Name amended by SB 595 (Ch. 1246) 1983.]

1797.101. The Emergency Medical Services Authority shall be headed by the Director of the Emergency Medical Services Authority who shall be appointed by the Governor upon nomination by the Secretary of California Health and Human Services. The director shall be a physician and surgeon licensed in California pursuant to the provisions of Chapter 5 (commencing with Section 2000) of Division 2 of the Business and Professions Code, and who has substantial experience in the practice of emergency medicine. [Amended by SB 898 (Ch. 1074) 1981; AB 2917 (Ch. 274) 2008.]

1797.102. The authority, utilizing regional and local information, shall assess each EMS area or the system's service area for the purpose of determining the need for additional emergency medical services, coordination of emergency medical services, and the effectiveness of emergency medical services.

1797.103. The authority shall develop planning and implementation guidelines for emergency medical services systems which address the following components:

- (a) Manpower and training.
- (b) Communications.
- (c) Transportation.
- (d) Assessment of hospitals and critical care centers.
- (e) System organization and management.
- (f) Data collection and evaluation.
- (g) Public information and education.
- (h) Disaster response.

1797.104. The authority shall provide technical assistance to existing agencies, counties, and cities for the purpose of developing the components of emergency medical services systems.

1797.105. (a) The authority shall receive plans for the implementation of emergency medical services and trauma care systems from EMS agencies.

(b) After the applicable guidelines or regulations are established by the authority, a local EMS agency may implement a local plan developed pursuant to Section 1797.250, 1797.254, 1797.257, or 1797.258 unless the authority determines that the plan does not effectively meet the needs of the persons served and is not consistent with coordinating activities in the geographical area served, or that the plan is not concordant and consistent with applicable guidelines or regulations, or both the guidelines and regulations, established by the authority.

(c) A local EMS agency may appeal a determination of the authority pursuant to subdivision (b) to the commission.

(d) In an appeal pursuant to subdivision (c), the commission may sustain the determination of the authority or overrule and permit local implementation of a plan, and the decision of the commission is final. [Amended by AB 1235 (Ch. 1735) 1984.]

1797.106. (a) Regulations, standards, and guidelines adopted by the authority and by local EMS agencies pursuant to the provisions of this division shall not prohibit hospitals which contract with group practice prepayment health care service plans from providing necessary medical services for the members of those plans.

(b) Regulations, standards, and guidelines adopted by the authority and by local EMS agencies pursuant to the provisions of this division shall provide for the transport and transfer of a member of a group practice prepayment health care service plan to a hospital that contracts with the plan when the base hospital determines that the condition of the member permits the transport or when the condition of the member permits the transfer, except that when the dispatching agency determines that the transport by a transport unit would unreasonably remove the transport unit from the area, the member may be transported to the nearest hospital capable of treating the member. [Amended by SB 1124 (Ch. 1391) 1984.]

1797.107. The authority shall adopt, amend, or repeal, after approval by the commission and in accordance with the provisions of Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, such rules and regulations as may be reasonable and proper to carry out the purposes and intent of this division and to enable the authority to exercise the powers and perform the duties conferred upon it by this division not inconsistent with any of the provisions of any statute of this state.

1797.108. Subject to the availability of funds appropriated therefore, the authority may contract with local EMS agencies to provide funding assistance to those agencies for planning, organizing, implementing, and maintaining regional emergency medical services systems.

In addition, the authority may provide special funding to multi-county EMS agencies which serve rural areas with extensive tourism, as determined by the authority, to reduce the burden on the rural EMS agency of providing the increased emergency medical services required due to that tourism.

Each local or multi-county EMS agency receiving funding pursuant to this section shall make a quarterly report to the authority on the functioning of the local EMS system. The authority may continue to transfer appropriated funds to the local EMS agency upon satisfactory operation. [Added by SB 1157 (Ch. 191) 1983.]

1797.109. (a) The director may develop, or prescribe standards for and approve, an emergency medical technician training and testing program for the Department of the California Highway Patrol, Department of Forestry and Fire Protection, California Fire Fighter Joint Apprenticeship Committee, and other public safety agency personnel, upon the request of, and as deemed appropriate by, the director for the particular agency.

(b) The director may, with the concurrence of the Department of the California Highway Patrol, designate the California Highway Patrol Academy as a site where the training and testing may be offered.

(c) The director may prescribe that each person, upon successful completion of the training course and upon passing a written and a practical examination, be certified as an emergency medical technician of an appropriate classification. A suitable identification card may be issued to each certified person to designate that person's emergency medical skill level.

(d) The director may prescribe standards for refresher training to be given to persons trained and certified under this section.

(e) The Department of the California Highway Patrol shall, subject to the availability of federal funds, provide for the initial training of its uniformed personnel in the rendering of emergency medical technician services to the public in specified areas of the state as designated by the Commissioner of the California Highway Patrol. [Added by SB 898 (Ch. 1074) 1981; amended by AB 3355 (Ch. 427) 1992; and amended by AB 2469 (Ch. 157) 2000.]

1797.110. The Legislature finds that programs funded through the authority are hindered by the length of time required for the state process to execute approved contracts and payment of vendor claims. These programs include, but are not limited to, general fund assistance to rural multi-county EMS agencies and dispersal of federal grant moneys for EMS systems development to local EMS agencies. This hardship is particularly felt by new or rural community based EMS agencies with modest reserves and cash flow problems. It is the intent of the Legislature that advance payment authority be established for the authority in order to alleviate such problems for those types of contractors to the extent possible.

Notwithstanding any other provision of law, the authority may, to the extent funds are available, provide for advanced payment under any financial assistance contract which the authority determines has been entered into with any small rural, or new EMS agency with modest reserves and potential cash flow problems, as determined by the authority. Such programs include, but are not limited to, local county or multi-county EMS agencies. No advance payment or aggregate of advance payments made pursuant to this section shall exceed 25 percent of the total annual contract amount. No advance payment should be made pursuant to this section if the applicable federal law prohibits advance payment. [Added by SB 1157 (Ch. 191) 1983.]

1797.111. With the approval of the Department of Finance, and for use in the furtherance of the work of the authority, the director may accept all of the following:

(a) Grants of interest in real property.

(b) Gifts of money from public agencies or from organizations or associations organized for scientific, educational, or charitable purpose. [Added by SB 595 (Ch. 1246) 1983.]

1797.112. (a) The Emergency Medical Services Personnel Fund is hereby created in the State Treasury, the funds in which are to be held in trust for the benefit of the authority's testing and personnel licensure program and for the purpose of making

reimbursements to entities for the performance of functions for which fees are collected pursuant to Section 1797.172, for expenditure upon appropriation by the Legislature.

(b) The authority may transfer unused portions of the Emergency Medical Services Personnel Fund to the Surplus Money Investment Fund. Funds transferred to the Surplus Money Investment Fund shall be placed in a separate trust account, and shall be available for transfer to the Emergency Medical Services Personnel Fund, together with interest earned, when requested by the authority.

(c) The authority shall maintain a reserve balance in the Emergency Medical Services Personnel Fund of five percent. Any increase in the fees deposited in the Emergency Medical Services Personnel Fund shall be effective upon a determination by the authority that additional moneys are required to fund expenditures of the personnel licensure program, including, but not limited to, reimbursements to entities set forth in subdivision (a).

[Added by AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989; technically, as two identical sections with the same number. SB 2510 (Ch. 216) 1990, repealed the duplicate as part of a general code cleanup. Amended by SB 463 (Ch. 100) 1993 which provided authority from July 13, 1993 through December 31, 1993 for EMSA to temporarily certify EMT-Ps. AB 1980 (Ch. 997) 1993, extended the authority to certify EMT-Ps through December 31, 1993.

Note that AB 1980 (Ch. 997) 1993, also amends this section back to its pre July 1993 language effective January 1, 1995. Amended by AB 3123 (Ch. 709) 1994 to remove continuous appropriation, establish a trust and authority to maintain a reserve; amended by AB 2877 (Ch. 93) 2000 to reduce the reserve to five percent.]

1797.113. The Emergency Medical Services Training Program Approval Fund is hereby established in the State Treasury and, notwithstanding Section 13340 of the Government Code, is continuously appropriated to the authority for the authority's training program review and approval activities. The fees charged by the authority under Section 1797.191 shall be deposited in this fund. The authority may transfer unexpended and unencumbered moneys contained in the Emergency Medical Services Training Program Approval Fund to the Surplus Money Investment Fund for investment pursuant to Article 4 (commencing with Section 16470) of Chapter 3 of Part 2 of Division 4 of Title 2 of the Government Code. All interest, dividends, and pecuniary gains from such investments or deposits shall accrue to the Emergency Medical Services Training Program Approval Fund. [Added by AB 243 (Ch. 246) 1994 to correspond with Health & Safety Code Section 1596.866. Amended by SB 1524 (Ch. 666) 1998.]

1797.114. The rules and regulations of the authority established pursuant to Section 1797.107 shall include a requirement that a local EMS agency local plan developed pursuant to this division shall require that in providing emergency medical transportation services to any patient, the patient shall be transported to the closest appropriate medical facility, if the emergency health care needs of the patient dictate this course of action. Emergency health care need shall be determined by the prehospital emergency medical care personnel under the direction of a base hospital physician and surgeon or in conformance with the regulations of the authority adopted pursuant to Section 1797.107. [Added by AB 984 (Ch. 979) 1998.]

1797.115. (a) To the extent permitted by federal law and upon appropriation in the annual Budget Act or another statute, the Director of Finance may transfer any moneys in the Federal Trust Fund established pursuant to Section 16360 of the Government Code to the Emergency Medical Services Authority if the money is made available by the United States for expenditure by the state for purposes consistent with the implementation of this section.

(b) Moneys appropriated pursuant to subdivision (a) shall be allocated by the authority to the California Fire Fighter Joint Apprenticeship Program to do all of the following:

(1) Offset the cost of paramedic training course development.

(2) Enter into reimbursement contracts with eligible state and local agencies that in turn may contract with educational institutions for the delivery of paramedic training conducted in compliance with the requirements of subdivision (a) of Section 1797.172.

(3) Allocate funds, in the form of grants, to eligible state and local agencies to defray the cost of providing paramedic training for fire services personnel, including, but not limited to, instructional supplies and trainee compensation expenses.

(c) To the extent permitted by federal law, the authority shall recover its costs for administration of this section from the funds transferred pursuant to subdivision (a).

(d) In order to be eligible for a grant under paragraph (3) of subdivision (b), a state or local agency shall demonstrate a need for additional paramedics.

(e) For purposes of this section, the following definitions apply:

(1) "Fire service personnel" includes, but is not limited to, a firefighter or prehospital emergency medical worker employed by a state or local agency.

(2) "Local agency" means any city, county, city and county, fire district, special district, joint powers agency, or any other political subdivision of the state that provides fire protection services.

(3) "State agency" means any state agency that provides residential or institutional fire protection, including, but not limited to, the Department of Forestry and Fire Protection.

[Added by SB 1629 (Ch. 1050) 2002; amended by SB 600 (Ch. 62) 2003.]

1797.116. (a) The authority shall establish additional training standards that include the criteria for the curriculum content recommended by the Emergency Response Training Advisory Committee established pursuant to Section 8588.10 of the Government Code, involving the responsibilities of first responders to terrorism incidents and to address the training needs of those identified as first responders.

(b) Every EMT I, EMT II, and EMT-P, as defined in Sections 1797.80, 1797.82, and 1797.84, may receive the appropriate training described in this section. Pertinent training previously completed by any jurisdiction's EMT I, EMT II, or EMT-P personnel and meeting the training requirements of this section may be submitted to the training program approving authority to assess its content and determine whether it meets the training standards prescribed by the authority. [Added by SB 1629 (Ch. 1050) 2002.]

1797.117. (a) The authority shall establish and maintain a centralized registry system for the monitoring and tracking of each EMT-I and EMT-II certificate status and each EMT-P license status. This centralized registry system shall be used by the certifying entities as part of the certification process for an EMT-I and EMT-II and by the authority

as part of the licensure process for an EMT-P license. The authority shall, by regulation, specify the data elements to be included in the centralized registry system, the requirements for certifying entities to report the data elements for inclusion in the registry, including reporting deadlines, the penalties for failure of a certifying entity to report certification status changes within these deadlines, and requirements for submission to the Department of Justice fingerprint images and related information required by the Department of Justice of, except as otherwise provided in this division, EMT-I and EMT-II certificate candidates or holders and EMT-P license candidates or holders for the purposes described in subdivision (c). The data elements to be included in the centralized registry system shall include, but are not limited to, data elements that are to be made publicly available pursuant to subdivision (b).

(b) The information made available to the public through the centralized registry system shall include all of the following data elements: the full name of every individual who has been issued an EMT-I or EMT-II certificate or EMT-P license, the name of the entity that issued the certificate or license, the certificate or license number, the date of issuance of the license or certificate, and the license or certificate status.

(c) (1) As part of the centralized registry system, the authority shall electronically submit to the Department of Justice fingerprint images and related information required by the Department of Justice of all EMT-I and EMT-II certificate candidates or holders, and of all EMT-P license applicants, for the purposes of obtaining information as to the existence and content of a record of state or federal convictions and state or federal arrests and also information as to the existence and content of a record of state or federal arrests for which the Department of Justice establishes that the person is free on bail or on his or her recognizance pending trial or appeal.

(2) When received, the Department of Justice shall forward to the Federal Bureau of Investigation requests for federal summary criminal history information received pursuant to this subdivision. The Department of Justice shall review the information returned from the Federal Bureau of Investigation and compile and electronically disseminate a primary response to the authority and electronically disseminate a dual response to one government agency certifying entity.

(3) The Department of Justice shall electronically provide the primary response to the authority and also electronically, the dual response to one certifying entity that is a government agency, pursuant to paragraph (1) of subdivision (p) of Section 11105 of the Penal Code.

(d) The authority shall request the Department of Justice to provide subsequent arrest notification service, as provided pursuant to Section 11105.2 of the Penal Code, for persons described in subdivision (c). All subsequent arrest notifications provided to the authority for persons described in subdivision (c) shall be electronically submitted to one government agency certifying entity, as a dual response by the Department of Justice.

(e) The Department of Justice shall charge a fee sufficient to cover the cost of processing the request described in this section. [Added by AB 2917 (Ch. 274) 2008.]

1797.118. (a) On and after July 1, 2010, and except as provided in subdivision (b), every EMT-I and EMT-II certificate candidate or holder shall have their fingerprint images and related information submitted to the authority for submission to the Department of Justice pursuant to the regulations adopted pursuant to Section

1797.117 for a state and federal level criminal offender record information search, including subsequent arrest information.

(b) If a state level criminal offender record information search, including subsequent arrest information, has been conducted on a currently certified EMT-I or EMT-II, who was certified prior to July 1, 2010, for the purposes of employment or EMT-I or EMT-II certification, then the certifying entity or employer as identified in paragraph (2) of subdivision (a) of Section 1798.200 shall verify in writing to the authority pursuant to regulations adopted pursuant to Section 1797.117 that a state level criminal offender record information search, including subsequent arrest information, has been conducted and that nothing in the criminal offender record information search precluded the individual from obtaining EMT-I or EMT-II certification. [Added by AB 2917 (Ch. 274) 2008.]

Article 2. Recodifications

1797.120. [Repealed by AB 1123 (Ch. 1058); 1987.]

1797.121. The authority shall report to the Legislature on the effectiveness of the systems provided for in this division on or before January 1, 1984, and annually thereafter, including within this report, systems impact evaluations on death and disability.

Article 3. Coordination With Other State Agencies

1797.130. The director shall chair an Interdepartmental Committee on Emergency Medical Services established pursuant to Section 1797.132.

1797.131. [Repealed by AB 1153 (Ch. 477) 1987.]

1797.132. An Interdepartmental Committee on Emergency Medical Services is hereby established. This committee shall advise the authority on the coordination and integration of all state activities concerning emergency medical services. The committee shall include a representative from each of the following state agencies and departments: the Office of Emergency Services, the Department of the California Highway Patrol, the Department of Motor Vehicles, a representative of the administrator of the California Traffic Safety Program as provided by Chapter 5 (commencing with Section 2900) of Division 2 of the Vehicle Code, the Medical Board of California, the State Department of Health Services, the Board of Registered Nursing, the State Department of Education, the National Guard, the Office of Statewide Health Planning and Development, the State Fire Marshal, the California Conference of Local Health Officers, the Department of Forestry and Fire Protection, the Chancellor's Office of the California Community Colleges, and the Department of General Services. [Amended by SB 595 (Ch. 1246) 1983; AB 184 (Ch. 886) 1989; and SB 3355 (Ch. 427) 1992.]

1797.133. The director may appoint select resource committees of experts and may contract with special medical consultants for assistance in the implementation of this division.

Article 4. Medical Disasters

1797.150. In cooperation with the Office of Emergency Services, the authority shall respond to any medical disaster by mobilizing and coordinating emergency medical services mutual aid resources to mitigate health problems.

1797.151. The authority shall coordinate, through local EMS agencies, medical and hospital disaster preparedness with other local, state, and federal agencies and departments having a responsibility relating to disaster response, and shall assist the Office of Emergency Services in the preparation of the emergency medical services component of the State Emergency Plan as defined in Section 8560 of the Government Code.

1797.152. (a) The director, and the Director of Health Services may jointly appoint a regional disaster medical and health coordinator for each mutual aid region of the state. A regional disaster medical and health coordinator shall be either a county health officer, a county coordinator of emergency services, an administrator of a local EMS agency, or a medical director of a local EMS agency. Appointees shall be chosen from among persons nominated by a majority vote of the local health officers in a mutual aid region.

(b) In the event of a major disaster which results in a proclamation of emergency by the Governor, and in the need to deliver medical or public and environmental health mutual aid to the area affected by the disaster, at the request of the authority, the State Department of Health Services, or the Office of Emergency Services, a regional disaster medical and health coordinator in a region unaffected by the disaster may coordinate the acquisition of requested mutual aid resources from the jurisdictions in the region.

(c) A regional disaster medical and health coordinator may develop plans for the provision of medical or public health mutual aid among the counties in the region.

(d) No person may be required to serve as a regional disaster medical and health coordinator.

No state compensation shall be paid for a regional disaster medical and health coordinator position, except as determined appropriate by the state, if funds become available. [Added by AB 1390 (Ch. 185) 1989.]

1797.153. (a) In each operational area the county health officer and the local EMS agency administrator may act jointly as the medical health operational area coordinator (MHOAC). If the county health officer and the local EMS agency administrator are unable to fulfill the duties of the MHOAC they may jointly appoint another individual to fulfill these responsibilities. If an operational area has a MHOAC, the MHOAC in cooperation with the county office of emergency services, local public health department, the local office of environmental health, the local department of mental health, the local EMS agency, the local fire department, the regional disaster and medical health coordinator (RDMHC), and the regional office of the Office of Emergency

Services (OES), shall be responsible for ensuring the development of a medical and health disaster plan for the operational area. The medical and disaster plans shall follow the Standard Emergency Management System and National Incident Management System. The MHOAC shall recommend to the operational area coordinator of the Office of Emergency Services a medical and health disaster plan for the provision of medical and health mutual aid within the operational area.

(b) For purposes of this section, "operational area" has the same meaning as that term is defined in subdivision (b) of Section 8559 of the Government Code.

(c) The medical and health disaster plan shall include preparedness, response, recovery, and mitigation functions consistent with the State Emergency Plan, as established under Sections 8559 and 8560 of the Government Code, and, at a minimum, the medical and health disaster plan, policy, and procedures shall include all of the following:

- (1) Assessment of immediate medical needs.
- (2) Coordination of disaster medical and health resources.
- (3) Coordination of patient distribution and medical evaluations.
- (4) Coordination with inpatient and emergency care providers.
- (5) Coordination of out-of-hospital medical care providers.
- (6) Coordination and integration with fire agencies personnel, resources, and emergency fire prehospital medical services.
- (7) Coordination of providers of nonfire based prehospital emergency medical services.
- (8) Coordination of the establishment of temporary field treatment sites.
- (9) Health surveillance and epidemiological analyses of community health status.
- (10) Assurance of food safety.
- (11) Management of exposure to hazardous agents.
- (12) Provision or coordination of mental health services.
- (13) Provision of medical and health public information protective action recommendations.
- (14) Provision or coordination of vector control services.
- (15) Assurance of drinking water safety.
- (16) Assurance of the safe management of liquid, solid, and hazardous wastes.
- (17) Investigation and control of communicable disease.

(d) In the event of a local, state, or federal declaration of emergency, the MHOAC shall assist the OES operational area coordinator in the coordination of medical and health disaster resources within the operational area, and be the point of contact in that operational area, for coordination with the RDMHC, the OES, the regional office of the OES, the State Department of Public Health, and the authority.

(e) Nothing in this section shall be construed to revoke or alter the current authority for disaster management provided under either of the following:

- (1) The State Emergency Plan established pursuant to Section 8560 of the Government Code.
- (2) The California standardized emergency management system established pursuant to Section 8607 of the Government Code. [Added by AB 586 (Ch. 703) 2006. Amended by SB 1039 (Ch. 483) 2007.]

Article 5. Personnel

1797.160. No owner of a publicly or privately owned ambulance shall permit the operation of the ambulance in emergency service unless the attendant on duty therein, or, if there is no attendant on duty therein, the operator, possesses evidence of that specialized training as is reasonably necessary to ensure that the attendant or operator is competent to care for sick or injured persons who may be transported by the ambulance, as set forth in the emergency medical training and educational standards for ambulance personnel established by the authority pursuant to this article. This section shall not be applicable in any state of emergency declared pursuant to the California Emergencies Services Act (Chapter 7 commencing with Section 8550) of Division 1 of Title 2 of the Government Code), when it is necessary to fully utilize all available ambulances in an area and it is not possible to have the ambulance operated or attended by persons with the qualifications required by this section. [Relocated by SB 595 (Ch. 1246) 1983. Formerly H&S Code Section 1760.5.]

1797.170. (a) The authority shall develop and, after approval by the commission pursuant to Section 1799.50, adopt regulations for the training and scope of practice for EMT-I certification.

(b) Any individual certified as an EMT-I pursuant to this division shall be recognized as an EMT-I on a statewide basis, and recertification shall be based on statewide standards. Effective July 1, 1990, any individual certified as an EMT-I pursuant to this act shall complete a course of training on the nature of sudden infant death syndrome which is developed by the California SIDS program in the State Department of Public Health in consultation with experts in the field of sudden infant death syndrome. [Amended by SB 1124 (Ch. 1391) 1984; SB 1067 (Ch. 1111) 1989; and AB 2917 (Ch. 274) 2008.]

1797.171. (a) The authority shall develop, and after approval of the commission pursuant to Section 1799.50, shall adopt, minimum standards for the training and scope of practice for EMT-II.

(b) An EMT-II shall complete a course of training on the nature of sudden infant death syndrome in accordance with subdivision (b) of Section 1797.170.

(c) In rural or remote areas of the state where patient transport times are particularly long and where local resources are inadequate to support an EMT-P program for EMS responses, the director may approve additions to the scope of practice of EMT-IIs serving the local system, if requested by the medical director of the local EMS agency, and if the EMT-II has received training equivalent to that of an EMT-P. The approval of the director, in consultation with a committee of local EMS medical directors named by the Emergency Medical Directors Association of California, is required prior to implementation of any addition to a local optional scope of practice for EMT-IIs proposed by the medical director of a local EMS agency. No drug or procedure that is not part of the basic EMT-P scope of practice, including, but not limited to, any approved local options, shall be added to any EMT-II scope of practice pursuant to this subdivision.

Approval of additions to the scope of practices pursuant to this subdivision may be given only for EMT-II programs in effect on January 1, 1994. [Amended by AB 1123 (Ch. 1058) 1987; SB 1067 (Ch. 1111) 1989; and AB 3123 (Ch. 709) 1994.]

1797.172. (a) The authority shall develop and, after approval by the commission pursuant to Section 1799.50, adopt minimum standards for the training and scope of practice for EMT-P.

(b) The approval of the director, in consultation with a committee of local EMS medical directors named by the EMS Medical Directors Association of California, is required prior to implementation of any addition to a local optional scope of practice for EMT-Ps proposed by the medical director of a local EMS agency.

(c) Notwithstanding any other provision of law, the authority shall be the agency solely responsible for licensure and licensure renewal of EMT-Ps who meet the standards and are not precluded from licensure because of any of the reasons listed in subdivision (d) of Section 1798.200. Each application for licensure or licensure renewal shall require the applicant's social security number in order to establish the identity of the applicant. The information obtained as a result of a state and federal level criminal offender record information search shall be used in accordance with Section 11105 of the Penal Code, and to determine whether the applicant is subject to denial of licensure or licensure renewal pursuant to this division. Submission of fingerprint images to the Department of Justice may not be required for licensure renewal upon determination by the authority that fingerprint images have previously been submitted to the Department of Justice during initial licensure, or a previous licensure renewal, provided that the license has not lapsed and the applicant has resided continuously in the state since the initial licensure.

(d) The authority shall charge fees for the licensure and licensure renewal of EMT-Ps in an amount sufficient to support the authority's licensure program at a level that ensures the qualifications of the individuals licensed to provide quality care. The basic fee for licensure or licensure renewal of an EMT-P shall not exceed one hundred twenty-five dollars (\$125) until the adoption of regulations that specify a different amount that does not exceed the authority's EMT-P licensure, license renewal, and enforcement programs. The authority shall annually evaluate fees to determine if the fee is sufficient to fund the actual costs of the authority's licensure, licensure renewal, and enforcement programs. If the evaluation shows that the fees are excessive or are insufficient to fund the actual costs of the authority's EMT-P licensure, licensure renewal, and enforcement programs, then the fees shall be adjusted accordingly through the rulemaking process described in the Administrative Procedures Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code). Separate additional fees may be charged, at the option of the authority, for services that are not shared by all applicants for licensure and licensure renewal, including, but not limited to, any of the following services:

- (1) Initial application for licensure as an EMT-P.
- (2) Competency testing, the fee for which shall not exceed thirty dollars (\$30), except that an additional fee may be charged for the cost of any services that provide enhanced availability of the exam for the convenience of the EMT-P, such as on-demand electronic testing.

(3) Fingerprint and criminal record check. The applicant shall, if applicable according to subdivision (c), submit fingerprint images and related information for criminal offender record information searches with the Department of Justice and the Federal Bureau of Investigation.

(4) Out-of-state training equivalency determination.

(5) Verification of continuing education for a lapse in licensure.

(6) Replacement of a lost licensure card. The fees charged for individual services shall be set so that the total fees charged to EMT-Ps shall not exceed the authority's actual total cost for the EMT-P licensure program.

(e) The authority may provide nonconfidential, nonpersonal information relating to EMS programs to interested persons upon request, and may establish and assess fees for the provision of this information. These fees shall not exceed the costs of providing the information.

(f) At the option of the authority, fees may be collected for the authority by an entity that contracts with the authority to provide any of the services associated with the EMT-P program. All fees collected for the authority in a calendar month by any entity designated by the authority pursuant to this section to collect fees for the authority shall be transmitted to the authority for deposit into the Emergency Medical Services Personnel Fund within 30 calendar days following the last day of the calendar month in which the fees were received by the designated entity, unless the contract between the entity and the authority specifies a different timeframe. [Amended by SB 595 (Ch. 1246) 1983; AB 1123 (Ch. 1058) 1987; SB 1067 (Ch. 1111), AB 1558 (Ch. 1134), AB 2159 (Ch. 1362) 1989; SB 463 (Ch. 100) 1993; and AB 1980 (Ch. 997) 1993. Note that AB 1980 (Ch. 997) 1993, did not take effect until January 1, 1995. Provisions of SB 1067 not given effect because of later signing of AB 1558 and AB 2159. AB 1558 and AB 2159 amended this section in an identical manner. Amended by AB 3123 (Ch. 709) 1994 to establish EMT-P licensure program under EMS Authority, places a maximum limit on fees except for special services; Amended by AB 1215 (Ch. 549) 1999 and Amended by AB 2917 (Ch. 274) 2008.]

1797.173. The authority shall assure that all training programs for EMT-I, EMT-II, and EMT-P are located in an approved licensed hospital or an educational institution operated with written agreements with an acute care hospital, including a public safety agency that has been approved by the local emergency medical services agency to provide training. The authority shall also assure that each training program has a competency-based curriculum. EMT-I training and testing for fire service personnel may be offered at sites approved by the State Board of Fire Services and training for officers of the California Highway Patrol may be provided at the California Highway Patrol Academy. [Amended by SB 595 (Ch. 1246) 1983.]

1797.174. In consultation with the commission, the Emergency Medical Directors Association of California, and other affected constituencies, the authority shall develop statewide guidelines for continuing education courses and approval for continuing education courses for EMT-Ps and for quality improvement systems which monitor and promote improvement in the quality of care provided by EMT-Ps throughout the state. [Repealed by AB 1123 (Ch. 1058) 1987. Added by AB 1980 (Ch. 997) 1993.]

1797.175. The authority shall establish the standards for continuing education and shall designate the examinations for certification and recertification of all prehospital personnel. The authority shall consider including training regarding the characteristics and method of assessment and treatment of acquired immune deficiency syndrome (AIDS). [Amended by SB 1552 (Ch. 1213) 1988; and AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989.]

1797.176. The authority shall establish the minimum standards for the policies and procedures necessary for medical control of the EMS system. [Amended by AB 3269 (Ch. 1390) 1988.]

1797.177. No individual shall hold himself or herself out to be an EMT-I, EMT-II, EMT-P, or paramedic unless that individual is currently certified as such by the local EMS agency or other certifying authority.

1797.178. No person or organization shall provide advanced life support or limited advanced life support unless that person or organization is an authorized part of the emergency medical services system of the local EMS agency or of a pilot program operated pursuant to the Wedworth-Townsend Paramedic Act, Article 3 (commencing with Section 1480) of Chapter 2.5 of Division 2.

1797.179. Notwithstanding any other provision of law, and to the extent federal financial participation is available, any city, county or special district providing paramedic services as set forth in Section 1797.172, shall reimburse the Health Care Deposit Fund for the state costs of paying such medical claims. Funds allocated to the county from the County Health Services Fund pursuant to Part 4.5 (commencing with Section 16700) of Division 9 of the Welfare and Institutions Code may be utilized by the county or city to make such reimbursement. [Added by SB 735 (Ch. 1322) 1980.]

1797.180. No agency, public or private, shall advertise or disseminate information to the public that the agency provides EMT-II or EMT-P rescue or ambulance services unless that agency does in fact provide this service on a continuous 24 hours-per-day basis. If advertising or information regarding that agency's EMT-II or EMT-P rescue or ambulance service appears on any vehicle it may only appear on those vehicles utilized solely to provide that service on a continuous 24 hours-per-day basis. [Relocated and amended by SB 595 (Ch. 1246) 1983. Formerly H & S Code Section 1484.3.]

1797.181. The authority may, by regulation, prescribe standardized insignias or emblems for patches which may be affixed to the clothing of an EMT-I, EMT-II, or EMT-P. [Relocated and by SB 595 (Ch. 1246); 1983. Formerly H & S Code Section 1481.5.]

1797.182. All ocean, public beach, and public swimming pool lifeguards and all firefighters in this state, except those whose duties are primarily clerical or administrative, shall be trained to administer first aid and cardiopulmonary resuscitation. The training shall meet standards prescribed by the authority, and shall be satisfactorily completed by such persons as soon as practical, but in no event more than one year

after the date of employment. Satisfactory completion of a refresher course which meets the standards prescribed by the authority in cardiopulmonary resuscitation and other first aid shall be required at least every three years. The authority may designate a public agency or private nonprofit agency to provide for each county the training required by this section. The training shall be provided at no cost to the trainee.

As used in this section, "lifeguard" means any regularly employed and paid officer, employee, or member of a public aquatic safety department or marine safety agency of the State of California, a city, county, city and county, district, or other public or municipal corporation or political subdivision of this state.

As used in this section, "firefighter" means any regularly employed and paid officer, employee, or member of a fire department or fire protection or firefighting agency of the State of California, a city, county, city and county, district, or other public or municipal corporation or political subdivision of this state or member of an emergency reserve unit of a volunteer fire department or fire protection district. [Relocated and updated by SB 595 (Ch. 1246) 1983. Formerly H & S Code Section 217.]

1797.183. All peace officers described in Section 13518 of the Penal Code, except those whose duties are primarily clerical or administrative, shall be trained to administer first aid and cardiopulmonary resuscitation (CPR). The training shall meet standards prescribed by the authority, in consultation with the Commission on Peace Officers Standards and Training, and shall be satisfactorily completed by those officers as soon as practical, but in no event more than one year after the date of employment. Satisfactory completion of either refresher training or appropriate testing, which meets the standards of the authority, in cardiopulmonary resuscitation and other first aid, shall be required at periodic intervals as determined by the authority. [Added by SB 595 (Ch. 1246) 1983.]

1797.184. The authority shall develop and, after approval by the commission pursuant to Section 1799.50, adopt all of the following:

- (a) Guidelines for disciplinary orders, temporary suspensions, and conditions of probation for EMT-I and EMT-II certificate holders that protects the public health and safety.
- (b) Regulations for the issuance of EMT-I and EMT-II certificates by a certifying entity that protects the public health and safety.
- (c) Regulations for the recertification of EMT-I and EMT-II certificate holders that protect the public health and safety.
- (d) Regulations for disciplinary processes for EMT-I and EMT-II applicants and certificate holders that protect the public health and safety. These disciplinary processes shall be in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

[Added by AB 2917 (Ch. 274) 2008.]

1797.185. (a) The authority shall establish criteria for the statewide recognition of the certification of EMT-P personnel in the basic scope of practice of those personnel. The criteria shall include, but need not be limited to, the following:

(1) Standards for training, testing, certification, and revocation of certification, as required for statewide recognition of certification. The standards may include designation by the authority of the specific examinations required for certification, including, at the option of the authority, an examination provided by the authority. At the option of the authority, the standards may include a requirement for registration of prehospital emergency care personnel with the authority or other entity designated by the authority.

(2) Conditions for local accreditation of certified EMT-P personnel which are reasonable in order to maintain medical control and the integrity of the local EMS system, as determined by the authority and approved by the commission.

(3) Provisions for local accreditation in approved optional scope of practice, if any, as allowed by applicable state regulations and statutes.

(4) Provisions for the establishment and collection of fees by the appropriate agency, which may be the authority or an entity designated by the authority to collect fees for the authority, for testing, certification, accreditation, and registration with the appropriate state or local agency in the appropriate scope of practice. All fees collected for the authority in a calendar month by any entity designated by the authority pursuant to this section to collect fees for the authority shall be transmitted to the authority for deposit into the Emergency Medical Services Personnel Fund within 30 calendar days following the last day of the calendar month in which the fees were received by the designated entity.

(b) After January 1, 1991, all regulations for EMT-P personnel adopted by the authority shall, where relevant, include provisions for statewide recognition of certification or authorization for the scope of practice of those personnel.

(c) On or before July 1, 1991, the authority shall amend all relevant regulations for EMT-P care personnel to include criteria developed pursuant to subdivision (c) of Section 1797.7 and subdivision (b) of Section 1797.172 to ensure statewide recognition of certification for the scope of practice of those personnel.

(d) All future regulations for EMT-P personnel adopted by the authority shall, where relevant, include provisions for statewide recognition of certification or authorization for the scope of practice of those personnel. [Added by AB 3057 (Ch. 312) 1986. Amended by AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989. Provisions from AB 2159 given effect over those from AB 1558.]

1797.186. All persons described in Sections 1797.170, 1797.171, 1797.172, 1797.182, and 1797.183, whether volunteers, partly paid, or fully paid, shall be entitled to prophylactic medical treatment to prevent the onset of disease, provided that the person demonstrates that he or she was exposed, while in the service of the department or unit, to a contagious disease, as listed in Section 2500 of Title 17 of the California Administrative Code, while performing first aid or cardiopulmonary resuscitation services to any person.

Medical treatment under this section shall not affect the provisions of Division 4 (commencing with Section 3200) or Division 5 (commencing with Section 6300) of the Labor Code or the person's right to make a claim for work-related injuries, at the time the contagious disease manifests itself. [Added by AB 140 (Ch. 1543) 1985.]

1797.187. A peace officer as described in Section 830.1, subdivision (a) of Section 830.2, or subdivision (g) of Section 830.3 of the Penal Code, while in the service of the agency or local agency which employs him or her, shall be notified by the agency or local agency if the peace officer is exposed to a known carcinogen, as defined by the International Agency for Research on Cancer, or as defined by its director, during the investigation of any place where any controlled substance, as defined in Section 11007 is suspected of being manufactured, stored, transferred, or sold, or any toxic waste spills, accidents, leaks, explosions, or fires.

The Commission on Peace Officers Standards and Training basic training course, and other training courses as the commission determines appropriate, shall include, on or before January 1, 1990, instruction on, but not limited to, the identification and handling of possible carcinogenic materials and the potential health hazards associated with these materials, protective equipment, and clothing available to minimize contamination, handling, and disposing of materials and measures and procedures that can be adopted to minimize exposure to possible hazardous materials. [This section was added to Division 2.5 in error by AB 2376 (Ch. 947) 1988. Amended by SB 1880 (Ch. 606) 1998.]

1797.188. (a) As used in this section:

(1) "Prehospital emergency medical care person or personnel" means any of the following: an authorized registered nurse or mobile intensive care nurse, emergency medical technician-I, emergency medical technician-II, emergency medical technician-paramedic, lifeguard, firefighter, or peace officer, as defined or described by Sections 1797.56, 1797.80, 1797.82, 1797.84, 1797.182, and 1797.183, respectively, or a physician and surgeon who provides prehospital emergency medical care or rescue services.

(2) "Reportable disease or condition" or "a disease or condition listed as reportable" means those diseases prescribed by Subchapter 1 (commencing with Section 2500) of Chapter 4 of Title 17 of the California Administrative Code, as may be amended from time to time.

(3) "Exposed" means at risk for contracting the disease, as defined by regulations of the state department.

(4) "Health facility" means a health facility, as defined in Section 1250, including a publicly operated facility.

(b) In addition to the communicable disease testing and notification procedures applicable under Chapter 3.5 (commencing with Section 120260) of Part 1 of Division 105, all prehospital emergency medical care personnel, whether volunteers, partly paid, or fully paid, who have provided emergency medical or rescue services and have been exposed to a person afflicted with a disease or condition listed as reportable, which can, as determined by the county health officer, be transmitted through oral contact or secretions of the body, including blood, shall be notified that they have been exposed to the disease and should contact the county health officer if all the following are satisfied:

(1) The prehospital emergency medical care person, who has rendered emergency medical or rescue services and has been exposed to a person afflicted with a reportable disease or condition, provides the health facility with his or her name and telephone number at the time the patient is transferred from that prehospital emergency medical care person to the admitting health facility; or the party transporting the person afflicted

with the reportable disease or condition provides that health facility with the name and telephone number of the prehospital emergency medical care person who provided the emergency medical or rescue services.

(2) The health facility reports the name and telephone number of the prehospital emergency medical care person to the county health officer upon determining that the person to whom the prehospital emergency medical care person provided the emergency medical or rescue services is diagnosed as being afflicted with a reportable disease or condition.

(c) The county health officer shall immediately notify the prehospital emergency medical care person who has provided emergency medical or rescue services and has been exposed to a person afflicted with a disease or condition listed as reportable, which can, as determined by the county health officer, be transmitted through oral contact or secretions of the body, including blood, upon receiving the report from a health facility pursuant to paragraph (1) of subdivision (b). The county health officer shall not disclose the name of the patient or other identifying characteristics to the prehospital emergency medical care person.

Nothing in this section shall be construed to authorize the further disclosure of confidential medical information by the health facility or any prehospital emergency medical care personnel described in this section except as otherwise authorized by law.

In the event of the demise of the person afflicted with the reportable disease or condition, the health facility or county health officer shall notify the funeral director, charged with removing the decedent from the health facility, of the reportable disease prior to the release of the decedent from the health facility to the funeral director.

Notwithstanding Section 1798.206, violation of this section is not a misdemeanor. [Added by SB 1518 (Ch. 999) 1986. Amended by AB 1119 (Ch. 260) 1988; and AB 2056 (Ch. 102) 2006.]

1797.189. (a) As used in this section:

(1) "Chief medical examiner-coroner" means the chief medical examiner or the coroner as referred to in subdivision (m) of Section 24000, Section 24010, subdivisions (k), (m), and (n) of Section 24300, subdivisions (k), (m), and (n) of Section 24304, and Sections 27460 to 27530, inclusive, of the Government Code and Section 102850.

(2) "Prehospital emergency medical care person or personnel" means any of the following: authorized registered nurse or mobile intensive care nurse, emergency medical technician-I, emergency medical technician-II, emergency medical technician-paramedic, lifeguard, firefighter, or peace officer, as defined or described by Sections 1797.56, 1797.80, 1797.82, 1797.84, 1797.182, and 1797.183, respectively, or a physician and surgeon who provides prehospital emergency medical care or rescue services.

(3) "Reportable disease or condition" or "a disease or condition listed as reportable" means those diseases specified in Subchapter 1 (commencing with Section 2500) of Chapter 4 of Title 17 of the California Administrative Code, as may be amended from time to time."

(4) "Exposed" means at risk for contracting a disease, as defined by regulations of the state department.

(5) "Health facility" means a health facility, as defined in Section 1250, including a publicly operated facility.

(b) Any prehospital emergency medical care personnel, whether volunteers, partly paid, or fully paid who have provided emergency medical or rescue services and have been exposed to a person afflicted with a disease or condition listed as reportable, that can, as determined by the county health officer, be transmitted through oral contact or secretions of the body, including blood, shall be notified that they have been exposed to the disease and should contact the county health officer if all of the following conditions are met:

(1) The prehospital emergency medical care person, who has rendered emergency medical or rescue services and has been exposed to a person afflicted with a reportable disease or condition, provides the chief medical examiner-coroner with his or her name and telephone number at the time the patient is transferred from that prehospital medical care person to the chief medical examiner-coroner; or the party transporting the person afflicted with the reportable disease or condition provides that chief medical examiner-coroner with the name and telephone number of the prehospital emergency medical care person who provided the emergency medical or rescue services.

(2) The chief medical examiner-coroner reports the name and telephone number of the prehospital emergency medical care person to the county health officer upon determining that the person to whom the prehospital emergency medical care person provided the emergency medical or rescue services is diagnosed as being afflicted with a reportable disease or condition.

(c) The county health officer shall immediately notify the prehospital emergency medical care person who has provided emergency medical or rescue services and has been exposed to a person afflicted with a disease or condition listed as reportable, that can, as determined by the county health officer, be transmitted through oral contact or secretions of the body, including blood, upon receiving the report from a health facility pursuant to paragraph (1) of subdivision (b). The county health officer shall not disclose the name of the patient or other identifying characteristics to the prehospital emergency medical care person.

Nothing in this section shall be construed to authorize the further disclosure of confidential medical information by the chief medical examiner-coroner or any of the prehospital emergency medical care personnel described in this section except as otherwise authorized by law.

The chief medical examiner-coroner, or the county health officer shall notify the funeral director, charged with removing or receiving the decedent afflicted with a reportable disease or condition from the chief medical examiner-coroner, of the reportable disease prior to the release of the decedent from the chief medical examiner-coroner to the funeral director.

Notwithstanding Section 1798.206, violation of this section is not a misdemeanor. [Added by AB 2356 (Ch. 992) 1987. Amended by AB 1119 (Ch. 260) 1988; and SB 1497 (Ch. 1023) 1996.]

1797.190. The authority may establish minimum standards for the training and use of automatic external defibrillators. [Added by AB 3037 (Ch. 217) 1988. Amended by AB 2041 (Ch. 718) 2002.]

1797.191. (a) The authority shall establish minimum standards for the training in pediatric first aid, pediatric cardiopulmonary resuscitation (CPR), and preventive health practices required by Section 1596.866.

(b)(1) The authority shall establish a process for the ongoing review and approval of training programs in pediatric first aid, pediatric CPR, and preventive health practices as specified in paragraph (2) of subdivision (a) of Section 1596.866 to ensure that those programs meet the minimum standards established pursuant to subdivision (a). The authority shall charge fees equal to its costs incurred for the pediatric first aid and pediatric CPR training standards program and for the ongoing review and approval of these programs.

(2) The authority shall establish, in consultation with experts in pediatric first aid, pediatric CPR, and preventive health practices, a process to ensure the quality of the training programs, including, but not limited to, a method for assessing the appropriateness of the courses and the qualifications of the instructors.

(c) (1) The authority may charge a fee equal to its costs incurred for the preventive health practices program and for the initial review and approval and renewal of approval of the program.

(2) If the authority chooses to establish a fee process based on the use of course completion cards for the preventive health practices program, the cost shall not exceed seven dollars (\$7) per card for each training participant until January 1, 2001, at which time the authority may evaluate its administrative costs. After evaluation of the costs, the authority may establish a new fee scale for the cards so that revenue does not exceed the costs of the ongoing review and approval of the preventive health practices training.

(d) For the purposes of this section, "training programs" means programs that apply for approval by the authority to provide the training in pediatric first aid, pediatric CPR, or preventive health practices as specified in paragraph (2) of subdivision (a) of Section 1596.866. Training programs include all affiliated programs that also provide any of the authority-approved training required by this division. "Affiliated programs" means programs that are overseen by persons or organizations that have an authority-approved training program in pediatric first aid, pediatric CPR, or preventive health practices. Affiliated programs also include programs that have purchased an authority-approved training program in pediatric first aid, pediatric CPR, or preventive health practices. Training programs and their affiliated programs shall comply with this division and with the regulations adopted by the authority pertaining to training programs in pediatric first aid, pediatric CPR, or preventive health practices.

(e) The director of the authority may, in accordance with regulations adopted by the authority, deny, suspend, or revoke any approval issued under this division or may place any approved program on probation, upon the finding by the director of the authority of an imminent threat to the public health and safety as evidenced by the occurrence of any of the actions listed in subdivision (f).

(f) Any of the following actions shall be considered evidence of a threat to the public health and safety, and may result in the denial, suspension, probation, or revocation of a program's approval or application for approval pursuant to this division.

(1) Fraud.

(2) Incompetence.

(3) The commission of any fraudulent, dishonest, or corrupt act that is substantially related to the qualifications, functions, and duties of training program directors and instructors.

(4) Conviction of any crime that is substantially related to the qualifications, functions, and duties of training program directors and instructors. The record of conviction or a certified copy of the record shall be conclusive evidence of the conviction.

(5) Violating or attempting to violate, directly or indirectly, or assisting in or abetting the violation of or conspiring to violate, this division or the regulations promulgated by the authority pertaining to the review and approval of training programs in pediatric first aid, pediatric CPR, and preventive health practices as specified in paragraph (2) of subdivision (a) of Section 1596.866.

(g) In order to ensure that adequate qualified training programs are available to provide training in the preventive health practices course to all persons who are required to have that training, the authority may, after approval of the Commission on Emergency Medical Services pursuant to Section 1799.50, establish temporary standards for training programs for use until permanent standards are adopted pursuant to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

(h) Persons who, prior to the date on which the amendments to this section enacted in 1998 become operative, have completed a course or courses in preventive health practices as specified in subparagraph (C) of paragraph (2) of subdivision (a) of Section 1596.866, and have a certificate of completion card for a course or courses in preventive health practices, or certified copies of transcripts that identify the number of hours and the specific course or courses taken for training in preventive health practices shall be deemed to have met the requirement for training in preventive health practices. [Added by AB 243 (Ch. 246) 1994 to establish standards for training required in Health and Safety Code 1596.866. Urgency clause, effective July 21, 1994. Amended by SB 1524 (Ch. 666) 1998. Urgency clause, effective September 20, 1998; Amended by SB 966 (Ch. 83).]

1797.192. On or before July 1, 1991, the authority shall adopt standards for a standard statewide scope of practice which shall be utilized for the training and certification testing of EMT-P personnel for certification as EMT-P's. Local EMS systems shall not be required to utilize the entire standard scope of practice. Testing of EMT-P personnel for local accreditation to practice shall only include local operational policies and procedures, and drug, device, or treatment procedures being utilized within that local EMS system pursuant to Sections 1797.172 and 1797.221.

[Added by AB 1558 (Ch. 1134), AB 2159 (Ch. 1362) 1989; technically, as two identical sections with the same number. SB 1510 (Ch. 216) 1990; repealed the duplicate as part of a general code cleanup.]

1797.193. (a) By July 1, 1992, existing firefighters in this state shall complete a course on the nature of sudden infant death syndrome taught by experts in the field of sudden infant death syndrome. All persons who become firefighters after January 1, 1990, shall complete a course on this topic as part of their basic training as firefighters. The course

shall include information on the community resources available to assist families who have lost children to sudden infant death syndrome.

(b) For purposes of this section, the term "firefighter" has the same meaning as that specified in Section 1797.182.

(c) When the instruction and training are provided by a local agency, a fee shall be charged sufficient to defray the entire cost of the instruction and training. [Added by SB 1067 (Ch. 1111) 1989 as Section 1797.192. Renumbered as 1797.193 by SB 2510 (Ch. 216) 1990.]

1797.194. The purpose of this section is to provide for the state licensure of EMT-P personnel. Notwithstanding any provision of law, including, but not limited to, Section 1797.208 and 1797.214, all of the following applies to EMT-P personnel:

(a) Any reference to EMT-P certification pursuant to this division shall be equivalent to EMT-P licensure pursuant to this division, including, but not limited to, any provision in this division relating to the assessment of fees.

(b) The statewide examination designated by the authority for licensure of EMT-P personnel and the licensure issued by the authority shall be the single sufficient examination and licensure required for practice as an EMT-P.

(c) EMT-P licenses shall be renewed every two years upon submission to the authority of proof of satisfactory completion of continuing education or other educational requirements established by regulations of the authority, upon approval by the commission. If the evaluation and recommendations of the authority required pursuant to Section 8 of Chapter 997 of the Statutes of 1993, so concludes, the renewal of EMT-P licenses shall, in addition to continuing education requirements, be contingent upon reexamination at 10-year intervals to ensure competency.

(d) Every EMT-P licensee may be disciplined by the authority for violations of this division. The proceedings under this subdivision shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the authority shall have all the powers granted therein for this purpose.

(e) Nothing in this section shall be construed to extend the scope of practice of an EMT-P beyond prehospital settings, as defined by regulations of the authority.

(f) Nothing in this section shall be construed to alter or interfere with the local EMS agency's ability to locally accredit licensed EMT-Ps.

(g) Nothing in this section shall be construed to hinder the ability of the medical director of the local EMS agency to maintain medical control within the local EMS system in accordance with this division, including, but not limited to, Chapter 5 (commencing with Section 1798.) [Added by AB 3123 (Ch. 709) 1994.]

1797.195. (a) Notwithstanding any other provision of law to the contrary, an EMT-I, EMT-II, or EMT-P may provide emergency medical care pursuant to this section in the emergency department of a hospital that meets the definition of small and rural hospital pursuant to Section 1188.855, except that in the case of a hospital meeting the definition contained in Section 1188.855 the population of the incorporated place or census designated place where the hospital is located shall not have increased to more than 20,000 since 1980, and all of the following conditions are met:

(1) The EMT-I, EMT-II, or EMT-P is on duty as a prehospital emergency medical care provider.

(2) The EMT-I, EMT-II, or EMT-P shall function under direct supervision as defined in hospital protocols that have been issued pursuant to paragraph (3), and only where the physician and surgeon or the registered nurse determines that the emergency department is faced with a patient crisis, and that the services of the EMT-I, EMT-II, or EMT-P are necessary to temporarily meet the health care needs of the patients in the emergency department.

(3) The utilization of an EMT-I, EMT-II, or EMT-P in the emergency department is done pursuant to hospital protocols that have been developed by the hospital's nursing staff, the physician and surgeon medical director of the emergency department, and the administration of the hospital, with the approval of the medical staff, and that shall include at least all of the following:

(A) A requirement that the EMT-I, EMT-II, or EMT-P successfully completes a hospital training program on the protocols and procedures of the hospital emergency department. The program shall include, but not be limited to, features of the protocols for which the EMT-I, EMT-II, or EMT-P has not previously received training and a post program evaluation.

(B) A requirement that the EMT-I, EMT-II, or EMT-P annually demonstrates and documents to the hospital competency in the emergency department procedures.

(C) The emergency medical care to be provided in the emergency department by the EMT-I, EMT-II, or EMT-P shall be set forth or referenced in the protocols and shall be limited to that which is otherwise authorized by their certification or licensure as defined in statute or regulation. The protocols shall not include patient assessment in this setting, except when the assessment is directly related to the specific task the EMT-I, EMT-II, or EMT-P is performing.

(D) A process for continuity of patient care when the EMT-I, EMT-II, or EMT-P is called to an off-site emergency situation.

(E) Procedures for the supervision of the EMT-I, EMT-II, or EMT-P.

(4) The protocols for utilization of an EMT-I, EMT-II, or EMT-P in the emergency department are developed in consultation with the medical director of the local EMS agency and the emergency medical care committee, if a committee has been formed.

(5) A written contract shall be in effect relative to the services provided pursuant to this section, between the ambulance company and the hospital, where the EMT-I, EMT-II, or EMT-P is employed by an ambulance company that is not owned by the hospital.

(b) When services of emergency personnel are called upon pursuant to this section, responsibility for the medical direction of the EMT-I, EMT-II, or EMT-P rests with the hospital, pursuant to the hospital protocols as set forth in paragraph (3) of subdivision (a).

(c) Although this section authorizes the provision of services in an emergency department of certain small and rural hospitals, nothing in this section is intended to expand or restrict the types of services or care to be provided by EMT-I, EMT-II, or EMT-P pursuant to this article.

* Due to the unique circumstances concerning the very limited resources of small and rural hospitals and the need for temporary personnel in emergency departments of those hospitals, it is necessary to permit the use of EMS personnel to meet this need, and the Legislature finds and declares that a general statute cannot be made applicable

within the meaning of Section 16 of Article IV of the California Constitution. [Added by SB 422 (Ch. 239) 1995. *Intent language to clarify need and limited uses for EMS personnel in small and rural hospitals was not included in code.]

1797.196. (a) For purposes of this section, “AED” or “defibrillator” means an automated or automatic external defibrillator.

(b) In order to ensure public safety, any person or entity that acquires an AED is not liable for any civil damages resulting from any acts or omissions in the rendering of the emergency care under subdivision (b) of Section 1714.21 of the Civil Code, if that person or entity does all of the following:

(1) Complies with all regulations governing the placement of an AED.

(2) Ensures all of the following:

(A) That the AED is maintained and regularly tested according to the operation and maintenance guidelines set forth by the manufacturer, the American Heart Association, and the American Red Cross, and according to any applicable rules and regulations set forth by the governmental authority under the federal Food and Drug Administration and any other applicable state and federal authority.

(B) That the AED is checked for readiness after each use and at least once every 30 days if the AED has not been used in the preceding 30 days. Records of these checks shall be maintained.

(C) That any person who renders emergency care or treatment on a person in cardiac arrest by using an AED activates the emergency medical services system as soon as possible, and reports any use of the AED to the licensed physician and to the local EMS agency.

(D) For every AED unit acquired up to five units, no less than one employee per AED unit shall complete a training course in cardiopulmonary resuscitation and AED use that complies with the regulations adopted by the Emergency Medical Service Authority and the standards of the American Heart Association or the American Red Cross. After the first five AED units are acquired, for each additional five AED units acquired, one employee shall be trained beginning with the first AED unit acquired. Acquirers of AED units shall have trained employees who should be available to respond to an emergency that may involve the use of an AED unit during normal operating hours.

(E) That there is a written plan that describes the procedures to be followed in the event of an emergency that may involve the use of an AED, to ensure compliance with the requirements of this section. The written plan shall include, but not be limited to, immediate notification of 911 and trained office personnel at the start of AED procedures.

(3) When an AED is placed in a building, building owners shall ensure that tenants annually receive a brochure, approved as to content and style by the American Heart Association or American Red Cross, which describes the proper use of an AED, and also ensure that similar information is posted next to any installed AED.

(4) When an AED is placed in a building, no less than once a year, building owners shall notify their tenants as to the location of AED units in the building.

(5) When an AED is placed in a public or private K–12 school, the principal shall ensure that the school administrators and staff annually receive a brochure, approved as to content and style by the American Heart Association or the American Red Cross,

that describes the proper use of an AED. The principal shall also ensure that similar information is posted next to every AED. The principal shall, at least annually, notify school employees as to the location of all AED units on the campus. The principal shall designate the trained employees who shall be available to respond to an emergency that may involve the use of an AED during normal operating hours. As used in this paragraph, "normal operating hours" means during the hours of classroom instruction and any school-sponsored activity occurring on school grounds.

(c) Any person or entity that supplies an AED shall do all of the following:

(1) Notify an agent of the local EMS agency of the existence, location, and type of AED acquired.

(2) Provide to the acquirer of the AED all information governing the use, installation, operation, training, and maintenance of the AED.

(d) A violation of this provision is not subject to penalties pursuant to Section 1798.206.

(e) The protections specified in this section do not apply in the case of personal injury or wrongful death that results from the gross negligence or willful or wanton misconduct of the person who renders emergency care or treatment by the use of an AED.

(f) Nothing in this section or Section 1714.21 of the Civil Code may be construed to require a building owner or a building manager to acquire and have installed an AED in any building.

SEC. 2. Section 1797.196 of the Health and Safety Code, as amended by Section 2 of Chapter 85 of the Statutes of 2006, is repealed. [Added by SB 911 (Ch. 163) 1999. Amended and repealed by AB 2041 (Ch. 718) 2002. Amended, by SB 600 (Ch. 62) 2003; AB 254 (Ch. 111) 2005, AB 2083 (Ch. 85) 2006; and SB 1436 (Ch. 71) 2012.]

1797.197. The authority shall establish training and standards for all prehospital emergency care personnel, as defined pursuant to paragraph (2) of subdivision (a) of Section 1797.189, regarding the characteristics and method of assessment and treatment of anaphylactic reactions and the use epinephrine. The authority shall promulgate regulations regarding these matters for use by all prehospital emergency care personnel. [Added by AB 559 (Ch. 458) 2001.]

1797.198. The Legislature finds and declares all of the following:

(a) Trauma care is an essential public service. It is as vital to the safety of the public as the services provided by law enforcement and fire departments. In communities with access to trauma centers, mortality and morbidity rates from traumatic injuries are significantly reduced. For the same reasons that each community in California needs timely access to the services of skilled police, paramedics, and fire personnel, each community needs access to the services provided by certified trauma centers.

(b) Trauma centers save lives by providing immediate coordination of highly specialized care for the most life-threatening injuries.

(c) Trauma centers save lives, and also save money, because access to trauma care can mean the difference between full recovery from a traumatic injury, and serious disability necessitating expensive long-term care.

(d) Trauma centers do their job most effectively as part of a system that includes a local plan with a means of immediately identifying trauma cases and transporting those patients to the nearest trauma center.

(e) It is essential for persons in need of trauma care to receive that care within the 60-minute period immediately following injury. It is during this period, referred to as the “golden hour,” when the potential for survival is greatest, and the need for treatment for shock or injury is most critical.

(f) It is the intent of the Legislature in enacting this act to promote access to trauma care by ensuring the availability of services through EMS agency-designated trauma centers. [Added by AB 430 (Ch. 171) 2001. Amended by AB 131 (Ch. 80) 2005.]

1797.199. (a) There is hereby created in the State Treasury, the Trauma Care Fund, which, notwithstanding Section 13340 of the Government Code, is hereby continuously appropriated without regard to fiscal years to the authority for the purposes specified in subdivision (c).

(b) The fund shall contain any moneys deposited in the fund pursuant to appropriation by the Legislature or from any other source, as well as, notwithstanding Section 16305.7 of the Government Code, any interest and dividends earned on moneys in the fund.

(c) Moneys in the fund shall be expended by the authority to provide for allocations to local EMS agencies, for distribution to local EMS agency-designated trauma centers provided for by this chapter.

(d) Within 30 days of the effective date of the enactment of an appropriation for purposes of implementing this chapter, the authority shall request all local EMS agencies with an approved trauma plan, that includes at least one designated trauma center, to submit within 45 days of the request the total number of trauma patients and the number of trauma patients at each facility that were reported to the local trauma registry for the most recent fiscal year for which data are available, pursuant to Section 100257 of Title 22 of the California Code of Regulations. However, the local EMS agency’s report shall not include any registry entry that is in reference to a patient who is discharged from the trauma center’s emergency department without being admitted to the hospital unless the nonadmission is due to the patient’s death or transfer to another facility. Any local EMS agency that fails to provide these data shall not receive funding pursuant to this section.

(e) Except as provided in subdivision (m), the authority shall distribute all funds to local EMS agencies with an approved trauma plan that includes at least one designated trauma center in the local EMS agency’s jurisdiction as of July 1 of the fiscal year in which funds are to be distributed.

(1) The amount provided to each local EMS agency shall be in the same proportion as the total number of trauma patients reported to the local trauma registry for each local EMS agency’s area of jurisdiction compared to the total number of all trauma patients statewide as reported under subdivision (d).

(2) The authority shall send a contract to each local EMS agency that is to receive funds within 30 days of receiving the required data and shall distribute the funds to a local EMS agency within 30 days of receiving a signed contract and invoice from the agency.

(f) Local EMS agencies that receive funding under this chapter shall distribute all those funds to eligible trauma centers, except that an agency may expend 1 percent for administration. It is the intent of the Legislature that the funds distributed to eligible trauma centers be spent on trauma services. The funds shall not be used to supplant existing funds designated for trauma services or for training ordinarily provided by the trauma hospital. The local EMS agency shall utilize a competitive grant-based system. All grant proposals shall demonstrate that funding is needed because the trauma center cares for a high percentage of uninsured patients. Local EMS agencies shall determine distribution of funds based on whether the grant proposal satisfies one or more of the following criteria:

(1) The preservation or restoration of specialty physician and surgeon oncall coverage that is demonstrated to be essential for trauma services within a specified hospital.

(2) The acquisition of equipment that is demonstrated to be essential for trauma services within a specified hospital.

(3) The creation of overflow or surge capacity to allow a trauma hospital to respond to mass casualties resulting from an act of terrorism or natural disaster.

(4) The coordination or payment of emergency, nonemergency, and critical care ambulance transportation that would allow for the time-urgent movement or transfer of critically injured patients to trauma centers outside of the originating region so that specialty services or a higher level of care may be provided as necessary without undue delay.

(g) A trauma center shall be eligible for funding under this section if it is designated as a trauma center by a local EMS agency pursuant to Section 1798.165 and complies with the requirements of this section. Both public and private hospitals designated as trauma centers shall be eligible for funding.

(h) A trauma center that receives funding under this section shall agree to remain a trauma center through June 30 of the fiscal year in which it receives funding. If the trauma center ceases functioning as a trauma center, it shall pay back to the local EMS agency a pro rata portion of the funding that has been received. If there are one or more trauma centers remaining in the local EMS agency's service area, the local EMS agency shall distribute the funds among the other trauma centers. If there is no other trauma center within the local EMS agency's service area, the local EMS agency shall return the moneys to the authority.

(i) In order to receive funds pursuant to this section, an eligible trauma center shall submit, pursuant to a contract between the trauma center and the local EMS agency, relevant and pertinent data requested by the local EMS agency. A trauma center shall demonstrate that it is appropriately submitting data to the local EMS agency's trauma registry and a local EMS agency shall audit the data annually within two years of a distribution from the local EMS agency to a trauma center. Any trauma center receiving funding pursuant to this section shall report to the local EMS agency how the funds were used to support trauma services.

(j) It is the intent of the Legislature that all moneys appropriated to the fund be distributed to local EMS agencies during the same year the moneys are appropriated. To the extent that any moneys are not distributed by the authority during the fiscal year in which the moneys are appropriated, the moneys shall remain in the fund and be eligible for distribution pursuant to this section during subsequent fiscal years.

(k) By October 31, 2002, the authority shall develop criteria for the standardized reporting of trauma patients to local trauma registries. The authority shall seek input from local EMS agencies to develop the criteria. All local EMS agencies shall utilize the trauma patient criteria for reporting trauma patients to local trauma registries by July 1, 2003.

(l) By December 31 of the fiscal year following any fiscal year in which funds are distributed pursuant to this section, a local EMS agency that has received funds from the authority pursuant to this chapter shall provide a report to the authority that details the amount of funds distributed to each trauma center, the amount of any balance remaining, and the amount of any claims pending, if any, and describes how the respective centers used the funds to support trauma services. The report shall also describe the local EMS agency's mechanism for distributing the funds to trauma centers, a description of their audit process and criteria, and a summary of the most recent audit results.

(m) The authority may retain from any appropriation to the fund an amount sufficient to implement this section, up to two hundred eighty thousand dollars (\$280,000). This amount may be adjusted to reflect any increases provided for wages or operating expenses as part of the authority's budget process. [Added by AB 430 (Ch. 171) 2001. Amended by AB 131 (Ch. 80) 2005]

Uncodified Language from AB 430 (Ch. 171), 2001 added in Section 50.5

Local emergency medical services agencies that do not have existing trauma care system plans may submit proposals for funding their preparation of a trauma care system plan to the Emergency Medical Services Authority by January 15, 2002. Upon the receipt of all local EMS agency proposals, the authority shall establish an appropriate funding level for a one-time payment to fund preparation and implementation of their trauma care system plans, contingent upon funding for this purpose in the Budget Act or another statute.

The authority may retain from any state appropriation for the purpose of this section an amount sufficient to implement this section, up to one hundred seven thousand dollars (\$107,000) subject to approval in the budget process.

Uncodified Language Contained in AB 1988 (Ch. 333), 2002

SECTION 1.

(a) Access to trauma and emergency medical services has been greatly reduced in recent years due to emergency department closures and a great increase in uninsured patients without access to primary care. As a result, ambulance diversion and waiting time has dramatically increased.

(b) Eighty percent of licensed emergency departments reported monetary losses during the 1999-2000 fiscal year.

(c) Hospitals and physicians provided over four hundred fifty million dollars (\$450,000,000) in uncompensated emergency medical services last year.

(d) California lacks a statewide trauma and emergency medical services plan.

SECTION 2. (a) The Emergency Medical Services Authority (EMSA) shall convene a task force of interested parties to study the delivery and provision of emergency medical services in California.

(b) The task force shall do all of the following:

(1) (A) Develop a plan to ensure that all Californians are served by appropriate coverage areas for emergency and trauma services and that sufficient numbers of emergency departments and trauma centers exist to serve each area's population. If the task force determines that some areas lack coverage, it shall develop recommendations to extend coverage to those areas.

(B) The plan developed pursuant to subparagraph (A) shall include specific consideration of, and recommendations developed by the task force for, ensuring access to emergency and trauma services for uninsured patients.

(2) Review emergency department and trauma center standards to ensure appropriate levels of care that maximize state resources and ensure coverage for all Californians including, but not limited to, the State Department of Health Services emergency department regulations and EMSA trauma center regulations.

(3) Review the roles, responsibilities, and interactions of the EMSA and the State Department of Health Services related to emergency medical service oversight and administration.

(4) Submit a report that includes the plan described in paragraph (1) and the recommendations of the task force with regard to paragraphs (1), (2), and (3) to the Legislature within two years from the date that funding and positions have been provided for the project.

(c) The task force shall be comprised of all the following members:

(1) Three members appointed by the Senate Committee on Rules, at least one of whom is a member of the Senate, and at least one of whom is a public member.

(2) Three members appointed by the Speaker of the Assembly, at least one of whom is a member of the Assembly, and at least one of whom is a public member.

(3) One representative appointed by EMSA from a list provided by the California Medical Association.

(4) One representative appointed by EMSA from a list provided by the California Healthcare Association.

(5) One representative appointed by EMSA from a list provided by the California Chapter of the American College of Emergency Physicians.

(6) One representative appointed by EMSA from a list provided by the California Professional Firefighters.

(7) One representative appointed by EMSA from a list provided by the Emergency Medical Services Administrators Association of California.

(8) One representative appointed by EMSA from a list provided by the California Nurses Association.

(9) One representative appointed by EMSA from a list provided by the California Ambulance Association.

(10) One representative appointed by EMSA from a list provided by consumer organizations.

(11) One representative appointed by EMSA from a list provided by the Rural Healthcare Center.

(12) One representative appointed by EMSA from a list provided by the California Children's Hospital Association.

(13) One representative appointed by EMSA from a list provided by the Children's Specialty Care Coalition.

(14) One representative appointed by EMSA from a list provided by the California Association of Public Hospitals and Health Systems.

(15) One representative of organized labor, appointed by EMSA.

(16) One representative appointed by EMSA from a list provided by the California Emergency Nurses Association.

(17) One representative appointed by EMSA from a list provided by the California State Firefighters' Association.

(18) One representative from the State Department of Health Services appointed by the director of the department.

(19) One representative appointed by EMSA from a list provided by the California Fire Chiefs Association.

(20) One representative appointed by EMSA from a list provided by the California Dental Association.

(d) The task force shall terminate after issuing the report required by subdivision (b).

(e) This section shall be implemented only to the extent that the authority obtains private funding needed to support and monitor the work of the task force for the purposes of this section.

CHAPTER 4. LOCAL ADMINISTRATION

Article 1. Local EMS Agency

1797.200. Each county may develop an emergency medical services program. Each county developing such a program shall designate a local EMS agency which shall be the county health department, an agency established and operated by the county, an entity with which the county contracts for the purposes of local emergency medical services administration, or a joint powers agency created for the administration of emergency medical services by agreement between counties or cities and counties pursuant to the provisions of Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code.

1797.201. Upon the request of a city or fire district that contracted for or provided, as of June 1, 1980, prehospital emergency medical services, a county shall enter into a written agreement with the city or fire district regarding the provision of prehospital emergency medical services for that city or fire district. Until such time that an agreement is reached, prehospital emergency medical services shall be continued at not less than the existing level, and the administration of prehospital EMS by cities and fire districts presently providing such services shall be retained by those cities and fire districts, except the level of prehospital EMS may be reduced where the city council, or the governing body of a fire district, pursuant to a public hearing, determines that the reduction is necessary.

Notwithstanding any provision of this section the provisions of Chapter 5 (commencing with Section 1798) shall apply.

1797.202. (a) Every local EMS agency shall have a full- or part-time licensed physician and surgeon as medical director, who has substantial experience in the practice of emergency medicine, as designated by the county or by the joint powers agreement, to provide medical control and to assure medical accountability throughout the planning, implementation and evaluation of the EMS system. The authority director may waive the requirement that the medical director have substantial experience in the practice of emergency medicine if the requirement places an undue hardship on the county or counties.

(b) The medical director of the local EMS agency may appoint one or more physicians and surgeons as assistant medical directors to assist the medical director with the discharge of the duties of medical director or to assume those duties during any time that the medical director is unable to carry out those duties as the medical director deems necessary.

(c) The medical director may assign to administrative staff of the local EMS agency for completion under the supervision of the medical director, any administrative functions of his or her duties which do not require his or her professional judgment as medical director.

[Amended by AB 2329 (Ch. 567) 1987; and AB 2159 (Ch. 1362) 1989.]

1797.204. The local EMS agency shall plan, implement, and evaluate an emergency medical services system, in accordance with the provisions of this part, consisting of an organized pattern of readiness and response services based on public and private agreements and operational procedures.

1797.206. The local EMS agency shall be responsible for implementation of advanced life support systems and limited advanced life support systems and for the monitoring of training programs.

[Amended by SB 595 (Ch. 1246) 1983.]

1797.208. The local EMS agency shall be responsible for determining that the operation of training programs at the EMT-I, EMT-II, and EMT-P levels are in compliance with this division, and shall approve the training programs if they are found to be in compliance with this division. The training program at the California Highway Patrol Academy shall be exempt from the provisions of this section. [Amended by SB 595 (Ch. 1246) 1983.]

1797.210. (a) The medical director of the local EMS agency shall issue a certificate, except an EMT-P certificate, to an individual upon proof of satisfactory completion of an approved training program, passage of the certifying examination designated by the authority, completion of any other requirements for certification established by the authority, and a determination that the individual is not precluded from certification for any of the reasons listed in Section 1798.200. The certificate shall be proof of the individual's initial competence to perform at the designated level.

(b) The medical director of the local EMS agency shall, at the interval specified by the authority, recertify an EMT-I or EMT-II upon proof of the individual's satisfactory passage of the examination for recertification designated by the authority, completion of any continuing education or other requirements for recertification established by the authority, and a determination that the individual is not precluded from recertification because of any of the reasons listed in Section 1798.200. [Amended by SB 595 (Ch. 1246) 1983; by AB 3269 (Ch. 1390) 1988; by AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989; and SB 627 (Ch. 64) 1993.]

1797.211. Each local EMS agency shall submit certificate status updates to the authority within three working days after a final determination is made regarding a certification disciplinary action taken by the medical director that results in a change to an EMT-I or EMT-II certificate status. [Added by AB 2917 (Ch. 274) 2008.]

1797.212. The local EMS agency may establish a schedule of fees for certification in an amount sufficient to cover the reasonable cost of administering the certification provisions of this division. However, a local EMS agency shall not collect fees for the certification or recertification of an EMT-P. [Amended by SB 595 (Ch. 1246) 1983; and SB 627 (Ch. 64) 1993.]

1797.213. (a) Any local EMS agency conducting a program pursuant to this article may provide courses of instruction and training leading to certification as an EMT-I, EMT-II,

EMT-P, or authorized registered nurse. When such instruction and training are provided, a fee may be charged sufficient to defray the cost of such instruction and training.

(b) Effective July 1, 1990, any courses of instruction and training leading to certification as an EMT-I, EMT-II, EMT-P, or authorized registered nurse shall include a course of training on the nature of sudden infant death syndrome which is developed by the California SIDS program in the State Department of Health Services in consultation with experts in the field of sudden infant death syndrome, and effective January 1, 1990, any individual certified as an EMT-I, EMT-II, EMT-P, or authorized registered nurse shall complete that course of training. The course shall include information on the community resources available to assist families who have lost a child to sudden infant death syndrome. An individual who was certified as an EMT-I, EMT-II, EMT-P, or authorized registered nurse prior to January 1, 1990, shall complete supplementary training on this topic on or before January 1, 1992. [Relocated and amended by SB 595 (Ch. 1246) 1983. Formerly H&S Code 1481.3. Amended by SB 1067 (Ch. 1111) 1989.]

1797.214. A local EMS agency may require additional training or qualifications, for the use of drugs, devices, or skills in either the standard scope of practice or a local EMS agency optional scope of practice, which are greater than those provided in this chapter as a condition precedent for practice within such EMS area in an advanced life support or limited advanced life support prehospital care system consistent with standards adopted pursuant to this division.[Amended by SB 595 (Ch. 1246) 1983; and AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362) 1989.]

1797.215. Notwithstanding any other provision of law, EMT-I's, EMT-II's, and EMT-P's shall be required to renew their cardiopulmonary resuscitation certificate no more than once every two years.
[Added by SB 916 (Ch. 774) 1983.]

1797.216. Public safety agencies that are certifying entities may certify and recertify public safety personnel as EMT-I. The state fire marshal, subject to policy guidance and advice from the State Board of Fire Services, may certify and recertify fire safety personnel as EMT-I. All persons certified shall have completed a program of training approved by the local EMS agency or the authority and have passed a competency-based examination. [Amended by SB 595 (Ch. 1246) 1983 and amended by AB 2917 (Ch. 274) 2008.]

1797.217. (a) Every certifying entity shall submit to the authority certification data required by Section 1797.117.

(b) The authority shall collect fees from each certifying entity for the certification and certification renewal of each EMT-I and EMT-II in an amount sufficient to support the authority's central registry program and the local EMS agency administrative law judge reimbursement program. Separate additional fees may be charged, at the option of the authority, for services that are not shared by all applicants.

(c) The authority's fees shall be established in regulations, and fees charged for individual services shall be set so that the total fees charged shall not exceed the

authority's actual total cost for the authority's central registry program, state and federal criminal offender record information search response program, and the local EMS agency administrative law judge reimbursement program.

(d) In addition to any fees collected by EMT-I or EMT-II certifying entities to support their certification, recertification, or enforcement programs, EMT-I or EMT-II certifying entities shall collect fees to support the authority's central registry program, and the local EMS agency administrative law judge reimbursement program. In lieu of collecting fees from an individual, pursuant to an employer choice, a collective bargaining agreement, or other employment contract, the certifying entity shall provide the appropriate fees to the authority pursuant to this subdivision.

(e) All fees collected for or provided to the authority in a calendar month by an EMT-I or EMT-II certifying entity pursuant to this section shall be transmitted to the authority for deposit into the Emergency Medical Technician Certification Fund within 30 calendar days following the last day of the calendar month in which the fees were received by the certifying entity, unless a contract between the certifying entity and the authority specifies a different timeframe.

(f) At the option of the authority, fees may be collected for the authority by an entity that contracts with the authority to provide any of the services associated with the registry program, or the state and federal criminal offender record information search response program, or the local EMS agency administrative law judge reimbursement program. All fees collected for the authority in a calendar month by any entity designated by the authority pursuant to this section to collect fees for the authority shall be transmitted to the authority for deposit into the Emergency Medical Technician Certification Fund within 30 calendar days following the last day of the calendar month in which the fees were received by the designated entity, unless the contract between the entity and the authority specifies a different timeframe.

(g) The authority shall annually evaluate fees to determine if the fee is sufficient to fund the actual costs of the authority's central registry program, state and federal criminal offender record information search response program, and local EMS agency administrative law judge reimbursement program. If the evaluation shows that the fees are excessive or are insufficient to fund the actual costs of these programs, then the fees will be adjusted accordingly through the rulemaking process as outlined in the Administrative Procedures Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).

(h) The Emergency Medical Technician Certification Fund is hereby created in the State Treasury. All moneys deposited in the fund shall be made available, upon appropriation, to the authority for purposes of the central registry program, state and federal criminal offender record information search response program, and the local EMS agency administrative law judge reimbursement program. The local EMS agency administrative law judge reimbursement program is solely for the purpose of making reimbursements to local emergency medical service agencies for actual administrative law judge costs regarding EMT-I or EMT-II disciplinary action appeals. Reimbursement to the local emergency medical service agencies shall only be made if adequate funds are available from fees collected for the authority's local EMS agency administrative law judge reimbursement program.

(i) The authority may transfer unused portions of the Emergency Medical Technician Certification Fund to the Surplus Money Investment Fund. Funds transferred to the Surplus Money Investment Fund shall be placed in a separate trust account, and shall be available for transfer to the Emergency Medical Technician Certification Fund, together with interest earned, when requested by the authority.

(j) The authority shall maintain a reserve balance in the Emergency Medical Technician Certification Fund of 5 percent of annual revenues. Any increase in the fees deposited in the Emergency Medical Technician Certification Fund shall be effective upon a determination by the authority that additional moneys are required to fund expenditures of this section. [Added by AB 2917 (Ch. 274) 2008.]

1797.218. Any local EMS agency may authorize an advanced life support or limited advanced life support program which provides services utilizing EMT-II or EMT-P, or both, for the delivery of emergency medical care to the sick and injured at the scene of an emergency, during transport to a general acute care hospital, during interfacility transfer, while in the emergency department of a general acute care hospital until care responsibility is assumed by the regular staff of that hospital, and during training within the facilities of a participating general acute care hospital. [Amended by SB 595 (Ch. 1246) 1983.]

1797.219. All investigatory and disciplinary processes for EMT-I and EMT-II certificate holders shall be, subject to Chapter 9.6 (commencing with Section 3250) of Division 4 of Title 1 of the Government Code, with respect to certificate holders who are firefighters otherwise subject to these provisions, and Chapter 9.7 (commencing with Section 3300) of Division 4 of Title 1 of the Government Code, with respect to certificate holders who are peace officers otherwise subject to these provisions. [Added by AB 2917 (Ch. 274) 2008.]

1797.220. The local EMS agency, using state minimum standards, shall establish policies and procedures approved by the medical director of the local EMS agency to assure medical control of the EMS system. The policies and procedures approved by the medical director may require basic life support emergency medical transportation services to meet any medical control requirements including dispatch, patient destination policies, patient care guidelines, and quality assurance requirements. [Amended by AB 3269 (Ch. 1390) 1988.]

1797.221. The medical director of the local EMS agency may approve or conduct any scientific or trial study of the efficacy of the prehospital emergency use of any drug, device, or treatment procedure within the local EMS system, utilizing any level of prehospital emergency medical care personnel. The study shall be consistent with any requirements established by the authority for scientific or trial studies conducted within the prehospital emergency medical care system, and, where applicable, with Article 5 (commencing with Section 111550) of Chapter 6 of Part 5 of Division 104. No drug, device, or treatment procedure which has been specifically excluded by the authority from usage in the EMS system shall be included in such a study. [Added by AB 3119

(Ch. 299) 1988. Provisions became effective July 8, 1988. Amended by SB 1497 (Ch. 1023) 1996.]

1797.222. A county, upon the recommendation of its local EMS agency, may adopt ordinances governing the transport of a patient who is receiving care in the field from prehospital emergency medical personnel, when the patient meets specific criteria for trauma, burn, or pediatric centers adopted by the local EMS agency.

The ordinances shall, to the extent possible, ensure that individual patients receive appropriate medical care while protecting the interests of the community at large by making maximum use of available emergency medical care resources. These ordinances shall be consistent with Sections 1797.106, 1798.100, and 1798.102, and shall not conflict with any state regulations or any guidelines adopted by the Emergency Medical Service Authority.

This section shall not be construed as prohibiting the helicopter program of the Department of the California Highway Patrol from a role in providing emergency medical services when the best medically qualified person at the scene of an accident determines it is in the best interests of any injured party. [Added by SB 358 (Ch. 1237) 1983.]

1797.224. A local EMS agency may create one or more exclusive operating areas in the development of a local plan, if a competitive process is utilized to select the provider or providers of the services pursuant to the plan. No competitive process is required if the local EMS agency develops or implements a local plan that continues the use of existing providers operating within a local EMS area in the manner and scope in which the services have been provided without interruption since January 1, 1981. A local EMS agency which elects to create one or more exclusive operating areas in the development of a local plan shall develop and submit for approval to the authority, as part of the local EMS plan, its competitive process for selecting providers and determining the scope of their operations. This plan shall include provisions for a competitive process held at periodic intervals. Nothing in this section supersedes Section 1797.201.

[Added by AB 3153 (Ch. 1349) 1984.]

1797.226. Without altering or otherwise affecting the meaning of any portion of this division as to any other county, as to San Bernardino County only, it shall be competent for any local EMS agency which establishes exclusive operating areas pursuant to Section 1797.224 to determine the following:

(a) That a minor alteration in the level of life support personnel or equipment, which does not significantly reduce the level of care available, shall not constitute a change in the manner and scope of providing service.

(b) That a successor to a previously existing emergency services provider shall qualify as an existing provider if the successor has continued uninterrupted the emergency transportation previously supplied by the prior provider. [Added by AB 3434 (Ch. 965) 1986.]

Article 2. Local Emergency Medical Services Planning

1797.250. In each designated EMS area, the local EMS agency may develop and submit a plan to the authority for an emergency medical services system according to the guidelines prescribed pursuant to Section 1797.103.

1797.251. [Added by SB 534 (Ch. 1067) 1983. Repealed by AB 1235 (Ch. 1735) 1984.]

1797.252. The local EMS agency shall, consistent with such plan, coordinate and otherwise facilitate arrangements necessary to develop the emergency medical services system.

1797.254. Local EMS agencies shall annually submit an emergency medical services plan for the EMS area to the authority, according to EMS Systems, Standards, and Guidelines established by the authority. [Amended by AB 1119 (Ch. 260) and AB 3483 (Ch. 197) 1996.]

1797.256. A local EMS agency may review applications for grants and contracts for federal, state, or private funds concerning emergency medical services or related activities in its EMS area.

1797.257. A local EMS agency which elects to implement a trauma care system on or after the effective date of the regulations adopted pursuant to Section 1798.161 shall develop and submit a plan for that trauma care system to the authority according to the requirements of the regulations prior to the implementation of that system. [Added by AB 1235 (Ch. 1735) 1984.]

1797.258. After the submission of an initial trauma care system plan, a local EMS agency which has implemented a trauma care system shall annually submit to the authority an updated plan which identifies all changes, if any, to be made in the trauma care system. [Added by AB 1235 (Ch. 1735) 1984.]

Article 3. Emergency Medical Care Committee

[Article 3 was relocated and amended by SB 595 (Ch. 1246) 1983. Article 3 sections were formerly located in Article 1 of Chapter 9 of Division 2 of H & S Code.]

1797.270. An emergency medical care committee may be established in each county in this state. Nothing in this division should be construed to prevent two or more adjacent counties from establishing a single committee for review of emergency medical care in these counties. [Formerly H & S Code Section 1751. Amended by SB 627 (Ch. 64) 1993.]

1797.272. The county board of supervisors shall prescribe the membership, and appoint the members, of the emergency medical care committee. If two or more

adjacent counties establish a committee, the county boards of supervisors shall jointly prescribe the membership, and appoint the members of the committee. [Formerly H & S Code Section 1752.]

1797.274. The emergency medical care committee shall, at least annually, review the operations of each of the following:

- (a) Ambulance services operating within the county.
- (b) Emergency medical care offered within the county, including programs for training large numbers of people in cardiopulmonary resuscitation and lifesaving first aid techniques.
- (c) First aid practices in the county. [Formerly H & S Code Section 1755.]

1797.276. Every emergency medical care committee shall, at least annually, report to the authority, and the local EMS agency its observations and recommendations relative to its review of the ambulance services, emergency medical care, and first aid practices, and programs for training people in cardiopulmonary resuscitation and lifesaving first aid techniques, and public participation in such programs in that county. The emergency medical care committee shall submit its observations and recommendations to the county board or boards of supervisors which it serves and shall act in an advisory capacity to the county board or boards of supervisors which it serves, and to the local EMS agency, on all matters relating to emergency medical services as directed by the board or boards of supervisors. [Formerly H & S Code Section 1756. Amended by AB 1119 (Ch. 260) 1988.]

CHAPTER 5. MEDICAL CONTROL

1798. (a) The medical direction and management of an emergency medical services system shall be under the medical control of the medical director of the local EMS agency. This medical control shall be maintained in accordance with standards for medical control established by the authority.

(b) Medical control shall be within an EMS system which complies with the minimum standards adopted by the authority, and which is established and implemented by the local EMS agency.

(c) In the event a medical director of a base station questions the medical effect of a policy of a local EMS agency, the medical director of the base station shall submit a written statement to the medical director of the local EMS agency requesting a review by a panel of medical directors of other base stations. Upon receipt of the request, the medical director of a local EMS agency shall promptly convene a panel of medical directors of base stations to evaluate the written statement. The panel shall be composed of all the medical directors of the base stations in the region, except that the local EMS medical director may limit the panel to five members.

This subdivision shall remain in effect only until the authority adopts more comprehensive regulations that supersede this subdivision. [Amended by SB 1124 (Ch. 1391) 1984. Subsection (c) added by AB 214 (Ch. 1225) and SB 12 (Ch. 1240) 1987. Paragraphs (1), (2), and (3) under subsection (a) deleted by AB 3269 (Ch. 1390) 1988.]

1798.2. The base hospital shall implement the policies and procedures established by the local EMS agency and approved by the medical director of the local EMS agency for medical direction of prehospital emergency medical care personnel. [Amended by SB 1124 (Ch. 1391) 1984; and AB 3269 (Ch. 1390) 1988.]

1798.3. Advanced life support and limited advanced life support personnel may receive medical direction from an alternative base station in lieu of a base hospital when the following conditions are met:

(a) The alternative base station has been designated by the local EMS agency and approved by the medical director of the local EMS agency, pursuant to Section 1798.105, to provide medical direction to prehospital personnel because no base hospital is available to provide medical direction for the geographical area assigned.

(b) The medical direction is provided by either of the following:

(1) A physician and surgeon who is trained and qualified to issue advice and instructions to prehospital emergency medical care personnel.

(2) A mobile intensive care nurse who has been authorized by the medical director of the local EMS agency, pursuant to Section 1797.56, as qualified to issue instructions to prehospital emergency medical care personnel. [Added by AB 3269 (Ch. 1390) 1988.]

1798.4. [Repealed by AB 3269 (Ch. 1390) 1988.]

1798.6. (a) Authority for patient health care management in an emergency shall be vested in that licensed or certified health care professional, which may include any paramedic or other prehospital emergency personnel, at the scene of the emergency

who is most medically qualified specific to the provision of rendering emergency medical care. If no licensed or certified health care professional is available, the authority shall be vested in the most appropriate medically qualified representative of public safety agencies who may have responded to the scene of the emergency.

(b) If any county desires to establish a unified command structure for patient management at the scene of an emergency within that county, a committee may be established in that county comprised of representatives of the agency responsible for county emergency medical services, the county sheriff's department, the California Highway Patrol, public prehospital-care provider agencies serving the county, and public fire, police, and other affected emergency service agencies within the county. The membership and duties of the committee shall be established by an agreement for the joint exercise of powers under Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code.

(c) Notwithstanding subdivision (a), authority for the management of the scene of an emergency shall be vested in the appropriate public safety agency having primary investigative authority. The scene of an emergency shall be managed in a manner designed to minimize the risk of death or health impairment to the patient and to other persons who may be exposed to the risks as a result of the emergency condition, and priority shall be placed upon the interests of those persons exposed to the more serious and immediate risks to life and health. Public safety officials shall consult emergency medical services personnel or other authoritative health care professionals at the scene in the determination of relevant risks. [Relocated by AB 334 (Ch. 206) 1983. Formerly H & S Code Section 1482.5.]

CHAPTER 6. FACILITIES

Article 1. Base Hospitals

[Heading amended by SB 1124 (Ch. 1391); 1984.]

1798.100. In administering the EMS system, the local EMS agency, with the approval of its medical director, may designate and contract with hospitals or other entities approved by the medical director of the local EMS agency pursuant to Section 1798.105 to provide medical direction of prehospital emergency medical care personnel, within its area of jurisdiction, as either base hospitals or alternative base stations, respectively. Hospitals or other entities so designated and contracted with as base hospitals or alternative base stations shall provide medical direction of prehospital emergency medical care provided for the area defined by the local EMS agency in accordance with policies and procedures established by the local EMS agency and approved by the medical director of the local EMS agency pursuant to Sections 1797.220 and 1798. [Amended by SB 1124 (Ch. 1391) 1984; and AB 3269 (Ch. 1390) 1988.]

1798.101. (a) In rural areas, as determined by the authority, where the use of a base hospital having a basic emergency medical services special permit pursuant to subdivision (c) of Section 1277 is precluded because of geographic or other extenuating circumstances, a local EMS agency, in order to assure medical direction to prehospital emergency medical care personnel, may utilize other hospitals which do not have a basic emergency medical service permit but which have been approved by the medical director of the local EMS agency for utilization as a base hospital, if both of the following apply:

(1) Medical control is maintained in accordance with policies and procedures established by the local EMS agency, with the approval of the medical director of the local EMS agency.

(2) Approval is secured from the authority.

(b)(1) In rural areas, as determined by the authority, when the use of a hospital having a basic emergency medical service special permit is precluded because of geographic or other extenuating circumstances, as determined by the authority, the medical director of the local EMS agency may authorize another facility which does not have this special permit to receive patients requiring emergency medical services if the facility has adequate staff and equipment to provide these services, as determined by the medical director of the local EMS agency.

(2) A local EMS agency which utilizes in its EMS system any facility which does not have a special permit to receive patients requiring emergency medical care pursuant to paragraph (1) shall submit to the authority, as part of the plan required by Section 1797.254, protocols approved by the medical director of the local EMS agency to ensure that the use of that facility is in the best interests of patient care. The protocols addressing patient safety and the use of the nonpermit facility shall take into account, but not be limited to, the following:

(A) The medical staff, and the availability of the staff at various times to care for patients requiring emergency medical services.

(B) The ability of staff to care for the degree and severity of patient injuries.

(C) The equipment and services available at the hospital necessary to care for patients requiring emergency medical services and the severity of their injuries.

(D) The availability of more comprehensive emergency medical services and the distance and travel time necessary to make the alternative emergency medical services available.

(E) The time of day and any limitations which may apply for a nonpermit facility to treat patients requiring emergency medical services.

(3) Any change in the status of a nonpermit facility, authorized pursuant to this subdivision to care for patients requiring emergency medical services, with respect to protocols and the facility's ability to care for the patients shall be reported by the facility to the local EMS agency. [Added by SB 1791 (Ch. 1162) 1986. Amended by AB 3269 (Ch. 1390) 1988.]

1798.102. The base hospital shall supervise prehospital treatment, triage, and transport, advanced life support or limited advanced life support, and monitor personnel program compliance by direct medical supervision. [Amended by SB 1124 (Ch. 1391) 1984.]

1798.104. The base hospital shall provide, or cause to be provided, EMS prehospital personnel training and continuing education in accordance with local EMS policies and procedures. [Amended by 1124 (Ch. 1391) 1984.]

1798.105. The medical director of the local EMS agency may approve an alternative base station, as defined in Section 1797.53, to provide medical direction to advanced life support or limited advanced life support personnel for an area of the local EMS system for which no qualified base hospital is available, to provide that medical direction, providing that both the following conditions are met:

(a) Medical control is maintained in accordance with policies and procedures established by the local EMS agency, with the approval of the medical director of the local EMS agency.

(b) Any responsibilities of a base station hospital, including review of run reports or provision of continuing education, which are not assigned to the alternative base station, are assigned to either the local EMS agency, a base hospital for another area of the local EMS system, or a receiving hospital which has been approved by the medical director to, and has agreed to, assume the responsibilities.

[Added by AB 3269 (Ch. 1390) 1988.]

Article 2. Critical Care

1798.150. The authority may establish, in cooperation with affected medical organizations, guidelines for hospital facilities according to critical care capabilities.

Article 2.5 Regional Trauma Systems

[Article 2.5 was added by SB 534 (Ch. 1067) 1983.]

1798.160. Except where the context otherwise requires, the following definitions in this section govern construction of this article:

(a) "Trauma case" means any injured person who has been evaluated by prehospital personnel according to policies and procedures established by the local EMS agency pursuant to Section 1798.163 and has been found to require transportation to a trauma facility.

(b) "Trauma facility" means a health facility, as defined by regulation, which is capable of treating one or more types of potentially seriously injured persons and which has been designated as part of the regional trauma care system by the local EMS agency.

(c) "Trauma care system" means an arrangement under which trauma cases are transported to, and treated by, the appropriate trauma facility. [Amended by AB 1235 (Ch. 1735) 1984.]

1798.161. (a) The authority shall submit draft regulations specifying minimum standards for the implementation of regional trauma systems to the commission on or before July 1, 1984, and shall adopt the regulations on or before July 1, 1985. These regulations shall provide specific requirements for the care of trauma cases and shall ensure that the trauma care system is fully coordinated with all elements of the existing emergency medical services system. The regulations shall be adopted as provided in Section 1799.50, and shall include, but not be limited to, all of the following:

(1) Prehospital care management guidelines for triage and transportation of trauma cases.

(2) Flow patterns of trauma cases and geographic boundaries regarding trauma and non-trauma cases.

(3) The number of trauma cases necessary to assure that trauma facilities will provide quality care to trauma cases referred to them.

(4) The resources and equipment needed by trauma facilities to treat trauma cases.

(5) The availability and qualifications of the health care personnel, including physicians and surgeons, treating trauma cases with a trauma facility.

(6) Data collection regarding system operation and patient outcome.

(7) Periodic performance evaluation of the trauma system and its components.

(b) The authority may grant an exception to a portion of the regulations adopted pursuant to subdivision (a) upon substantiation of need by a local EMS agency that, as defined in the regulations, compliance with the requirement would not be in the best interests of the persons served within the affected local EMS area. [Amended by AB 1235 (Ch. 1735) 1984.]

1798.162. (a) A local emergency medical services agency may implement a trauma care system only if the system meets the minimum standards set forth in the regulations for implementation established by the authority and the plan required by Section 1797.257 has been submitted to, and approved by, the authority. Prior to submitting the plan for the trauma care system to the authority, a local emergency medical services

agency shall hold a public hearing and shall give adequate notice of the public hearing to all hospitals and other interested parties in the area proposed to be included in the system. This subdivision does not preclude a local EMS agency from adopting trauma care system standards which are more stringent than those established by the regulations.

(b) Notwithstanding subdivision (a) or any other provision of this article, the Santa Clara County Emergency Medical Services Agency may implement a trauma care system prior to the adoption of regulations by the authority pursuant to Section 1798.161. If the Santa Clara County Emergency Medical Services Agency implements a trauma care system pursuant to this subdivision prior to the adoption of those regulations by the authority, the agency shall prepare and submit to the authority a trauma care system plan which conforms to any regulations subsequently adopted by the authority. [Amended by AB 1235 (Ch. 1735) 1984.]

1798.163. A local emergency medical services agency implementing a trauma care system shall establish policies and procedures which are concordant and consistent with the minimum standards set forth in the regulations adopted by the authority. This section does not preclude a local EMS agency from adopting trauma care system standards which are more stringent than those established by the regulations. [Amended by AB 1235 (Ch. 1735) 1984.]

1798.164. (a) A local emergency medical services agency may charge a fee to an applicant seeking initial or continuing designation as a trauma facility in an amount sufficient to cover the costs directly related to the designation of trauma facilities pursuant to Section 1798.165 and to the development of the plans prepared pursuant to Sections 1797.257 and 1797.258, and subdivision (b) of Section 1798.162.

(b) Each local emergency medical services agency charging fees pursuant to subdivision (a) shall annually provide a report to the authority and to each trauma facility having paid a fee to the agency. The report shall contain sufficient detail to apprise facilities of the specific application of fees collected and to assure the authority that fees collected were expended in compliance with subdivision (a).

(c) The authority may establish a prescribed format for the report required in subdivision (b). [Amended by AB 1235 (Ch. 1735) 1984, and AB 2934 (Ch. 768) 1988.]

1798.165. (a) Local emergency medical services agencies may designate trauma facilities as part of their trauma care system pursuant to the regulations promulgated by the authority.

(b) The health facility shall only be designated to provide the level of trauma care and service for which it is qualified and which is included within the system implemented by the agency.

(c) No health care provider shall use the terms "trauma facility," "trauma hospital," "trauma center," "trauma care provider," "trauma vehicle," or similar terminology in its signs or advertisements, or in printed materials and information it furnishes to the general public, unless the use is authorized by the local EMS agency. [Amended by AB 1235 (Ch. 1735) 1984; and SB 702 (Ch. 570) 1985.]

1798.166. A local emergency medical services agency which elects to implement a trauma care system on or after January 1, 1984, shall develop and submit a plan to the authority according to the regulations established prior to the implementation.

1798.167. Nothing in this article shall be construed to restrict the authority of a health care facility to provide a service for which it has received a license pursuant to Chapter 2 (commencing with Section 1250) of Division 2.

1798.168. Nothing in this article shall be construed as changing the boundaries of any local emergency medical services agency in existence on January 1, 1984.

1798.169. Nothing in this article shall be construed as restricting the use of a helicopter of the Department of the California Highway Patrol from performing missions which the department determines are in the best interests of the people of the State of California.

Article 3. Transfer Agreements

1798.170. A local EMS agency may develop triage and transfer protocols to facilitate prompt delivery of patients to appropriate designated facilities within and without its area of jurisdiction. Considerations in designating a facility shall include, but shall not be limited to, the following:

(a) A general acute care hospital's consistent ability to provide on-call physicians and services for all emergency patients regardless of ability to pay.

(b) The sufficiency of hospital procedures to ensure that all patients who come to the emergency department are examined and evaluated to determine whether or not an emergency condition exists.

(c) The hospital's compliance with local EMS protocols, guidelines, and transfer agreement requirements. [Amended by AB 214 (Ch. 1225) and SB 12 (Ch. 1240) 1987.]

1798.172. (a) The local EMS agency shall establish guidelines and standards for completion and operation of formal transfer agreements between hospitals with varying levels of care in the area of jurisdiction of the local EMS agency consistent with Sections 1317 to 1317.9a, inclusive, and Chapter 5 (commencing with Section 1798). Each local EMS agency shall solicit and consider public comment in drafting guidelines and standards. These guidelines shall include provision for suggested written agreements for the type of patient, initial patient care treatments, requirements of interhospital care, and associated logistics for transfer, evaluation, and monitoring of the patient.

(b) Notwithstanding subdivision (a), and in addition to Section 1317, a general acute care hospital licensed under Chapter 2 (commencing with Section 1250) of Division 2 shall not transfer a person for nonmedical reasons to another health facility unless that other facility receiving the person agrees in advance of the transfer to accept the transfer. [Amended by AB 214 (Ch. 1225) and SB 12 (Ch. 1240) 1987; and AB 3217 (Ch. 888) 1988.]

Article 3.5. Use of "Emergency"

1798.175. (a) No person or public agency shall advertise itself as, or hold itself out as, providing emergency medical services, by using in its name or advertising the word "emergency" or any derivation thereof, or any words which suggest that it is staffed and equipped to provide emergency medical services, unless the person or public agency satisfies one of the following requirements:

- (1) Is a general acute care hospital providing approved standby, basic, or comprehensive emergency medical services regulated by this chapter.
- (2) Meets all of the following minimum standards:
 - (A) Emergency services are available in the facility seven days a week, 24 hours a day.
 - (B) Has equipment, medication, and personnel experienced in the provision of services needed to treat life-, limb-, or function threatening conditions.
 - (C) Diagnostic radiology and clinical laboratory services are provided by persons on duty or on call and available when needed.
 - (D) At least one physician who is trained and experienced in the provision of emergency medical care who is on duty or on call so as to be immediately available to the facility.
 - (E) Medical records document the name of each patient who seeks care, as well as the disposition of each patient upon discharge.
 - (F) A roster of specialty physicians who are available for referral, consultation, and specialty services is maintained and available.
 - (G) Policies and procedures define the scope and conduct of treatment provided, including procedures for the management of specific types of emergencies.
 - (H) The quality and appropriateness of emergency services are evaluated at least annually as part of a quality assurance program.
 - (I) Provide information to the public that describes the capabilities of the facility, including the scope of services provided, the manner in which the facility complies with the requirements of this section pertaining to the availability and qualifications of personnel or services, and the manner in which the facility cooperates with the patient's primary care physician in follow-up care.
 - (J) Clearly identifies the responsible professional or professionals and the legal owner or owners of the facility in its promotion, advertising, and solicitations.
 - (K) Transfer agreements are in effect at all times with one or more general acute care hospitals which provide basic or comprehensive emergency medical services wherein patients requiring more definitive care will be expeditiously transferred and receive prompt hospital care. Reasonable care shall be exercised to determine whether an emergency requiring more definitive care exists and the person seeking emergency care shall be assisted in obtaining these services, including transportation services, in every way reasonable under the circumstances.
- (b) Nothing in this article shall be construed to require the licensing or certification of any person or public agency meeting the minimum standards of paragraph (2) of subdivision (a), nor to exempt from licensure those health facilities covered by paragraph (1) of sub-division (a).
- (c) Nothing in this article shall be construed to:

(1) Prohibit a physician in private practice, an outpatient department of a general acute care hospital whether located on or off the premises of the hospital, or other entity authorized to offer medical services from advertising itself as, or otherwise holding itself out as, providing urgent, immediate, or prompt medical services, or from using in its name or advertising the words "urgent", "prompt", "immediate", any derivative thereof, or other words which suggest that it is staffed and equipped to provide urgent, prompt, or immediate medical services.

(2) Prohibit prehospital emergency medical care personnel certified pursuant to, or any state or local agencies established pursuant to, this division, or any emergency vehicle operating within the emergency medical services system from using the word "emergency" in the title, classification, or designation of the personnel agency, or vehicle.

(d) Any person or public agency using the word "emergency" or any derivation thereof in its name or advertising on January 1, 1987, but which would be prohibited from using the word or derivation thereof by this article, shall have until January 1, 1988, to comply with this article. [Added by SB 2162 (Ch. 1377) 1986.]

Article 4. Poison Control Centers

[Article 4. was added by SB 1124 (Ch. 1391); 1984.]

1798.180. (a) The authority shall establish minimum standards for the operation of poison control centers.

(b) The authority shall establish geographical service areas and criteria for designation of regional poison control centers. The authority may designate poison control centers which have met the standards established pursuant to subdivision (a), in accordance with the criteria adopted pursuant to this subdivision.

(c) No person or persons, business, agency, organization, or other entity, whether public or private, shall hold itself out as providing a poison advice service or use the term poison control center, poison advice center, or any other term which implies that it is qualified to provide advice on the treatment or handling of poisons in its advertising, name, or in printed materials and information it furnishes to the general public unless that entity meets one of the following conditions:

(1) Has been designated as a poison control center by the authority.

(2) Is a company or organization which provides a poison information service for products or chemicals which it manufactures or distributes.

(d) Nothing in this section shall prohibit a qualified health care professional, within his or her level

of professional expertise, from providing advice regarding poisoning or poisons to his or her patient or patients upon request or whenever he or she deems it warranted in the exercise of his or her professional judgment, as otherwise permitted by law. [Amended by AB 580 (Ch. 972) 1987.]

1798.181. The authority shall consolidate the number of poison control centers if it is determined by the authority that the consolidation will result in cost savings. [Added by AB 861 (Ch. 1366) 1992.]

1798.182. The authority may authorize a poison control center, instead of providing poison control services directly, to contract with an entity in another state to provide poison control services during any part of the 24-hour period for which the center is required to provide poison control services, if both of the following conditions are met:

(a) The center is unable to provide poison control services 24 hours a day.

(b) The entity in the other state provides substantially the same poison control services as required under Section 1798.180, and regulations adopted pursuant thereto. An entity in another state shall not be deemed not to provide substantially the same poison control services solely because the staff of the entity is licensed in the other state, and not licensed in the State of California. [Added by SB 66 (Ch. 236) 1993.]

1798.183. The authority may authorize a poison control center to provide poison control services for fewer than 24 hours a day, as the authority deems necessary. [Added by SB 66 (Ch. 236) 1993.]

CHAPTER 7. PENALTIES

1798.200. (a) (1) (A) Except as provided in paragraph (2), an employer of an EMT-I or EMT-II may conduct investigations, as necessary, and take disciplinary action against an EMT-I or EMT-II who is employed by that employer for conduct in violation of subdivision (c). The employer shall notify the medical director of the local EMS agency that has jurisdiction in the county in which the alleged violation occurred within three days when an allegation has been validated as a potential violation of subdivision (c).

(B) Each employer of an EMT-I or EMT-II employee shall notify the medical director of the local EMS agency that has jurisdiction in the county in which a violation related to subdivision (c) occurred within three days after the EMT-I or EMT-II is terminated or suspended for a disciplinary cause, the EMT-I or EMT-II resigns following notification of an impending investigation based upon evidence that would indicate the existence of a disciplinary cause, or the EMT-I or EMT-II is removed from EMT-related duties for a disciplinary cause after the completion of the employer's investigation.

(C) At the conclusion of an investigation, the employer of an EMT-I or EMT-II may develop and implement, in accordance with the guidelines for disciplinary orders, temporary suspensions, and conditions of probation adopted pursuant to Section 1797.184, a disciplinary plan for the EMT-I or EMT-II. Upon adoption of the disciplinary plan, the employer shall submit that plan to the local EMS agency within three working days. The employer's disciplinary plan may include a recommendation that the medical director of the local EMS agency consider taking action against the holder's certificate pursuant to paragraph (3).

(2) If an EMT-I or EMT-II is not employed by an ambulance service licensed by the Department of the California Highway Patrol or a public safety agency or if that ambulance service or public safety agency chooses not to conduct an investigation pursuant to paragraph (1) for conduct in violation of subdivision (c), the medical director of a local EMS agency shall conduct the investigations, and, upon a determination of disciplinary cause, take disciplinary action as necessary against the EMT-I or EMT-II. [Amended by SB 1330 (Ch. 328) Statutes of 2010.] At the conclusion of these investigations, the medical director shall develop and implement, in accordance with the recommended guidelines for disciplinary orders, temporary orders, and conditions of probation adopted pursuant to Section 1797.184, a disciplinary plan for the EMT-I or EMT-II. The medical director's disciplinary plan may include action against the holder's certificate pursuant to paragraph (3).

(3) The medical director of the local EMS agency may, upon a determination of disciplinary cause and in accordance with regulations for disciplinary processes adopted pursuant to Section 1797.184, deny, suspend, or revoke any EMT-I or EMT-II certificate issued under this division, or may place any EMT-I or EMT-II certificate holder on probation, upon the finding by that medical director of the occurrence of any of the actions listed in subdivision (c) and the occurrence of one of the following:

(A) The EMT-I or EMT-II employer, after conducting an investigation, failed to impose discipline for the conduct under investigation, or the medical director makes a determination that the discipline imposed was not according to the guidelines for disciplinary orders and conditions of probation and the conduct of the EMT-I or EMT-II certificate holder constitutes grounds for disciplinary action against the certificate.

(B) Either the employer of an EMT-I or EMT-II further determines, after an investigation conducted under paragraph (1), or the medical director determines after an investigation conducted under paragraph (2), that the conduct requires disciplinary action against the certificate.

(4) The medical director of the local EMS agency, after consultation with the employer of an EMT-I or EMT-II, may temporarily suspend, prior to a hearing, any EMT-I or EMT-II certificate or both EMT-I and EMT-II certificates upon a determination that both of the following conditions have been met:

(A) The certificate holder has engaged in acts or omissions that constitute grounds for revocation of the EMT-I or EMT-II certificate.

(B) Permitting the certificate holder to continue to engage in the certified activity without restriction would pose an imminent threat to the public health or safety.

(5) If the medical director of the local EMS agency temporarily suspends a certificate, the local EMS agency shall notify the certificate holder that his or her EMT-I or EMT-II certificate is suspended and shall identify the reasons therefor. Within three working days of the initiation of the suspension by the local EMS agency, the agency and employer shall jointly investigate the allegation in order for the agency to make a determination of the continuation of the temporary suspension. All investigatory information not otherwise protected by law held by the agency and employer shall be shared between the parties via facsimile transmission or overnight mail relative to the decision to temporarily suspend. The local EMS agency shall decide within 15 calendar days, whether to serve the certificate holder with an accusation pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code. If the certificate holder files a notice of defense, the hearing shall be held within 30 days of the local EMS agency's receipt of the notice of defense. The temporary suspension order shall be deemed vacated if the local EMS agency fails to make a final determination on the merits within 15 days after the administrative law judge renders the proposed decision.

(6) The medical director of the local EMS agency shall refer, for investigation and discipline, any complaint received on an EMT-I or EMT-II to the relevant employer within three days of receipt of the complaint, pursuant to subparagraph (A) of paragraph (1) of subdivision (a).

(b) The authority may deny, suspend, or revoke any EMT-P license issued under this division, or may place any EMT-P license issued under this division, or may place any EMT-P licenseholder on probation upon the finding by the director of the occurrence of any of the actions listed in subdivision (c). Proceedings against any EMT-P license or licenseholder shall be held in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) Any of the following actions shall be considered evidence of a threat to the public health and safety and may result in the denial, suspension, or revocation of a certificate or license issued under this division, or in the placement on probation of a certificate holder or licenseholder under this division:

- (1) Fraud in the procurement of any certificate or license under this division.
- (2) Gross negligence.
- (3) Repeated negligent acts.
- (4) Incompetence.

(5) The commission of any fraudulent, dishonest, or corrupt act that is substantially related to the qualifications, functions, and duties of prehospital personnel.

(6) Conviction of any crime which is substantially related to the qualifications, functions, and duties of prehospital personnel. The record of conviction or a certified copy of the record shall be conclusive evidence of the conviction.

(7) Violating or attempting to violate directly or indirectly, or assisting in or abetting the violation of, or conspiring to violate, any provision of this division or the regulations adopted by the authority pertaining to prehospital personnel.

(8) Violating or attempting to violate any federal or state statute or regulation that regulates narcotics, dangerous drugs, or controlled substances.

(9) Addiction to, the excessive use of, or the misuse of, alcoholic beverages, narcotics, dangerous drugs, or controlled substances.

(10) Functioning outside the supervision of medical control in the field care system operating at the local level, except as authorized by any other license or certification.

(11) Demonstration of irrational behavior or occurrence of a physical disability to the extent that a reasonable and prudent person would have reasonable cause to believe that the ability to perform the duties normally expected may be impaired.

(12) Unprofessional conduct exhibited by any of the following:

(A) The mistreatment or physical abuse of any patient resulting from force in excess of what a reasonable and prudent person trained and acting in a similar capacity while engaged in the performance of his or her duties would use if confronted with a similar circumstance. Nothing in this section shall be deemed to prohibit an EMT-I, EMT-II, or EMT-P from assisting a peace officer, or a peace officer who is acting in the dual capacity of peace officer and EMT-I, EMT-II, or EMT-P, from using that force that is reasonably necessary to effect a lawful arrest or detention.

(B) The failure to maintain confidentiality of patient medical information, except as disclosure is otherwise permitted or required by law in Part 2.6 (commencing with Sections 56) of Division 1 of the Civil Code. [Amended by SB 1330 (Ch. 328) Statutes of 2010.]

(C) The commission of any sexually related offense specified under Section 290 of the Penal Code.

(d) The information shared among EMT-I, EMT-II, and EMT-P employers, medical directors of local EMS agencies, the authority, and EMT-I and EMT-II certifying entities shall be deemed to be an investigative communication that is exempt from public disclosure as a public record pursuant to subdivision (f) of Section 6254 of the Government Code. A formal disciplinary action against an EMT-I, EMT-II, or EMT-P shall be considered a public record available to the public, unless otherwise protected from disclosure pursuant to state or federal law.

(e) For purposes of this section "disciplinary cause" means an act that is substantially related to the qualifications, functions, and duties of an EMT-I, EMT-II, or EMT-P and is evidence of a threat to the public health and safety described in subdivision (c).

SEC. 16. This act shall become operative only if Senate Bill 997 of the 2007-08 Regular Session is enacted and becomes effective on or before January 1, 2009.

SEC. 17. This act shall not be construed to limit or otherwise impair the medical control of the medical director of a local EMS agency granted pursuant to Section 1798 of the Health and Safety Code.

SEC. 18. The Legislature finds and declares that Section 15 of this act, which amends Section 1798.200 of the Health and Safety Code, imposes a limitation on the public's right of access to the meetings of public bodies or the writings of public officials and agencies within the meaning of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest protected by this limitation and the need for protecting that interest: emergency medical technicians serve a critical role in the state's emergency response network. The public safety is best protected when appropriate and consistent disciplinary standards are applied. When accusations have been made against a certified EMT-I or EMT-II, the individual must be given the investigatory and due process protection that is offered to other licensed and certified professionals such as paramedics, physicians, nurses, and other health care providers. The public shall have certification, licensure, disciplinary and other information readily available with the implementation of the EMT-I, EMT-II, and EMT-P registry as created by Section 1797.117 of the Health and Safety Code.

SEC. 19. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution for certain costs that may be incurred by a local agency or school district because, in that regard, this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution. However, if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. [Amended by AB 1853 (Ch. 1156) 1983; AB 3269 (Ch. 1390) 1988; and SB 463 (Ch. 100) 1993. AB 1980 (Ch. 997) 1993; amended this section as well but would not take effect until January 1, 1995. Amended by AB 3123 (Ch. 709) 1994; AB 1215 (Ch. 549) 1999; AB 2917 (Ch. 274) 2008; and by AB 1164 (Ch. 140) 2009.]

1798.201. (a) When information comes to the attention of the medical director of the local EMS agency that an EMT-P licenseholder has committed any act or omission that appears to constitute grounds for disciplinary action under this division, the medical director of the local EMS agency may evaluate the information to determine if there is reason to believe that disciplinary action may be necessary.

(b) If the medical director sends a recommendation to the authority for further investigation or discipline of the licenseholder, the recommendation shall include all documentary evidence collected by the medical director in evaluating whether or not to make that recommendation. The recommendation and accompanying evidence shall be deemed in the nature of an investigative communication and be protected by Section 6254 of the Government Code. In deciding what level of disciplinary action is appropriate in the case, the authority shall consult with the medical director of the local EMS agency. [Added by AB 3123 (Ch. 709) 1994.]

1798.202. (a) The director of the authority or the medical director of the local EMS agency, after consultation with the relevant employer, may temporarily suspend, prior to

hearing, any EMT-P license upon a determination that: (1) the licensee has engaged in acts or omissions that constitute grounds for revocation of the EMT-P license; and (2) permitting the licensee to continue to engage in the licensed activity, or permitting the licensee to continue in the licensed activity without restriction, would present an imminent threat to the public health or safety. When the suspension is initiated by the local EMS agency, subdivision (b) shall apply. When the suspension is initiated by the director of the authority, subdivision (c) shall apply.

(b) The local EMS agency shall notify the licensee that his or her EMT-P license is suspended and shall identify the reasons therefore. Within three working days of the initiation of the suspension by the local EMS agency, the agency shall transmit to the authority, via facsimile transmission or overnight mail, all documentary evidence collected by the local EMS agency relative to the decision to temporarily suspend. Within two working days of receipt of the local EMS agency's documentary evidence, the director of the authority shall determine the need for the licensure action. Part of that determination shall include an evaluation of the need for continuance of the suspension during the licensure action review process. If the director of the authority determines that the temporary suspension order should not continue, the authority shall immediately notify the licensee that the temporary suspension is lifted. If the director of the authority determines that the temporary suspension order should continue, the authority shall immediately notify the licensee of the decision to continue the temporary suspension and shall, within 15 calendar days of receipt of the EMS agency's documentary evidence, serve the licensee with a temporary suspension order and accusation pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) The director of the authority shall initiate a temporary suspension with the filing of a temporary suspension order and accusation pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code and shall notify the director of the local EMS agency, and the relevant employer.

(d) If the licensee files a notice of defense, the hearing shall be held within 30 days of the authority's receipt of the notice of defense. The temporary suspension order shall be deemed vacated if the authority fails to make a final determination on the merits within 15 days after the administrative law judge renders the proposed decision.

[Amended by SB 595 (Ch. 1246) 1983. Repealed by AB 3123 (Ch. 709) 1994 and language moved to new Section 1798.209. Added new Section 1798.202 by AB 3123 (Ch. 709) 1994.]

1798.204. Proceedings for probation, suspension, revocation, or denial of a certificate, or a denial of a renewal of a certificate, under this division shall be conducted in accordance with guidelines established by the Emergency Medical Services Authority. [Amended by AB 1853 (Ch. 1156) 1983.]

1798.205. Any alleged violations of local EMS agency transfer protocols, guidelines, or agreements shall be evaluated by the local EMS agency. If the local EMS agency has concluded that a violation has occurred, it shall take whatever corrective action it deems appropriate within its jurisdiction, including referrals to the district attorney under Section 1798.206 and 1798.208 and shall notify the State Department of Health

Services if it concludes that any violation of Sections 1317 to 1317.9a, inclusive, has occurred. [Added by AB 214 (Ch. 1225). Substantially duplicate section was added by SB 12 (Ch. 1240) 1987 and was repealed by AB 1910 (Ch. 1360) 1990, as part of a general code cleanup.]

1798.206. Any person who violates this part, the rules and regulations adopted pursuant thereto, or county ordinances adopted pursuant to this part governing patient transfers is guilty of a misdemeanor. The attorney general or the district attorney may prosecute any of these misdemeanors which fall within his or her jurisdiction. [Amended by AB 214 (Ch. 1225) 1987.]

1798.207. (a) It is a misdemeanor for any person to knowingly and willfully engage in conduct that subverts or attempts to subvert any licensing or certification examination, or the administration of any licensing or certification examination, conducted pursuant to this division, including, but not limited to, any of the following:

- (1) Conduct that violates the security of the examination material.
 - (2) Removing from the examination room any examination materials without authorization.
 - (3) The unauthorized reproduction by any means of any portion of the actual licensing or certification examination.
 - (4) Aiding by any means the unauthorized reproduction of any portion of the actual licensing or certification examination.
 - (5) Paying or using professional or paid examination-takers, for the purpose of reconstructing any portion of the licensing or certification examination.
 - (6) Obtaining or attempting to obtain examination questions or other examination material from examinees or by any other method, except by specific authorization either before, during, or after an examination.
 - (7) Using or purporting to use any examination questions or materials that were improperly removed or taken from any examination for the purpose of instructing or preparing any applicant for examination.
 - (8) Selling, distributing, buying, receiving, or having unauthorized possession of any portion of a future, current, or previously administered licensing or certification examination.
 - (9) Communicating with any other examinee during the administration of a licensing or certification examination.
 - (10) Copying answers from another examinee or permitting one's answers to be copied by another examinee.
 - (11) Having in one's possession during the administration of the licensing or certification examination any books, equipment, notes written or printed materials, or data of any kind, other than the examination materials distributed, or otherwise authorized to be in one's possession during the examination.
 - (12) Impersonating any examinee or having an impersonator take the licensing or certification examination on one's behalf.
- (b) The penalties provided in this section are not exclusive remedies and shall not preclude remedies provided pursuant to any other provision of law.

(c) In addition to any other penalties, a person found guilty of violating this section shall be liable for the actual damages sustained by the agency administering the examination not to exceed ten thousand dollars (\$10,000) and the costs of litigation. [Added by AB 3138 (Ch. 215) 1992.]

1798.208. Whenever any person who has engaged, or is about to engage, in any act or practice which constitutes, or will constitute, a violation of any provision of this division, the rules and regulations promulgated pursuant thereto, or local EMS agency mandated protocols, guidelines, or transfer agreements, the superior court in and for the county wherein the acts or practices take place or are about to take place may issue an injunction or other appropriate order restraining the conduct on application of the authority, the Attorney General, or the district attorney of the county. The proceedings under this section shall be governed by Chapter 3 (commencing with Section 525) of Title 7 of Part 2 of the Code of Civil Procedure, except that no undertaking shall be required. [Amended by AB 214 (Ch. 1225) and SB 12 (Ch. 1240) 1987.]

1798.209. The local EMS agency may place on probation, suspend, or revoke the approval under this division of any training program for failure to comply with this division or any rules or regulations adopted pursuant thereto. [Added by AB 3123 (Ch. 709) 1994; language was formerly in Section 1798.202.]

1798.210. (a) The authority may impose an administrative fine of up to two thousand five hundred dollars (\$2,500) per violation on any licensed paramedic found to have committed any of the actions described by subdivision (c) of Section 1798.200 that did not result in actual harm to a patient. Fines may not be imposed if a paramedic has previously been disciplined by the authority for any other act committed within the immediately preceding five-year period.

(b) The authority shall adopt regulations establishing an administrative fine structure, taking into account the nature and gravity of the violation. The administrative fine shall not be imposed in conjunction with a suspension for the same violation, but may be imposed in conjunction with probation for the same violation except when the conditions of the probation require a paramedic's personal time or expense for training, clinical observation, or related corrective instruction.

(c) In assessing the fine, the authority shall give due consideration to the appropriateness of the amount of the fine with respect to factors that include the gravity of the violation, the good faith of the paramedic, the history of previous violations, any discipline imposed by the paramedic's employer for the same occurrence of that conduct, as reported pursuant to Section 1799.112, and the totality of the discipline to be imposed. The imposition of the fine shall be subject to the administrative adjudication provisions set forth in Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(d) If a paramedic does not pay the administrative fine imposed by the authority and chooses not to renew his or her license, the authority may enforce the order for repayment in any appropriate court. This right of enforcement shall be in addition to any other rights the authority may have to require a paramedic to pay costs.

(e) In any action for collection of an administrative fine, proof of the authority's decision shall be conclusive proof of the validity of the order of payment and the terms for payment.

(f) (1) Except as provided in paragraph (2), the authority shall not license or renew the license of any paramedic who has failed to pay an administrative fine ordered under this section.

(2) The authority may, in its discretion, conditionally license or renew for a maximum of one year the license of any paramedic who demonstrates financial hardship and who enters into a formal agreement with the authority to reimburse the authority within that one-year period for the unpaid fine.

(g) All funds recovered under this section shall be deposited into the state General Fund.

(h) Nothing in this section shall preclude the authority from imposing an administrative fine in any stipulated settlement.

(i) For purposes of this section, "licensed paramedic" includes a paramedic whose license has lapsed or has been surrendered. [Added by AB 1655 (Ch. 513) 2004.]

1798.211. When making a decision regarding a disciplinary action pursuant to Section 1798.200 or Section 1798.210, the authority, and when applicable the administrative law judge, shall give credit for discipline imposed by the employer and for any immediate suspension imposed by the local EMS agency for the same conduct. [Added by AB 1655 (Ch. 513) 2004.]

CHAPTER 8. COMMISSION ON EMERGENCY MEDICAL SERVICES

Article 1. The Commission

1799. The Commission on Emergency Medical Services is hereby created in the Health and Human Services Agency. [Amended by SB 997 (Ch. 275) 2008.]

1799.2. The commission shall consist of 18 members appointed as follows:

(a) One full-time physician and surgeon, whose primary practice is emergency medicine, appointed by the Senate Committee on Rules from a list of three names submitted by the California Chapter of the American College of Emergency Physicians.

(b) One physician and surgeon, who is a trauma surgeon, appointed by the Speaker of the Assembly from a list of three names submitted by the California Chapter of the American College of Surgeons.

(c) One physician and surgeon appointed by the Senate Committee on Rules from a list of three names submitted by the California Medical Association.

(d) One county health officer appointed by the Governor from a list of three names submitted by the California Conference of Local Health Officers.

(e) One registered nurse, who is currently, or has been previously, authorized as a mobile intensive care nurse and who is knowledgeable in state emergency medical services programs and issues, appointed by the Governor from a list of three names submitted by the Emergency Nurses Association.

(f) One full-time paramedic or EMT-II, who is not employed as a full-time peace officer, appointed by the Senate Committee on Rules from a list of three names submitted by the California Rescue and Paramedic Association.

(g) One prehospital emergency medical service provider from the private sector, appointed by the Speaker of the Assembly from a list of three names submitted by the California Ambulance Association.

(h) One management member of an entity providing fire protection and prevention services appointed by the Governor from a list of three names submitted by the California Fire Chiefs Association.

(i) One physician and surgeon who is board prepared or board certified in the specialty of emergency medicine by the American Board of Emergency Medicine and who is knowledgeable in state emergency medical services programs and issues appointed by the Speaker of the Assembly.

(j) One hospital administrator of a base hospital who is appointed by the Governor from a list of three names submitted by the California Association of Hospitals and Health Systems.

(k) One full-time peace officer, who is either an EMT-II or a paramedic, who is appointed by the Governor from a list of three names submitted by the California Peace Officers Association.

(l) Two public members who have experience in local EMS policy issues, at least one of whom resides in a rural area as defined by the authority, and who are appointed by the Governor.

(m) One administrator from a local EMS agency appointed by the Governor from a list of four names submitted by the Emergency Medical Services Administrator's Association of California.

(n) One medical director of a local EMS agency who is an active member of the Emergency Medical Directors Association of California and who is appointed by the Governor.

(o) One person appointed by the Governor, who is an active member of the California State Firemen's Association.

(p) One person who is employed by the Department of Forestry and Fire Protection (CAL-FIRE) appointed by the Governor from a list of three names submitted by the California Professional Firefighters.

(q) One person who is employed by a city, county, or special district that provides fire protection appointed by the Governor from a list of three names submitted by the California Professional Firefighters.

SEC. 5. This act shall become operative only if Assembly Bill 2917 of the 2007-08 Regular Session is enacted and becomes effective on or before January 1, 2009. [Amended by SB 1124 (Ch. 1391) 1984; AB 99 (Ch. 42) 1985; AB 1017 (Ch. 1102) 1987; SB 217 (Ch. 220) 1989; and by SB 997 (Ch. 275) 2008.]

1799.3. At the discretion of the appointing power or body, a member of the commission may be reappointed or may continue to serve if he or she no longer continues to function in the capacity which originally qualified him or her for appointment. However, where Section 1799.2 requires that an appropriate organization submit names to the appointing power or body, a person shall not be reappointed pursuant to this section unless his or her name is submitted by that appropriate organization. [Added by AB 99 (Ch. 42) 1985.]

1799.4. (a) Except as otherwise provided in this section, the terms of the members of the commission shall be three calendar years, commencing January 1 of the year of appointment. No member shall serve more than two consecutive full terms; provided, however, that a term or part of a term served pursuant to paragraph (1) or (2) of subdivision (b) shall not be included in this limitation.

(b) (1) The first members appointed on or after January 1, 1985, pursuant to subdivisions (a), (b), (c), and (d) of Section 1799.2 shall serve from the date of appointment to the end of that calendar year, plus one additional year.

(2) The first members appointed on or after January 1, 1985, pursuant to subdivisions (e), (f), (g), (h), and (i) of Section 1799.2 shall serve from the date of appointment to the end of that calendar year, plus two additional years.

(3) The first members appointed on or after January 1, 1985, pursuant to subdivisions (j), (k), and (m) of Section 1799.2 shall be from the date of appointment to the end of that calendar year, plus three additional years.

(4) The first member appointed on or after January 1, 1985, pursuant to subdivision (l) of Section 1799.2 shall serve from the date of appointment to the end of that calendar year, plus one additional year and the second member shall serve from the date of appointment to the end of that calendar year, plus two additional years.

(5) The first member appointed pursuant to subdivision (n) of Section 1799.2 shall serve from the date of appointment to the end of the 1991 calendar year.

(6) It is the purpose of this subdivision to provide for staggered terms for the members of the commission. [Amended by AB 2840 (Ch. 1726) 1984; AB 99 (Ch. 42) 1985; and AB 1017 (Ch. 1102) 1987.]

1799.6. The members of the commission shall receive no compensation for their services, but shall be reimbursed for their actual, necessary, traveling and other expenses incurred in the discharge of their duties.

1799.8. The commission shall select a chairperson from its members and shall meet at least quarterly on the call of the director, the chairperson, or three members of the commission.

Article 2. Duties of the Commission

1799.50. The commission shall review and approve regulations, standards, and guidelines to be developed by the authority for implementation of this division.

1799.51. The commission shall advise the authority on the development of an emergency medical data collection system.

1799.52. The commission shall advise the director concerning the assessment of emergency facilities and services.

1799.53. The commission shall advise the director with regard to communications, medical equipment, training personnel, facilities, and other components of an emergency medical services system.

1799.54. The commission shall review and comment upon the emergency medical services portion of the State Health Facilities and Service Plan developed pursuant to Section 127155. [Amended by SB 1497 (Ch. 1023) 1996.]

1799.55. Based upon evaluations of the EMS systems in the state and their coordination, the commission shall make recommendations for further development and future directions of the emergency medical services in the state.

1799.56. The commission may utilize technical advisory panels established pursuant to the provisions of Section 1797.133 as are needed to assist in developing standards for emergency medical services.

CHAPTER 9. LIABILITY LIMITATION

1799.100. In order to encourage local agencies and other organizations to train people in emergency medical services, no local agency, entity of state or local government, private business or nonprofit organization included on the statewide registry that voluntarily and without expectation and receipt of compensation donates services, goods, labor, equipment, resources, or dispensaries or other facilities, in compliance with Section 8588.2 of the Government Code, or other public or private organization which sponsors, authorizes, supports, finances, or supervises the training of people, or certifies those people, excluding physicians and surgeons, registered nurses, and licensed vocational nurses, as defined, in emergency medical services, shall be liable for any civil damages alleged to result from those training programs.

SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution. [Amended by SB 595 (Ch. 1246) 1983; AB 2796 (Ch. 363) 2008.]

1799.102. (a) No person who in good faith, and not for compensation, renders emergency care at the scene of an emergency shall be liable for any civil damages resulting from any act or omission. The scene of an emergency shall not include emergency departments and other places where medical care is usually offered. This subdivision applies only to the medical, law enforcement, and emergency personnel specified in this chapter.

(b) (1) It is the intent of the Legislature to encourage other individuals to volunteer, without compensation, to assist others in need during an emergency, while ensuring that those volunteers who provide care or assistance act responsibly.

(2) Except for those persons specified in subdivision (a), no person who in good faith, and not for compensation, renders emergency medical or nonmedical care or assistance at the scene of an emergency shall be liable for civil damages resulting from any act or omission other than an act or omission constituting gross negligence or willful or wanton misconduct. The scene of an emergency shall not include emergency departments and other places where medical care is usually offered. This subdivision shall not be construed to alter existing protections from liability for licensed medical or other personnel specified in subdivision (a) or any other law.

(c) Nothing in this section shall be construed to change any existing legal duties or obligations, nor does anything in this section in any way affect the provisions in Section 1714.5 of the Civil Code, as proposed to be amended by Senate Bill 39 of the 2009-10 Regular Session of the Legislature.

(d) The amendments to this section made by the act adding subdivisions (b) and (c) shall apply exclusively to any legal action filed on or after the effective date of that act.

SEC. 2. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

Because the state has long encouraged Californians to assist others facing danger in an emergency, and the ability to do so without fear of potential suit has been thrown into question by the recent California Supreme Court decision of *Van Horn v. Watson*, (2008) 45 Cal.4th 322, decided on December 18, 2008, this legislation clarifying the intent of the Legislature needs to go into effect immediately so as to avoid any confusion in this important area of the law. [Amended by AB 83 (Ch. 77) 2009.]

1799.104. (a) No physician or nurse, who in good faith gives emergency instructions to an EMT-II or mobile intensive care paramedic at the scene of an emergency, shall be liable for any civil damages as a result of issuing the instructions.

(b) No EMT-II or mobile intensive care paramedic rendering care within the scope of his duties who, in good faith and in a nonnegligent manner, follows the instructions of a physician or nurse shall be liable for any civil damages as a result of following such instructions.

1799.105. (a) A poison control center which (1) meets the minimum standards for designation and operation established by the authority pursuant to Section 1798.180, (2) has been designated a regional poison control center by the authority, and (3) provides information and advice for no charge on the management of exposures to poisonous or toxic substances, shall be immune from liability in civil damages with respect to the emergency provision of that information or advice, for acts or omissions by its medical director, poison information specialist, or poison information provider as provided in subdivisions (b) and (c).

(b) Any poison information specialist or poison information provider who provides emergency information and advice on the management of exposures to poisonous or toxic substances, through, and in accordance with, protocols approved by the medical director of a poison control center specified in subdivision (a), shall only be liable in civil damages, with respect to the emergency provision of that information or advice, for acts or omissions performed in a grossly negligent manner or acts or omissions not performed in good faith. This subdivision shall not be construed to immunize the negligent adoption of a protocol.

(c) The medical director of a poison control center specified in subdivision (a) who provides emergency information and advice on the management of exposures to poisonous or toxic substances, where the exposure is not covered by an approved protocol, shall be liable only in civil damages, with respect to the emergency provision of that information or advice, for acts or omission performed in a grossly negligent manner or acts or omissions not performed in good faith. This subdivision shall neither be construed to immunize the negligent failure to adopt adequate approved protocols nor to confer liability upon the medical director for failing to develop or approve a protocol when the development of a protocol for a specific situation is not practical or the situation could not have been reasonably foreseen. [Added by AB 4587 (Ch. 1192) 1988.]

1799.106. (a) In addition to the provisions of Section 1799.104 of this code, Section 2727.5 of the Business and Professions Code, and Section 1714.2 of the Civil Code, and in order to encourage the provision of emergency medical services by firefighters,

police officers or other law enforcement officers, EMT-I, EMT-II, EMT-P, or registered nurses, a firefighter, police officer or other law enforcement officer, EMT-I, EMT-II, EMT-P, or registered nurse who renders emergency medical services at the scene of an emergency or during an emergency air or ground ambulance transport shall only be liable in civil damages for acts or omissions performed in a grossly negligent manner or acts or omissions not performed in good faith. A public agency employing such a firefighter, police officer or other law enforcement officer, EMT-I, EMT-II, EMT-P, or registered nurse shall not be liable for civil damages if the firefighter, police officer or other law enforcement officer, EMT-I, EMT-II, EMT-P, or registered nurse is not liable.

(b) For purposes of this section, "registered nurse" means a registered nurse trained in emergency medical services and licensed pursuant to Chapter 6 (commencing with Section 2700) of Division 2 of the Business and Professions Code.

[Amended by SB 595 (Ch. 1246) 1983 and SB 1365 (Ch. 69) 2012.]

1799.107. (a) The Legislature finds and declares that a threat to the public health and safety exists whenever there is a need for emergency services and that public entities and emergency rescue personnel should be encouraged to provide emergency services. To that end, a qualified immunity from liability shall be provided for public entities and emergency rescue personnel providing emergency services.

(b) Except as provided in Article 1 (commencing with Section 17000) of Chapter 1 of Division 9 of the Vehicle Code, neither a public entity nor emergency rescue personnel shall be liable for any injury caused by an action taken by the emergency rescue personnel acting within the scope of their employment to provide emergency services, unless the action taken was performed in bad faith or in a grossly negligent manner.

(c) For purposes of this section, it shall be presumed that the action taken when providing emergency services was performed in good faith and without gross negligence. This presumption shall be one affecting the burden of proof.

(d) For purposes of this section, "emergency rescue personnel" means any person who is an officer, employee, or member of a fire department or fire protection or firefighting agency of the federal government, the State of California, a city, county, city and county, district, or other public or municipal corporation or political subdivision of this state, or of a private fire department, whether such person is a volunteer or partly paid or fully paid, while he or she is actually engaged in providing emergency services as defined by subdivision (e).

(e) For purposes of this section, "emergency services" includes, but is not limited to, first aid and medical services, rescue procedures and transportation, or other related activities necessary to insure the health or safety of a person in imminent peril. [Added by SB 1120 (Ch. 275) 1984. Amended by AB 2173 (Ch. 617) 1998.]

1799.108. Any person who has a certificate issued pursuant to this division from a certifying agency to provide prehospital emergency field care treatment at the scene of an emergency, as defined in Section 1799.102, shall be liable for civil damages only for acts or omissions performed in a grossly negligent manner or acts or omissions not performed in good faith.

1799.110. (a) In any action for damages involving a claim of negligence against a physician and surgeon arising out of emergency medical services provided in a general acute care hospital emergency department, the trier of fact shall consider, together with all other relevant matters, the circumstances constituting the emergency, as defined herein, and the degree of care and skill ordinarily exercised by reputable members of the physician and surgeon's profession in the same or similar locality, in like cases, and under similar emergency circumstances.

(b) For the purposes of this section, "emergency medical services" and "emergency medical care" means those medical services required for the immediate diagnosis and treatment of medical conditions which, if not immediately diagnosed and treated, could lead to serious physical or mental disability or death.

(c) In any action for damages involving a claim of negligence against a physician and surgeon providing emergency medical coverage for a general acute care hospital emergency department, the court shall admit expert medical testimony only from physicians and surgeons who have had substantial professional experience within the last five years while assigned to provide emergency medical coverage in a general acute care hospital emergency department. For purposes of this section, "substantial professional experiences" shall be determined by the custom and practice of the manner in which emergency medical coverage is provided in general acute care hospital emergency departments in the same or similar localities where the alleged negligence occurred. [Relocated by SB 595 (Ch. 1246) 1983. Formerly H & S Code Section 1768.]

1799.111. (a) A licensed general acute care hospital, as defined by subdivision (a) of Section 1250, that is not a county-designated facility pursuant to Section 5150 of the Welfare and Institutions Code, a licensed acute psychiatric hospital, as defined in subdivision (b) of Section 1250, that is not a county-designated facility pursuant to Section 5150 of the Welfare and Institutions Code, licensed professional staff of those hospitals, or any physician and surgeon, providing emergency medical services in any department of those hospitals to a person at the hospital shall not be civilly or criminally liable for detaining a person who is subject to detention pursuant to Section 5150 of the Welfare and Institutions Code, if all of the following conditions exist during the detention:

(1) The person cannot be safely released from the hospital because, in the opinion of the treating physician and surgeon, or a clinical psychologist with the medical staff privileges, clinical privileges, or professional responsibilities provided in Section 1316.5, the person, as a result of a mental disorder, presents a danger to himself or herself, or others, or is gravely disabled. For purposes of this paragraph, "gravely disabled" means an inability to provide for his or her basic personal needs of food, clothing, or shelter.

(2) The hospital staff, treating physician and surgeon, or appropriate licensed medical health professional, have made, and documented, repeated unsuccessful efforts to find appropriate mental health treatment for the person.

(3) The person is not detained beyond 24 hours.

(4) There is probable cause for the detention.

(5) If the person is detained beyond eight hours, but less than 24 hours, all of the following additional conditions shall be met:

(A) A transfer for appropriate mental health treatment for the person has been delayed because of the need for continuous and ongoing care, observation, or treatment that the hospital is providing.

(B) In the opinion of the treating physician and surgeon, or a clinical psychologist with the medical staff privileges or professional responsibilities provided for in Section 1316.5, the person, as a result of a medical disorder, is still a danger to himself or herself, or others, or is gravely disabled, as defined in paragraph (1) of subdivision (a).

(b) In addition to the conditions set forth in subdivision (a), a licensed general acute care hospital, as defined by subdivision (a) of Section 1250 that is not a county-designated facility pursuant to Section 5150 of the Welfare and Institutions Code, a licensed acute psychiatric hospital as defined by subdivision (b) of Section 1250 that is not a county-designated facility pursuant to Section 5150 of the Welfare and Institutions Code, licensed professional staff of those hospitals, or any physician and surgeon, providing emergency medical services in any department of those hospitals to a person at the hospital shall not be civilly or criminally liable for the actions of a person detained up to 24 hours in those hospitals who is subject to detention pursuant to Section 5150 of the Welfare and Institutions Code after that person's release from the detention at the hospital, if all of the following conditions exist during the detention:

(1) The person has not been admitted to a licensed general acute care hospital or a licensed acute psychiatric hospital for evaluation and treatment pursuant to Section 5150 of the Welfare and Institutions Code.

(2) The release from the licensed general acute care hospital or the licensed acute psychiatric hospital is authorized by a physician and surgeon or a clinical psychologist with the medical staff privileges or professional responsibilities provided for in Section 1316.5, who determines, based on a face-to-face examination of the person detained, that the person does not present a danger to himself or herself or others and is not gravely disabled, as defined in paragraph (1) of subdivision (a). In order for this paragraph to apply to a clinical psychologist, the clinical psychologist shall have a collaborative treatment relationship with the physician and the surgeon. The clinical psychologist may authorize the release of the person from the detention, but only after he or she has consulted with the physician and surgeon. In the event of a clinical or professional disagreement regarding the release of a person subject to the detention, the detention shall be maintained unless the hospital's medical director overrules the decision of the physician and the surgeon opposing the release. Both the physician and surgeon and the clinical psychologist shall enter their findings, concerns, or objections in the person's medical record.

(c) Nothing in this section shall affect the responsibility of a general acute care hospital or an acute psychiatric hospital to comply with all state laws and regulations pertaining to the use of seclusion and restraint and psychiatric medications for psychiatric patients. Persons detained under this section shall retain their legal rights regarding consent for medical treatment.

(d) A person detained under this section shall be credited for the time detained, up to 24 hours, in the event he or she is placed on a subsequent 72-hour hold pursuant to Section 5150 of the Welfare and Institutions Code.

(e) The amendments to this section made by the act adding this subdivision shall not be construed to limit any existing duties for psychotherapists contained in Section 43.92 of the Civil Code.

(f) Nothing in this section is intended to expand the scope of licensure of clinical psychologists. [Added by SB 2003 (Ch. 716) 1996. Amended by SB 1111 (Ch. 547) 1997, and by SB 916 (Ch. 608) 2007.]

1799.112. (a) EMT-P employers shall report in writing to the local EMS agency medical director and the authority and provide all supporting documentation within 30 days of whenever any of the following actions are taken:

(1) An EMT-P is terminated or suspended for disciplinary cause or reason.

(2) An EMT-P resigns following notice of an impending investigation based upon evidence indicating disciplinary cause or reason.

(3) An EMT-P is removed from paramedic duties for disciplinary cause or reason following the completion of an internal investigation.

(b) The reporting requirements of subdivision (a) do not require or authorize the release of information or records of an EMT-P who is also a peace officer protected by Section 832.7 of the Penal Code.

(c) For purposes of this section, "disciplinary cause or reason" means only an action that is substantially related to the qualifications, functions, and duties of a paramedic and is considered evidence of a threat to the public health and safety as identified in subdivision (c) of Section 1798.200.

(d) Pursuant to subdivision (i) of Section 1798.24 of the Civil Code, upon notification to the paramedic, the authority may share the results of its investigation into a paramedic's misconduct with the paramedic's employer, prospective employer when requested in writing as part of a preemployment background check, and the local EMS agency.

(e) The information reported or disclosed in this section shall be deemed in the nature of an investigative communication and is exempt from disclosure as a public record by subdivision (f) of Section 6254 of the Government Code.

(f) A paramedic applicant or licensee to whom the information pertains may view the contents, as set forth in subdivision (a) of Section 1798.24 of the Civil Code, of a closed investigation file upon request during the regular business hours of the authority. [Added by AB 1655 (Ch. 513) 2004.]

CHAPTER 11. EMERGENCY AND CRITICAL CARE SERVICES FOR CHILDREN

[Chapter 11 added by SB 1170 (Ch. 1206) 1989.]

1799.200. (a) The State Department of Health Services shall contract with an organization with expertise in program evaluation, pediatric emergency medical services and critical care for the purposes specified in subdivision (b).

(b) The contractor, in consultation with a professional pediatric association, a professional emergency physicians association, a professional emergency medical services medical directors association, the Emergency Medical Services Authority, and the State Department of Health Services, shall perform a study that will identify the outcome criteria which can be used to evaluate pediatric critical care systems. This study shall include, but not be limited to, all of the following:

(1) Development of criteria to identify how changes in pediatric critical care systems affect the treatment of critically ill and injured children.

(2) Development of criteria to compare the systems in place in various areas of the state.

(3) Determination of whether the necessary data is currently available.

(4) Estimate of the cost to providers, such as emergency medical services agencies and hospitals, of collecting this data.

(5) Recommendations concerning the most reliable and cost-effective monitoring plan for use by agencies and facilities at the state, regional, and local levels.

1799.201. The contractor shall submit the results of the study to the Legislature and the Governor not later than January 1, 1991.

[*These sections were numbered 1199.200 and 1199.201 in SB 1170, but were apparently intended to be numbered 1799.200 and 1799.201, respectively, as indicated by the placement of Chapter 11 in Division 2.5.]

CHAPTER 12. EMERGENCY MEDICAL SERVICES FOR CHILDREN

[Chapter 12 added by AB 3483 (Ch. 197) 1996.]

1799.202. This chapter shall be known and may be cited as the California Emergency Medical Services for Children Act of 1996. [Added by AB 3483 (Ch. 197) 1996.]

1799.204. (a) For purposes of this chapter, the following definitions apply:

(1) "EMSC Program" means the Emergency Medical Services For Children Program administered by the authority.

(2) "Technical advisory committee" means a multidisciplinary committee with pediatric emergency medical services, pediatric critical care, or other related expertise.

(3) "EMSC component" means the part of the local agency's EMS plan that outlines the training, transportation, basic and advanced life support care requirements, and emergency department and hospital pediatric capabilities within a local jurisdiction.

(b) Contingent upon available funding, an Emergency Medical Services For Children Program is hereby established within the authority.

(c) The authority shall do the following to implement the EMSC Program:

(1) Employ or contract with professional, technical, research, and clerical staff as necessary to implement this chapter.

(2) Provide advice and technical assistance to local EMS agencies on the integration of an EMSC Program into their EMS system.

(3) Oversee implementation of the EMSC Program by local EMS agencies.

(4) Establish an EMSC technical advisory committee.

(5) Facilitate cooperative interstate relationships to provide appropriate care for pediatric patients who must cross state borders to receive emergency and critical care services.

(6) Work cooperatively and in a coordinated manner with the State Department of Health Services and other public and private agencies in the development of standards and policies for the delivery of emergency and critical care services to children.

(7) On or before March 1, 2000, produce a report for the Legislature describing any progress on implementation of this chapter. The report shall contain, but not be limited to, a description of the status of emergency medical services for children at both the state and local levels, the recommendation for training, protocols, and special medical equipment for emergency services for children, an estimate of the costs and benefits of the services and programs authorized by this chapter, and a calculation of the number of children served by the EMSC system. [Added by AB 3483 (Ch. 197) 1996 and amended by AB 430 (Ch. 171) 2001.]

1799.205. A local EMS agency may develop an EMSC Program in its jurisdiction, contingent upon available funding. If a local EMS agency develops an EMSC Program in its jurisdiction, the local EMS agency shall develop and incorporate in its EMS plan an EMSC component that complies with EMS plan requirements. The EMSC component shall include, but need not be limited to, the following:

(a) EMSC system planning, implementation, and management.

(b) Injury and illness prevention planning, that includes, among other things, coordination, education, and data collection.

- (c) Care rendered to patients outside the hospital.
- (d) Emergency department care.
- (e) Interfacility consultation, transfer, and transport.
- (f) Pediatric critical care and pediatric trauma services.
- (g) General trauma centers with pediatric considerations.
- (h) Pediatric rehabilitation plans that include, among other things, data collection and evaluation, education on early detection of need for referral, and proper referral of pediatric patients.
- (i) Children with special EMS needs outside the hospital.
- (j) Information management and system evaluation. [Added by AB 3483 (Ch. 197) 1996.]

1799.207. The authority may solicit and accept grant funding from public and private sources to supplement state funds. [Added by AB 3483 (Ch. 197) 1996.]

Chapter	Bill Number/ Author	Year	Subject/Sections Affected
Ch. 1260	SB 125/ Garamendi	1980	Creation of Division 2.5/ EMS System: 1797 et seq (added)
Ch. 1322	SB 735/Greene	1980	City/County reimbursement of state for paramedic services paid for by federal government: 1797.179 (added)
Ch. 1074	SB 898/ Garamendi	1981	Appointment of director; EMT-I training by CHP and CDF: 1797.101 (amended) 1797.109 (added)
Ch. 191	SB 1157/ Nielsen	1983	Funding of local EMS agencies: 1797.108 (added) 1797.110 (added)
Ch. 206	AB 334/ Moorhead	1983	Medical control at the scene: 1798.6 (added)
Ch. 774	SB 916/Marks	1983	Limitation on CPR training requirements: 1797.215 (added)
Ch. 1067	SB 534/Maddy	1983	Regional Trauma Systems: 1797.251 (added) Article 2.5: 1797.260 through 1797.169 (added to Ch. 6) 1797.109 (added)
Ch. 1156	AB 1853/Filante	1983	Guidelines for negative certification proceedings: 1798.200 (amended) 1798.204 (amended)
Ch. 1237	SB 358/Carpenter	1983	County transportation ordinance: 1797.222 (added)

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 1246	SB 595/Watson	1983	EMS recodification: 1797.1 (amended) 1797.4 (repealed) 1797.5 (added) 1797.54 (amended) 1797.56 (amended) 1797.665 (added) 1797.67 (added) 1797.68 (amended) 1797.76 (amended) 1797.84 (amended) 1797.100 (amended) 1797.101 (amended) 1797.111 (added) 1797.132 (amended) 1797.160 (added) 1797.172 (amended) 1797.173 (amended) 1797.180 – 1797.83 (added) 1797.206 (amended) 1797.208 (amended) 1797.210 (amended) 1797.212 (amended) 1797.213 (added) 1797.214 (amended) 1797.216 (amended) 1797.218 (amended) Article 3: 1797.270 - 1797.276 (added) 1798.200 (amended) 1798.202 (amended) 1798.204 (amended) 1799.100 (amended) 1799.106 (amended) 1799.110 (added)

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 275	SB1120/Keene	1984	Liability limit for rescue personnel 1799.107 (added)
Ch. 349	SB 3153/Bronzan	1984	Exclusive operating zones: 1797.6 (added) 1797.85 (added) 1797.224 (added)
Ch. 1391	SB 1124/Watson	1984	EMS recodifications-final sections: 1797.52 (amended) 1797.56 (amended) 1797.58 (amended) 1797.59 (added) 1797.74 (amended) 1797.97 (added) 1797.106 (amended) 1797.170 (amended) 1798. (amended) 1798.2 (amended) 1798.4 (amended) 1798.100 (amended) 1798.102 (amended) 1798.104 (amended) Article 4: 1798.180 (added to Ch. 6) 1799.2 (amended)
Ch. 1726	AB 2840/Felando	1984	Commission on EMS terms 1799.4 (amended)
Ch. 1735	AB 1235/Fraze	1984	Trauma systems - technical changes: 1797.105 (amended) 1797.251 (repealed) 1797.257 (added) 1797.258 (added) 1798.160 – 1798.165 (amended)

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 42	AB 99/Johnston	1985	Membership of Commission on EMS: 1799.2 (amended) 1799.3 (added) 1799.4 (amended)
Ch. 570	SB 702/Watson	1985	Prohibition on use of term "trauma": 1798.165 (amended)
Ch. 1543	AB 140/ Lancaster	1985	Prophylactic medical treatment: 1797.186 (added)
Ch. 312	AB 3057/Tucker	1986	Statewide recognition of certification/authorization: 1797.7 (added) 1797.185 (added)
Ch. 965	AB 3434/Eaves	1986	San Bernardino County definition of exclusive operating areas: 1797.226 (added)
Ch. 999	SB 1518/Royce	1986	Notification of exposure to reportable disease - Hospital: 1797.188 (added)
Ch. 1162	SB 1791/Carpenter	1986	Expansion of definition of "hospital": 1797.88 (amended) 1798.101 (added)
Ch. 1377	SB 2162/Mello	1986	Prohibitions on use of word "emergency" in advertising of emergency services: Article 3.5: 1798.175 (added to Ch. 6)
Ch. 477	AB 1153/Wyman	1987	Repeal of reporting requirement: 1797.131 (repealed)
Ch. 567	AB 2329/Filante	1987	Medical director of local EMS agency: 1797.202 (amended)
Ch. 972	AB 580/Allen	1987	Regional poison control centers: 1797.97 (amended) 1798.180 (amended)

Ch. 992	AB 2356/ McClintock	1987	Notification of exposure to reportable disease - Coroner: 1797.189 (added)
Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 1058	AB 1123/Zeltner	1987	Elimination of obsolete provisions: 1797.120 (repealed) 1797.171 (amended) 1797.172 (amended) 1797.174 (repealed)
Ch. 1102	AB 1017/Bronzan	1987	Addition of medical director of a local EMS agency to Commission: 1799.2 (amended) 1799.4 (amended)
Ch. 1225	AB 214/Margolin	1987	Hospital emergency patient transfers/medical control: 1798. (amended) 1798.170 (amended) 1798.172 (amended) 1798.205 (added) 1798.208 (amended)
Ch. 1240	SB 12/Maddy	1987	Hospital emergency patient transfers/medical control/EMS Fund: 1797.98a through 1797.98e 1798. (amended) 1798.170 (amended) 1798.172 (amended) 1798.205 (added)
Ch. 217	AB 3037/Chandler	1988	AED training for use of automated external defibrillators: 1797.190 (added)
Ch. 260	AB 1119/Zeltner	1988	Wedforth-Townsend reference update; notification of exposure cleanup; deletion of health systems agency references: 1797.4 (added) 1797.188 (amended) 1797.189 (amended) 1797.254 (amended) 1797.276 (amended)

Ch. 299	AB 3119/Allen	1988	Utilization of prehospital emergency medical care personnel in trial studies: 1797.221
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Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 768	AB 2934/ Quackenbush	1988	Trauma center designation fee: report on application of fees: 1798.164 (amended)
Ch. 945	SB 612/Presley	1988	EMS fund: Increase in assessment; reallocation of proceeds: 1797.98(a)
Ch. 1192	AB 4587/Leslie	1988	Liability limitation poison control centers: 1799.105 (added)
Ch. 1213	SB 1552	1988	EMSA to consider including information on AIDS in continuing education requirements: 1797.175 (amended)
Ch. 1390	AB 3269/Filante	1988	Medical control update; alternative base stations; alternative receiving facilities: 1797.53 (added) 1797.665 (repealed) 1797.176 (amended) 1797.210 (amended) 1797.220 (amended) 1798. (amended) 1798.2 (amended) 1798.3 (added) 1798.4 (repealed) 1798.100 (amended) 1798.101 (amended) 1798.105 (added) 1798.200 (amended)
Ch. 185	AB 1390/Kelly	1989	Appointment of (RDMHC): 1797.152 (added)
Ch. 220	SB 217/Royce	1989	Addition of firefighter to the Commission on EMS: 1799.2 (amended)

Ch. 237	AB 1257/Filante	1989	Repeal of obsolete provision: 1797.98d (repealed)
Ch. 886	AB 184/Speier	1989	Changes the name of the Medical Board: 1797.132 (amended)
Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 1111	SB 1067/Boatwright	1989	SIDS training requirements: 1797.170 (amended) 1797.171 (amended) 1797.192 (added) 1797.213 (amended)
Ch. 1134	AB 1558/Allen	1989	EMS personnel fund and clarification for state testing of EMT-Ps: 1797.3 (amended) 1797.7 (amended) 1797.63 (added) 1797.112 (added) 1797.172 (amended) 1797.185* (amended) 1797.192 (added) 1797.210 (amended) 1797.214 (amended)
Ch. 1362	AB 2159/Bronzan	1989	EMT-P optional S.O.P.; medical director experience requirement: 1797.3 (amended) 1797.7 (amended) 1797.63 (added) 1797.112 (added) 1797.172 (amended) 1797.175 (amended) 1797.185* (amended) 1797.192 (added) 1797.202 (amended) 1797.210 (amended) 1797.214 (amended)
Ch. 1206	SB 1170/Morgan	1989	Pediatric critical care study: 1799 (1199).200** (added) 1799 (1199).201** (added)

*Slightly different amendments were made to Section 1797.185 by AB 1558 (Ch. 1134) and AB 2159 (Ch. 1362). Since AB 2159 was chaptered after AB 1558, the amendments made by AB 2159 are given effect.

** These sections were numbered 1199.200 and 1199.201 in SB 1170, but were apparently intended to be numbered 1799.200 and 1799.201, respectively, as indicated by the placement of Chapter 11 in Division 2.5.

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 216	SB 2510/Lockyer	1990	Maintenance of Codes: 1797.63 (duplicate repealed) 1797.112 (duplicate repealed) 1797.192 (duplicate repealed) 1797.193 (renumbered)
Ch. 1171	SB 2098/Maddy	1990	Changes to EMS Fund rules: 1797.98a (amended) 1797.98c (amended) 1797.98e (amended) 1797.98f (added)
Ch. 1360	AB 1910/Assembly Committee on Judiciary	1990	Maintenance of Codes: 1798.205 (duplicate repealed)
Ch. 1169	SB 946/Maddy	1991	Changes to EMS Fund rules: 1797.98a (amended) 1797.98c (amended) 1797.98e (amended) 1797.98g (added)
Ch. 215	AB 3138/Hunter	1992	Certification Examination security 1798.207 (added)
Ch. 427	AB 3355/Assembly Committee on Judiciary	1992	Maintenance of Codes: Change name of CDF to CDF&FP 1797.109 (amended) 1797.132 (amended)
Ch. 1366	SB 861/Connelly	1992	Consolidation of PCCs 1798.181 (added)
Ch. 997	AB 1980/Klehs	1993	State certification sunseting 1-1-95 1797.112 (amended) 1797.172 (amended)

Ch. 236	SB 66/Bergeson	1993	1797.174 (amended) 1798.200 (amended) PCC standards 1798.182 (added) 1798.183 (added)
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Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 100	SB 463/Bergeson	1993	Temporary State Certification from 7-13-93 through 12-31-93 1797.112 (amended) 1797.172 (amended) 1798.200 (amended)
Ch. 64	SB 627/Committee on Budget and Fiscal Review	1993	Removes EMT-P Certification from individual county control. 1797.210 1797.212 1797.270
Ch. 246	AB 243/Alpert	1994	Child daycare facilities; pediatric first aid and CPR training programs. 1797.113 (added) 1797.191 (added)
Ch. 709	AB 3123/Klehs	1994	State Licensure of EMT-P personnel: 1797.112 (amended) 1797.171 (amended) 1797.172 (amended) 1797.194 (added) 1797.200 (amended) 1798.201 (added) 1798.202 (repealed) 1798.202 (added) 1798.209 (added)
Ch. 1143	SB 1683/Thompson	1994	Poison control centers funding; Expending unencumbered funds: 1797.98a (amended) 1797.98h (added)
Ch. 239	SB 422/Thompson	1995	Use of EMS personnel in emergency departments:

			1797.195 (added)
Ch. 197	AB 3483/Friedman	1996	EMS for Children Program: 1797.254 (amended) 1799.202 (adds Chapter 12) 1799.204 (added Chapter 12) 1799.205 (added) 1799.207 (added)

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 716	SB 2003/Costa	1996	Liability immunity hospital EMS providers: 1799.111 (added)
Ch. 1023	SB 1497/Committee on HHS	1996	Recodifications and corrections to cross-reference: 1797.98e (amended) 1797.189 (amended) 1797.221 (amended) 1799.54 (amended)
Ch. 547	SB 111/Costa	1997	Liability immunity: clinical psychologist: 1799.111 (amended)
Ch. 58	AB 2021/Poohigian	1998	Maddy Fund change. Heading (amended) 1797.98a (amended)
Ch. 606	SB 1880/Committee on Public Safety	1998	Corrects obsolete cross-reference: 1797.187 (amended)
Ch. 617	AB 2173/Pacheco	1998	Firefighter worker's Compensation: 1799.107 (amended)
Ch. 666	SB 1524/Alpert	1998	Daycare Preventive Health Practices training program: 1797.113 (amended) 1797.191 (amended)
Ch. 979	AB 984/Davis	1998	Health care coverage for ambulance transport: 1797.114 (added)
Ch. 1016	SB 277/Maddy	1998	EMS Fund physician reimbursement:

			1797.98f (amended)
Ch. 83	SB 966/ Committee on Judiciary	1999	Clean up language: 1797.191 (amended)
Ch. 163	SB 911/Figueroa	1999	Liability immunity for use of AED: 1797.196 (added)
Ch. 549	AB 1215/ Thompson	1999	EMT background checks: 1797.172 (amended) 1798.200 (amended)
Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 679	SB 623/Speier	1999	County EMS Fund accounting and reporting requirements: 1797.98b (amended)
Ch. 93	AB 2877/Thomson	2000	EMS Personnel Fund reserve : 1797.112 (amended)
Ch. 157	AB 2469/Reyes	2000	EMS training for California Fire Fighter Joint Apprenticeship Committee. 1797.109 (amended)
Ch. 171	AB 430/Cardenas	2001	Trauma Care Fund. 1797.198 and 1797.199 (added) 1799.204 (amended) Uncodified language related to 1797.199 (added)
Ch. 458	AB 559/Wiggins	2001	Use of epinephrine auto-injectors. 1797.197 (added)
Ch. 333	AB 1988/Diaz	2002	Trauma Task Force. (uncodified language inserted following Section 1797.199)
Ch. 430	AB 1833/Nakano	2002	Revisions to EMS Fund. 1797.98c (amended) 1797.98e (amended)
Ch. 612	SB 1350/McPherson	2002	Terrorism response training. 1797.116 (added)
Ch. 678	SB 1695/Escutia	2002	Administration of naloxone hydrochloride.

Ch. 718	AB 2041/Vargas	2002	1797.8 (added) CPR training and AED immunity. 1797.190 (amended) 1797.196 (amended, repealed, added)
Ch. 1050	AB 1629/Soto	2002	Funding for California Fire Fighter Joint Apprenticeship Program paramedic training. 1797.115 (added)

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 62	SB 600/Committee on Judiciary	2003	Technical non-substantive changes: 1797.115 (amended) 1797.196 (amended)
Ch. 707	SB 476/Florez	2003	EMS Fund reserve requirement and distribution formula: 1797.98 (a) (amended) 1797.98 (b) (amended) 1797.98 (c) (amended) 1797.98 (e) (amended)
Ch. 513	AB 1655/ Negrete-McLeod	2004	EMT-P fines and employer reporting: 1798.210 (added) 1798.211 (added) 1799.112 (added)
Ch. 524	SB 635/Dunn	2004	Modifies Maddy EMS Fund: 1797.98 (e) (amend/repeal) 1797.98 (e) (added)
Ch. 80	AB 131/Committee on Budget	2005	Trauma care funding Intent language and distribution process: 1797.198 (amended) 1797.199 (amended)
Ch. 111	AB 254/Nakanishi	2005	AED program for K-12 schools: 1797.196 (amended)
Ch. 671	SB 941/Alquist	2005	Changes to Maddy EMS Fund: 1797.98 (a) (amended) 1797.98 (c) (amended)

			1797.98 (e) (amended)
Ch. 60	SB 1236/Padilla	2008	Penalty assessment for pediatric trauma centers: 1797.98a (amended)

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 274	AB 2917/Torricono	2008	EMT certification and enforcement, establishes statewide EMT Registry: 1797.61 (added) 1797.62 (repealed and added) 1797.101 (amended) 1797.117 (added) 1797.118 (added) 1797.170 (amended) 1797.172 (amended) 1797.184 (added) 1797.211 (added) 1797.216 (amended) 1797.217 (added) 1797.219 (added) 1798.200 (amended)
Ch. 275	SB 997/ Ridley-Thomas	2008	Adds Advanced EMT & Commission seats: 1797.82 (amended) 1799 (amended) 1799.2 (amended)
Ch. 288	AB 2702/Nunez	2008	Maddy Funds provisions for Los Angeles County; Extends sunset date on EMS Funds for pediatric trauma: 1797.98a (amended) 1797.98e (amended)
Ch. 289	SB 1141/Margett	2008	Public aircraft used for EMS: 1797.9 (added)
Ch. 363	AB 2796/Nava	2008	OES Donation Registry:

			1799.100 (amended)
Ch. 77	AB 83/Feuer	2009	Limits liability for nonmedical care provided at an emergency scene: 1799.102 (amended)
Ch. 140	AB 1164/Tran	2009	Maintenance of the codes: 1798.200 (amended)
Ch. 537	AB 1475/Solorio	2009	Limits use of EMS Fund: 1797.98a (amended)

Chapter	Bill Number/Author	Year	Subject/Sections Affected
Ch. 403	AB 1059/Huffman	2011	Expands reporting for EMS Fund: 1797.98(b)
Ch. 71	SB 1436/Lowenthal	2012	Eliminates sunset date for AED liability provisions 1797.196 (a)

California Community Paramedic Curriculum Framework
Adapted from North Central EMS Institute Community Paramedic Curriculum v 3.0

Version 1.4 12/17/2013

I -- Modules 1-7 -- Core Didactic and Skills Lab Material (Approximately 100 hours provided in 4 Regionalized Training Locations)

II -- Module 8 – Clinical Skills Testing and Experience (50-100 hours to achieve competency provided at the Local project Site)

Module
<p align="center">1 Role of the Community Paramedic In the Health Care System</p> <p>Goal 1. The Community Paramedic will understand and analyze their role in the health care system.</p> <p>Objectives At the completion of the program the participant will be able to:</p> <p>1.1. Define <i>Community Paramedic</i>.</p> <ul style="list-style-type: none">• 1.1.1. 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 <p>1.2. Discuss the history and future of their role.</p> <ul style="list-style-type: none">• 1.2.1. Rural and remote dilemma in the United States• 1.2.2. <u>2004 Rural and Frontier EMS Agenda of the Future</u>• 1.2.3. <u>Community Healthcare and Emergency Cooperative (CHEC)</u>• 1.2.4. <u>International Roundtable on Community Paramedics (IRCP)</u>• 1.2.5. National Consensus Conference on Community Paramedicine Report (2012) <p>1.3. Explain the “scope of practice” to stakeholders.</p> <ul style="list-style-type: none">• 1.3.1. Driven by the system’s current paramedic scope of practice• 1.3.2. Assesses and identifies gaps between community needs and services• 1.3.3. Improves quality of life and health• 1.3.4. Services provided only where and when there are no others to provide them• 1.3.5. Navigates and establishes systems to better serve citizens

- 1.3.6. Becomes advocate, facilitator, liaison and resource coordinator
 - 1.3.7. Provides expanded services to meet individual community needs
- 1.4. Discuss the different relationship they will have with members of the healthcare team.
- 1.4.1. EMS
 - 1.4.2 Physicians
 - 1.4.3. Nursing
 - 1.4.4. Social Worker
 - 1.4.5. Mental Health
 - 1.4.6. Veteran's Affairs
 - 1.4.7. Other health care health care partners in the local community
 - 1.4.8 Hospital and Clinics, etc.
- 1.5. Compare and contrast the strategies of advocacy and liaison work.
- 1.5.1. Advocacy
 - 1.5.2. Liaison
- 1.6. Identify common local, regional, state, and national organizations that can provide support for clients.
- 1.6.1. Local
 - 1.6.2. Regional
 - 1.6.3. State
 - 1.6.4. National
- 1.7. Identify the operational parameters of California Community Paramedic Pilot Project.
- 1.7.1. California Community Paramedic Pilot Project Handbook
 - 1.7.2. Project Statutory and Regulatory Authority
 - 1.7.3. Scope and Settings of Practice
 - 1.7.3. Medical Direction
 - 1.7.4. Standard Pilot Project Procedures
- 1.8 Identify GAPS in the current health care system
- 1.8.1. National
 - 1.8.2. State
 - 1.8.3 Local
- 1.9 Describe the effectiveness of current CP Programs
- 1.9.1. Role
 - 1.9.2. Evidence
 - 1.9.3. Importance
 - 1.9.4. Examples
- 1.10 Describe Health care reimbursement
- 1.10.1 Affordable Health Care Act
 - 1.10.2 Medicare
 - 1.10.3 MediCaid\Medi-Cal
 - 1.10.4 PPO
 - 1.10.5 HMO
 - 1.10.6 Uninsured

1.11 Health Insurance Portability and Accountability Act (HIPAA)

- 1.11.1. Privacy of individually identifiable health information
- 1.11.2. Security of electronic protected health information
- 1.11.3. Covered entities and business associates

2 Social Determinants of Health

Goal

2. The Community Paramedic will understand the social determinates of health and be able to articulate and provide information to clients and health care professional in regards to the complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities. These social structures and economic systems include the social environment, physical environment, health services, and structural and societal factors.

Objectives

At the completion of the program the participant will be able to:

2.1. Define the social ecology model and the determinants of health.

- 2.1.1 Definitions
- 2.1.2 Framework for Prevention

2.2. Describe the correlation between health status indicators and the individual characteristics.

- 2.2.1. Age
- 2.2.2. Gender
- 2.2.3. Education level
- 2.2.4. Economic status
- 2.2.5. Race

2.3. Identify social characteristics that are correlated with health status indicators.

- 2.3.1. Race
- 2.3.2. Ethnicity
- 2.3.3. Relationship status

2.4. Identify environmental determinants of health.

- 2.4.1. Environmental Triggers
- 2.4.2. Urban blight

2.5. Identify the impact of organizational policies, societal regulations and laws on health behaviors.

- 2.5.1. Drunk driving
- 2.5.2. Seat belt use
- 2.5.3. Influence of culture and spirituality on health status indicators
- 2.5.4 Other Organizations with Policies that influence societal norms (AHA, American Cancer Society, MADD, etc)
- 2.5.5 Local organizations that influence policy

2.6. Define social margin.

- 2.6.1. High risk and high need population
- 2.6.2. Factors that lead to inequalities of healthcare

2.7. The Community Paramedic will be able to describe the role documentation plays in assessing the gaps in patient's healthcare needs and in providing resources to the patient.

- 2.7.1. Documentation
- 2.7.2 Use of documentation software (i.e. Practice Fusion)

3 Public Health and Primary Care Role of the Community Paramedic

Goal

3. The Community Paramedic will understand their role in public health and primary care, and how to apply evaluation methodologies.

Objectives

At the completion of the program the participant will be able to:

3.1. Describe health promotion activities in public health.

- 3.1.1. Health Risk Appraisals (HRAs)
- 3.1.2. Biometric Screenings
- 3.1.3. Immunizations
- 3.1.4. Community Education

3.2. Describe prevention activities in public health.

- 3.2.1. Primary and secondary injury prevention programs
- 3.2.2. Examples of injury prevention efforts by lifestage.
- 3.2.3. Prevention programs in general (i.e. Smoking, Colon cancer reduction, obesity, etc.)
- 3.2.4 Identify Local Prevention Resources

3.3. Describe chronic disease management in public health.

- 3.3.1. Disease management programs

3.4. Describe and apply the appropriate risk mitigation strategies based on the social determinants of health.

- 3.4.1. Individual level behavior modification
- 3.4.2. Health Literacy
- 3.4.3. Social risk reduction
- 3.4.4. Environmental risk reduction
- 3.4.5. Economic risk reduction

3.5. Discuss financial impact of the Community paramedic upon healthcare payers.

- 3.5.1. Public and private insurance programs
- 3.5.2. Common barriers to enrollment in public programs
- 3.5.3. Assist in completing applications
- 3.5.4. Other potential financial stakeholders

3.6. Describe and apply the appropriate evaluation techniques to measure the success of a program.

- 3.6.1. Formative Evaluation
- 3.6.2. Process Evaluation
- 3.6.3. Outcome Evaluation

- 3.6.4. Impact Evaluation
- 3.7. Describe their role in the pilot project to include:
- 3.7.1. Connecting patients to PCP's or community resources
 - 3.7.2. Alternative health care facilities
 - 3.7.3. Reduction of re-admissions
 - 3.7.4. Alternative community health care practitioners (hospice, etc.)
- 3.8. Describe evaluation methodologies and their impact.
- 3.8.1. Quality Improvement
 - 3.8.2. Structure, Process, and Outcome measurements
 - 3.8.3. EMS Core Measures
 - 3.8.4. Evidence-based information
 - 3.8.5. Best Practices

4 Developing Cultural Competence

Goal

4. The Community Paramedic will utilize appropriate methods for interacting sensitively, effectively, and professionally with persons from diverse cultural, socioeconomic, educational, racial, ethical and professional backgrounds, and persons of all ages and lifestyle preferences.

Objectives

At the completion of the program the participant will be able to:

- 4.1. Provide a broad definition of culture.
- 4.1.1 Culture
 - 4.1.2. Ethnic Group
 - 4.1.3. Acculturation
- 4.2. Recognize the divide between culture and individual identity.
- 4.2.1. Factors that affect an individual's experience with culture of origin
 - 4.2.2. Gauge degree of acculturation
- 4.3. Describe how culture impacts health.
- 4.3.1. Barriers to healthcare
 - 4.3.2. Stereotypes
- 4.4. Recognize the risks of stereotyping.
- 4.4.1. Patient as an individual
 - 4.4.2. Inappropriate conclusions
 - 4.4.3. Eroding trust
- 4.5. Develop Cultural Competence/Awareness.
- 4.5.1. Developed as a process
 - 4.5.2. Race and Ethnicity
 - 4.5.3. Religion and Spirituality
 - 4.5.4. Sexual Identity, including LGBT
 - 4.5.5. Age
- 4.6. Incorporate cultural competence and awareness into Community Paramedic

work.

- 4.6.1. Needs assessment
- 4.6.2. Web of resources
- 4.6.3. Referrals
- 4.6.4. Models of Effective Cross-Cultural communication and Negotiation (BATHE, BELIEF, ESFT, ETHNIC, Kleinman, LEARN)

4.7. Discuss how culture can impact the use of EMS.

- 4.7.1. Web of resources
- 4.7.2. Outreach
- 4.7.3. Individual
- 4.7.4. Community

4.8. Utilize culturally competent communication strategies to interact with others.

- 4.8.1. Patients
- 4.8.2. Family
- 4.8.3. Friends
- 4.8.4. Healthcare partners
- 4.8.5. Healthcare colleagues

5 The Community Paramedic's Role Within the Community

Goal

5. The Community Paramedic will be able to identify the health status of populations and their related determinants of health and illness and along with community partners develop a plan to improve public health in their local community.

Objectives

At the completion of the program the participant will be able to:

5.1. Discuss a community needs assessment.

- 5.1.1 Definition
- 5.1.2 Use
- 5.1.3 Identify public health partners to develop community needs assessment

5.2. Develop potential patient profiles based upon EMS call volume.

- 5.2.1. Use of EMS
- 5.2.2. Populations
- 5.2.3. Morbidity and mortality
- 5.2.4. Perception
- 5.2.5. Low acuity calls
- 5.2.6. Client profiles

5.3. Evaluate other needs of the community.

- 5.3.1. High-risk and high-need populations
- 5.3.2. Societal and institutional gaps
- 5.3.3. Develop profiles

5.4. Discuss how mapping plays a role, as part of a community needs assessment.

- 5.4.1. GIS mapping and frequent use

- 5.4.2. Recognize unmet community needs
 - 5.4.3. Create a map for your local community
 - 5.4.4. Add to the map when you figure out the challenges in your service area
- 5.5. Describe different types of safety nets to support individual client needs.
- 5.5.1. Organizations
 - 5.5.2. Non-profit safety nets
 - 5.5.3. Private safety nets
 - 5.5.4. Public safety net systems
 - 5.5.5. Identify local safety nets in community
- 5.6. Discuss the role financing plays on the types of clients an agency will serve and resources available to clients.
- 5.6.1. Taking referrals
 - 5.6.2. Receiving referrals
 - 5.6.3. Evaluation and receipt of assistance
- 5.7. Discuss the different types and levels of care and services available to address a client's health, mental health, substance abuse and social service needs.
- 5.7.1. Medical Needs
 - 5.7.2. Mental Health Needs
 - 5.7.3. Substance Abuse Treatment Needs
 - 5.7.4. Social Services Needs
 - 5.7.5. Hospital based social services
 - 5.7.6. Benefits of using local resources to include prevention, and cost.
- 5.8. Interpret a resource map/guide.
- 5.8.1. Types of services
 - 5.8.2. Types of clients
- 5.9. Discuss the interrelationship of resources.
- 5.9.1. Definition
 - 5.9.2. Explanation
- 5.10. Translate local client/community need.
- 5.10.1. Resources based on client profiles
 - 5.10.2. Types and trajectories of care
- 5.11. Demonstrate the use of pathways to care for clients.
- 5.11.1. Levels of care
 - 5.11.2. Client Populations
 - 5.11.3. Assisting programs
 - 5.11.4. Follow-up on referrals
- 5.12. Discuss the concept of negative consequences in working with clients.
- 5.12.1. Discuss Parallel "Web of Resources"
 - 5.12.2. Behavioral paradigm
 - 5.12.3. Behavior change
 - 5.12.4. Utilization
 - 5.12.5. Client's situation
 - 5.12.6. Goal
- 5.13. Apply communication techniques about negative consequences to assist in

modifying behavior.

- 5.13.1. Credibility
- 5.13.2. Threat of negative consequences
- 5.13.3. Application and usage

5.14. Discuss the types of resources needed to apply negative consequences as a means of modifying unhealthy behavior.

- 5.14.1. Types of negative consequences

5.15. Define outreach.

- 5.15.1. Definition

5.16. Conduct outreach to a variety of programs for the purpose of engaging their services into the web of resources.

- 5.16.1. Program Outreach
- 5.16.2. Quid pro quo

5.17. Create a relationship with an agency that becomes part of the web of resources.

- 5.17.1. Establishing an ongoing relationship
- 5.17.2. Structure the relationship

5.18. Evaluate the effectiveness of the relationship with an agency.

- 5.18.1. Numbers of clients
- 5.18.2. Difficulties
- 5.18.3. Amount of assistance

5.19. Discuss the purpose of community outreach.

- 5.19.1. Use
- 5.19.2. How identified
- 5.19.3. Stakeholders

5.20. Translate a needs assessment into a community outreach strategy.

- 5.20.1. Evaluation
- 5.20.2. Deployment
- 5.20.3. Follow-up
- 5.20.4. Interventions

5.21. Identify the steps involved in individual outreach.

- 5.21.1. Case Finding
- 5.21.2. Safely approaching a client
- 5.21.3. Introductions
- 5.21.4. The biopsychosocial assessment
- 5.21.5. Identifying resources

5.22. Discuss case finding for both housed and homeless clients.

- 5.22.1. Sources of information
- 5.22.2. Homeless clients
- 5.22.3. Housed Clients

5.23. Discuss basic safety principles associated with individual outreach.

- 5.23.1. Working alone
- 5.23.2. De-escalation
- 5.23.3. Staffing

5.24. Approach a client and introduce them in a manner that sets the tone for

effective outreach.

- 5.24.1. Introduction
 - 5.24.2. Approaching a client
- 5.25. Conduct a biopsychosocial assessment.
- 5.25.1. Psycho- Psychological assessment
 - 5.25.2. Biopsychosocial assessment
 - 5.25.3. Bio- Medical assessment
- 5.26. Identify resources that could address unmet or under met needs of a client.
- 5.26.1. Unmet or under met needs
 - 5.26.2. Web of resources
 - 5.26.3. Resistance
- 5.27. Discuss the HOME Team Interventional Technique case study.
- 5.27.1. The Homeless Outreach and Medical Emergency (HOME)
 - 5.27.2. Purpose
- 5.28. Discuss and apply the steps involved in the HOME Team interventional technique.
- 5.28.1 Review and discuss Home Team case study
 - 5.28.1. Johnson Intervention
 - 5.28.2. Motivational interviewing
 - 5.28.3. Positive approach
- 5.29. Use the web of resources to motivate clients to change.
- 5.29.1 System Navigation
 - 5.29.2 Utilizing other sources of care
- 5.30. Explain different forms and sources of client referrals.
- 5.30.1. Phone referral
 - 5.30.2. Written referral
 - 5.30.3. Web based referral
- 5.31. Discuss physical transportation of a client to resource provider.
- 5.31.1. Client's condition
 - 5.31.2. Safe transportation
 - 5.31.3. Structuring transports
 - 5.31.4. Receiving agencies
 - 5.31.5. Financial considerations
- 5.32. Identify and provide medical interventions aimed at bridging the gap between the field and other sources of care.
- 5.32.1. Basis for
 - 5.32.2. Psychosocial concerns
 - 5.32.3. Length of time
 - 5.32.4. Specific types
- 5.33. Provide adequate tracking and follow-up for a client.
- 5.33.1. Tracking clients
 - 5.33.2. Visit clients
 - 5.33.3. Follow-up
 - 5.33.4. Waiver

- 5.33.5. Information sharing
 - 5.33.6. Memorandum of Understanding
 - 5.33.7. Moving the client
- 5.34. Explain how to reconnect a client to the web of resources.
- 5.34.1 Reconnecting
 - 5.34.2 Assess
 - 5.34.3 Predetermine
- 5.35. Discuss documentation used during a client contact.
- 5.35.1 Documenting contacts
 - 5.35.2 Appropriate documentation
 - 5.35.3 Documentation mechanism
 - 5.35.4 Research and tracking of trends
- 5.36. Discuss the types of documentation to use when a client is contacted through the 911 system.
- 5.36.1 Planning with local EMS Agency and State EMS Authority (EMSA)
 - 5.36.2 Local protocols
- 5.37. Documentate during an initial outreach contact.
- 5.37.1. During outreach
 - 5.37.2. Initial contact
- 5.38. Conduct ongoing documentation for a client.
- 5.38.1 Meetings
 - 5.38.2 Keeping notes
- 5.39. Compare and contrast different types of documentation.
- 5.39.1. Electronic documentation
 - 5.39.2. Paper documentation forms
 - 5.39.3. Data collection

6 Community Paramedic's Personal Safety & Wellness

Goal

6. The Community Paramedic will understand the importance of balancing stress and wellness while ensuring their personal safety.

Objectives

At the completion of the program the participant will be able to:

- 6.1 . Define key terms associated with wellness and safety.
- 6.2. Distinguish the application of safety and wellness methods to both self and to the patient
- 6.3. Discuss the components of well-being.
 - 6.2.1. Physical Well-Being
 - 6.2.2. Mental Well-Being
 - 6.2.3. Emotional Well-Being
 - 6.2.4. Spiritual Well-Being
- 6.3. Discuss the physiological effects of stress.
 - 6.3.1 Hans Seyle, MD, PhD!

- 6.3.2 Causes of stress
 - 6.3.3 General adaptation syndrome
 - 6.3.4 Physiologic responses
 - 6.3.5 Physiological manifestations
 - 6.3.6 Reactions to Stress
- 6.4. Discuss the concept of burnout.
- 6.4.1. Unrelieved stress
 - 6.4.2. Development of
 - 6.4.3. Distress
 - 6.4.4. Beliefs
 - 6.4.5. Symptoms
 - 6.4.6. Guidelines
- 6.5. Identify the warning signs of stress.
- 6.5.1. Signs of burnout
- 6.6. Identify strategies to manage stress.
- 6.6.1. Ways to help manage stress
- 6.7. Discuss wellness.
- 6.7.1. Nutrition
 - 6.7.2. Exercise and relaxation
 - 6.7.3. Sleep
 - 6.7.4. Disease prevention
 - 6.7.5. Balance
- 6.8. Discuss lifestyle changes including chronic diseases and death and dying.
- 6.8.1. Stages of grief
 - 6.8.2. Working with family members
 - 6.8.3. Dealing With a Grieving Child
 - 6.8.4. Working with the patient
 - 6.8.5. Patient reactions
 - 6.8.6. Anxiety
 - 6.8.7. Mental health problems
 - 6.8.8. Receiving unrelated bad news
- 6.9. Discuss caring for ill and injured adult patients.
- 6.9.1. Informing the patient
 - 6.9.2. Communication
 - 6.9.3. Orientation
 - 6.9.4. Refusal of care
 - 6.9.5. Allowing for hope
 - 6.9.6. Family members
- 6.10. Discuss caring for ill and injured pediatric patients.
- 6.10.1. Caring for a child
 - 6.10.2. Dealing with death of a child
- 6.11. Identify actions that can reduce stressful situations during patient/family interactions.
- 6.11.1. Professional demeanor

- 6.11.2. Compassion
 - 6.11.3. Expressing fears and concerns
 - 6.11.4. Religious customs
 - 6.11.5. Death
 - 6.11.6. DNR
- 6.12. Discuss professional boundaries that must be established with the client.
- 6.12.1. Definition
 - 6.12.2. Characteristics
 - 6.12.3. Setting limits
 - 6.12.4. Negotiating boundaries
 - 6.12.5. Drawing the boundary line
 - 6.12.6. Preventing the crossing of boundaries
- 6.13. Define key terms associated with personal safety.
- 6.14. The Community Paramedic will be able to define and defend personal Safety.
- 6.14.1. Self-care
 - 6.14.2. Recognition of hazards
 - 6.14.3. Self-control
- 6.15. Illustrate infectious disease and transmission.
- 6.15.1. Spread of infectious diseases
 - 6.15.2. Transmission
 - 6.15.3. Immunity
- 6.16. Discuss and implement OSHA Blood-Borne Pathogens standard.
- 6.16.1. OSHA standard
 - 6.16.2. CDC
 - 6.16.3. Universal precautions
 - 6.16.4. Engineering controls
 - 6.16.5. Environmental controls
 - 6.16.6. Textiles and laundry
 - 6.16.7. Soiled patient care equipment
 - 6.16.8. Post-Exposure Management
- 6.17. Identify how to minimize risks of infection.
- 6.17.1. Preventive measures
 - 6.17.2. Respiratory hygiene/cough etiquette
 - 6.17.3. Communication
 - 6.17.4. Infection control routine
- 6.18. Identify and mitigate hazards while working in a home visit environment.
- 6.18.1. Work environment
 - 6.18.2. Physical hazards
 - 6.18.3. Sanitation hazards
 - 6.18.4. Violence
 - 6.18.5. Personal safety
- 6.19. Discuss behavioral emergencies.
- 6.19.1. Definition
 - 6.19.2. Description

- 6.19.3. Evaluation
 - 6.19.4. Psychological First Aid
- 6.20. Explain the safe movement and positioning of a patient.
- 6.20.1. Potential injuries
 - 6.20.2. Training and practice
 - 6.20.3. Special techniques
 - 6.20.4. Body mechanics
 - 6.20.5. Special equipment

7 Clinical Didactic and Skills Lab for Community Paramedic

Goal

7. The Community Paramedic will have developed and advanced knowledge and skills to communicate with and medically assess acute and chronically ill and injured patients

Objectives

At the completion of the program the participant will be able to:

7.1. Compile a history on a non-acute patient.

- 7.1.1 Approach to the interview
- 7.1.2 Interviewing techniques
- 7.1.3 Sensitive topics
- 7.1.4 Societal aspects
- 7.1.5 Medication reconciliation

7.2. Perform a comprehensive physical examination and document an appropriate patient history, using a standardized form, of a sub-acute, semi-chronic patient.

- 7.2.1. Requirements of a physical examination
- 7.2.2. Focused physical examination
- 7.2.3. Comprehensive physical examination through a review of systems
- 7.2.4. Documentation and reporting

7.3. Recognize the clinical differences between the newborn, pediatric, adult, and geriatric populations.

- 7.3.1. Newborn populations
- 7.3.2. Pediatric populations
- 7.3.3. Adult populations
- 7.3.4. Geriatric populations
- 7.3.5. Monitoring high risk populations
- 7.3.6. End of life issues
- 7.3.7. Assess for use of CAM and communication with primary medical doctor

7.4. Interpret results and reports obtained through laboratory procedures and diagnostic imaging.

- 7.4.1. Radiological testing
 - 7.4.2. Laboratory testing
 - 7.4.3. Health promotion studies
 - 7.4.4. Identifying red flags
- 7.5. Obtain specimens and samples for laboratory testing.
- 7.5.1. Regulation of point of care testing/CLIA
 - 7.5.2. Specimen collection techniques
 - 7.5.3. Utilization of bedside lab diagnostics
 - 7.5.4. iStat testing
- 7.6. Utilize specialty equipment in the gathering of a history and physical of a sub-acute, semi-chronic patient.
- 7.6.1. Digital equipment
 - 7.6.2. Cameras
 - 7.6.3. Computer
 - 7.6.4. Telemedicine
 - 7.6.5. Otoscope
 - 7.6.6. Bluetooth Stethoscope
- 7.7. Demonstrate use of common home health equipment and devices.
- 7.7.1. Medical equipment
 - 7.7.2. Ambulatory assist devices
 - 7.7.3. Commodes
 - 7.7.4. In home hospital beds
 - 7.7.5. Patient transfer devices and ergonomics
- 7.8. Access and maintain proper care of ports, central lines, catheters, and ostomies.
- 7.8.1. Port and central line care
 - 7.8.2. Ileostomy care
 - 7.8.3. Urinary catheter care
 - 7.8.4. Colostomy care
 - 7.8.5. Peg tubes
- 7.9. Identify the need for Psychological First Aid (PFA) as it pertains to the individual experiencing a crisis situation.
- 7.9.1. Definition
 - 7.9.2. Signs of stress
 - 7.9.3. Defense mechanisms
 - 7.9.4. Pre-existing conditions
 - 7.9.5. Development of the goals of PFA
 - 7.9.6. Providing PFA
- 7.10. Assist patients and families with end-of-life issues.
- 7.10.1. Hospice
 - 7.10.2. Palliative care
 - 7.10.3. DNR and POLST
 - 7.10.4. Advance Directives
 - 7.10.5. Durable Power of Attorney for Healthcare Decisions
- 7.11. Collaborate with other healthcare professionals to provide care within the public

health system.

- 7.11.1. Immunizations
- 7.11.2. Transportation and access to resources
- 7.11.3. Health promotion and injury prevention clinical opportunities
- 7.11.4. Disease prevention activities

8 Clinical Skills Testing and Experience for Community Paramedic (Local Site Responsibility)

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 Assessment
- 8.1.2. Eligible for Transport to Alternate Destinations
- 8.1.3. Hospice Support

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
- 8.2.2. Asthma
- 8.2.3. COPD
- 8.2.4. Diabetes
- 8.2.5. Neurological conditions
- 8.2.6. Hypertension
- 8.2.7. Wound care
- 8.2.8. Infections
- 8.2.9. Oral health
- 8.2.10. Mental health

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. Multiple/Frequent Calls from Service
- 8.3.2. Inadequate Self-Care
- 8.3.3. Medication Reconciliation
- 8.3.4. Social Service Resource Needs
- 8.3.5. Mental Health Resource Needs

- 8.3.6. Home Safety/Fall Prevention
- 8.3.7. THRIVE Infant-Family Program
- 8.3.8. Caregiver Problems
- 8.3.9. Welfare Check
- 8.3.10. Direct Observation of Treatment (TB)
- 8.3.11. Assessment of Nutrition, Hydration, and Weight

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
- 8.4.2. Asthma
- 8.4.3. COPD
- 8.4.4. Diabetes
- 8.4.5. Alcohol or Drug Related Issues
- 8.4.6. Field Treat and Release instructions

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
- 8.5.2. Pilot Project Forms
- 8.5.3. Communication with Physicians
- 8.5.4. Communication with Hospitals and health facilities
- 8.5.5. Health Information Exchange
- 8.5.6. ePCR and local documentation software (ie Practice Fusion)

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	FP
Medical Equipment		
Otoscope	30	FP
Blue Tooth Stethoscope	5	FP
Home Medication		
Compliance	7	FP
Medication Reconciliation	7	FP
Patient Documentation		
SOAP Notes	5	FP
Chart Review	15	FP
History & Physical	20	FP
Assessment	20	FP
Results from Tests/Diagnostic tools	15	FP
Identifying Red Flags	5	FP
Identifying further testing needs	5	FP
Prenatal		
Doppler	5	FP
Measurements	5	FP
Urine for Protein	5	FP
Acute Illness Management		
0-1 years	5	FP
1-5 years	5	FP
6-13 years	5	FP
14-18 years	5	FP
18 + years	5	FP
65 + years	5	FP
Chronic Illness Management		
CHF	5	FP
Asthma	5	FP
COPD	5	FP
Diabetes	5	FP
Post-CVA	5	FP
Provide Patient Education	5	FP
Management of Patients (Optional)		
Drug or Alcohol Conditions	5	FP
Mental Health Issues	5	FP
Obesity	5	FP

Alternate Destination Support Paramedic

Curriculum Framework

Version 1.1 12/17/2013

- Additional curriculum framework objectives and competencies shall be defined by local pilot site.
- All instruction must be Instructor-led.
- Estimated time to achieve objectives—8 -16 hours.

Module

1 Role of the Paramedic in the Pilot Project Site

Goal:

1. The student will understand and analyze their role in the pilot program for alternate destination transportation.

Objectives & Summary:

- 1.1. The paramedic will be able to discuss the community paramedicine pilot project and the associated requirements.
 - 1.1.1. Definition of mobile integrated health care and the community paramedic.
 - 1.1.2. History of community paramedicine
 - 1.1.3. Report on California study entitled, “Community Paramedicine: A Promising Model for Integrating Emergency and Primary Care”
 - 1.1.4. Office of Statewide Health Planning and Development (OSHPD), Health Workforce Pilot Projects
 - 1.1.5. Role of the California Emergency Medical Services Authority
 - 1.1.6. Health and Safety Code Statutory Requirements
 - 1.1.7. Data requirements
 - 1.1.8. Community Health partners
- 1.2. The paramedic will be able to describe the requirements for medical oversight as part of pilot program.
 - 1.2.1. Role of Local EMS Agency and LEMSA Medical Director
 - 1.2.2. Role of Project Medical Director
 - 1.2.3. Offline medical direction, both prospective and retrospective
 - 1.2.4. Online medical direction, if available
 - 1.2.5. 100% retrospective review of patients

2 Assessing Patients for Inclusion in Pilot Project

Goal

2. The paramedic will understand how to assess and identify patients for inclusion the pilot project and make alternate destination decisions.

Objectives and Summary

- 2.1. 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.
 - 2.1.1. Detailed history taking for the patient population
 - 2.1.2. Detailed physical assessment for the patient population
 - 2.1.3. Signs and symptoms for patient eligibility and study inclusion
 - 2.1.4. Patient Exclusion Criteria
- 2.2. The paramedic will be able to describe the available alternate destination facilities.
 - 2.2.1. Capabilities of the alternate destination facility Limitations of the alternate destination facility
 - 2.2.2. Special requirements for use of the alternate destination facility
 - 2.2.3. Restrictions of the alternate destination facility, including hours of operation
 - 2.2.4. Communication and advance notification
- 2.3. The paramedic will be able to discuss the policies and procedures, and protocols for the alternate destination pilot project.
 - 2.3.1. Policies and procedures
 - 2.3.2. Medical protocols
 - 2.3.3. Inclusion and exclusion criteria

3 Alternate Destination Processes

Goal

3. The paramedic will understand what additional processes are required to implement alternate destination procedures.

Objectives and Summary

- 3.1. The paramedic will understand how to provide information that allows

the patient to make informed consent.

- 3.1.1. Definition of informed consent
- 3.1.2. Components necessary to achieve informed consent
- 3.1.3. Ineligibility for informed consent (ie. Mental status, age, communication barriers)
- 3.1.4. Declined consent
- 3.1.5. Consent documentation

3.2. The paramedic will be able to discuss the required documentation for the alternate destination pilot project.

- 3.2.1. Policies and procedures
- 3.2.2. Data collection

3.3. The paramedic will understand how patient safety and quality improvement are measured in the pilot project.

- 3.3.1. Patient safety outliers, including remediation or project removal
- 3.3.2. Outcome measurements
- 3.3.3. Patient satisfaction surveys
- 3.3.4. Provider education

4 Competency Testing

Goal

4. The paramedic will demonstrate competency prior to implementing the alternate destination pilot project.

Objectives and Summary

4.1 The paramedic will successfully complete competency testing.

- 4.1.1. Knowledge of the alternate destination project
- 4.1.2. Policies, procedures, and protocols
- 4.1.3. Skill in making alternate destination decisions

California Healthcare Foundation Grant Budget Allocations

Budget Category	Funding Source	Total \$\$	Time Period
Project Manager Phase I	CHCF Grant Award for Project Manager to oversee implementation of Phase I activities	35,000	October 2013 – April 2014
Project Manager Phase II & III	CHCF Grant Award for Project Manager to oversee implementation of Phase II & III activities	100,000	May 2014 – December 2015
Project Manager Travel	CHCF Grant Award for Project Manager Travel to Pilot Sites, etc.	15,000	October 2013- December 2015
Independent Evaluator	CHFC Grant Award for Independent Evaluator to be dependent on OSHPD Project approval.	Up to 200,000	October 2014 – December 2015
Data Collection	CHCF Grant Award for Data Collection assistance at local pilot sites (15-20k per site)	180,000 – 240,000	July 2014 – June 2015
Core Training	CHFC Funding for Core Training	Up to 200,000	May – June 2014

		5/1/13 through 9/30/13	10/1/13 through 9/30/14	10/1/14 through 9/30/15	10/1/15 through 2/20/16	Totals
Personnel Staffing Level		0.29	0.70	0.70	0.29	
Salaries		\$31,000	\$77,000	\$77,000	\$31,000	\$216,000
	FTE					
Director	15%	\$ 11,000	\$ 28,000	\$ 28,000	\$ 11,000	\$ 78,000
Chief Deputy Director	15%	\$ 7,000	\$ 18,000	\$ 18,000	\$ 7,000	\$ 50,000
Deputy Director (Legislation)	5%	\$ 2,000	\$ 5,000	\$ 5,000	\$ 2,000	\$ 14,000
EMS Personnel Division Chief	10%	\$ 3,000	\$ 8,000	\$ 8,000	\$ 3,000	\$ 22,000
EMS Personnel Division Manager	25%	\$ 8,000	\$ 18,000	\$ 18,000	\$ 8,000	\$ 52,000
Benefits (Program)		\$ 13,000	\$ 32,000	\$ 32,000	\$ 13,000	\$ 90,000
Director		\$ 4,000	\$ 10,000	\$ 10,000	\$ 4,000	\$ 28,000
Chief Deputy Director		\$ 2,000	\$ 6,000	\$ 6,000	\$ 2,000	\$ 16,000
Deputy Director (Legislation)		\$ 1,000	\$ 2,000	\$ 2,000	\$ 1,000	\$ 6,000
EMS Personnel Division Chief		\$ 1,000	\$ 3,000	\$ 3,000	\$ 1,000	\$ 8,000
EMS Personnel Division Manager		\$ 4,000	\$ 9,000	\$ 9,000	\$ 4,000	\$ 26,000
Workers Compensation Insurance		\$ 1,000	\$ 2,000	\$ 2,000	\$ 1,000	\$ 6,000
Sub Totals:		\$ 44,000	\$ 109,000	\$ 109,000	\$ 44,000	\$ 306,000
Operating Expenses						
General Expenses		\$ -	\$ 1,000	\$ 1,000	\$ -	\$ 2,000
Communications		\$ 1,000	\$ 2,000	\$ 2,000	\$ 1,000	\$ 6,000
In-State Travel		\$ 1,000	\$ 2,000	\$ 2,000	\$ 1,000	\$ 6,000
Facilities Operations		\$ 3,000	\$ 8,000	\$ 8,000	\$ 3,000	\$ 22,000
Consultant and Professional Services - Internal		\$ 2,000	\$ 5,000	\$ 5,000	\$ 2,000	\$ 14,000
Departmental Indirect Costs		\$ 2,000	\$ 5,000	\$ 5,000	\$ 2,000	\$ 14,000
Sub Totals:		\$ 9,000	\$ 23,000	\$ 23,000	\$ 9,000	\$ 64,000
Total Program Costs		\$ 53,000	\$ 132,000	\$ 132,000	\$ 53,000	\$ 370,000

Description of Functions of the Project Sponsor, and other Project Staff

Director: The Director of the Emergency Medical Services, Dr. Howard Backer, will have primary project oversight and will serve as the Principal Investigator for the Health Workforce Pilot Project #173. The Director will lead the State Advisory Committee, which will provide oversight for all pilot sites participating in the project. The Director will maintain ultimate authority to determine continued pilot site participation.

Chief Deputy Director: Dan Smiley, Chief Deputy Director of the Emergency Medical Services Authority, will function as the operational lead, providing review and oversight of all pilot sites as the state sponsor, and will provide recommendations to the Director concerning necessary project alterations to maintain patient safety and project optimization. Mr. Smiley will participate in the State Advisory Committee, review core and local curriculum, review quarterly data reports and assist in standardization of pilot site policies and protocols.

Deputy Director: Jennifer Lim, Deputy Director of Legislation and External Affairs will have primary responsibility for approval of the external communication plan, informing key stakeholders of the HWPP #173 project updates and milestones.

EMS Personnel Division Chief: Sean Trask, Chief of the EMS Personnel Division will review documents prepared by staff, provide recommendations and leadership at the program level regarding decisions related to EMS Personnel. The Chief will participate on the Statewide Advisory Committee and review quarterly summarized pilot site results.









EMS Personnel Division Manager: Lisa Witchey, Manager of the EMS Personnel Division will assist in administrative functions including document and report preparation, review of quarterly summary data reports; participate on the curriculum development committee, data committee and the state advisory committee; and will prepare public documents outlining project status, milestones and achievements throughout the pilot project. Lisa will also assist in drafting the final summary report.

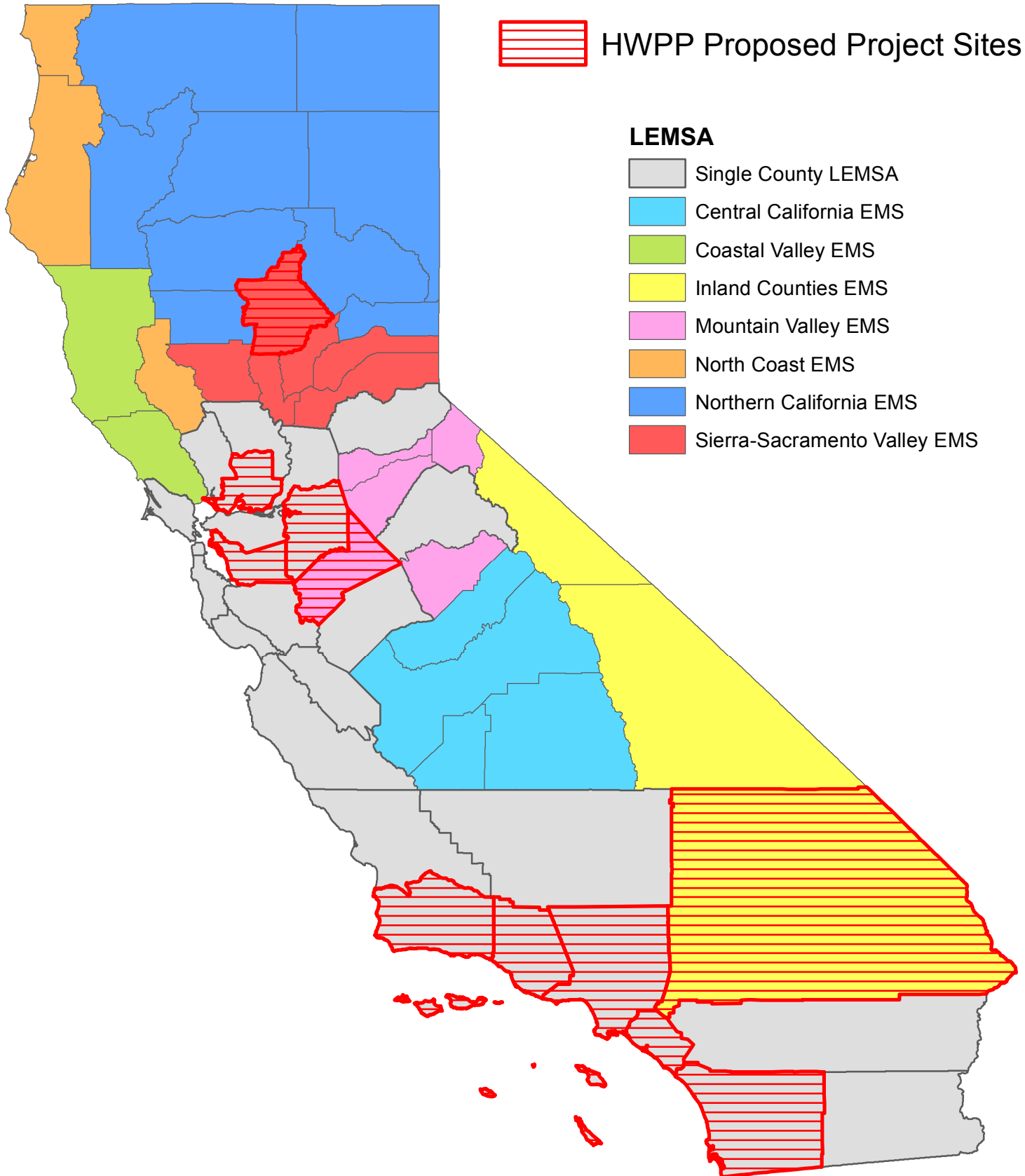
California Community Paramedic Pilot Projects



 HWPP Proposed Project Sites

LEMSA

-  Single County LEMSAs
-  Central California EMS
-  Coastal Valley EMS
-  Inland Counties EMS
-  Mountain Valley EMS
-  North Coast EMS
-  Northern California EMS
-  Sierra-Sacramento Valley EMS



Community Paramedic Pilot Site Information

Project #	Lead Agency	LEMSA	Pilot Concept	EMS Providers	Partners
CP001	UCLA Center for Pre Hospital Care	Los Angeles	Alternate Destination	Santa Monica, Glendale & Pasadena Fire Dept's	Glendale Memorial Hospital, Huntington Medical Foundation Urgent Care Center, Kaiser Permanente, Pasadena Public Health Department UCLA Health System
CP002	UCLA Center for Pre Hospital Care	Los Angeles	Post Hospital Discharge Follow Up (CHF)	Burbank & Glendale Fire Dept's	Providence St. Joseph's Medical Center
CP003	Orange County Fire Chief's Assoc	Orange County	Alternate Destination	Fountain Valley, Huntington Beach & Newport Beach Fire Dept's	Covenant Health Network, Kaiser Permanente, Memorial Care Health System, University of California, Irvine Center for Disaster Medical Sciences
CP004	Butte County EMS	Sierra-Sacramento	Post Hospital Discharge Follow Up	Butte County EMS, Inc	Enloe Medical Center
CP005	Ventura County EMS Agency	Ventura	Directly Observed Treatment of TB	AMR Ventura, Gold Coast Ambulance & LifeLine Ambulance	Ventura Public Health Department
CP006	Ventura County EMS Agency	Ventura & Santa Barbara	Hospice Support	AMR Ventura & Santa Barbara	Assisted Hospice Care of Ventura
CP007	Alameda County EMS Agency	Alameda County	Post Hospital Discharge & Frequent 911 Callers	Alameda City & Hayward Fire Dept's	Kaiser Permanente, Alameda County Medical Center

Community Paramedic Pilot Site Information

Project #	Lead Agency	LEMSA	Pilot Concept	EMS Providers	Partners
CP008	San Bernardino County Fire Dept	San Bernardino County	Post Hospital Discharge Follow Up	San Bernardino County Fire Dept	Arrowhead Regional Medical Center, San Bernardino County Department of Public Health
CP009	Carlsbad Fire Dept	San Diego	Alternate Destination	Carlsbad Fire Dept	Kaiser Permanente
CP010	City of San Diego	San Diego	Frequent 911 Callers	San Diego City Fire Dept & Rural Metro Corp	San Diego Health and Human Services Agency, San Diego State Institute of Public Health, SDSU School of Social Work, UCSD Department of Preventive Medicine, UCSD Department of Emergency Medicine, Hospital Association of San Diego and Imperial Counties
CP011	San Joaquin County EMS Agency	San Joaquin County	Post Hospital Discharge Follow Up	AMR San Joaquin County	San Joaquin General Hospital's Family Medicine, Health Plan of San Joaquin, University of the Pacific
CP012	Mountain Valley EMS	Stanislaus County	Alternate Destination Mental Health	AMR Stanislaus County	Sutter Health Memorial Medical Center, Stanislaus County Behavioral Health and Recovery Services

Community Paramedic Pilot Site Information

Project #	Lead Agency	LEMSA	Pilot Concept	EMS Providers	Partners
CP013	Medic Ambulance	Solano County	Post Hospital Discharge Follow Up	Medic Ambulance	Kaiser Permanente

EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400
RANCHO CORDOVA, CA 95670
(916) 322-4336 FAX (916) 324-2875

**LETTER OF INTENT
FOR COMMUNITY PARAMEDICINE PILOT PROJECT**

The California Emergency Medical Services Authority (EMSA) is seeking the interest of local EMS agencies to develop pilot projects that expand the role and practice of the Emergency Medical Technician–Paramedic (EMT-P). Expanded use of paramedic resources to address local health care needs is part of a national trend termed “Community Paramedicine”, also known as “Mobile Integrated Healthcare”.

This Letter of Intent solicits proposals from Healthcare agency's or EMS providers in collaboration with a Local EMS Agency to develop a community paramedicine pilot project designed to test an expanded role for EMT-P's. EMSA will submit an application to OSHPD <http://www.oshpd.ca.gov/hwdd/HWPP.html> for a Health Workforce Pilot Project regarding community paramedicine based upon the selected local pilot project proposals.

I. Background

OSHPD advances safe, quality healthcare environments through innovative and responsive services and information that finance emerging needs, ensure safe facilities, support informed decisions and cultivate a dynamic workforce. OSHPD’s Healthcare Workforce Development Division impacts the development of California’s health professions and the communities they serve via career awareness, training and placement, financial incentives, and systems delivery, as well as research and policy. Specifically, OSHPD’s Health Workforce Pilot Projects (HWPP) program allows organizations to test, demonstrate and evaluate new or expanded roles for healthcare professionals or new healthcare delivery alternatives before changes in licensing laws are made by the Legislature.

The California Emergency Medical Services Authority (EMSA) provides leadership to develop and implement Emergency Medical Systems (EMS) throughout California and sets standards for the training and scope of practice of various levels of EMS personnel. EMSA operates the State Paramedic Licensure program that licenses and conducts disciplinary investigations of paramedics to ensure that the care they provide meet high standards for prehospital care. EMSA also plays a central role in improving the quality of emergency medical services

available. In California, day-to-day EMS system management is the responsibility of local and regional EMS agencies.

Currently EMT-Paramedics are trained to provide advanced life support services in emergency settings or during inter-facility transfers. California Health and Safety Code Division 2.5, Emergency Medical Services:

- a) Limits the EMT-Paramedics scope of practice to emergency care in the pre-hospital environment
- b) Requires that patients under the care of an EMT-Paramedic be transported to a general acute hospital that has a basic or comprehensive emergency department permit (Health and Safety Code Section 1797.52, 1797.218)
- c) Requires emergency medical services to transport a patient to the closest and most appropriate facility (Health and Safety Code Section 1797.114).

The expanded role of paramedic services through Community Paramedicine in California may allow for the following:

- a. Transport patients with specified conditions not needing emergency care to alternate, non-emergency department locations.
- b. After assessing and treating as needed, determine whether it is appropriate to refer or release an individual at the scene of an emergency response rather than transporting them to a hospital emergency department.
- c. Address the needs of frequent 911 callers or frequent visitors to emergency departments by helping them access primary care and other social services.
- d. Provide follow-up care for persons recently discharged from the hospital and at increased risk of a return visit to the emergency department or readmission to the hospital.
- e. Provide support for persons with diabetes, asthma, congestive heart failure, or multiple chronic conditions.
- f. Partner with community health workers and primary care providers in underserved areas to provide preventive care.

II. Project Authority

HWPP (Division 107, Part 3, Chapter 3, Article 1, Health and Safety Code Section 128125) allows organizations to test, demonstrate, and evaluate new or expanded roles for healthcare professionals or new healthcare delivery alternatives before changes in licensing laws are made by the Legislature. The HWPP Program has become a model for demonstrating and evaluating expanded roles of health care providers and since 1972, 23 legislative and/or regulatory changes have been influenced by HWPP.

III. Project Parameters

This pilot project is intended 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. Statutes that may be temporarily waived through OSHPD's HWPP authority include the following sections of the Health and Safety code that limit the destination of patients transported by paramedics and that specify the limited emergency settings where Paramedics can provide services: 1797.52, 1797.114, and 1797.218. The pilot program will allow the State to generate, collect and analyze data that will examine the practice of community paramedicine and serve as a basis to recommend changes to existing statute and regulations.

The HWPP Application will be sponsored at the State level by the Emergency Medical Services Authority (EMSA). The projects will be planned and executed at the local level by collaboration and partnership between Local EMS Agencies (LEMSA), EMS provider agencies, and appropriate health care partners. The HWPP project may be piloted for a period of up to 24 months. HWPP projects may be extended one year at a time for a few years, if OSHPD Director determines that continuation of the project will contribute substantially to the availability of high-quality services in the state or region.

EMSA anticipates receiving proposals from LEMSAs or EMS and healthcare providers with LEMSA support to participate in CP pilots involving any of the following general project areas:

- a. Transport patients with specified conditions not needing emergency care to alternate, non-emergency department locations.
- b. After assessing and treating as needed, determine whether it is appropriate to refer or release an individual at the scene of an emergency response rather than transporting them to a hospital emergency department.

- c. Address the needs of frequent 911 callers or frequent visitors to emergency departments by helping them access primary care and other social services.
- d. Provide follow-up care for persons recently discharged from the hospital and at increased risk of a return visit to the emergency department or readmission to the hospital.
- e. Provide support for persons with diabetes, asthma, congestive heart failure, or multiple chronic conditions.
- f. Partner with community health workers and primary care providers in underserved areas to provide preventive care.

IV. Pilot Site Requirements and Program Standards

Pilot Eligibility

Any Healthcare agency or EMS provider in collaboration and partnership with a Local EMS Agency may submit a Letter of Intent for consideration of participation in the HWPP. All partners, including the local EMS agency (LEMSA), must be signatories to the proposal. Prospective applicants must either employ paramedics or have a MOU with an agency that employs paramedics.

Local and State Governance and Medical Control

EMSA will establish a State CP Advisory Committee to review and oversee the individual project sites. The Advisory Committee will provide feedback, direction and monitor any program issues that arise. The Committee will include representation from EMSA and from each project site, including representatives of LEMSAs, EMS providers, and healthcare systems.

EMSA anticipates that increased medical control and oversight will be necessary to ensure patient safety and for quality improvement. The LEMSA Medical Director or his designee will act as the principal investigator and has primary responsibility for medical control for any project in her/his jurisdiction. A local CP Project Steering Committee must be established for each pilot site that includes the LEMSA Medical Director or his designee, the LEMSA administrator or designee, as well as a medical director and administrator from any participating Healthcare systems and EMS provider agency. The purpose of this Steering Committee is to provide additional medical and administrative oversight. The local Steering Committee shall work in

collaboration with the EMSA Community Paramedicine Project Manager and Independent Evaluator.

Paramedic Eligibility

In order to be eligible to be trained as a Community Paramedic, the individual should have a minimum of 4 years' experience as a Paramedic. Preference should be given to individuals who have an A.A. degree or higher level of education, and each shall be recommended for the training program by the Medical Director of the agency or LEMSA. If feasible, health care partners should participate in the selection.

Standardized CP Training

The core content of the CP training curriculum will be standardized among the pilot programs. Training will include both didactic and clinical training. This training is estimated to be approximately 150-200 hours, depending upon the pilot project, and will use the nationally recognized CP training curriculum as a model. <http://communityparamedic.org/Home.aspx>. The curriculum will be reviewed and may be modified by the State Advisory Committee to ensure that it meets the needs of all proposed pilot areas. Core training may be coordinated geographically based on the location of the approved pilot proposals. Local CP training must also provide an understanding of the project parameters, local medical system organization, project policies and protocols and clinical experience. This content should be approved by the Local Project Steering Committee and will be subject to review by the State Steering Committee.

At the conclusion of training, a student will be required to successfully pass an examination to demonstrate competency. A pilot program local accreditation will be granted by the LEMSA upon successful completion of the training program and examination. The LEMSA will then notify EMSA of the CP accreditation, which will be documented in the central registry.

Data Collection

Data collection will be the responsibility of the local project and should measure or demonstrate key objectives for the project. Proposed data points may be altered or supplemented by the Independent Evaluator.

Objectives for evaluation should be tailored to the specific concept(s) being tested and should 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
- Healthcare service utilization patterns
- Patient satisfaction
- Primary care provider and/or health system satisfaction

Optimally, applicants should have the ability to 1) collect and share data electronically and 2) include linkage to Electronic Health Records (EHR's). Pilot participants will be required to provide a report of quarterly results to the local CP Project Steering Committee, Independent Evaluator, and to the State CP Advisory Committee through the EMSA Project Manager for review.

Funding

Funding will be the responsibility of each pilot site. Projects may be supported through grants, identified cost savings, or partnerships with other local agencies.

A California HealthCare Foundation (CHCF) grant with EMSA is pending to support the state program manager, an independent evaluator, training programs, and a stipend to assist in pilot site data collection.

IV. Letter of Intent Proposal Format

A Letter of Intent should be typed and no more than 8 pages in length.

One application for a pilot project proposal is required for each unique study design or methodology. A LEMSA, or applicant, may submit multiple applications within the LEMSA. The

Community Paramedicine Letter of Intent

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LEMSA is responsible for coordinating multiple pilot projects. A pilot project proposal may include multiple EMS providers and healthcare partners (provided it maintains the same study design). Multiple study concepts (i.e. pre-hospital or out-of-hospital) may be incorporated into a single design or methodology.

- a) Title of Proposed Project Concept
- b) Identify the category(s) that best describes the project you propose to pilot

port to alternate locations	Post hospital or emergency department follow up
Assess, treat and refer	Care for chronic conditions
Manage frequent 911 callers	Preventive health services

- c) Brief description of proposed concept, project management and partners (include geographic area to be served)
- d) Purpose and objectives
- e) Estimated project length (24 Months)
- f) Background Information
 - Need for project
 - Types and number of patients likely to be seen
 - Anticipated number of community paramedics to be trained and future anticipated employment opportunities for community paramedics
 - Other programs in California or other states serving as models for this project
- g) Program Management
 - Operational methodology
 - Local governance and medical control
 - Provisions for protecting patient's safety
 - Anticipated sources of funding
 - Paramedic eligibility
 - Local CP Training

- h) Evaluation and data collection (include components regarding process evaluation, qualitative evaluation, impact evaluation and utilization, estimate of healthcare cost savings, and dissemination of results)
- i) Contact Information:

Contact Person	Name of Local Agency
Address	Telephone
E-mail	Fax number

V. Submission of Letter of Intent

Interested parties are requested to submit a Letter of Intent proposal in electronic format to EMSA:

Lou Meyer
Project Manager
Community Paramedicine - Mobile Integrated Health
Emergency Medical Services Authority
lou.meyer@emsa.ca.gov

An **LOI submission conference call** will be hosted by EMSA on August 14, 2013

In order to assist in facilitating the Pre-LOI Conference, please submit questions to EMSA no later than August 7, 2013.

All Letters of Intent must be submitted by September 30, 2013 to be considered.

HWPP Project Steps and Timeframe

EMSA will review all proposals submitted and, in collaboration with OSHPD, will select proposals to take part in the HWPP. EMSA will then complete and submit the application to OSHPD for review. As part of the review process, OSHPD will solicit input from relevant licensing boards and committees, and a public meeting will be held to allow public comment concerning the proposed project. A public hearing will also take place to document the HWPP

Community Paramedicine Letter of Intent

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on public record. Following the public hearing, OSHPD will notify EMSA of the overall application status, and EMSA will notify the involved parties.

Approximate Timeline:

Year	Month	Task
2013	July - Sept	<ul style="list-style-type: none"> Proposals through Letter of Intent submitted by September 30, 2013
	October	<ul style="list-style-type: none"> EMSA proposal review with OSHPD to select pilot sites
	November	<ul style="list-style-type: none"> EMSA submits HWPP application to OSHPD
		<ul style="list-style-type: none"> OSHPD internal review process, application sent to Licensing Boards for review
	December	<ul style="list-style-type: none"> Licensing Board review
2014	February	<ul style="list-style-type: none"> OSHPD Public Meeting held for public comments
	March	<ul style="list-style-type: none"> OSHPD Public Hearing takes place
	April	<ul style="list-style-type: none"> OSHPD will notify EMSA if application for HWPP is approved
		<ul style="list-style-type: none"> EMSA will notify pilot sites, recruitment will begin within the EMS agencies for community paramedics
	June	<ul style="list-style-type: none"> Training will begin for CP pilot programs
	September	<ul style="list-style-type: none"> CP's begin providing care for first 1 year period
2015	September	<ul style="list-style-type: none"> Overall project analysis begins Pilots are anticipated to be extended for an additional year to 2016 to gather additional data
	October	<ul style="list-style-type: none"> OSHPD Project Analysis Report

Community Paramedic Trainee Agreement

Community Paramedicine is a pilot training project authorized in the California Health and Safety Code and Administrative Code as a Health Workforce Pilot Project (HWPP). As an approved HWPP, the Community Paramedic is permitted to demonstrate training content beyond the current scope of practice for EMT-Paramedics in California. All Community Paramedics participating in the pilot project must comply with clinical standards prescribed by the project. Only EMT-Paramedics holding current California licensure and who have satisfied all of the selection and training criteria for the pilot project may deliver care pursuant to the protocols of the Community Paramedicine pilot project.

I understand that this project does not authorize participants to practice Community Paramedicine, apart from the project, without legislative change authorizing this practice and that there is no assurance that such change will take place. Authority cited: Section 92101 (d) California Code of Regulations.

There is no assurance of employment-utilization of Community Paramedics beyond the pilot project itself, and even participation in the pilot project is subject to the need for and acceptance of Community Paramedic services by the patient population.

My signature is evidence that I have read the above statement, have had the opportunity to discuss it with project staff, and that I understand and accept its terms.

Signature participant: _____

Date: _____

CP Pilot Representative: _____

Date: _____

Job Description
COMMUNITY PARAMEDIC

Department:

Reports To:

Class Code:

EEO Category:

Supervisory Responsibility:

Pay Band:

FLSA Status:

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;
- 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;
- Cleans and maintains living quarters;
- Maintains records of vehicles, supplies, training and daily work; and
- Performs other related duties as assigned.

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 clinicals as assigned or requested to maintain proficiency in areas of focus for the program;
- 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 by the State of California;
- Must possess and maintain a valid California driver's license;
- This position has been designated safety sensitive and therefore the incumbent is subject to random drug testing.

Training Data

Data shown by training phase type. All data will be reported by pilot site.

Core curriculum	Site-specific didactic instruction	Site-specific clinical instruction
Cost of classroom space	Cost of classroom space	Cost of classroom space
Cost of instructor	Cost of instructor	Cost of instructor
Cost of instruction materials	Cost of instruction materials	Cost of instruction materials
Hours completed per trainee	Hours completed per trainee	Hours completed per trainee
Pass rate on assessment	Pass rate on assessment	Pass rate on assessment
		Cost of patient participants in clinical practicum

Baseline Data

Data shown by project type.

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Patient Demographics					
Age	Age of each patient eligible	Age of each patient eligible	Age of each patient eligible	Age of each home hospice patient	Age of each TB patient
				Age of each family member of a home hospice patient receiving grief and/or crisis counseling	Age of each household member for each TB patient in your target geographic area
Gender	Gender of each patient eligible	Gender of each frequent 911 caller	Gender of each patient eligible	gender of each home hospice patient	Gender of each TB patient
				Gender of each family member of a home hospice patient receiving grief and/or crisis support	Gender of each household member for each TB patient
Race	Race/ethnicity of each patient eligible	Race/ethnicity of each frequent 911 caller	Race/ethnicity of each patient eligible	Race/ethnicity of each home hospice patient	Race/ethnicity of each TB patient

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
				Race/ethnicity of each family member of a home hospice patient receiving grief and/or crisis counseling	Race/ethnicity of each household member for each TB patient
Language	Language in which each patient requests care	Language in which each frequent 911 caller prefers care	Language in which each patient eligible prefers care	Language in which each home hospice patient prefers that care is provided	Language in which each TB patient prefers that care is provided
Zip code	Zip code to which the ems responded for each eligible patient	Zip code to which the ems responded for each eligible patient	zip code to which the ems responded to each patient eligible	Zip code for each home hospice care patient	Zip code in which DOT was administered
Primary type of insurance	Primary type of insurance for each patient eligible	Primary type of insurance for each frequent 911 caller	Primary type of insurance for each patient eligible	Primary type of insurance for each home hospice patient	Primary type of insurance for each TB patient
Cost					
Average cost of EMS transport	Average cost per EMS transport in your geographic area	Average cost per EMS transport in your geographic area	Average cost per EMS transport in your geographic area	Average cost per EMS transport in your geographic area	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Average charges of EMS transport	Average charges to the patient or insurer for EMS transport in your geographic area	Average charges to the patient or insurer for EMS transport in your geographic area	Average charges to the patient or insurer for EMS transport in your geographic area	Average charges to the patient or insurer for EMS transport in your geographic area	
Average cost of care among partner ED	Average cost of care for eligible patients among partner EDs	Average cost of care for eligible patients among partner EDs	Average cost of care for eligible patients among partner EDs	Average cost of care for eligible patients among partner EDs	
Average charges for care among partner ED	Average charges for care for eligible patients among partner EDs	Average charges for care for eligible patients among partner EDs	Average charges for care for eligible patients among partner EDs	Average charges for care for eligible patients among partner EDs	
Average cost of inpatient care for eligible patients admitted to the partner hospital	Average cost of inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average cost of inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average cost of inpatient care for eligible patients readmitted to the partner hospital within 30 days of discharge	Average cost of inpatient care for eligible patients admitted to the partner hospital	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Average charges for inpatient care for eligible patients admitted to the partner hospital	Average charges for inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average charges for inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average charges for inpatient care for eligible patients readmitted to the partner hospital within 30 days of discharge	Average charges for inpatient care for eligible patients admitted to the partner hospital	
Claims paid	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient admission(s) for eligible patients among partner EDs and hospitals	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient admission(s) for eligible patients among partner EDs and hospitals	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient readmission(s) for eligible patients among partner EDs and hospitals	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient admission(s) for eligible patients among partner EDs and hospitals	
Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Cost of comfort care medications				Average cost for the administration of comfort care medications to home hospice patients	
Charges for comfort care medications				Average charges for the administration of comfort care medications to home hospice patients	
Cost of grief/crisis counseling				Average cost of grief/crisis counseling for families of hospice patients	
Charges of grief/crisis counseling				Average cost of grief/crisis counseling for families of hospice patients	
					Cost of directly observed therapy (DOT) treatment per patient provided as it is currently being provided

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
					Charges to the patient or insurer for DOT treatment per patient as it is currently being provided
EMS Utilization					
Eligible patients	Number of patients per month eligible for CP intervention from EMS provider(s)	Number of Frequent 911 callers per month from EMS provider(s)	Number of patients per month eligible for intervention discharged from partner hospitals	Number of patients per month on home hospice in the geographic area	
Total number of EMS transports per month in the geographic area	Total number of EMS transports per month in the geographic area	Total number of EMS transports per month in the geographic area	Total number of EMS transports per month in the geographic area	Total number of EMS transports per month in the geographic area	
Total number of eligible transports per month (based on partner EMS providers only)	Total number of EMS transports per month in the geographic area eligible for intervention	Total number of EMS transports per month in the geographic area eligible for intervention	Total number of EMS transports per month in the geographic area eligible for intervention	Total number of EMS transports per month in the geographic area eligible for intervention	
Total number of EMS transports per month to partner EDs	Total number of EMS transports per month to partner EDs	Total number of EMS transports per month to partner EDs	Total number of EMS transports per month to partner EDs	Total number of EMS transports per month to partner EDs	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Total number of eligible transports to partner EDs per month (based on partner EMS providers only)	Total number of EMS transports of eligible patients to partner EDs	Total number of EMS transports of eligible patients to partner EDs	Total number of EMS transports of eligible patients to partner EDs	Total number of EMS transports of eligible patients to partner EDs	
Length of time spent by EMT-P per patient providing service	Length of time spent by EMT-P per patient providing service	Length of time spent by EMT-P per patient providing service	Length of time spent by EMT-P per patient providing service	Length of time spent by EMT-P per patient providing service	
Number of miles traveled per transport	Number of miles traveled per transport	Number of miles traveled per transport	Number of miles traveled per transport	Number of miles traveled per transport	
Time of day of service provision	Time of day of service provision	Time of day of service provision	Time of day of service provision	Time of day of service provision	Time of day of service provision
Ems response	Total use of EMS response equipment (fire engine or ambulance) on 911 calls eligible for intervention per month	Total use of EMS response equipment (fire engine or ambulance) on 911 calls eligible for intervention per month	Total use of EMS response equipment (fire engine or ambulance) on 911 calls eligible for intervention per month	Total use of EMS response equipment (fire engine or ambulance) on 911 calls eligible for intervention per month	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Other Health Care Utilization					
Saturation	Monthly saturation percent for each partner ED	Monthly saturation percent for each partner ED	Monthly saturation percent for each partner ED	Monthly saturation percent for each partner ED	
Wait time for care in partner ED for all patients	Average wait time for care among all patients among partner EDs	Average wait time for care among all patients among partner EDs	Average wait time for care among all patients among partner EDs	Average wait time for care among all patients among partner EDs	
Wait time for care in partner ED for eligible patients	Average wait time for care for eligible patients among partner EDs	Average wait time for care for eligible patients among partner EDs	Average wait time for care for eligible patients among partner EDs	Average wait time for care for eligible patients among partner EDs	
Total number of eligible patients admitted to the partner hospital per month	Total number of eligible patients admitted to the partner hospital subsequent to EMS transport per month	Total number of eligible patients admitted to the partner hospital subsequent to EMS transport per month	Total number of eligible patients readmitted to the partner hospital within 30 days of initial discharge per month	Total number of eligible patients admitted to the partner hospital per month	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Length of stay	Average length of hospital stay for eligible patients admitted to the partner hospital subsequent to EMS transport	Average length of hospital stay for eligible patients admitted to the partner hospital subsequent to EMS transport	Average length of hospital stay for eligible patients readmitted to the partner hospital within 30 days of discharge	Average length of hospital stay for eligible patients admitted to the partner hospital	
Patient disposition	Disposition of eligible patients after EMS transport (treated and released; admitted to hospital; death)	Disposition of eligible patients after EMS transport (treated and released; admitted to hospital; death)	Disposition of eligible patients after EMS transport (treated and released; admitted to hospital; death)	Disposition of eligible patients after EMS transport (treated and released; admitted to hospital; death)	
Social svc	Number of eligible patients enrolled in social service programs (Stanislaus only)	Number of eligible patients per month enrolled in social service programs			
Primary care		Number of eligible patients per month with a usual source of primary care			

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Mental health	Number of eligible patients with a usual source of mental health care (Stanislaus only)	Number of eligible patients per month with a usual source of mental health care			
Home health			Total number of eligible patients per month who received follow up care by another home health provider		
Care plan		Estimated number of frequent 911 callers per month with a care plan in place			
Compliance with care plan		Estimated number of frequent 911 callers in compliance with their individual care plan per month	Estimated number of eligible patients per month in compliance with their post-discharge care plan		

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Grief counseling services				Total number of family members who receive grief and/or crisis counseling from hospice provider per month	
					Number of identified cases of TB in the geographic area in which the pilot project will be implemented
					Number TB patients receiving DOT in the geographic area
					Number of DOT treatments administered per month (identify non-facility based DOT)

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
					Number of patients who complete their DOT treatment each month
					Number of daily symptom surveys completed per month for patients receiving DOT
					Number of mal-absorption issues identified per patient receiving DOT
					Length of time from onset to identification of mal-absorption issues per patient receiving DOT per month

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
					Number of DOT treatment side effects per patient receiving DOT per month (excluding mal-absorption issues)
					Number of new TB cases identified per month among household members of existing TB patients
					Number of TB patients per household receiving DOT per month

Implementation Data*

Data shown by project type.

*All of the “baseline” data will continue to be collected during implementation for all patients, except where CP-specific measures are substituted for EMT-P-specific measure for patients who receive intervention. “Baseline” data measures will be collected for all patients who refuse treatment and for patients who do not receive study intervention due to the unavailability of study-required resources. For Alternate Transport and Frequent 911, baseline data measures will also be collected for patients receiving intervention if they are transferred to an ED subsequent to their transport by the CP to a non-ED destination.

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Cost					
Average cost of transport by CP to non-ED destination	Average cost of transport by CP to non-ED destination	Average cost of transport by CP to non-ED destination	Average cost of transport by CP to non-ED destination		
Average cost to EMS provider agency of care provided by CP	Average cost to ems provider agency of care provided by CP	Average cost to ems provider agency of care provided by CP	Average cost to ems provider agency of care provided by CP	Average cost to ems provider agency of care provided by CP	
Average cost of care in non-ED destination	Average cost of care in non-ED destination	Average cost of care in non-ED destination	Average cost of care in non-ED destination	Average cost of care in non-ED destination	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Average charges for care in non-ED destination	Average charges for care in non-ED destination	Average charges for care in non-ED destination	Average charges for care in non-ED destination	Average charges for care in non-ED destination	
Average cost of inpatient care for relevant patients in non-ED destinations with inpatient treatment		Average cost of inpatient care for relevant patients in non-ED destinations with inpatient treatment			
Average charges of inpatient care for relevant patients in non-ED destinations		Average charges of inpatient care for relevant patients in non-ED destinations			
Claims paid	Average claims paid by health insurance plans & networks for care in non-ED destination	Average claims paid by health insurance plans & networks for care in non-ED destination and inpatient admission(s) for care in non-ED destination	Average claims paid by health insurance plans & networks for care in non-ED destination	Average claims paid by health insurance plans & networks for care in non-ED destination	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention
Cost of comfort care medications				Average cost for the administration of comfort care medications to home hospice patients by CPs	
Cost of grief/crisis counseling				Average cost of grief/crisis counseling for families of hospice patients by CPs	
					Cost of DOT treatment per patient provided as it is provided by CP

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
					Charges to the patient or insurer for DOT treatment per patient as it is provided by CP
EMS Utilization					
Number of study patients	Number of patients per month who receive intervention	Number of Frequent 911 callers per month who receive intervention	Number of patients per month who receive intervention	Number of patients per month on home hospice who receive intervention	Number of patients per month who receive intervention
Total number of CP transports per month to non-ED destination	Total number of CP transports per month to non-ED destination	Total number of CP transports per month to non-ED destination	Total number of CP transports per month to non-ED destination		
EMS Response to patients who receive CP intervention	Total use of EMS response equipment (fire engine or ambulance) on 911 calls that receive CP intervention per month	Total use of EMS response equipment (fire engine or ambulance) on 911 calls that receive CP intervention per month	Total use of EMS response equipment (fire engine or ambulance) on 911 calls that receive CP intervention per month	Total use of EMS response equipment (fire engine or ambulance) on 911 calls that receive CP intervention per month	

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Length of time spent by CP per patient in providing intervention	Length of time spent by CP per patient in providing intervention	Length of time spent by CP per patient in providing intervention	Length of time spent by CP per patient in providing intervention	Length of time spent by CP per patient in providing intervention	Length of time spent by CP per patient in providing intervention
Estimate of length of time spent by CP per patient encounter in pilot-required activities (informed consent, satisfaction survey, etc.)	Estimate of length of time spent by CP per patient encounter in pilot-required activities (informed consent, satisfaction survey, etc.)	Estimate of length of time spent by CP per patient encounter in pilot-required activities (informed consent, satisfaction survey, etc.)	Estimate of length of time spent by CP per patient encounter in pilot-required activities (informed consent, satisfaction survey, etc.)	Estimate of length of time spent by CP per patient encounter in pilot-required activities (informed consent, satisfaction survey, etc.)	Estimate of length of time spent by CP per patient encounter in pilot-required activities (informed consent, satisfaction survey, etc.)
Number of CP encounters per patient per month	Number of CP encounters per patient per month	Number of CP encounters per patient per month	Number of CP encounters per patient per month	Number of CP encounters per patient per month	Number of CP encounters per patient per month
Number of miles traveled per transport	Number of miles traveled per transport	Number of miles traveled per transport	Number of miles traveled per patient encounter	Number of miles traveled per patient encounter	Number of miles traveled per patient encounter

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Time of day of service provision	Time of day of service provision	Time of day of service provision	Time of day of service provision	Time of day of service provision	Time of day of service provision
Other health care utilization					
Wait time for care in non-ED destination for all patients	Wait time for care in non-ED destination for all patients	Wait time for care in non-ED destination for all patients			
Wait time for care in non-ED destination for study patients	Wait time for care in non-ED destination for study patients	Wait time for care in non-ED destination for study patients			
Total number of study patients subsequently transferred to the ED after CP intervention	Total number of study patients subsequently transferred to the ED after CP intervention	Total number of study patients subsequently transferred to the ED after CP intervention	Total number of study patients subsequently transferred to the ED after CP intervention	Total number of study patients subsequently transferred to the ED after CP intervention	
Length of stay in non-ED destination (if admitted inpatient)		Length of stay in non-ED destination (if admitted inpatient)			

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Patient disposition	Disposition of study patients	Disposition of study patients	Disposition of study patients	Disposition of study patients	
Social svc	Number of study per month patients enrolled in social service programs (Stanislaus only)	Number of study per month patients enrolled in social service programs			
Primary care		Number of study patients per month with a usual source of primary care			
Mental health	Number of study patients per month with a usual source of mental health care (Stanislaus only)	Number of study patients per month with a usual source of mental health care			
Home health			Total number of study patients per month who received follow up care by another home health provider		

Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Care plan		Total number of frequent 911 callers per month in compliance with their care plan	Total number of patients per month in compliance with their post-discharge plan per month		
Compliance with care plan		Estimated number of frequent 911 callers per month in compliance with their individual care plan per month	Number of study patients per month in compliance with their post-discharge care plan		
Grief counseling svc				Total number of family members who receive grief and/or crisis counseling from CP per month	

Training Cost (shown by training phase; costs will be reported per pilot project)		
Core curriculum	Site-specific didactic instruction	Site-specific clinical instruction
Cost of classroom space	Cost of classroom space	Cost of classroom space
Cost of instructor	Cost of instructor	Cost of instructor
Cost of instruction materials	Cost of instruction materials	Cost of instruction materials
		Cost of patient participants in clinical practicum

Baseline Cost (Shown per pilot project)					
Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Average cost of EMS transport	Average cost per EMS transport in your geographic area	Average cost per EMS transport in your geographic area	Average cost per EMS transport in your geographic area	Average cost per EMS transport in your geographic area	
Average charges of EMS transport	Average charges to the patient or insurer for EMS transport in your geographic area	Average charges to the patient or insurer for EMS transport in your geographic area	Average charges to the patient or insurer for EMS transport in your geographic area	Average charges to the patient or insurer for EMS transport in your geographic area	
Average cost of care among partner ED	Average cost of care for eligible patients among partner EDs	Average cost of care for eligible patients among partner EDs	Average cost of care for eligible patients among partner EDs	Average cost of care for eligible patients among partner EDs	

Average charges for care among partner ED	Average charges for care for eligible patients among partner EDs	Average charges for care for eligible patients among partner EDs	Average charges for care for eligible patients among partner EDs	Average charges for care for eligible patients among partner EDs	
Average cost of inpatient care for eligible patients admitted to the partner hospital	Average cost of inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average cost of inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average cost of inpatient care for eligible patients readmitted to the partner hospital within 30 days of discharge	Average cost of inpatient care for eligible patients admitted to the partner hospital	
Average charges for inpatient care for eligible patients admitted to the partner hospital	Average charges for inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average charges for inpatient care for eligible patients admitted to the partner hospital subsequent to EMS transport	Average charges for inpatient care for eligible patients readmitted to the partner hospital within 30 days of discharge	Average charges for inpatient care for eligible patients admitted to the partner hospital	
Claims paid	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient admission(s) for eligible patients among partner EDs and hospitals	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient admission(s) for eligible patients among partner EDs and hospitals	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient readmission(s) for eligible patients among partner EDs and hospitals	Average claims paid by health insurance plans & networks for ED visit(s) and inpatient admission(s) for eligible patients among partner EDs and hospitals	

Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service	Cost of salary and benefits of EMT-P providing service
Cost of comfort care medications				Average cost for the administration of comfort care medications to home hospice patients	
Charges for comfort care medications				Average charges for the administration of comfort care medications to home hospice patients	
Cost of grief/crisis counseling				Average cost of grief/crisis counseling for families of hospice patients	
Charges of grief/crisis counseling				Average cost of grief/crisis counseling for families of hospice patients	

					Cost of directly observed therapy (DOT) treatment per patient provided as it is currently being provided
					Charges to the patient or insurer for DOT treatment per patient as it is currently being provided

Implementation Cost (Shown per pilot project)					
Short title	Alternate Transport	Frequent 911 Caller	Post-hospital	Hospice	Tuberculosis
Average cost of transport by CP to non-ED destination	Average cost of transport by CP to non-ED destination	Average cost of transport by CP to non-ED destination	Average cost of transport by CP to non-ED destination		
Average cost to EMS provider agency of care provided by CP	Average cost to EMS provider agency of care provided by CP	Average cost to EMS provider agency of care provided by CP	Average cost to EMS provider agency of care provided by CP	Average cost to EMS provider agency of care provided by CP	
Average cost of care in non-ED destination	Average cost of care in non-ED destination	Average cost of care in non-ED destination	Average cost of care in non-ED destination	Average cost of care in non-ED destination	
Average charges for care in non-ED destination	Average charges for care in non-ED destination	Average charges for care in non-ED destination	Average charges for care in non-ED destination	Average charges for care in non-ED destination	
Average cost of inpatient care for relevant patients in non-ED destinations with inpatient treatment		Average cost of inpatient care for relevant patients in non-ED destinations with inpatient treatment			

Average charges of inpatient care for relevant patients in non-ED destinations		Average charges of inpatient care for relevant patients in non-ED destinations			
Claims paid	Average claims paid by health insurance plans & networks for care in non-ED destination	Average claims paid by health insurance plans & networks for care in non-ED destination and inpatient admission(s) for care in non-ED destination	Average claims paid by health insurance plans & networks for care in non-ED destination	Average claims paid by health insurance plans & networks for care in non-ED destination	
Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention	Cost of salary and benefits of CP providing intervention
Cost of comfort care medications				Average cost for the administration of comfort care medications to home hospice patients by CPs	
Cost of grief/crisis counseling				Average cost of grief/crisis counseling for families of hospice patients by CPs	

					Cost of DOT treatment per patient provided as it is provided by CP
					Charges to the patient or insurer for DOT treatment per patient as it is provided by CP

**California Code of Regulations
TITLE 22. SOCIAL SECURITY
DIVISION 9. PRE-HOSPITAL EMERGENCY MEDICAL SERVICES
CHAPTER 12. EMS System Quality Improvement**

Article 1. Definitions

100400. Emergency Medical Services System Quality Improvement Program.

"Emergency Medical Services System Quality Improvement Program" or EMS QI Program means methods of evaluation that are composed of structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process and recognize excellence in performance and delivery of care.

NOTE: Authority cited: Sections 1797.103, 1797.107, 1797.174, and 1797.176 Health and Safety Code. Reference: Sections 1797.174, 1797.202, 1797.204, 1797.220, and 1798.175 Health and Safety Code.

100401. EMS Service Provider.

"EMS Service Provider" means an organization employing certified EMT-I, certified EMT-II or licensed paramedic personnel for the delivery of emergency medical care to the sick and injured at the scene of an emergency, during transport, or during interfacility transfer.

NOTE: Authority cited: Sections 1797.107, 1797.174, and 1797.176 Health and Safety Code. Reference: Section 1797.174 Health and Safety Code.

Article 2. EMS Service Provider

100402. EMS Service Provider Responsibilities.

(a) An EMS service provider shall:

(1) Develop and implement, in cooperation with other EMS system participants, a provider-specific written EMS QI program, as defined in Section 100400 of this Chapter. Such programs shall include indicators, as defined in Section III and Appendix E of the Emergency Medical Services System Quality Improvement Program Model Guidelines, which address, but are not limited to, the following:

- (A) Personnel
- (B) Equipment and Supplies
- (C) Documentation
- (D) Clinical Care and Patient Outcome
- (E) Skills Maintenance/Competency
- (F) Transportation/Facilities
- (G) Public Education and Prevention
- (H) Risk Management

(2) Review the provider-specific EMS QI Program annually for appropriateness to the operation of the EMS provider and revise as needed.

(3) Participate in the local EMS agency's EMS QI Program that may include making available mutually agreed upon relevant records for program monitoring and evaluation.

(4) Develop, in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, collaboration is required with the

provider medical director and the local EMS agency medical director or his/her designee if the provider does not have a medical director.

(5) Provide the local EMS agency with an annual update, from date of approval and annually thereafter, on the provider EMS QI Program. The update shall include, but not be limited to, a summary of how the EMS provider's EMS QI Program addressed the program indicators.

(b) The EMS provider EMS QI Program shall be in accordance with the Emergency Medical Services System Quality Improvement Program Model Guidelines (Rev. 3/04), incorporated herein by reference, and shall be approved by the local EMS agency. This is a model program which will develop over time and is to be tailored to the individual organization's quality improvement needs and is to be based on available resources for the EMS QI program.

(c) The provider EMS QI Program shall be reviewed by the local EMS agency at least every five years.

NOTE: Authority cited: Sections 1797.103, 1797.107, 1797.174 and 1797.176 Health and Safety Code. Reference: Sections 1797.174 and 1797.220 Health and Safety Code.

Article 3. Paramedic Base Hospital

100403. Paramedic Base Hospital and Alternate Base Station Responsibilities.

(a) A paramedic base hospital and alternate base station shall:

(1) Develop and implement, in cooperation with other EMS system participants, a hospital-specific written EMS QI program, as defined in Section 100400 of this Chapter. Such programs shall include indicators, as defined in Section III and Appendix E of the Emergency Medical Services System Quality Improvement Program Model Guidelines, which address, but are not limited to, the following:

(A) Personnel

- (B) Equipment and Supplies
- (C) Documentation
- (D) Clinical Care and Patient Outcome
- (E) Skills Maintenance/Competency
- (F) Transportation/Facilities
- (G) Public Education and Prevention
- (H) Risk Management

(2) Review hospital-specific EMS QI Program annually for appropriateness to the operation of the base hospital or alternative base station and revise as needed.

(3) Participate in the local EMS agency's EMS QI Program that may include making available mutually agreed upon relevant records for program monitoring and evaluation.

(4) Develop, in cooperation with appropriate personnel/agencies, a performance improvement action plan when the base hospital or alternative base station EMS QI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, collaboration with the base hospital medical director or his/her designee or alternate base station medical director or his/her designee is required.

(5) Provide the local EMS agency with an annual update, from date of approval and annually thereafter, on the hospital EMS QI Program. The update shall include, but not be limited to, a summary of how the base hospital/alternate base station's EMS QI Program addressed the program indicators.

(b) The base hospital/alternate base station EMS QI Program shall be in accordance with the Emergency Medical Services System Quality Improvement Program Model Guidelines (Rev. 3/04), incorporated herein by reference, and shall be approved by the local EMS agency. This is a model program which will develop over time and is to be tailored to the individual

organization's quality improvement needs and is to be based on available resources for the EMS QI program.

(c) The base hospital/alternate base station EMS QI Program shall be reviewed by the local EMS agency at least every five years.

NOTE: Authority cited: Sections 1797.103, 1797.107, 1797.174, and 1797.176 Health and Safety Code. Reference: Sections 1797.174, 1797.220, and 1798.2, Health and Safety Code.

Article 4. Local EMS Agency

100404. Local EMS Agency.

(a) The local EMS agency shall:

(1) Develop and implement, in cooperation with other EMS system participants, a system-wide written EMS QI program, as defined in Section 100400 of this Chapter. Such programs shall include indicators, as defined in Section III and Appendix E of the Emergency Medical Services System Quality Improvement Program Model Guidelines, which address, but are not limited to, the following:

- (A) Personnel
- (B) Equipment and Supplies
- (C) Documentation
- (D) Clinical Care and Patient Outcome
- (E) Skills Maintenance/Competency
- (F) Transportation/Facilities
- (G) Public Education and Prevention
- (H) Risk Management

(2) Review system-wide EMS QI Program annually for appropriateness to the system and revise as needed.

(3) Develop, in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, collaboration is required with the local EMS agency medical director.

(4) Provide the EMS Authority with an annual update, from date of approval and annually thereafter, on the local EMS Agency's EMS QI Program. The update shall include, but not be limited to, a summary of how the local EMS Agency's EMS QI Program addressed the program indicators.

(b) The local EMS Agency EMS QI Program shall be in accordance with the Emergency Medical Services System Quality Improvement Program Model Guidelines (Rev. 3/04), incorporated herein by reference, and shall be approved by the EMS Authority. This is a model program which will develop over time and is to be tailored to the individual organization's quality improvement needs and is to be based on available resources for the EMS QI program.

(c) The local EMS Agency EMS QI Program shall be reviewed by the EMS Authority at least every five years.

NOTE: Authority cited: Sections 1797.103, 1797.107, 1797.174 and 1797.176 Health and Safety Code. Reference: Sections 1797.94, 1797.174, 1797.202, 1797.204, 1797.220, and 1798 Health and Safety Code.

Article 5. EMS Authority

100405. EMS Authority.

(a) The EMS Authority shall:

(1) Develop and implement, in cooperation with other EMS system participants, a state-wide written EMS QI program, as defined in Section 100400 of this Chapter. Such programs shall include indicators, as defined in Section III and Appendix E of the Emergency Medical Services System Quality Improvement Program Model Guidelines, which address, but are not limited to, the following:

(A) Personnel

(B) Equipment and Supplies

(C) Documentation

(D) Clinical Care and Patient Outcome

(E) Skills Maintenance/Competency

(F) Transportation/Facilities

(G) Public Education and Prevention

(H) Risk Management

(2) Review state-wide EMS QI Program annually for appropriateness to the state and revise as needed.

(3) Develop, in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, collaboration is required with the EMS Authority medical consultant.

(4) Provide the local EMS Agencies with an annual update on the EMS Authority's EMS QI Program. The update shall include, but not be limited to, a summary of how the EMS Authority's EMS QI Program addressed the state indicators.

(b) The EMS Authority EMS QI Program shall be in accordance with the Emergency Medical Services System Quality Improvement Program Model Guidelines (Rev. 3/04), incorporated herein by reference. This is a model program which will develop over time and is to be tailored to the individual organization's quality improvement needs and is to be based on available resources for the EMS QI program.

NOTE: Authority cited: Sections 1797.103, 1797.107, 1797.174 and 1797.176 Health and Safety Code. Reference: Sections 1797.54 and 1797.174 Health and Safety Code.

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 services 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, 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

Witness Signature

Date

Date

Tuberculosis 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.

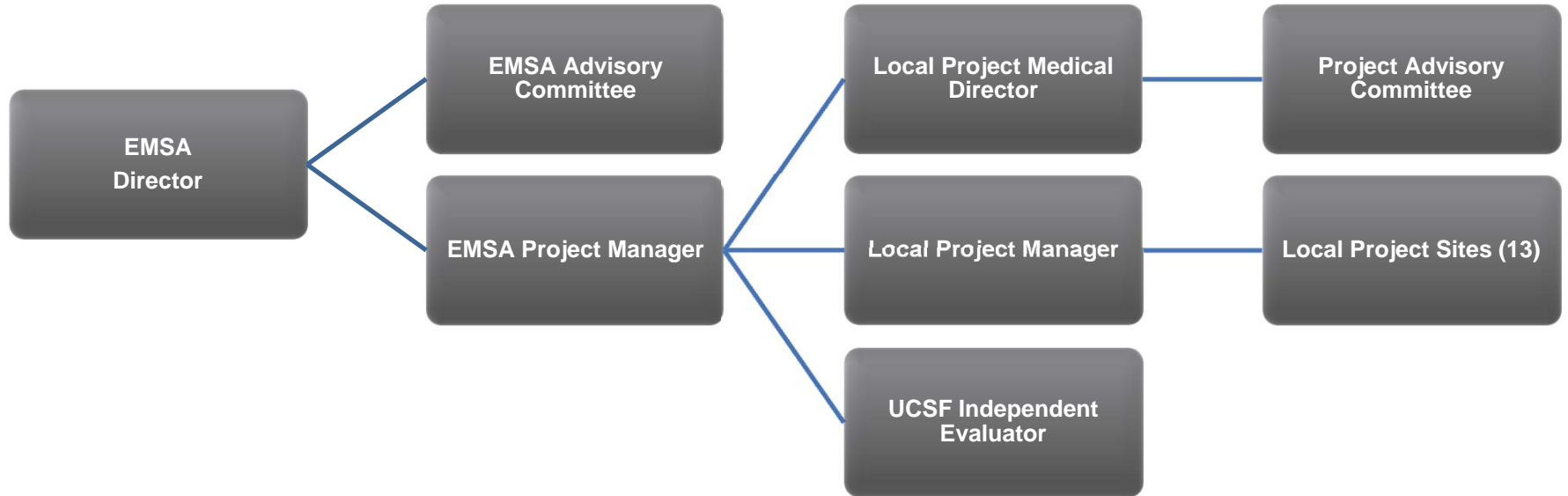
Signature

Witness Signature

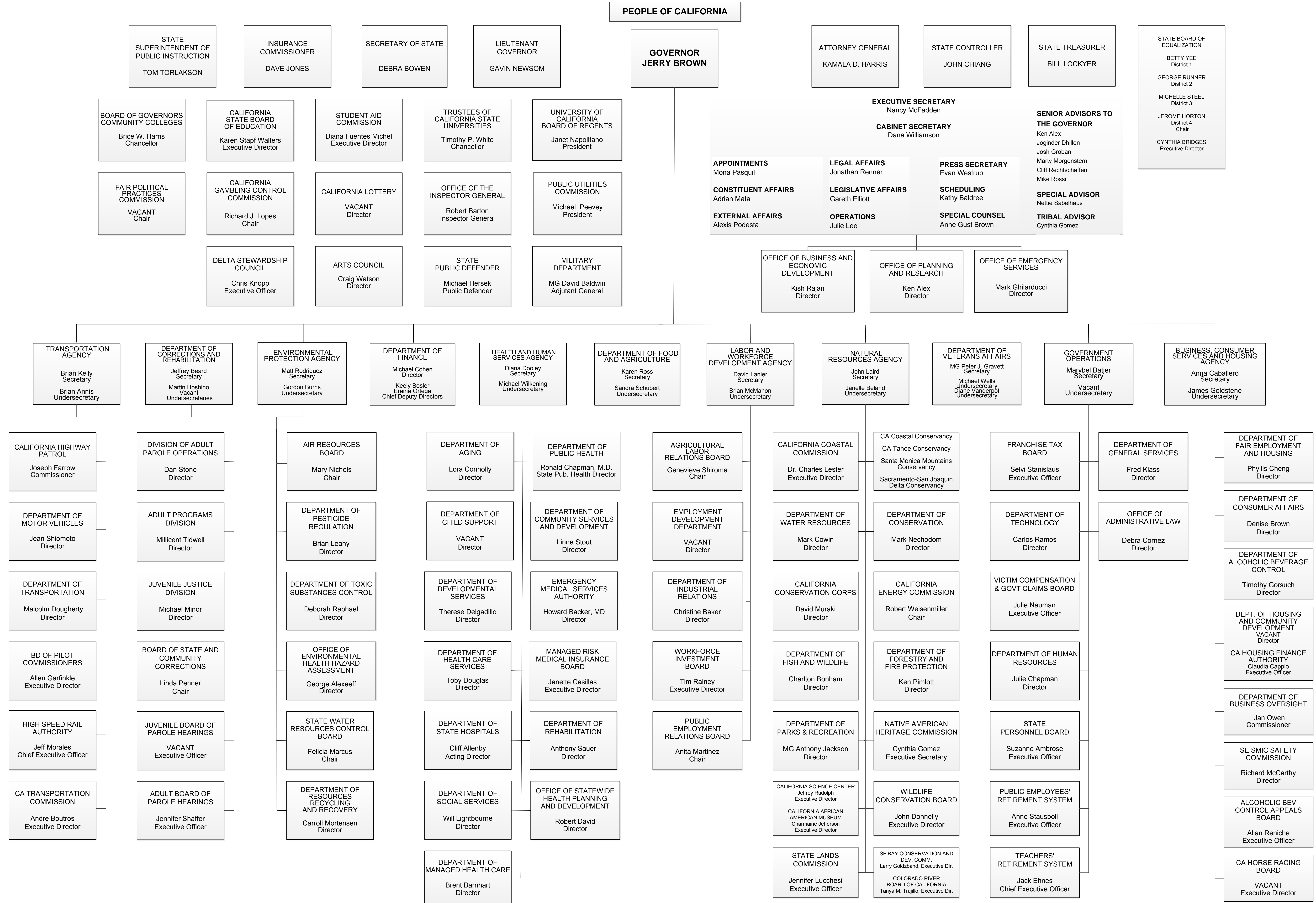
Date

Date

Community Paramedicine Pilot Project Organizational Lines of Authority



CALIFORNIA STATE GOVERNMENT – THE EXECUTIVE BRANCH



Curriculum Vitae

Howard D. Backer, M.D., MPH, FACEP, FAWM

2013

Work

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Personal (Home)

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hdbacker@gmail.com
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Current position

Director, Emergency Medical Services Authority

July 2011-

I was appointed by Governor Brown to lead this state Department, which is part of the Health and Human Services Agency. The EMS Authority provides leadership in developing and implementing EMS systems throughout California and setting standards for the training and scope of practice of various levels of EMS personnel. EMSA serves as the licensing agency for paramedics. EMSA also has responsibility for disaster medical preparedness and coordinating the medical response to major disasters. In addition, I have also maintained responsibility to coordinate preparedness efforts among the member departments of our agency, which includes continued development of Emergency Function 8 (Public Health and Medical). EMSA oversees the development and regulation of specialty care emergency systems, including the trauma system, stroke and STEMI systems, pediatric emergency system of care, and the poison control system.

Prior Positions

Interim Director, California Department of Public Health

California Public Health Officer

March 2011-June 2011

July 2005-November 2005

I was asked to serve twice in this interim position as the State Public Health Officer while a new permanent appointee was recruited and selected. This position served as the Director of the Department of Public Health and prior to formation of a separate Department of Public Health, as the Chief Deputy for Public Health within the California Department of Health Services. Responsibilities included direction and medical supervision of public health program, policy, budget, and legislation in California. I was also the key press spokesperson for public health. The Department of Public Health consists of more than 200 programs, with 3,200 employees and a budget of \$3.5 Billion.

Associate Secretary, Emergency Preparedness

California Health and Human Services Agency (CHHSA)

August 2008-Mar 2011

This was a new position. Responsibilities included:

- Leading development of the annexes for two Emergency Functions--Health and Medical, and Mass Care and Shelter--under the new State Emergency Plan, including the integration of internal and external agencies and organizations;
- Identifying gaps in disaster planning and response for EF 6 and 8, and then coordinating activities among thirteen departments in the Agency to address them, e.g., medical shelters, disaster mental health plan;
- Representing CHHSA on State level committees and groups for emergency preparedness and response issues, and serving as the liaison with the Governor's Office and California Emergency Management Agency (CalEMA);
- Serving as Co-chair for the Health and Medical work group for the Southern California Catastrophic Earthquake plan led by FEMA.

Other Key Projects:

- Defined role for Health and Human Services Agency and Secretary for disaster preparedness and response, including initiation of Policy Council comprised of department directors and cabinet secretaries.
- Served as adviser to HHS Secretary during H1N1 and coordinated high level strategic and policy in California.
- Co-chaired Cabinet Pandemic Influenza Working Group with Chief Deputy of Cal EMA and Governor's Office to develop a concept of operations for pandemic influenza response across all State Agencies and key Departments.
- Initiated planning efforts for medical support of mass shelters and for disaster mental health.
- Co-chaired cross-sector preparedness consortium and summit meeting to integrate government, business, and non-profit/community based sectors.
- Developed health and medical catastrophic event plan in coordination with federal government.

Chief, Immunization Branch, California Department of Public Health

July 2003-August 2008

I was program manager for the California immunization program that has approximately 70 staff, including a network of regional field staff. The program distributes \$350 million of vaccine, provides quality assurance and practice improvement to more than 4,000 public and private provider sites through VFC and 317 vaccine funds. The program is also responsible for surveillance and disease control of vaccine preventable diseases, influenza vaccination, public and provider education, promotion of immunization, provider quality assurance, immunization registry development, and immunization program development for children, adolescents, and adults. In addition, the

Immunization Branch provides legislative and policy analysis for the Department of Public Health.

Lead, Pandemic Planning

CA Department of Health Services (now Public Health)
Jan 2005-2008

Chief Medical Consultant for Emergency Preparedness

CA Department of Health Services
June 2004- 2007

Lead, smallpox planning and vaccination program

California Department of Health Services
Oct 2002--2004

These three special assignments were concurrent with my position in the Immunization Branch, but I reported directly to the Department Director or Public Health Officer. All these areas required coordination of planning with the local health departments. The smallpox vaccination program was for first responders, health care, and public health personnel. It was the first time in 35 years that smallpox vaccine had been offered to these groups, requiring extensive program development, training, education for both vaccinator and recipient, and developing a system for surveillance of adverse events.

As medical consultant for the Health Officer, I accelerated and coordinated development of public health emergency preparedness for California. I was involved in prioritization, grant submission and program development. As the infrastructure was developed, I served as Chief Medical Consultant for Emergency Preparedness.

When pandemic preparedness became a priority, I was charged to lead this activity from within the Immunization Program. This required extensive networking throughout State Government, as well as broad reach into other public and private sectors. We developed the State Pandemic Plan, including policy issues around pandemic response, and worked with the Emergency Preparedness Office on medical surge capacity. I served on several CDC work groups for issues such as vaccine prioritization and antiviral medication policy.

Medical Consultant and Epidemiologist

Immunization Branch, Division of Communicable Disease Control,
California Department of Health Services
Nov 2000-2003

Other activities

Public Health Leadership Institute Scholar
2005-2006

This was a year of leadership training sponsored by CDC and University of North Carolina. It consisted of small group, project-focused work, interspersed with on-site

intensive seminars and distance learning. Another benefit was the exceptional networking opportunities with other national public health leaders.

Founding member and Executive Board of Bay Area Partnership for Preparedness
2005-present

I was co-founder and have been an intermittent leader of this consortium of sector partners, including government, business, community based organizations, education, and others is focused on creating regional resilience to disasters in the greater San Francisco Bay Area.

Chair, Association of Immunization Managers
March 2006-March 2007

AIM represents the immunization managers of each state and territory to the CDC and other interested organizations. The organization provides a forum for immunization managers to exchange ideas and coordinate program and policy. During my years as Chair and Executive Board member, we strengthened our working relationship with CDC and gained considerable recognition as experts in immunization program and policy. Among other activities, I led the formation of a widely quoted policy on school immunization mandates and created the position of research coordinator to facilitate data collection and analysis from the state immunization programs.

Wilderness and Travel Medicine
1985—

Throughout my career, I have been extensively involved in prevention and treatment of medical problems in remote areas, including international travelers. This evolved from work in remote areas, such as Yellowstone National Park, Lake Tahoe, and Vail Colorado. I am one of the founding members of the Wilderness Medical Society and served in multiple leadership roles during the developing years of the Society. In addition, I have long served as the medical consultant for an adventure travel company. My areas of expertise are infectious diseases, especially infectious diarrhea, field water disinfection, medical precautions and contraindications to extreme environments, heat illness, and preparing for international travel. Over the years, much of my writing and lecturing have been in these areas.

Clinical

2000-present
Part-time clinical
Urgent Care, UC Berkeley Student Health Center

Prior Clinical Positions

Feb 1985 – Nov 2000 (Part-time 2000-2010)
The Permanente Medical Group, Kaiser Permanente
Emergency department staff, Hayward, CA

1983 - Sept 1984

Private practice, Truckee-Tahoe Medical Group
General Practice, Medical Orthopedics and Sports Medicine
Truckee, Squaw Valley, and Tahoe City, California

1980 - 1983

Attending staff and Associate Chief, Emergency Department
Highland, Alameda County Hospital, Oakland, California.

Highland and San Francisco General Hospital were public, academic teaching hospitals with residency programs.

July - November 1980

Attending staff, Emergency department
San Francisco General Hospital

Nov 1979-May 1980

Vail Valley Medical Center
Emergency medicine and medical orthopedics

June – Sept 1976-1978

Lake Hospital, Yellowstone National Park
Acute care and hospital medicine in a remote environment

International Work

1980 St Jude's Hospital, St Lucia, West Indies

2008 and 2009 Consultant to Ministry of Emergencies, planning and execution of pandemic exercise, Kiev, Ukraine

2010 Delegation to Chile to analyze response to recent earthquake, apply lessons to California, and exchange program information

Medical Training

Preventive Medicine Resident

University of California, San Francisco 1997-1999

My focus was on clinical prevention and the interface between medical quality and prevention. During my training, I worked with Kaiser Permanente national program, Kaiser Permanente Northern California Regional Offices, the California Department of Health Services Communicable Disease Division, and a national medical consulting company.

Master's Degree in Public Health

University of California, Berkeley 1997-1998

Residency/ Fellowship in Emergency Medicine

San Francisco General Hospital 1977-1988

Rotating Internship

Highland, Alameda County Hospital, Oakland, California 1975-1976

Medical School

University of California, San Francisco, 1971-1975

Pre-medical, B.A. degree

University of Michigan, Ann Arbor, Michigan, 1967-1971

Board Certification

American Board of Preventive Medicine 1999, 2009

(Public Health and General Preventive Medicine)

American Board of Emergency Medicine 1982

Recertification 1992, 2000, 2010

ICS training

100, 200, 300, 400, 700, 800

Security Clearance

Secret level

2013-

Membership

American Public Health Association

Council of State and Territorial Epidemiologists

American College of Preventive Medicine

Fellow, American College Emergency Physicians

International Society of Travel Medicine

Wilderness Medical Society:

Board of Directors, Secretary, and Treasurer 1985-1995

President 1991-1993

Editor, Newsletter 1985-1991

Fellow Academy of Wilderness Medicine

Developed and co-chaired national and international conferences

Publications

Backer HD. The International Traveler's Guide to Avoiding Infections [Book review].
JAMA. 2012; 308(22):2408-9.

Backer HD. Water disinfection for travelers. *and*

Backer HD, Shlim DR. Problems with heat and cold. In: Centers for Disease Control and Prevention. *Health Information for International Travel 2010*. Atlanta: U.S. Department of Health and Human Services, Public Health Service, 2009, 2011, 2012, 2014.

- Backer HD. Medicine for the Outdoors: Essential Guide to First Aid and Medical Emergencies [Book Review]. *JAMA*. 2009;302(15):1705-1706.
- Backer HD, Water Treatment. In, *Expedition and Wilderness Medicine*. Bledoe GH, Manyak MJ, Townes DA, eds. New York: Cambridge University Press, 2009.
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- Cummings KC, Louie J, Probert WS, Killoran PB, Schechter R, Mohle-Boetani JC, Vugia DJ, Backer H, Rosenberg J. Increased detection of meningococcal infections in California using a polymerase chain reaction assay. *Clin Infect Dis*. 2008 Apr 1;46(7):1124-6.
- Backer, H. Field Water Disinfection. In: Jong E, McMullen R, eds, *The Travel and Tropical Medicine Manual*, 4th ed. Philadelphia: Saunders Elsevier, 2008.
3rd Edition, 2003, WB Saunders
Second edition 1995, WB Saunders
- Backer HD. Water Disinfection for International Travelers. In, Keystone JS, Kozarsky PE, Freedman DO, et al., eds. *Travel Medicine*. 3rd Ed. Mosby-Elsevier, 2012.
- Backer HD: Field Water Disinfection. In: Auerbach PA, editor, *Wilderness Medicine: St Louis*, Mosby, 6th ed, 2012
5th edition Mosby, 2007
4th edition Mosby, Chapter 51: 1186-1236, 2001.
3rd edition, Mosby--Year Book, Chapter 43: 1060-1110, 1995.
2nd edition, CV Mosby, Chapter 29: 805-828.
- Adachi JA, Backer HD, DuPont HL: Infectious diarrhea from wilderness and foreign travel. In: Auerbach PA, editor, *Wilderness Medicine*. St. Louis: Mosby, 6th ed, 2012
Adachi JA, Backer HD, DuPont HL 4th edition, 2007
Adachi JA, Backer HD, DuPont HL 4th edition, Chapter 52:1237-1270, 2001
DuPont HL, Backer HD: Mosby--Year Book, 3rd edition, Chapter 42: 1028-1059, 1995.
Backer HD: CV Mosby, 2nd ed, Chapter 28:759-804.
- Tammy Pilisuk, Jeffery Goad, and Howard Backer. Vaccination delivery by chain pharmacies in California: Results of a 2007 survey. *J Am Pharm Assoc*. 2010;50:134–139.
- Louie JK, Schechter R, Honarmand S, Guevara HF, Shoemaker TR, Madrigal NY, Woodfill CJ, Backer HD, Glaser CA. Severe pediatric influenza in California, 2003-2005: implications for immunization recommendations. *Pediatrics*. 2006 Apr;117(4):e610-8.
- Backer H. Counterpoint: in favor of mandatory influenza vaccine for all health care workers. *Clin Infect Dis*. 2006 Apr 15;42(8):1144-7.

- Backer H. Smallpox Vaccination Newsletter. California Department of Public Health. Distributed to all local health departments in California. Weekly, then reduced to monthly *Bioterrorism Update*, 2004-2006.
- Hammer SJ, Backer H, Schechter R. [letter]*Arch Pediatr Adolesc Med*. 2004 Jul;158(7):708
- Backer HD, Decker L, Ackerson L. Reproducibility of increased blood pressure during an emergency department or urgent care visit; *Ann Emerg Med*; 41(4):507-512, 2003.
- Backer H. A different experience as a medical advisor for an adventure travel company. *High Alt Med Biol*. 2003; 4(2):255-6.
- Backer HD. Water Disinfection for International and Wilderness Travelers. *Clin Infect Dis*. 2002; 34(3):355-364.
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- Backer HD, Mohle-Boetani J, et al. High incidence of extraintestinal infections in an outbreak of *Salmonella* Havana associated with alfalfa sprouts. *Public Health Reports* 2000; 115(4):339-345
- Backer HD, Hollowell J: Use of Iodine for water disinfection: Iodine toxicity and maximum recommended dose. *Environ Health Perspect* 2000; 108:679-684.
- Backer HD: Prostate cancer screening: exploring the debate. *The Permanente Journal* 1999;3:30-40.
- Rutherford GW, Backer HD: Medicaid managed care and public health data. *Public Health Reports* 1999;114:225-230.
- Backer HD, Shopes E, Collins SL, Barkan H: Exertional heat illness and hyponatremia in Grand Canyon hikers. *American Journal Emergency Medicine* 1999;17:532-539.
- Backer H, Collins S: Use of a hand-held, battery operated, chemical analyzer in back country of Grand Canyon National Park. *Annals Emerg Med* 1999; 33:418-422.
- Backer H, Wallack L, Winett L. Prostate cancer screening controversies. In: Wallack L, Winett L. Media Advocacy in Cancer Prevention and Control.
- ASPH/CDC Cooperative Agreement #S581-17/17, Berkeley, 1998.
- Backer HD, Bowman WD, Paton BC, Steele P, Thygerson A: Wilderness First Aid: Emergency care for remote locations. National Safety Council and Wilderness Medical Society. Jones and Barlett, Sudbury, 1998.
- Backer HD: Medical limitations to wilderness travel. *Emergency Medicine Clinics N America* 1997;15:17-41.

Backer HD: Water disinfection strategies for Cryptosporidium (Editorial). *Wilderness and Environ Med* 1997; 8:75-77.

Backer HD: Effect of heat on the sterilization of artificially contaminated water. [editorial] *J Travel Med* 1996;3:1-4.. [editorial] *Wilderness and Environmental Medicine* 1997;8:75-77.

Backer, HD: Threatening Situations: Wilderness Medicine. In: Iserson KV, Sanders AB, Mathieu D, eds, *Ethics in Emergency Medicine*. Tucson, AZ, 1995, Galen Press p 421-6.

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Backer H, Shopes E, Collins S. Hyponatremia in recreational hikers in Grand Canyon National Park. *Journal of Wilderness Medicine* 1993;4:391-406.

Fraker LD, Gentile DA, Krivoy D, Condon M, Backer, HD. Giardia cyst inactivation by iodine. *Journal of Wilderness Medicine* 1992; 2:351-357.

Backer H. Field Water Disinfection [Questions and Answers]. *Journal American Medical Association* 1988;259:3185.

Backer H. Heat Disorders. In: Goldsmith R, Heyneman D (eds), *Tropical Medicine and Parasitology*, Chapter 31:632-639, Appleton & Lange, 1989.

Backer H, ed. *Wilderness Medicine Letter*: The official newsletter of the Wilderness Medical Society. Quarterly publication 1987-1991.

Peer Reviewer

Public Health Reports

Journal of Infectious Disease

Clinical Infectious Diseases

American Journal of Preventive Medicine

Journal of Wilderness and Environmental Medicine

Journal of Travel Medicine

Water Research

Lecturing and Educational (full list of presentations available)

More than 500 hours of continuing medical education lectures to physicians and other health professionals, and frequent (20-40/year) presentations on immunization, emergency preparedness, pandemic influenza, bioterrorism, infectious diseases of travelers, and other topics. Current topics are related to Emergency Medical Services.

Sample of invited presentations or abstracts in past 10 years (Does not include Wilderness and Travel Medicine)

Legal, ethical, and programmatic issues from smallpox vaccination: Implications for public health programs. American Public Health Association Annual Meeting, 2003, San Francisco, CA

California VFC Quality Assurance Data: Using VFC data to evaluate private provider practices. National Immunization Conference, 2004

California Experience with Smallpox Vaccination Program. American Public Health Association Annual Meeting, 2003, San Francisco, CA

Pro: Mandatory Influenza Vaccination for Health Care Workers. Debates on Controversial Topics IDSA Annual Meeting, 2005, San Francisco, CA

California Thimerosal in Vaccines Law: Who shapes vaccine policy? National Immunization Conference, 2005

Science behind Immunization Recommendations. Travel Medicine Conference, 2005, Berkeley, CA

Accelerated Vaccination Regimens for Travelers. Travel Medicine Conference, 2006, Walnut Creek, CA

Cold chain policy and practice. National Immunization Conference, Atlanta GA, 2006

HPV Vaccine Implementation: State Program Perspective. National Immunization Conference, 2007, Kansas City.

Parental Refusal of Immunoprophylaxis for Infants of Hepatitis B Virus Infected Mothers. National Immunization Conference 2007

Issues in immunization funding, State-level issues. AMA-AAP joint meeting on vaccine funding, 2007, Chicago, IL.

Implementation of School Mandates. National Vaccine Advisory Council, 2007

Lessons from H1N1. California Fire, EMS, and Disaster Conference, 2010.

Catastrophic Earthquake Plan for Southern California. California Department of Public Health Disaster Conference, 2010

Lessons for California from the Chilean Earthquake. California Hospital Association Disaster Conference, 2010.

Public Health and Medical Integration, EF 8, California Hospital Association Disaster Conference, 2011

Crisis Standard of Care, California Hospital Association Disaster Conference, 2012

California EMS System Current Initiatives, EMS Administrators Association, 2012

California EMS, Current Directions, CFED West, 2012

Mutual Aid and the Organization of Health and Medical Disaster Services in California, International EMS/Disaster Conference, Kuwait, 2013

Trauma systems: vision for the future. Trauma and resuscitation conference, UC San Diego, 2013

Community Paramedicine, Opportunities and Challenges, CFED West, 2013

Crisis Standard of Care, Department of Homeland Security/UASI Conference, 2013

Health and Medical Coordination and the State level, Department of Homeland Security/UASI Conference, 2013

Medical and Health coordination in California for disaster preparedness and response, and Vision for the Future, California Public Health Preparedness Conference, 2013

Policy, Politics, Science and how it impacts EMS practice, regional EMS conference, Ventura and Marin counties, 2013

Conference Chair or Co-Chair

1993 World Congress of Wilderness Medicine, Wilderness Medical Society

1995, 2003 Travel and Wilderness Medicine, Wilderness Medical Society and American Society of Tropical Medicine and Hygiene

1997 Travel and Wilderness Medicine, Wilderness Medical Society and International Society of Travel Medicine

2000, 2002, 2004, 2006, 2008, 2009, 2010, 2011 Travel Medicine, Kaiser Permanente and California Department of Public Health

Cross Sector Collaboration for Resiliency 2008, 2009, 2010 Bay Area Cross-Sector Partners in Preparedness and American Red Cross, Bay Chapter

Video broadcast presentations

I participated in the development, production, and presentation of these educational seminars. These were produced by the California Immunization Branch with the California Distance Learning Health Network at San Diego State University.

Smallpox Preparedness and Response 2004

Disease Investigation Training 2005

Pandemic Influenza Response 2006

Mass Vaccination 2007

LOUIS MEYER

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Stockton, CA 95029

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EXPIERENCED EMERGENCY MEDICAL SERVICES EXECUTIVE

PROFILE

Award-winning and decisive leadership experience as an accomplished operational executive, team builder and process advocate in start-up operations, new business development, regulatory compliance and new product roll-out. Critical support to community representatives, key decision-makers and thought leaders to set up infrastructures, create consensus, execute large-scale projects and deliver enterprise solutions.

- Proficient in smooth merger & acquisition transitions, due diligence and corporate integrations in both domestic and international market spaces.
- Solid expertise in cost reductions, funding acquisition, document creation, internal controls, and team relations;
- Confident negotiation and execution of complex contracts and agreements with top management, government entities and industry executives.
- Self-motivated to achieve peak performance, drive organizational growth, ensure full regulatory compliance and meet corporate objectives.
- Multi-tasking talents in consensus building, due diligence, business communications, organization, project management and attention to detail in time-sensitive situations.
- Extensive interaction with multiple governmental agencies at local, state & federal levels involving national emergency response strategies, resource allocation, committee participation and legal counsel/testimony.
- Extensive exposure to cross-cultural practices and international business protocols through frequent travel and site inspections; solid knowledge of regulatory requirements and quality standards.

AREAS OF EXPERTISE

Start-Up Operations • Strategic Planning • Profit Building • Client Relationship Building • Performance Metrics • Change Management • Team Leadership • Competitive Analysis Regulatory Compliance • Multi-Project Management • P&L/Budgeting • Expense Controls • Process Improvements • Staff Productivity • Operational Streamlining • Large-Scale Operations • Cost/Benefit Analysis • Training & Development • Emergency Response • Disaster Recovery • Solution Delivery • Mergers & Acquisition Due Diligence • Entrepreneur

EMPLOYMENT & ACCOMPLISHMENTS

Emergency Medical Service Corporation Inc., Denver, CO

1992 – 2011

Senior Vice President, 2008-2011

In charge of a variety of executive tasks, including strategic planning, service delivery, new product roll-out and corporate communications, for the nation's largest provider of emergency ambulance and emergency physician services. Key participant in all aspects of budgeting and financial operations, while instituting internal controls, reporting policies and business processes. Reviewed and analyzed public policy, laws and relevant legislation to maximize and support interests of special groups and general population.

- Received the "Distinguished Service Medal" in 2011 from the State of California EMS Authority, an "EMS Leadership Award" in 2011 from the Emergency Medical Services Administrators Association and a "Commendation" in 2011 from the San Joaquin County Board of Supervisors.
- Earned a "California Senate Resolution" in 2011 from Tony Strickland of the 19th Senatorial District and an "Assembly Resolution" in 2011 from the Speaker of the Assembly of the California Legislature.
- Appointed to serve as a Commissioner of the California Emergency Medical Services Commission for over 17 years; Chairman from 1995-1996 and 2005-2007.
- Recognized for establishing and maintaining consistent accountability, while instituting a productive atmosphere and cooperative spirit between national, regional and local organizations.
- Played a key role in designing and updating California's Emergency Medical Services system; continually improved operating regulations, standards and guidelines.
- Selected to represent this organization at industry conferences, community meetings and governing boards.

- Concurrently served as **Operations Section Chief** for NATCOM as part of the corporate Office of Emergency Preparedness; deployed disaster response personnel, vehicles and equipment to meet FEMA agreement targets during natural disasters (Hurricanes Ike, Gustav & Hanna) and Presidential Inauguration.
- Greatly assisted in turning around underperforming units throughout the US and achieving profitability.

Regional CEO, 1996-2008

Transitioned company after the acquisition and integration of AMR into EMSC. Held full accountability for an \$800 million organization, representing over 10,000 employees and all operations in 16 states west of the Mississippi River. Direct budgeting, financial functions, internal controls and overhead reduction. Established and maintained operating functions across departments and sites.

- Headed up HR initiatives, budget execution, executive recruiting, policy changes and turnaround strategies.
- Conducted investigations and hearings to resolve complaints and legal violations; also handled testimonies on an as-needed basis.
- Coordinated the design and introduction of budgetary control systems, recordkeeping systems and other administrative processes.
- Authored and delivered speeches and articles at meetings and conventions that promoted services and exchanged ideas.

Regional CEO, 1992-1996

Managed all business operations for the AMR West territory, representing over 7,000 employees in 4 US Western states. with American Medical Response Inc., based in Denver, CO. Appointed and directed department heads, managers and qualified professionals. Prepared and delivered detailed reports on budgets, expenses, activities and other items. Closely liaised between shareholders and external organizations.

- Reviewed and analyzed legislation, laws and public policy to recommend changes and support interests of both special groups and general population.
- Personally negotiated and approved contracts and agreements with suppliers, distributors, state/federal agencies and other entities.
- Introduced corrective action plans after identifying and resolving complex problems and issues.
- Frequently presided over or served on Boards of Directors, Management Committees and other groups.

PREVIOUS EXPERIENCE

- Held operational accountability of increasing levels of impact and influence as **CEO** during company growth at Life Medical Industries in Stockton, CA; sold this company at a profit to AMR in 1992.
- Successfully acquired and distributed organizational funding, maximized ROI, optimized productivity and continually enhanced operating efficiencies.
- Gained hands-on expertise in multi-departmental operations, budgeting, program implementation, resource allocation, policy development and cost controls.

EDUCATION

Delta Community College, Stockton, CA

Certificate – Mobile Intensive Care Paramedic

- Courses in Healthcare Administration and Pre-Hospital Care Medicine.

ACTIVITIES & AFFILIATIONS

- * Board of Trustees at O'Connor Woods Housing Corporation*Board of Directors – Hospice of San Joaquin, 2011-Present.
- * Former Board Member – American Ambulance Association.
- * Former President – California Ambulance Association.
- * Former Member – California Emergency Medical Services Commission.

DANIEL R. SMILEY

Chief Deputy Director,
California Emergency Medical Services Authority
10901 Gold Center Drive • Rancho Cordova, CA 95670 • (916) 322-4336
dan.smiley@emsa.ca.gov

EXPERIENCE

STATE OF CALIFORNIA, EMERGENCY MEDICAL SERVICES AUTHORITY SACRAMENTO, CA

Chief Deputy Director, March 1989-Present

**Interim Director, December 1989-March 1993*

**Acting Director, January 1997-March 1997*

**Interim Director, December 2007-June 2008*

**Acting Director, October 2010-July 2011*

Responsible for program, administration and policy issues of the State Emergency Medical Services Authority, one of the thirteen departments in the Health and Human Services Agency. Specific oversight of the EMS Division, EMS Personnel Division (including Paramedic Licensing and Enforcement Unit), Disaster Medical Response Division, plus Administration, Fiscal, and Information Services Division. The EMS Authority currently has budget of \$27 million and 85 employees (FY13/14).

COUNTY OF FRESNO, DEPARTMENT OF HEALTH, EMERGENCY MEDICAL SERVICES FRESNO, CA

Chief, EMS Division, November 1983-March 1989

EMS/Paramedic Instructor, March 1981-November 1983

Responsible for administration and policy issues of the County EMS system as Chief. Developed and operated county-wide dispatch center. Also, procured and monitored County ambulance contract. As an EMS instructor, taught EMT, paramedic, dispatcher, and mobile intensive care nurse primary training courses and continuing education. EMS Division had a budget of \$2 million and 17 employees.

CALIFORNIA STATE UNIVERSITY, FRESNO

FRESNO, CA

Lecturer (25%) January 1988-May 1989

Instructed in Health Science Department. Taught Emergency Care/First Aid, Safety Courses. One lecture section and two lab sections per semester.

STATE CENTER COMMUNITY COLLEGE DISTRICT, REEDLEY COLLEGE

FRESNO, CA

Instructor (PT), January 1983-May 1984

Instructed Emergency Medical Technician-I (Ambulance) courses. Taught one section per semester.

RIGGS AMBULANCE

MERCED, CA

Paramedic-Training Officer/Deputy Coroner, September 1979-March 1981(PT/FT)

EMT-II/Deputy Coroner, July 1976-September 1979 (FT)

EMT-I (Ambulance)/Deputy Coroner, January 1975-July 1976 (FT)

Responded to requests for medical aid from victims of illness or injury. Provided basic and advanced life support care. Transported victims to definitive medical care. Served as Deputy Coroner when transport of deceased victims was unnecessary.

COUNTY OF MERCED, SHERIFF'S DEPARTMENT

MERCED, CA

Reserve Deputy Sheriff, January 1978-January 1981

Responded to requests for law enforcement assistance (patrol division). Also worked with detectives (SMACC) and on special assignments.

JONES AMBULANCE/NORTH CENTRAL FIRE PROTECTION DISTRICT

FRESNO, CA

Paramedic, September 1979-November 1980 (FT), April 1981-July 1985 (PT)

EMT-I (Ambulance), July 1978-November 1978 (PT)

Responded to requests for medical aid from victims of illness or injury. Provided basic and advanced life support care. Transported victims to definitive medical care. Contract with North Central Fire Protection District for fire service responses.

EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA

SACRAMENTO PUBLIC AFFAIRS CENTER-LOS ANGELES, CA

Doctor of Public Administration (ABD), Public Administration major with a concentration in Health and Public Policy, 1988-2000.

UNIVERSITY OF SAN FRANCISCO

SAN FRANCISCO, CA

Master of Public Administration, Public Administration major with a concentration in Health Services Administration, 1987.

CALIFORNIA STATE UNIVERSITY, FRESNO

FRESNO, CA

Bachelor of Science, Health Science Major with a concentration in School and Community Health, 1983.

MERCED COLLEGE

MERCED, CA

Associate of Science, 1981.

SAN JOAQUIN DELTA COLLEGE

STOCKTON, CA

Mobile Intensive Care Paramedic Certificate, 1979.

SKILLS AND CREDENTIALS

California Paramedic (EMT-P), License # P00001, Expires 2/29/2012.

California Community Colleges Teaching Credential; Health and Physical Care Sciences and Related Technologies, Lifetime Credential (Issued 1982).

Martial Arts Certifications, Multiple; Shotokan Karate, TaeKwonDo, JuJitsu, Judo,

Aikido. 30+ years experience, since 1980. Instructor at American River College (1995-2005).

ADDITIONAL INTERNATIONAL ACTIVITIES

ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS (OPCW)

THE HAGUE, NETHERLANDS

FACULTY, MEDICAL RESPONSE TO CHEMICAL INCIDENTS COURSES

Ongoing Instruction and Facilitation for multi-national participants.

Kiev, Ukraine, 2012-2013.

WORLD HEALTH ORGANIZATION (WHO)

GENEVA, SWITZERLAND

ADVISOR, MASS GATHERINGS ADVISORY GROUP

Operational Support for Medical Care and Surveillance for EuroCup 2012.

Ukraine, 2012.

AGA KHAN DEVELOPMENT NETWORK (EMSA PARTNERSHIP)

FACULTY, MEDICAL MASS CASUALTY TRAINING COURSE

Course Facilitator for medical leaders of AKDN participants from Pakistan, Afghanistan, Tajikistan, India, Kenya, and Tanzania.

Pakistan, 2012.

CALIFORNIA NATIONAL GUARD (EMSA PARTNERSHIP)

SACRAMENTO, CA

CHIEF MEDICAL PLANNER, ROUGH AND READY INTERNATIONAL EXERCISE SERIES

Planned and executed multiple international exercises as part of the California-Ukraine State Partnership Program focusing upon disaster response for medical and public health emergencies for participants from Ukraine, Georgia, Moldova, and Azerbaijan.

Ukraine, 1999-2009.

TAIWAN MINISTRY OF HEALTH

TAIPEI, TAIWAN

FACULTY, MEDICAL RESPONSE TRAINING COURSES

Course Instructor for multiple courses related to disaster medical response and EMS development following Chi Chi 921 Earthquake in 1999.

Taiwan, 2000-2006.

GOVERNOR'S OFFICE OF EMERGENCY SERVICES (EMSA PARTNERSHIP)

SACRAMENTO, CA

TEAM MEMBER

Team member for evaluation and training of medical and rescue disaster response personnel in Gujarat, India following the Gujarat Earthquake in 2001.

India, 2001.

NAME Coffman, Janet		POSITION TITLE Associate Adjunct Professor	
eRA COMMONS USER NAME (credential, e.g., agency login) JANETMC			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Haverford College, Haverford, PA	B.A.	05/88	High Honors, History
Binghamton University, NY	M.A.	12/89	United States History
University of California, Berkeley	M.P.P.	05/95	Public Policy
University of California, Berkeley	Ph.D.	12/05	Health Services & Policy Analysis

A. Personal Statement

The proposed project will involve designing and conducting an evaluation of a community paramedicine pilot project in collaboration with the California Emergency Services Authority (EMSA) and up to 12 local EMSAs. This project provides a unique opportunity to assess innovative models for deploying emergency medical personnel to improve efficiency and quality of care. I would bring to this project over 20 years experience with health workforce research and policy analysis. I have co-authored multiple publications on emerging health professions and new roles for health professionals. Publications that are especially relevant to this proposal include a systematic review of studies of the impact of hospitalists on the cost and quality of hospital care and a concept paper on the feasibility of developing an enhanced role for In-Home Supportive Services workers in care coordination for their clients.

B. Positions and Honors

Positions and Employment

1990-1993	Legislative Aide, Committee on Veterans Affairs, United States Senate
1995-1996	Research Associate, Center for the Health Professions, University of California, San Francisco
1997-2001	Associate Director for Workforce Policy, Center for the Health Professions, University of California, San Francisco
2001-2005	Graduate Student Researchers, Division of Health Policy and Management, University of California, Berkeley
2005-2008	Senior Research Analyst, Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco
2008-2012	Assistant Adjunct Professor, Philip R. Lee Institute for Health Policy Studies & Department of Family and Community Medicine, University of California, San Francisco
2012-present	Associate Adjunct Professor, Philip R. Lee Institute for Health Policy Studies & Department of Family and Community Medicine, University of California, San Francisco
2013-present	Faculty Associate, Center for the Health Professions, University of California, San Francisco

C. Selected Publications

Peer-Reviewed Publications (selected from 23 publications)

1. Grumbach K, Coffman J, Vranizan K, Blick N, O'Neil E. (1998) Independent Practice Association Physician Groups in California. *Health Affairs*, 17(3): 227-237.
2. Coffman JM, Rosenoff E, Grumbach K. (2001) Racial/Ethnic Disparities in Nursing. *Health Affairs*, 20(3): 263-272.
3. Seago JA, Ash M, Spetz J, Coffman J, Grumbach K (2001). Hospital Registered Nurse Shortages: Environmental, Patient, and Institutional Predictors. *Health Services Research*. 36(5):831-852.
4. Coffman JM, Seago, JA, Spetz J. (2002) Minimum Nurse-to-Patient Ratios in Acute Care Hospitals in California. *Health Affairs*, 21(5): 53-64.

4. Grumbach K, Hart LG, Mertz E, Coffman J, Palazzo L (2003). Who is Caring for the Underserved? A Comparison of Primary Care Physicians and Non-physician Clinicians in California and Washington. *Annals of Family Medicine*. 1(1):97-104.
5. Coffman J, Rundall TG. (2005) The Impact of Hospitalists on the Cost and Quality of Inpatient Care in the United States: A Research Synthesis. *Medical Care Research and Review*. 62(4): 379-406.
6. Brown TT, Coffman JM, Quinn BC, Scheffler RM, Schwalm DD. (2006) Do Physicians Always Flee From HMOs? New Results Using Dynamic Panel Estimation Methods. *Health Services Research*, 41(2): 357-73.
6. Coffman JM, Cabana MD, Halpin HA, Yelin EH (2008). Effects of Asthma Education on Children's Use of Acute Care Services: A Meta-Analysis. *Pediatrics*. 121(3):575-586. PMID: 18310208.
7. Coffman JM, Cabana MD, Yelin EH (2009). Do School-based Asthma Education Programs Improve Self-Management and Health Outcomes? *Pediatrics*. 124(2):729-742. PMID: 19651589.
8. Coffman JM, Hong MK, Aubry WM, Luft HS, Yelin EH. (2009) Translating Medical Effectiveness Research into Policy: Lessons from the California Health Benefits Review Program. *The Milbank Quarterly*, 87(4):863-902. PMID: PMC2888024.
9. Meng YY, Coffman JM, Ripps J, Lee C, Kominski G (2011). Estimated Impact of California's New Law to Increase HIV Screening by Mandating Insurance Coverage. *AIDS Care*. 23(2):206-12.

Non-Peer-Reviewed Publications (selected from 69 publications)

1. Coffman J, Young J, Vranizan K, Blick N, Grumbach K (1997). *California Needs Better Medicine: Physician Supply and Medical Education in California*. San Francisco: UCSF Center for the Health Professions.
2. Grumbach K, Coffman J, Liu R, Mertz E (1999). *Strategies for Increasing Physician Supply in Medically Underserved Communities in California*. Berkeley, CA: California Policy Research Center.
3. Coffman J, Spetz J, Seago J, Rosenoff E, O'Neil E (2001). *Nursing in California: A Workforce Crisis*. San Francisco, CA: UCSF Center for the Health Professions.
4. Grumbach K, Coffman J, Muñoz C, Rosenoff E, Gándara P, Sepulveda E. (2002). *Strategies for Improving the Diversity of the Health Professions*. San Francisco: UCSF Center for California Health Workforce Studies. Report prepared for the US Bureau of Health Professions.
5. Coffman J, Quinn B, Brown T, Scheffler R (2004). *Is There A Doctor in the House? An Examination of the Physician Workforce in California over the Past 25 Years*. Berkeley, CA: UC-Berkeley Petris Center on Health Care Markets and Consumer Welfare.
6. Coffman JM (2009). *Reforming the Private Health Insurance Market: Lessons from California for National Health Reform*. Berkeley, CA: University of California, Berkeley Center on Health, Economic, and Family Security.
7. Coffman JM, Ojeda G (2010). *The Impact of National Health Care Reform on California's Health Workforce*. Berkeley, CA: California Program on Access to Care.
8. Coffman JM, Grumbach K, Fix M, Traister L, Bindman A (2012). *On the Road to Meaningful Use of Electronic Health Records: A Survey of California Physicians*. Oakland, CA: California HealthCare Foundation.
9. Coffman JM, Chapman S (2012). *Envisioning Enhanced Roles for In-Home Supportive Services Workers in Care Coordination for Consumers with Chronic Conditions: A Concept Paper*. Berkeley, CA: University of California, Berkeley Center for Labor Research and Education.
10. Coffman JM, Fix M (2013). *Improving Health Data Access: State Policymakers Weigh In*. Oakland, CA: California HealthCare Foundation.

D. Research Support

Ongoing Research Support

Spetz (PI) 09/01/2013 - 08/31/2017
 Health Services and Resource Administration, Bureau of Health Professions
 UCSF Health Workforce Research Center
 This cooperative agreement provides funding for research regarding the long-term care workforce.
 Role:Co-Investigator

#M-447657-18093 Yelin (PI) 01/01/2007 - 06/30/2015
University of California Office of the President
California Health Benefits Review Program.
This program provides members of the California State Legislature and their staff with independent analyses of legislation that would establish or repeal health insurance benefit mandates.
Role:Co-Investigator

#17545 Bindman (PI) 02/20/2013 - 08/31/2014
California HealthCare Foundation
Validation Study of Access to Primary Care Physicians for Medi-Cal Enrollees
Role:Co-Investigator
The purpose of this project is to conduct a telephone survey of physician practices to validate physician responses to questions on a mail survey that address Medicaid participation.

#17543 Bindman (PI) 02/15/2013 - 05/14/2014
California HealthCare Foundation
Physician Participation in Medi-Cal 2013
This project will produce a report on findings from a mail survey regarding California physicians' participation in Medicaid in 2013 and compare findings from similar surveys conducted in 2008 and 2011.
Role:Co-Investigator

#07-65682-A03 and #16048 Coffman (PI) 09/01/2010 - 03/31/2014
California Department of Health Care Services and the California HealthCare Foundation
California Physicians' Use of Electronic Health Records
This project will conduct a survey to estimate the percentage of California physicians who use electronic health records and characteristics of physicians and their practices associated with electronic health record use.
Role:Principal Investigator

#17856 Bindman (PI) 09/01/2013 - 02/28/2014
California HealthCare Foundation
Planning Grant for Study on Access to Specialty Care for Medi-Cal Beneficiaries
Role:Co-Investigator
The purpose of this planning grant is to develop a study on Medi-Cal recipients' access to specialty care..

Selected Completed Research Support

no grant number Coffman (PI) 06/01/2012 – 11/30/12
California Office of Statewide Health Planning and Development
Technical Assistance to Support Implementation of the Healthcare Workforce Clearinghouse
The purpose of this contract was to assist the California Office of Statewide Health Planning and Development in developing and enhancing its online Healthcare Workforce Clearinghouse.
Role:Principal Investigator

#16720 Coffman (PI) 01/01/2012 - 08/31/2012
California HealthCare Foundation
Assessment of California Policymakers' Needs for Health Care Data
The goals of this project were to assess California policymakers' needs for data on health and health care.
Role: Principal Investigator

#16535 Coffman (PI) 10/01/2011 - 12/31/2012
California HealthCare Foundation
Improving Access to Large, Public Datasets in California: Sustaining and Enhancing the Comparative Effectiveness Large Dataset Analysis Core
The purpose of this project was to sustain and expand efforts to expand resources for researchers interested in using large, public datasets to conduct research on health and health care topics.
Role: Principal Investigator

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Chapman, Susan A.	POSITION TITLE Associate Professor, Senior Research Faculty		
eRA COMMONS USER NAME (credential, e.g., agency login): SUSANCHAP			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
University of Iowa	B.S.	06/72	Nursing
Boston College	M.S.	08/78	Psychiatric Nursing
Boston University	M.P.H.	01/80	Public Health
University of California, Berkeley	Ph.D.	06/00	Health Services & Policy Analysis

A. Personal Statement

At the UCSF Center for Health Professions I have conducted research on the health care workforce for over 14 years. I have been Principal Investigator and Co-Investigator on over 26 grants and contracts with a focus on supply and demand, evaluation of workforce development, and workforce roles in new models of practice. My clinical nursing background, along with training in health policy analysis, has allowed me to examine broad policy issues with the credibility of someone who has been on the front lines and understands health care delivery. I have focused on the allied health professions including EMTs and Paramedics, Cancer Registrars, Medical Assistants, NPs, RNs, and LPNs, home care aides and many other single professions. Much of my research is across professions on issues such as regional supply and demand, diversity, team care and new and expanded roles for workers. I served on an IOM committee focused on workforce needs to care for an aging population and Chaired an IOM workshop on the allied health workforce. I have worked on the EMS workforce for the past decade including a NHTSA Division of EMS study on the EMS workforce, a NHTSA project on data definitions and common reporting across states, and a 7-year collaboration with the National Registry of EMT and other researchers on a longitudinal study of EMTs and Paramedics.

B. Positions and Honors

Positions and Employment

1972-1974	Charge Nurse, Inpatient Psychiatry, Massachusetts General Hospital, Boston, MA
1977-1980	Manager, Inpatient Mental Health, Union Hospital, Lynn, MA
1980-1983	Senior Research Associate, UCSF Institute for Health Policy Studies
1983-1985	Pew Fellowship in Health Policy Management, UCSF Medical Center
1985-1990	Manager, Hospital Contracting, Physician Group Administrator, Manager, Marketing and Planning, Mount Zion Hospital and Medical Center, San Francisco, CA
1990-1995	Director of Health Services, Case Management, and Quality Management, CIGNA HealthCare of Northern California, Oakland, CA
1995-1996	Director of Health Promotion and Continuous Quality Improvement, CIGNA HealthCare of Northern California, Oakland, CA
1996-1997	Graduate Research Associate, UC Berkeley Center for Health and Public Policy Studies
1996-1998	Independent Consultant, Managed Care Research
1998-1999	Consultant, Health Plan Performance Assessment, Kaiser Permanente, Oakland CA
1999-2008	Director of Allied Health Workforce Studies, UCSF Center for Health Professions
2008-present	Senior Research Faculty, UCSF Center for Health Professions
2002-2008	Assistant Adjunct Professor, UCSF School of Nursing, Department of Social and Behavioral Sciences

2008-present Associate Professor, UCSF School of Nursing, Department of Social and Behavioral Sciences
2008-present Director of Masters Program in Health Policy Nursing, UCSF School of Nursing, Department of Social and Behavioral Sciences

Other Experience and Professional Memberships (partial list)

2006-present National Registry of Emergency Medical Technicians, Columbus, OH, LEADS Research, Project Advisory Committee
2007-present California Hospital Association, Advisory Committee for Allied Health
2010-2011 Institute of Medicine, Chair, Workshop on Allied Health Workforce and Services

C. Relevant Peer-Reviewed Publications (Selected from 34 peer-reviewed publications)

Most relevant to the current application

1. Blau G, Chapman S, Boyer E, Flanagan R, Lam T, and Monos C. (2012) Correlates of Safety Outcomes During Patient Ambulance Transport A Partial Test of the Haddon Matrix Journal of Allied Health, 41(3): e69-72.
2. Blau G and Chapman S. (Summer 2011) Retrospectively Exploring the Importance of Items in the Decision to Leave the Emergency Medical Services (EMS) Profession and Their Relationships to Life Satisfaction After Leaving EMS and Likelihood of Returning to EMS, Journal of Allied Health, Vol 40(2) 329-32.
3. Blau G, Chapman S, Gibson G, and Bentley M. (Fall 2011) Exploring The Importance of Different Items As Reasons For Leaving Emergency Medical Services Between Fully Compensated, Partially Compensated, and Non -Compensated/Volunteer Samples, Journal of Allied Health, Vol 40(3) e33-e37.
4. Chapman S. (In Press) Recruitment and Retention of EMTs and Paramedics New to the Field, 10 Year LEADS Report, Academic Emergency Medicine.
5. Chapman SA, Wides C, and Spetz J. (2010) Payment Regulations for Advanced Practice Nursing: Implications for Primary Care, Policy, Politics, and Nursing Practice, 11(2): 89-98.
6. Blau G, Chapman SA, Pred R. (2009) Can a four-dimensional model of occupational commitment help to explain intent to leave the Emergency Medical Service occupation? Journal of Allied Health, Vol 38(3) 177-186.
7. Chapman SA, Blau G, Pred R, and Lopez A. (2009) Correlates of intent to leave job and profession for Emergency Medical Technicians and Paramedics, Career Development International, Vol 14(5) 487-503.
8. Seago JA, Spetz J, Chapman S, and Dyer W. (2006) Can the Use of LPNs Alleviate the Nursing Shortage? American Journal of Nursing, 106(7): 40-49.

Selected government reviewed publications and reports relevant to current application

1. Levine, R. & Chapman, S. (2013). National EMS Workforce Data Definitions. Washington, D.C.: U.S. Department of Transportation, National Highway Traffic Safety Administration, No. DTNH22-080F-00122, <http://www.nhtsa.gov/staticfiles/nti/pdf/811720.pdf>
2. Levine, R, and Chapman, S. (2012) Research and Literature Review for Emergency Medical Services (EMS) Workforce Data Collection, Planning, and Development Guidelines. May 10, 2012
3. Coffman J and Chapman S. (September 2012). Envisioning Enhanced Roles for In-Home Supportive Services Workers, A joint report from the Philip R. Lee Institute for Health Policy Studies and the Center for Personal Assistance Services, UCSF, and the Center for Labor Research and Education, UC Berkeley.
4. Chapman S and Christian S. (July 2009). Career Opportunities for California s Pipeline of Secondary Students: An Opportunity to Address the State's Workforce Shortages. Issue brief for the Health Workforce Tracking Collaborative, UCSF Center for the Health Professions.
5. Institute of Medicine, Retooling for an Aging American: Building the Health Care Workforce, April 11, 2008. Chapman, S and 14 co-authors, The National Academies. (Peer Reviewed Policy Report)
6. Chapman SA, Lindler V, Kaiser J, et al. (June 2008) EMS Workforce for the 21st Century: A National Assessment. Submitted to the U.S. Department of Transportation, National Highway Traffic Safety Administration, Office of Emergency Medical Services.

7. PE, Kocher N, Chapman S. (2004) Emergency Medical Technicians and Paramedics in California. Allied health professions in California- Issue Brief Series on the Allied Health Workforce in California. San Francisco, CA: UCSF Center for the Health

D. Research Support

Ongoing Research Support

Robert Wood Johnson Foundation Chapman (PI) 9/1/13-8/31/15
 Advanced Psychiatric Mental Health Nursing in Public Mental Health Settings
 This project funding is directed toward conducting case studies to assess how advanced psych NPs are utilized in public mental health settings and making recommendation to enhance their role
 Role: PI

U.S. Bureau of Health Professions (Spetz PI) 09/01/2013 - 08/31/2017
 Health Resources and Services Administration
 UCSF Health Workforce Research Center- Long Term Care
 This is a national cooperative agree to produce short research projects and policy briefs to address long term care workforce issues in the U.S.
 Role: Co-Investigator and Deputy Director

California Long Term Care Education Center Chapman(PI) 7/1/12-6/30/2015
 Center for Medicare and Medicaid Innovation-Primary funder
 Evaluation of Care Team Integration of the Home Based Workforce
 This goal of this project is to evaluate an intervention in which home care workers for high risk IHSS recipients are provided training and integrated into health care teams in 3 county Medi-Cal managed health care plans.
 Role: PI

California Community College Chancellors Office Chapman(PI) 9/30/10-3/31/14
 HRSA Division of Nursing-Primary Funder
 HRSA Division of Nursing-Personal Home Care Aide Training and Certification (PHCAST)
 This is a mixed methods evaluation of a three-year state demonstration grant to develop and provide standardized, competency based training for personal care (home care) aides.
 Role: PI

Selected Completed Research Support- (PI, Co-PI, or Co-Investigator)

U.S. DOT, National Highway Traffic Safety Administration (NHTSA) Chapman(PI) 09/2004-11/2008
 Emergency Medical Services (EMS) Workforce for the 21st Century
 This comprehensive analysis of the pre-hospital workforce involved an assessment of supply and demand, rural workforce issues, volunteer workers, and analysis of survey data. A stakeholder group of 20 organizations guided the project and participated in developing an *EMS Workforce Agenda for the Future*.
 Role: Principal Investigator

The California Wellness Foundation O'Neil(PI) 07/2008-06/2011
 The California Endowment, The California HealthCare Foundation
 Health Workforce Tracking Collaborative
 This was a statewide collaboration of major funders in health workforce with selected small projects culminating in issues briefs and dissemination activities.
 Role: Co-Director

Hitachi Foundation Dower(PI) 1/2010-3/2011
 Innovative Workforce Models in Health Care
 This study of role and career development for medical assistants produced case studies focused on staffing and care outcomes along with resources needed for model replication.
 Role: Co-Investigator

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Dower, Catherine		POSITION TITLE Health Policy and Law Director	
eRA COMMONS USER NAME (credential, e.g., agency login)			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
University of California, Berkeley	B.A.	05/83	Political Science
University of California, Berkeley	J.D.	06/93	Law

A. Personal Statement

This project is about testing expanded scopes of practice for emergency medicine technicians in California under the state’s Health Workforce Pilot Project (HWPP) program. For close to twenty years, I have been engaged in health policy, law and research, with focus on the health care workforce. I am trained and licensed in California as an attorney. An area of expertise is health professions regulation and scope of practice, including efforts to update and reform these systems. As staff to the Pew Health Professions Commission in the mid-1990s, I co-directed the Commission’s Taskforce on Health Care Workforce Regulation and was a principal author of the commission’s work on scope of practice and regulatory issues. I also have considerable experience in innovative practice design. For the past four years, I have directed the Innovative Workforce Models in Health Care initiative, which explores and advances high performing practice and staffing models. For almost a decade, I have co-directed California’s Health Workforce Tracking Collaborative, assessing efforts to address education, shortages and mal-distribution. With funding from the California HealthCare Foundation, I also oversaw a study of the HWPP program – including a review of all projects and impacts on legislation – from its establishment in the 1970s through the present, resulting in the publication of several reports and papers to inform leaders in the professions and policy makers. I am the author of scores of publications and have delivered well over 100 presentations, lectures and briefings to health care leaders, educators, and policy makers at the state and national levels.

B. Positions and Honors

Positions and Employment

1994-1999	Health Law and Policy Analyst, Center for the Health Professions, University of California, San Francisco
2000-2008	Associate Director of Health Law and Policy, Center for the Health Professions, University of California, San Francisco
2009-2012	Associate Director of Research, Center for the Health Professions, University of California, San Francisco
2012-2013	Associate Director, Center for the Health Professions, University of California, San Francisco
2013-	Health Policy and Law Director, Center for the Health Professions, University of California, San Francisco

Award

2011	Citizen Advocacy Center: Ben Shimberg Public Service Award. <i>For her outstanding contributions to reforming the state health professional regulatory system, and especially for her work to remove unjustifiable scope of practice restrictions.</i>
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<u>License</u>	State Bar of California #168086
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C. Selected Publications

Peer-Reviewed Publications (from 8 publications)

1. Dower CM, Gragnola CM, Finocchio LJ (1998). Changing Nature of Physician Licensure: Implications for Medical Education in California. *Western Journal of Medicine* 168(5): 422-427.
2. Paine LL, Dower C (1999). Midwifery in the 21st century: Final recommendations from the 1998 UCSF Center for Health Professions Taskforce on Midwifery. *American Journal of Nurse-Midwifery*. 44(4): 341-48.
3. Dower C. Healthcare Workforce Data and Policy: Local Decisions and Global Implications. *Healthcare Papers*. 3(2): 40-44.
4. Rittenhouse DR, Grumbach K, O'Neil E, Dower C, Bindman A (2004). Physician Organization and Care Management in California: From Cottage to Kaiser. *Health Affairs*. 23(6):51-62.

Non-Peer-Reviewed Publications (from 60+ publications)

1. Finocchio LJ, Dower CM, McMahon T, Gragnola CM and the Taskforce on Health Care Workforce Regulation. *Reforming Health Care Workforce Regulation: Policy Considerations for the 21st Century*. San Francisco, CA: Pew Health Professions Commission, December 1995.
2. Christian S, Dower C, O'Neil E. *Chart Overview of Nurse Practitioner Scopes of Practice in the United States*. San Francisco, CA: UCSF Center for the Health Professions. 2007.
3. Robitaille S, Christian S, Dower C. *Scope of Practice Laws in Health Care: Exploring New Approaches for California*. Oakland, CA: California HealthCare Foundation. March 2008.
4. Dower C, Christian S. *Improving Access to Health Care in California: Testing New Roles for Providers*. Oakland, CA: California HealthCare Foundation. 2009.
5. Wides C, Dower C. *A Review of California Office of Statewide Health Planning and Development, Health Workforce Pilot Projects Program 1973-2007*. San Francisco, CA: University of California San Francisco, Center for the Health Professions. 2010.
6. Dower C, Chapman S, Patton J, Dumlao A. *Nurse Practitioners and Physician Assistants Providing Primary Care in California Community Clinics*. San Francisco, CA: University of California San Francisco, Center for the Health Professions. 2011.
7. Blash L, Dower C, Chapman S (2011). *Southcentral Foundation—Nuka Model of Care Provides Career Growth for Frontline Staff*. San Francisco, CA: University of California San Francisco, Center for the Health Professions..
8. Bates T, Blash L, Chapman S, Dower C, O'Neil E (2011). *California's Health Care Workforce: Readiness for the ACA Era*. San Francisco, CA: University of California San Francisco, Center for the Health Professions
9. Dower C, O'Neil E (2011). *Primary care health workforce in the United States*. Robert Wood Johnson Foundation Research Synthesis Report No. 22.
10. Dower C (2013). *Health Gaps*. *Health Affairs: Health Policy Briefs*. Aug 15.

D. Research Support

Ongoing Research Support

#13-307 (plus multiple prior awards)

Dower (PI)

2009 - 2014

The Hitachi Foundation

Innovative Workforce Models in Health Care.

The purpose of this initiative is to explore, through a series of grant awards, innovative practice models in health care that integrate frontline workers more fully into care teams resulting in better patient outcomes, financial sustainability for the organization, and career opportunities for frontline workers such as medical assistants.

Roles: Principal Investigator and Project Director

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Wides, Cynthia		POSITION TITLE Research Analyst	
eRA COMMONS USER NAME (credential, e.g., agency login)			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Wesleyan University	B.A.	05/98	Sociology
University of San Francisco	M.A.	05/08	Economics

A. Personal Statement

I joined the Center for Health Professions (the Center) in May 2009 and have continued to build on my previous project management experience. I have extensive experience in the collection and management of quantitative data and in conducting literature reviews regarding economic and policy issues related to health care workforce, policy, and delivery. I most recently managed a national sample survey of underrepresented minority dentists' education and practice patterns. I serve on the Center's Evaluation Committee, where I am a key contributor to the direction and development of the evaluation plan for the all of the Center's programs. I am responsible for the design, coordination, collection, and analysis of all data required for program and organizational evaluation and impact measurement. In this capacity, I assist the programs in identifying and implementing best practices, appropriate metrics, and data collection tools. In addition, I have co-authored quantitative and qualitative analytical papers on innovations in health care delivery, health workforce issues, and expansions of scope of practice in California. Most relevantly, I worked closely with the OSHPD's Health Workforce Pilot Projects Program to complete a retrospective qualitative analysis of the program's scope and impact from its inception to 2010.

B. Positions and Honors

Positions and Employment

1999-2000 AmeriCorps Member/Program Manager, San Francisco
 2001-2006 Thelen, Reid, & Priest, Litigation Paralegal, San Francisco
 2007-2008 Perkins Coie LLP, Legal Secretary, San Francisco
 2008-2009 Foreign Agricultural Service, International Agricultural Research Intern, Paris, France
 2009-present Research Analyst, Center for the Health Professions, University of California, San Francisco

C. Publications

Peer-Reviewed Publications

1. Chapman S, **Wides C**, and Spetz J. (2010 May). Payment Regulations for Advanced Practice Nurses: Implications for Primary Care. *Policy, Politics & Nursing Practice*, 11(2):89-98.
2. **Wides, C.**, Brody, H., Alexander, C., Gansky, S., Mertz, E. (2013 May) Long-term Outcomes of a Dental Post-baccalaureate Program. *Journal of Dental Education*, 77(5):537-47.
3. **Wides, C.**, Lindsteadt, B., Mertz, E., Brown, J.S. (*in press*) Building Leadership among Laboratory-based and Clinical and Translational Researchers: the University of California, San Francisco Experience. *Clinical and Translational Science*.
4. **Wides, C.**, Rab-Alam, S., and Mertz, E. (2014 Feb. *forthcoming*) Shaking up the Dental Safety Net: Elimination of Optional Adult Dental Medicaid Benefits in California. *Journal of Healthcare for the Poor and Underserved*.

Non-Peer-Reviewed Publications

1. **Wides, C.**, Dower, C. A Review of California Office of Statewide Health Planning and Development, Health Workforce Pilot Projects Program 1973-2007. San Francisco, CA: Center for the Health Professions, University of California, San Francisco. May 2010.
2. **Wides, C.**, Bates, T., and Mertz, E. Registered Dental Hygienists in Alternative Practice in California, 2009 Descriptive Report. San Francisco, CA: Center for the Health Professions, University of California, San Francisco. 2011.
3. **Wides, C.**, Alam-Rab, S., and Mertz, E. The Impact of the Elimination of Adult Dental Benefits from Dental on the California Dental Safety Net. San Francisco, CA: Center for the Health Professions, University of California, San Francisco. Nov. 2011.
4. **Wides, C.**, Marks, A., Durgan, S., Mertz, E., Mutha, S. Leadership in Action: The Role and Impact of the CHCF Health Care Leadership Program's California Health Improvement Project (CHIP). San Francisco, CA: Center for the Health Professions, University of California, San Francisco. Feb. 2013.

D. Research Support

Ongoing Research Support

Research Contract
Bronx Lebanon Dental Center
A Survey of Underrepresented Minority Dentists
Sample survey and needs assessment of URM dentists in the US.
Role: Project Manager/Research Analyst

Mertz (PI) 01/01/2012 - 12/31/2014

President's Fund
Dentaquest Foundation
Increasing the Capacity of Underrepresented Minority Dentists in the US Sample survey and needs assessment of URM dentists in the US.
Role: Project Manager/Research Analyst

Mertz (PI) 07/01/2012 - 12/31/2013

Center for the Health Professions
The goal of this project is to develop and test an evaluation framework to assess the outcomes of leadership development across health professions through formal training programs.
Role: Research Analyst

07/01/2004 – 12/31/2013

Selected Completed Research Support

UOP/CA Department of Health Services/HRSA Prime Mertz (PI) 3/15/2011-3/15/2010
This research project will evaluate the effect of the elimination of the California Medicaid dental benefits for adults on the safety net dental workforce and service mix in a variety of settings.
Role: Project Manager/Research Assistant

P30 DE020752 Gansky/Barger (PI) 9/17/09-8/31/11
New faculty development for research to reduce oral health disparities
Goal: To appoint three independent tenure-track equivalent research intensive Assistant Professors in the School of Dentistry to expand the overall impact on the research field and build research capacity
Role: Research Assistant/Statistician

University of the Pacific Mertz (PI) 04/09/09 – 03/31/11
The goal of this project is to survey Registered Dental Hygienists in Alternative Practice in California (RDHAP), to understand their practice patterns, patients, professional opinions, finances and motivations.
Role: Research Assistant/Statistician

Pharmacy Leadership Institute Mertz (PI) 7/1/04 – 6/30/11
Continuing Education Program in leadership development for senior pharmacy managers. The goal of this project is to develop an evaluation framework and to track the ROI for leadership development.
Role: Research Assistant/Statistician

PROTOCOL
Determination for Exempt
Research/Not Research
Committee for the Protection of Human
Subjects

Protocol # 13-10-1364
10/21/2013

Protocol Title: Community Paramedicine Pilot Project
Protocol Type: Determination for Exempt Research/Not Research
Important Note: This Print View may not reflect all comments and contingencies for approval.
Please check the comments section of the online protocol.

***** Personnel Information *****

Principal Investigator
color="red">required

Name	Title	Credentials
Witchey, Lisa	Manager	B.A.
Email	Phone	Mailing Address
lisa.witchey@emsa.ca.gov	916-431-3707	
Organization Name	Additional Organizational Information	Fax
California Emergency Medical Services Authority		
Alternate Phone		

Training data is not currently needed

Responsible Official *

Name	Title	Credentials
Backer, Howard	Director	MD, MPH
Email	Phone	Mailing Address
howard.backer@emsa.ca.gov	916-431-3716	
Organization Name	Additional Organizational Information	Fax
California Emergency Medical Services Authority		
Alternate Phone		
Curriculum Vitae	View CV	

Training data is not currently needed

***** Vulnerable Population *****

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Vulnerable Population(s) Checklist

Select All That Apply :

Minors (In the United States, a minor is under 18 years of age. If research is conducted outside the United States, a minor is under the age of majority in the countries where research is to be conducted)

Prisoners

Pregnant Women/Fetuses/Neonates

X Other (i.e., any population that is not specified above)

There are no pre identified vulnerable populations involved in this pilot project.

***** General Checklist *****

General Checklist

Request Type

Indicate if you are requesting:

X Not Research Determination

Exempt Research Determination

Not Research and Exempt Research Determination

Institution Type

X Governmental

For-Profit

Nonprofit

***** Study Details *****

Title

Community Paramedicine Pilot Project

Complete Sections 1 - 5. Specify N/A as appropriate. Do not leave any required sections blank.

1. Study Details

a) Provide the rationale for why this request is being submitted to CPHS for approval (e.g., involvement of state data, state funding or state research staff).

The California Emergency Medical Services Authority (EMSA) will be conducting a pilot project utilizing a

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Health Workforce Pilot Project statutory waiver offered by the Office of Statewide Health Planning and Development (OSHPD). OSHPD directed EMSA to explore whether an IRB approval would be necessary for this particular project.

b) Provide a brief, non-technical description of the project, including a summary of the purpose and goals, project design and procedures.

This project is a system improvement evaluation that will utilize trained paramedics working in new roles under medical control, as they are required to do, to improve the delivery of medical care in emergency and non-emergency situations.

Community paramedicine (CP) is a 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, enhance access to primary care, and improve integration of care for medically underserved populations.

The goal of the project is to fill gaps in the existing emergency medical care system by using currently trained personnel working in collaboration with health care partners in addition to emergency departments to facilitate the most appropriate treatment in the most appropriate setting. An example scenario might involve a paramedic providing care to an individual who calls 911 for a strained ankle. The typical response would require the paramedic to transport the individual to a hospital emergency department. Under the pilot project, the paramedic, working under medical control from a physician, might determine that transportation to an urgent care clinic is a more appropriate and cost effective treatment alternative. Another scenario would be for paramedics to check on a patient within 24-28 of hospital or emergency department discharge to make sure that they are medically stable, understand the discharge instructions, filled their medications, and has a follow-up appointment.

c) Provide a brief description of any data/specimens that will be used and the involvement of human subjects in the study.

The population involved in this project includes the population that utilizes the existing emergency medical services system as well as referrals from hospitals or other health care systems following hospital discharge or to provide instruction in managing chronic diseases.

d) Describe the data elements/specimens to be used or collected and the source(s) of data/specimens. List or attach the variables to be used in this project.

Data collection will be tailored to the specific concept(s) being tested and should evaluate:

- patient safety
- Increased access to care
- Decreased hospital readmissions
- Decrease in low acuity ambulance transports
- Decrease in low acuity emergency department visits
- Cost savings
- Healthcare service utilization patterns
- Patient satisfaction
- Primary care provider and/or health system satisfaction.

e) Describe any subject recruitment methods, if applicable. Attach surveys to be used in the Attachments section.

Not applicable other than as described in answer to question 1c.

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- f) **Indicate the number of subjects or their data that will be involved in the study and the geographic areas to be covered.**

The geographic area involved is limited to specific California local jurisdictions or areas within a local jurisdiction. Projects will be run simultaneously within multiple local jurisdictions within California. The number of patient subjects will vary depending on the specific project. EMS providers are currently covered entities under HIPAA and exchange personal health information with hospitals and medical systems.

- g) **Provide a brief description of the end product, such as a report or article in a peer-reviewed journal, and the plan for disseminating the findings.**

Each local pilot site participating in the Community Paramedicine pilot project will write a report with appropriate data analysis. An overall report that aggregates results will be prepared and discussed by stakeholders and policy makers, as well as available to public. The findings of this program improvement project may lead to a permanent change to the paramedic practice and new options for managing low-acuity medical calls to 911.

- h) **Does the researcher collect or obtain the data or specimens that are considered personal information? CPHS defines personal information as being any of the following 18 Health Information Portability and Accountability Act identifiers.**

Y If yes, please check any of the identifiers below that apply to your project.

X Names

X Telephone numbers

X Any elements of dates (other than year) for dates directly related to an individual, including birth date, admission date, discharge date, date of death. For ages over 89: all elements of dates (including year) indicative of such age, except that such ages and elements may be aggregated into a single category of age 90 and older

Geographic subdivisions smaller than a state (except the first three digits of a zip code if the geographic unit formed by combining all zip codes with the same three initial digits contains more than 20,000 people and the initial three digits of a zip code for all such geographic units containing 20,000 or fewer people is changed to 000).

Fax numbers

Electronic mail addresses

Social security numbers

X Medical record numbers

X Health plan beneficiary numbers

Account numbers

Certificate/license numbers

Vehicle identifiers and serial numbers (VIN), including license plate numbers

Device identifiers and serial numbers (e.g., implanted medical device)

Web universal resource locators (URLs)

Internet protocol (IP) address numbers

Biometric identifiers, including finger and voice prints

Full face photographic images and any comparable images

Any other unique identifying number, code, or characteristic, other than dummy identifiers that are not derived from actual identifiers and for which the re-identification key is maintained by the health care provider and not disclosed to the researcher

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Other variables not listed above. An attached listing may be included.

*** * * Determination of Not Research * * ***

2. Determination of Not Research

1. Is an intent of this project to conduct a systematic investigation including development, testing and evaluation designed to develop or contribute to generalizable knowledge, which might include information presented to a broader audience or published with the intent of drawing scientific conclusions or increasing the body of scientific knowledge?

N

(Note: A project may involve research and non-research components. If any component of the project is deemed to be research, the project must be approved by CPHS)

2. Check the box which best describes the project for which these human subjects and/or their data or specimens will be used

Public Health Practice/Surveillance or Emergency Response:

The activity is carried out under the direct supervision of a governmental public health agency. The public health authority involved in the project has pre-existing legal authority to receive any confidential, identifiable information to be used in the activity. The activity addresses an important health issue for the population under the authority of the public health agency and is carried out for the benefit of that population. The activity constitutes accepted public health or medical practice and is not designed to test an experimental hypothesis, drug, or device. The activity involves the collection and analysis of health-related data in order to monitor the frequency of occurrence and distribution of diseases and/or health conditions and known risk factors in a population. All the data collected will only be used for this purpose.

Additional Considerations: Surveillance or study of highly personal behaviors, particularly with vulnerable populations, in general, should be considered research, and thus requires institutional review board approval. Publication of information obtained from public health practice or surveillance does not, in itself, indicate that the activity is research. Identifiable data obtained from public health surveillance activities may not be shared or used for research purposes without institutional review board approval

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below:

- X** Quality Assurance (QA) or Quality Improvement (QI):

Existing individual level data will be collected and analyzed and there is a formal commitment in advance of data collection to a corrective action plan related to outcomes of the analysis.

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advance of data collection to a corrective action plan related to outcomes of the analysis.

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below:

This project targets existing trained paramedics working in the California EMS system. The focus of this project is to improve the delivery of care within the existing system. Quality improvement changes will be made based on the review of patient care records.

Medical or Behavioral Practice:

1. Therapy, designed solely to benefit individual patient(s). The desired outcome is unproven, but there is an expectation of success for the patient's condition. This class of project could be termed "off-label" use of a medication or "humanitarian use" (does not include investigation new drugs) or...
2. Medical or behavioral practice to benefit a well-defined group of patients in a predictable way.

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below:

X Program Evaluation:

Assessment of the success of an established program or intervention in achieving its objectives in a specific population, and in which the information gained will be used only to provide feedback to the program, to ensure service quality or to make improvements in the program.

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below:

The project is evaluating the delivery of emergency medical care under the existing system utilizing existing trained personnel who work under the medical control of a physician. The current system is an inefficient way to deliver care, and utilizes the most expensive type of transportation to transport to the most expensive site of care (Emergency Department), regardless of the acuity or severity of the complaint. The evaluation will involve changing the transportation destination where paramedics can transport a patient to receive care within the healthcare system. Paramedics may also be used for their 24/7 mobile community access to provide outreach services at the usual setting (i.e., patient's home) for treatment of chronic conditions under medical direction of a physician.

Project is Resource Utilization Review:

Activity uses existing institutional records for client outcome monitoring in which individual level data are routinely collected and analyzed to determine the extent to which clients are experiencing intended program outcomes, client satisfaction and needs assessment surveys which collect data from persons eligible to receive the program services.

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Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below:

Case Report:

Data concerning one individual, their family, and/or environment, including medical history and any other information, collected for the purposes of analyzing and diagnosing the individual's condition or for instructional purposes or publication. It does not involve a testable hypothesis.

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below:

3. Is the information being requested already existing data that was gathered for another reason and is the research staff not able to determine the identity of the individuals? This may include coded data if the research staff does not have a key to the code.

N

*** * * Determination of Exempt Research * * ***

3. Determination of Exempt Research

1. Does this project involve any of the following:

Prisoners as human subjects

HIPAA Protected Health Information

Survey or interview of children (up to 18 years of age)

Observation of public behavior of children when researcher interacts with children

Regulated by the Food and Drug Administration (except category #6)

Greater than minimal risk (the probability and magnitude of harm or discomfort anticipated are not greater than normally encountered in daily life or routine exam or procedure)

Note: If you checked any of the categories above, your project cannot be considered exempt under federal regulations. Do not complete the remainder of this form. You will need to apply for CPHS review.

2. Select only one exemption category below that is appropriate for your project.

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- (1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as research on regular and special education instructional strategies or research on effectiveness of or comparison among instructional techniques, curricula or classroom management methods
- (2) Research involving only the use of educational tests, survey procedures, interview procedures or observation of public behavior unless:
 - a) Information is recorded in such a manner that subjects can be identified directly or through identifiers; and
 - b) Any disclosure of responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

This exemption is not allowed for research involving surveys or interviews with children (up to 18 years) or observation of public behavior of children if the investigator interacts with the children.

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below.

- (3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior if:
 - (i) Human subjects are elected or appointed officials or candidates for public office or
 - (ii) Federal laws require, without exception, that the confidentiality of personally identifiable information will be maintained throughout the research and thereafter

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below.

- (4) Research involving the collection or study of existing data, documents, records, pathological or diagnostic specimens. If:
 - (i) The sources are publicly available
 - (ii) The information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subject.

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below.

- (5) Research and demonstration projects which are conducted by or subject to the approval of a federal department or agency head, and are designed to study, evaluate or otherwise examine:
(Please note that projects that are federally funded but not directly supervised by a federal department or agency head do not qualify for this exemption)
 - (i) Public benefit or service programs
 - (ii) Procedures for obtaining benefits or services under those public benefit or service programs
 - (iii) Possible changes in or alternatives to public benefit or service programs or

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- (iv) Possible changes in methods or levels of payment for benefits or services under public benefit or service programs

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below.

- (6) Taste and food quality evaluation and consumer acceptance studies. If:
- (i) Wholesome foods without additives are consumed or
 - (ii) The food consumed contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below levels found to be safe by FDA or approved by the EPA or Food Safety and Inspection Service of USDA?

Provide an explanation for why this project qualifies for this category by addressing the relevant requirements below.

***** Attachments *****

4. Attachments

Add appropriate attachments (e.g., grant proposal, questionnaires, surveys, advertisements, list of variables, etc.) in this section.

To update or revise any attachments, please delete the existing attachment and add the revised document to replace it.

***** Assurance *****

Principle Investigator's Statement:

I affirm that the information provided is accurate and complete to the best of my knowledge

COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS

400 R Street, Suite 359
Sacramento, California 95811-8213
(916) 326-3660 FAX (916) 322-2512



10/17/2013

Witchey, Lisa
California Emergency Medical Services Authority
10901 Gold Center Dr.
Rancho Cordova, Ca 95670

Project Title: Community Paramedicine Pilot Project
Project Number: 13-10-1364

Dear Mrs. Witchey,

The Committee for the Protection of Human Subjects (CPHS) has **Approved** the above Request for Determination. It is Not Research and/or Exempt from CPHS review and does not require CPHS approval to be conducted. This decision is issued under CPHS' Federalwide Assurance #5434535 with the Office of Human Research Protections (OHRP).

If the parameters of your project change, or are reasonably expected to change, so that the project may no longer meet the federal requirements for not being research or for being exempt research, you must either:

- Submit another Request for CPHS Determination of Not Research or Exempt Research
- Submit a New project to CPHS for approval.

The Request or New project must describe the changes occurring or expected to occur in your project. If such a Request or New project is submitted, you must not implement any changes until you receive written confirmation from CPHS that your project either does not constitute research, is exempt from CPHS review, or is approved research.

If you have any questions, you may call our office at (916) 326-3660 or email us at cphs-mail@oshpd.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lucila Martinez".

Lucila Martinez
CPHS Administrator
(916) 326-3661
lucila.martinez@oshpd.ca.gov

Community Paramedicine Health Workforce Pilot Project Patient Acceptance/Satisfaction Survey¹

Questions for All Patients

Please mark the answer that best expresses your perception

I am very satisfied with the care I received from this provider.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

I am dissatisfied with some things about the care I received from this provider.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

I am very satisfied with my usual source of primary care.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree
- I do not have a usual source of primary care

I am dissatisfied with some things about the care I receive from my usual source of primary care.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree
- I do not have a usual source of primary care

In terms of your satisfaction, how would you rate your visit overall?

- Excellent
- Very good
- Good

¹ The versions of the survey distributed to patients will contain a code that identifies the pilot site through which the patient received care from a community paramedic. This is necessary so that we can assess whether rates of acceptance/satisfaction differ across sites. Patients will not be asked to provide their names or any other information that could reveal their identities. The limited demographic information we are requesting will be presented in aggregate.

- Fair
- Poor

In terms of your satisfaction, how would you rate the technical skills (thoroughness, carefulness, competence) of this provider?

- Excellent
- Very good
- Good
- Fair
- Poor

Would you like to have a visit from a Community Paramedic for similar treatment if needed in the future?

- Yes, definitely
- Yes, somewhat
- No

Would you recommend a Community Paramedic to your family and friends if they needed similar treatment in the future?

- Yes, definitely
- Yes, somewhat
- No

If you had the opportunity to receive similar care from a Community Paramedic again, would you do so?

- Yes, definitely
- Yes, somewhat
- No

About You

In the past 12 months, how many times have you contacted 911?

- 1 time
- 2
- 3
- 4
- 5 to 9
- 10 or more times

In general, how would you rate your overall health?

- Excellent
- Very good
- Good
- Fair
- Poor

In general, how would you rate your overall **mental** or **emotional** health?

- Excellent

- Very good
- Good
- Fair
- Poor

What is your age?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

Are you male or female?

- Male
- Female

What is the highest grade or level of school that you have completed?

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

Are you of Hispanic or Latino origin or descent?

- Yes, Hispanic or Latino
- No, not Hispanic or Latino

What is your race? Mark one or more.

- White
- Black or African-American
- Asian
- Native Hawaiian or Other Pacific Islander
- American Indian or Alaska Native
- Other

What is your preferred language?

- English
- Spanish
- Other

Additional Questions for Alternate Transportation Pilot Projects

This provider clearly explained that I could choose to be transported to either an emergency department or an alternate site (e.g., urgent care center)?

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

I appreciate having the opportunity to be transported to a location other than an emergency department for treatment of my condition.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

I feel confident about this provider's recommendation that I can receive safe and effective care for my condition at a location other than an emergency department.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

I am satisfied with the care I received at the alternate site.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

Additional Questions for Frequent 911 Caller Pilot Projects

Do you have an individual care plan?

- Yes
- No

Did this provider help you to follow your individual care plan?

- Yes, definitely
- Yes, somewhat
- No

I am very satisfied with the help this provider gave me to obtain medical care or mental health services.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

I am very satisfied with the help this provider gave me regarding food, housing, transportation, or other non-medical services.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

Additional Questions for Post-Hospital Pilot Project

Did this provider review the instructions you were given when you were discharged from the hospital?

- Yes
- No

Did the provider explain the instructions in a way that was easy to understand?

- Yes, definitely
- Yes, somewhat
- No

Did this provider give you instructions about information you need to keep track of about your condition, such as your weight, blood glucose, peak flow?

- Yes
- No

Were the provider's instructions about keeping track of your condition easy to understand?

- Yes, definitely
- Yes, somewhat
- No

Did the provider talk with you about your doctor's recommendations for your diet, such as the amount of liquids you should drink and the amounts and types of foods you should eat?

- Yes
- No

Were the provider's instructions about your diet easy to understand?

- Yes, definitely

- Yes, somewhat
- No

Did this provider check whether you have a follow-up appointment with your doctor and that you have transportation to your doctor's office?

- Yes
- No

If you did not have a follow-up appointment, did this provider help you make one?

- Yes
- No

Did this provider check whether you have all of the medicines you need to take?

- Yes
- No

Did this provider give you instructions about how to take your medicines?

- Yes
- No

Were the instructions about how to take your medicines easy to understand?

- Yes, definitely
- Yes, somewhat
- No

Did this provider suggest ways to help you remember to take your medicines?

- Yes
- No

Additional Questions for Tuberculosis Pilot Project

Does this provider ask you to complete daily symptom surveys?

- Always
- Most times
- Sometimes
- Occasionally
- Never

Does this provider answer any questions you may have about side effects of your treatment?

- Always
- Most times
- Sometimes
- Occasionally
- Never

If you experienced itching, nausea, or other side effects of your treatment, did this provider give you medication to treat them?

- Yes
- No

Additional Questions for Hospice Pilot Project **(administer only to patients who are capable of responding)**

I am satisfied with the administration of comfort care medications by this provider.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

I am satisfied with the grief and crisis counseling this provider gave to my family members.

- Strongly agree
- Agree
- Uncertain
- Disagree
- Strongly disagree

Community Paramedicine Health Workforce Pilot Project

Questionnaires for Community Paramedics

About Yourself

I enjoy working as a community paramedic.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

I have the training I need to carry out my responsibilities as a community paramedic.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The protocols that cover the care I provide are clear and easy to follow.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The protocols that cover the care I provide adequately address some of the challenges I face in carrying out my responsibilities.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

If given the choice, I would continue working as a community paramedic after the pilot project ends.

- Strongly disagree
- Mostly disagree

- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

If the pilot project is successful, I would encourage other paramedics to become community paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

I believe that the quality of care I provide as a Community Paramedic is at least as high as the quality of care that I provided as an EMT-Paramedic.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

My role as a Community Paramedic improves the efficiency of health care delivery for individual patients compared to the provision of care without Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

My role as a Community Paramedic improves the efficiency of health care delivery for the health care system as a whole in my geographic region compared to the provision of care without Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

About Other Health Care Colleagues

Compare to EMTP coordination of patient/client care with other health care providers and/or community service agencies is optimal.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

Health professionals at other organizations respect my role as a Community Paramedic.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

Health professionals at other organizations trust my judgment as a Community Paramedic.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

Health professionals at other organizations listen to and consider my opinions/views as a Community Paramedic in regard to patients' needs.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

Community Paramedicine Health Workforce Pilot Project

Questionnaires for Personnel Employed by Partner Organizations Who Work with Community Paramedics²³

The Community Paramedics with whom I work have the training needed to carry out their responsibilities.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

I respect the role and expertise of the Community Paramedics with whom I work.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

I trust the judgment of the Community Paramedics with whom I work.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

The Community Paramedics with whom I work listen to and consider my opinions/views in regards to patients' needs.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

If the pilot project is successful, I would encourage other paramedics to become Community Paramedics.

- Strongly disagree
- Mostly disagree

² Examples include personnel employed by urgent care centers and other alternate sites (alt transportation), social services personnel (frequent 911 callers), patient's personal physicians or consulting specialist physicians (post-hospital care), hospice personnel (hospice), public health nurses responsible for tuberculosis control (TB).

³ Surveys would be coded to indicate the pilot sites at which other EMS personnel practice. Personnel would not be asked to provide their names or any other information that would identify them.

- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The quality of care provided by a Community Paramedic is at least as high as the quality of care provided by other EMT-Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The role of Community Paramedic improves the efficiency of health care delivery for individual patients compared to the provision of care without Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The role of Community Paramedic improves the efficiency of health care delivery for the health care system as a whole in geographic region compared to the provision of care without Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The role of Community Paramedic improves access to the most appropriate level of care for individual patients compared to the provision of care without Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

Community Paramedicine Health Workforce Pilot Project

Questionnaires for Questions for Other EMS Personnel Who Work with Community Paramedics⁴

About Community Paramedics

The Community Paramedics with whom I work have the training needed to carry out their responsibilities.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

I respect the role and expertise of the Community Paramedics with whom I work.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

I trust the judgment of the Community Paramedics with whom I work.

- Always
- Most of the time
- Occasionally
- Rarely
- Never

If the pilot project is successful, I would consider becoming a Community Paramedic.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

⁴ Surveys would be coded to indicate the pilot sites at which other EMS personnel practice. Personnel would not be asked to provide their names or any other information that would identify them.

If the pilot project is successful, I would encourage other paramedics to become Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The quality of care provided by a Community Paramedic is at least as high as the quality of care provided by other EMT-Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The role of Community Paramedic improves the efficiency of health care delivery for individual patients compared to the provision of care without Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree

The role of Community Paramedic improves the efficiency of health care delivery for the health care system as a whole in geographic region compared to the provision of care without Community Paramedics.

- Strongly disagree
- Mostly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Mostly agree
- Strongly agree



EMERGENCY MEDICAL SERVICES AGENCY

September 25, 2013

**Los Angeles County
Board of Supervisors**

Gloria Molina
First District

Mark Ridley-Thomas
Second District

Zev Yaroslavsky
Third District

Don Knabe
Fourth District

Michael D. Antonovich
Fifth District

Cathy Chidester
Director

William Koenig, MD
Medical Director

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Health
California EMS Authority
10901 Gold Center Drive
Rancho Cordova, CA 95670

Dear Mr. Meyer:

I am pleased to submit letters of intent for two Community Paramedicine pilot projects proposed in Los Angeles County.

Los Angeles County EMS Agency has convened a Community Paramedic Steering Committee to provide guidance and coordination for project managers. The Steering Committee has approved the enclosed project descriptions to be submitted for your consideration. Both proposed projects will be managed and coordinated by UCLA Center for Prehospital Care but should be considered as separate and individual.

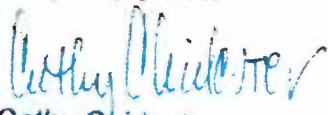
- Proposal # 1: **Alternate Transport Destination for Communities in Los Angeles County (ALTrans)**
- Proposal #2: **Community Paramedic Effectiveness Strategies for Congestive Heart Failure (COMPARE)**

We are confident that these projects will provide critical information and guidance for changes to EMS delivery models to help us better serve our prehospital community.

Any questions or concerns may be addressed to Todd LeGassick, Executive Director, UCLA Center for Prehospital Care at tlegassick@mednet.ucla.edu/310-312-9303 and me, cchidester@dhs.lacounty.gov.

We look forward to hearing from you in the near future.

Very truly yours,


Cathy Chidester
Director

- c: Director, State EMS Authority
Director, DHS
EMS Commission
Community Paramedicine Steering Committee
Executive Director, UCLA Center for Prehospital Care

Pioneer Blvd, Suite 200
Santa Fe Springs, CA 90670

Tel: (562) 347-1500
Fax: (562) 941-5835

*To improve health
through leadership,
service and education*

Health Services
<http://ems.dhs.lacounty.gov>





EMERGENCY MEDICAL SERVICES AGENCY
LOS ANGELES COUNTY

Los Angeles County Board of Supervisors

Gloria Molina
First District

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September 25, 2013

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Health
California EMS Authority
10901 Gold Center Drive
Rancho Cordova, CA 95670

Dear Mr. Meyer:

I am pleased to submit letters of intent for two Community Paramedicine pilot projects proposed in Los Angeles County.

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We look forward to hearing from you in the near future.

Very truly yours,


Cathy Chidester
Director

- c: Director, State EMS Authority
- Director, DHS
- EMS Commission
- Community Paramedicine Steering Committee
- Executive Director, UCLA Center for Prehospital Care



COUNTY OF ORANGE HEALTH CARE AGENCY

HEALTH DISASTER MANAGEMENT EMERGENCY MEDICAL SERVICES

*Excellence
Integrity
Service*

September 27, 2013

Lou Meyer, Project Manager
Community Paramedicine - Mobile Integrated Health
California EMS Authority
10901 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670

SUBJECT: LETTERS OF INTENT FOR COMMUNITY PARAMEDICINE PILOT PROJECT

Dear Mr. Meyer:

The Orange County EMS Agency is forwarding the two attached Community Paramedicine Pilot Projects proposals for consideration by the EMS Authority.

The proposals have been chosen by a local selection committee that ranks both proposals as equal in potential value for the community based on the different strengths and value to research that each brings.

The proposals are in the following general project areas:

1. Proposal from the Orange County Fire Chief's Association: transport of patients with specified conditions not needing emergency care to alternate, non-emergency department locations.
2. Proposal from the Anaheim Fire Department: After assessing and treating as needed, determine whether it is appropriate to refer or release an individual at the scene of an emergency response rather than transporting them to a hospital emergency department. This proposal includes addressing the needs of frequent 911 callers or frequent visitors to emergency departments by helping them access primary care and other social services.

It is understood that the letters of intent describe the general aspects of the proposed pilot projects. The Orange County EMS Agency is prepared to work with the two proposing groups to develop safe and effective programs for final implementation as field pilot projects.

Thank you for the opportunity to submit these proposals and please contact either of us for any questions or comments you may have.

With best regards,

Tammi McConnell, RN, MSN
EMS Program Administrator
(714) 834 2791
tmccConnell@ochca.com

Samuel J. Stratton, MD, MPH
EMS Medical Director
(714) 834 2824
sstratton@ochca.com

WUT
MARK REFOWITZ
DIRECTOR

HOLLY A. VEALE
ACTING DEPUTY AGENCY DIRECTOR
MEDICAL SERVICES

LYDIA MIKHAIL, MBA
DIVISION MANAGER
HEALTH DISASTER MANAGEMENT

TAMMI McCONNELL RN, MSN
EMS ADMINISTRATOR

405 W FIFTH STREET, SUITE 301A
SANTA ANA, CALIFORNIA 92701
TELEPHONE: 714- 834-3500
FAX: 714- 834-3125

SS: #1775

Attachment/Enclosure

October 15, 2013

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Healthcare
California Emergency Medical Services Authority
10901 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670

Dear Mr. Meyer,

As requested, this letter is being written to clarify the intent of the Butte County EMS Inc. & S-SV EMS Agency Community Paramedicine Pilot Project proposal previously submitted to EMSA on September 30, 2013.

The primary focus of this proposed pilot project will be the following:

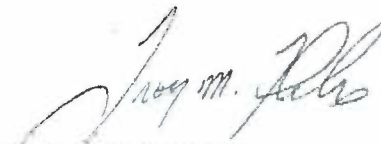
1. Readmission reduction (post hospital or emergency department follow up, care for chronic conditions). Patients with a discharge diagnosis of Acute Myocardial Infarction (AMI) and Congestive Heart Failure (CHF).
2. Patient follow up (post hospital or emergency department follow up). Community paramedics will work with the community's medical facilities and their Patient-Centered Medical Home (PCMH) initiatives to provide follow-up monitoring for patients recently released from the hospital to reduce post-discharge complications and costly readmissions.

Please be advised that this proposed 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 seen for 72 hours post discharge. This program will fill that gap, not replace, home health coverage. In addition, this project has the support of all of the healthcare providers listed in our submitted proposal.

Thank you for considering our pilot project proposal and please feel free to contact us with any additional questions.



Neal Cline, RN, JD, CFRN
Community Paramedicine Project Manager
Assistant Chief Quality and Education
Butte County EMS
530-332-7933



Troy M. Falck, MD
Medical Director
Sierra – Sacramento Valley EMS Agency
(916) 625-1702



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



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,

Steven Carroll
EMS Administrator

Angelo Salvucci, MD
Medical Director



Emergency Medical Services

300 North San Antonio Road • Santa Barbara, CA 93110-1316
805/681-5274 • FAX 805/681-5142

Takashi H. Wada, MD, MPH Director/Health Officer
Aimee M. Fournier Deputy Director
Suzanne Jacobson, CPA Chief Financial Officer
Susan Klein-Rothschild, LCSW Deputy Director
Elizabeth Snyder, MHA Deputy Director
Peter Maslin, MD Medical Director

Nancy Lapolla, MPH EMS Agency Director
Angelo Salvucci, MD EMS Agency Medical Director

September 20, 2013

Lou Meyer
Project Manager
Community Paramedicine – Mobile Integrated Health
Emergency Medical Services Authority

September 26, 2013

Dear Mr. Meyer;

Santa Barbara 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 that reads "Nancy Lapolla".

Nancy Lapolla, MPH
EMS Agency Director

A handwritten signature in blue ink that reads "Angelo Salvucci".

Angelo Salvucci, MD
EMS Agency Medical Director



ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

Alex Briscoe, Agency Director

Emergency Medical Services

1000 San Leandro Blvd, Suite 200
San Leandro, CA 94577

Fred Claridge, Director
Karl Sporer M.D., Medical Director
Main (510) 618-2050
Fax (510) 618-2099

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,

Attached please find the Alameda County EMS Agency's letter of intent (LOI) for the Community Paramedicine Pilot Project. Alameda County EMS is pleased to submit this letter of intent. It is our hope that we will be chosen as one of the pilot project sites statewide. All of the concepts for such a program discussed in your LOI guidance are particularly important in Alameda County. Our EMS system responds to over three hundred calls a day, emergency departments are often inundated with patients requiring long wait times for ambulance crews, and the cost of the system is very expensive. We believe that there are ways to improve the efficiency of our system, while at the same time increasing access to care and overall patient satisfaction.

As you will see from our letter, this effort is a collaborative one between the EMS Agency and a number of our provider agency partners. The design of our project will involve a balance between system-wide collaboration and local control of individual program sites. We believe that this approach provides us with both the oversight and flexibility necessary to accomplish our program goals.

We appreciate the leadership role taken by the EMS Authority in managing this program state-wide – and the partnership you've cultivated with the Office of Statewide Health Planning and Development (OSHPD). The connection between the state, county, and local levels gives this project the best chance of success. We are confident the trial study period will prove fruitful and will show that EMS resources can be used in non-traditional ways to complement the existing healthcare system.

Please don't hesitate to contact our Medical Director Dr. Karl Sporer if you have any questions about our letter or need further clarification. His email is karl.sporer@acgov.org and his direct line is (510) 618-2042. Thank you for the opportunity to submit our letter of intent for this exciting new project.

Best regards,

A handwritten signature in black ink, appearing to be "FC" or similar initials.

Fred Claridge
EMS Director



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:

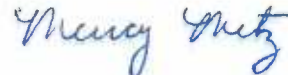
The County of San Diego Emergency Medical Services (EMS) has received and reviewed the Carlsbad Fire Department Letter of Intent to participate in the Health Workforce Pilot Project being offered by the California Emergency Medical Services Authority (EMSA). We are writing this letter in support of the 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



Inland Counties Emergency Medical Agency

Serving San Bernardino, Inyo, and Mono Counties

*Tom Lynch, EMS Administrator
Reza Vaezazizi, MD, 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

RE: LETTER OF INTENT FOR COMMUNITY PARAMEDICINE PILOT PROGRAM

Dear Mr. Meyer:

Enclosed is the Letter of Intent Proposal for Community Paramedicine Pilot Project, prepared by San Bernardino County Fire Department, on behalf of San Bernardino County.

If you have any questions about the submission, please do not hesitate to contact me at 909-388-5830 or via e-mail at Tom.Lynch@cao.sbcounty.gov

Sincerely,

Tom Lynch
EMS Administrator

TL/jlm

Enclosure

c: File Copy



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

EMERGENCY MEDICAL SERVICES
6255 Mission Gorge Road
San Diego, CA 92120
(619) 285-6429 Fax: (619) 285-6531

Border Health
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HIV, STD and Hepatitis
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MAA/TCM Program
Maternal, Child and Family Health Services
Public Health Laboratory
Public Health Nursing
Tuberculosis Control & Refugee Health
Vital Records

September 27, 2013

Lou Meyer, Project Manager
Community Paramedicine – Mobile Integrated Health
Emergency Medical Services Authority
lou.meyer@ emsa.ca.gov

Dear Mr. Meyer:

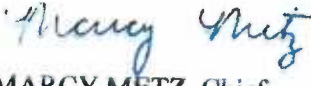
The County of San Diego Emergency Medical Services (EMS) has received and reviewed the City of San Diego Letter of Intent to participate in the Health Workforce Pilot Project being offered by the California Emergency Medical Services Authority (EMSA). We are writing this letter in support of the proposed 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



San Joaquin County Emergency Medical Services Agency



<http://www.sjgov.org/ems>

October 2, 2013

Lou Meyer, Project Manager
Community Paramedicine
California EMS Authority
10901 Gold Center Dr., Ste. 400
Rancho Cordova, CA. 95620

Mailing Address
PO Box 220
French Camp, CA 95231

Health Care Services Complex
Benton Hall
500 W. Hospital Rd.
French Camp, CA 95231

Phone Number
(209) 468-6818

Fax Number
(209) 468-6725

RE: Letter of Intent

Dear Mr. Meyer,

The San Joaquin County Emergency Medical Services Agency is pleased to submit a Letter of Intent to support the attached Community Paramedicine pilot projects. We are excited about the opportunity to be part of this innovative community based health care system.

Should you have any questions, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Burch".

Dan Burch
EMS Administrator



HEALTH SERVICES AGENCY

Administration
 830 Scenic Drive, P.O. Box 3271, Modesto, CA 95353
 Fax: 209.553.8330
www.hsahca.org

September 24, 2013

Lou Myers, Project Manager
 Community Paramedicine-Mobile Integrated Health
 California State EMS Authority

Re: Letter of Support

Dear Mr. Myers:

This letter is written in support of the Community Paramedicine-Behavioral Health Project in Stanislaus County. The program methodology is aimed to get the right level of care to the patients in an efficient, effective and timely manner. The program allows the paramedics, under the direction of the EMS Agency Medical Director, to provide medical clearance exams in the field. This permits some patients to go directly to a Behavioral Health Center and avoids an unnecessary Emergency Department visit.

Benefits of this program will be reducing cost, decreasing Emergency Department overcrowding, allowing more efficient use of Emergency Department resources and to reduce secondary transfers between the Emergency Department and Behavioral Health Centers.

The expansion in the scope of practice of paramedics will allow for innovation in addressing a problem that plagues Stanislaus County. We are supportive of this project and the potential benefits it has to offer our community.

Sincerely,

A handwritten signature in cursive script that reads 'Mary Ann Lee'.

Mary Ann Lee
 Managing Director