Healthcare Payments Data Program Review Committee

May 16, 2019

Office of Statewide Health Planning and Development

2020 W. El Camino Avenue, Sacramento, CA, 95833

Conference Room 1237

OSHPD

Office of Statewide Health Planning and Development

Welcome and Meeting Minutes

Ken Stuart, Chair, Review Committee

Data Sources & Formats: Approach

1. **Three sources**: The HPD System should establish collection methods and processes specific to three sources of data: 1) DHCS (for Medi-Cal), 2) CMS (for Medicare FFS), and 3) All other.
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3. **Incorporate Medicare**: The HPD should pursue the collection of Medicare FFS data, in the formats specified by CMS.
4. **APCD-CDL™**: The HPD should use the APCD-CDL™ for all other submitters.

Data Sources & Formats: Approach, cont.

5. **Three years of history**: The HPD should initially require submitters to provide three years' worth of historical Tier I "core" data (enrollment, claims and encounters, and provider).
6. **Supplemental files**: The HPD should collect non claims-based payments through required supplemental files to support total cost of care analyses in California's heavily capitated environment.
7. **Flexibility to adjust**: Additional legislation should provide OSHPD the authority to specify data collection formats for HPD submitters through regulation.

Deputy Director's Report

Scott Christman,

Chief Information Officer and Deputy Director,

OSHPD

Follow Up from April 18 Meeting

Multi-Payer Claims Data Collection in California: Lessons From the Front Lines.

Jill Yegian, OSHPD Consultant

Dolores Yanagihara, Vice President, Analytics & Performance Information, IHA

Rachel DuPré Brodie, Director, Performance Information, PBGH

Isaac Menashe, Associate Director of Policy, Evaluation and Research, Covered CA

Integrated Healthcare Association

HPD Review Committee Meeting

May 16, 2019

Dolores Yanagihara

IHA Data Infrastructure Coverage

IHA has performance information covering about 75% of California's population

- California Total Population: 39.4 million
- Population in IHA's Infrastructure: 30 million

Payer	Product	Source	Covered Lives
Commercial	HMO	10 health plans	9.0 M
	PPO	6 health plans	4.7 M
Medicare	Advantage	7 health plans	1.7 M
	FFS	CMS, research DUA	~3 M
Medi-Cal* (full-scope)	Managed Care	DHCS	~10 M
	FFS	DHCS	~1.6 M
Total		**22.9 M**	**~30 M**

* Receive results (numerator, denominator), not member level data

Integrated Healthcare Association

Data Submission Guide (DSG) Overview

- All-Payers Claim Database (APCD) layout
  - Aligned with format used by CHPI and CalPERS
  - Very similar to Common Data Layout
- Specifications for five data files:
  - Eligibility – Monthly enrollment segments
  - Medical Claims/Encounters
  - Pharmacy Claims
  - Cost – includes Capitation broken out into professional, facility, global
  - Lab Results
- https://www.iha.org/sites/default/files/resources/onpoint_-_iha_data_submission_guide_version_2.1_20190219.pdf
- Collecting 3 years of data ideal; 2 years acceptable for most measures

Integrated Healthcare Association

Member/Benefit Characteristics Collected (by month)

- Member zip code of residence
- Payer/product type
- PO attributed to
- ACO attributed to
- HDHP
- Risk Type (FFS, Professional Cap, Facility Cap, Global Cap)
- Covered CA (including metal tier and actuarial value)
- Employer Group Size
- Race & ethnicity (not well populated)

➢ Monthly enrollment segments allow tracking of coverage changes over time

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Total Cost of Care (TCOC) Measure

Developed by HealthPartners, NQF Endorsed

- Description: Total amount paid to any provider to care for members for a year
  - Professional, facility (inpatient and outpatient), pharmacy, and ancillary costs
  - Capitation, fee-for-service, **member cost share**, administrative adjustments
- Eligible Population: Ages 1 through 64; Minimum 9 months of enrollment
- Risk Adjustment: Johns Hopkins Concurrent ACG System adjusts for age, gender, diagnoses, and procedures
- CA Geography Adjustment: CMS Hospital Wage Index derived Geographic Adjustment Factor adjusts for geographic input cost differences
- CA Exclusions:
  - Mental health and chemical dependency services
  - Acupuncture and chiropractic services; dental and vision services

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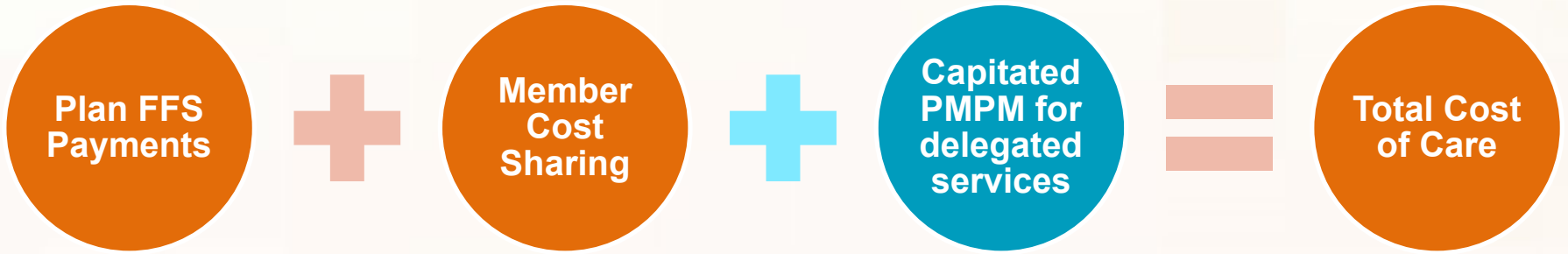
Total Cost of Care and Capitation

- Nearly 2/3 of CA commercial market has some exposure to capitated payments
- In commercial HMO, >99% of non-Kaiser PO contracts include capitation
- POs taking more risk represent disproportionate share of member enrollment

	Fee For Service	Shared Risk	Dual Risk	Global Risk
Capitated Services	None	Professional	Professional, Facility (paid separately)	Professional, Facility (paid together)
% of Enrollment	0.04%	53.6%	31.1%	15.3%
% of Physician Organization Contracts	0.4%	74.4%	12.7%	9.5%



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Cost Service Category Breakdowns

- Collect capitated payments by member in cost file

Behavioral Health: Not included in Overall Total Cost of Care

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Program Oversight

Committee Structure for Health Plan & Physician Organization Involvement

Governance Committee

Technical Payment Committee
Contracting, Actuarial, and Medical Economics Experts

Technical Measurement Committee
Clinical and Data Reporting Experts

IHA Staff

Partners

Some Learnings

- Leverage existing standard specifications; don't recreate wheel
- ETL and DQ are multi-faceted and nuanced – and critical to get right; they are the basis for all measurement and analysis that follows
- Identifying data quality or file issues specifically is necessary for timely resolution by plans; requires substantial technical expertise
- Strong relationships built on trust are essential
- Stakeholder engagement throughout process builds trust and buy-in
  - E.g., public comment, preview, appeals process, governance process

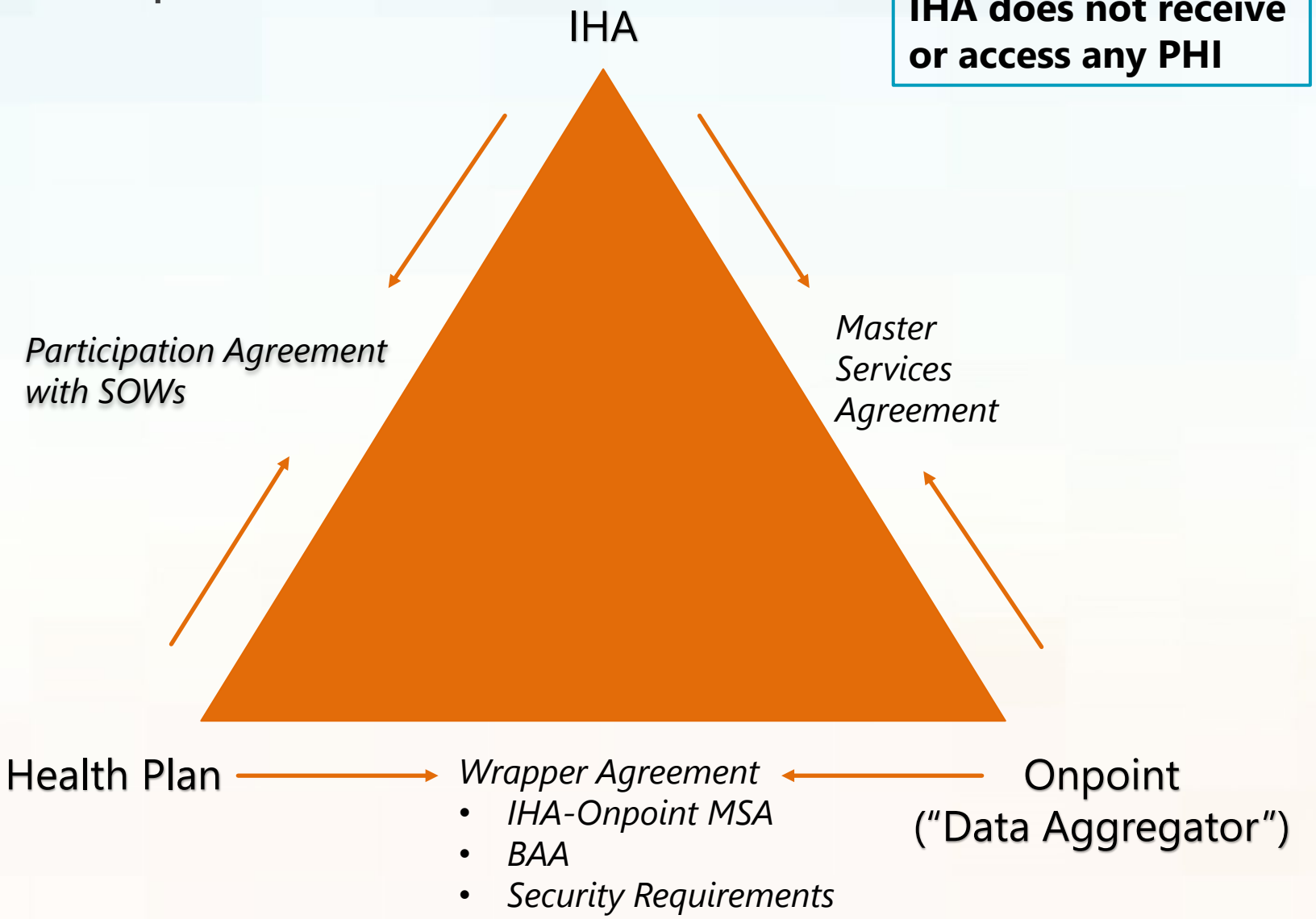
Integrated Healthcare ASSOCIATION

Questions?

Appendix

3-Way Relationship

IHA does not receive or access any PHI



Primary Use Cases

	Program	Common Measure Set	Participant Reports & Benchmarks	Recognition Awards	Public Reporting	Incentives
AMP Align Measure Perform AN IHA INITIATIVE Provider Organization Measurement	Commercial HMO	✓	✓	✓	✓	✓
	Medicare Advantage	✓	✓	✓	✓	Optional
	Commercial ACO	✓	✓	TBD	TBD	Optional
	Medi-Cal Managed Care	✓	✓	TBD	N/A	Optional
Atlas AN IHA INITIATIVE Geography, Payer, Product Measurement	Atlas	✓	✓	N/A	✓	N/A

- IHA analysis for industry insights
- Researcher access to data

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Actual Uses/Planned Uses

- Re-consideration of how plan markets PPO products based on Atlas findings
- Identification of and outreach to chronically lower performing organizations
- Examination of total cost, member OOP spending, and average risk by Covered CA metal tier, actuarial value, product type, region, and age group compared to off-exchange individual plans
- Analysis of high-need patient population in various California regions, how many and which medications these high-need patients take, and what services they use for what reasons
- Analysis comparing the total costs under a capitated model versus FFS model for members with the top ten cost-driving conditions
- Analysis of end of life care in Medi-Cal, replicating a study done on Medicare population
- Evaluation of network performance, including physician groups or geographic aggregates of physicians who serve PPO or EPO networks

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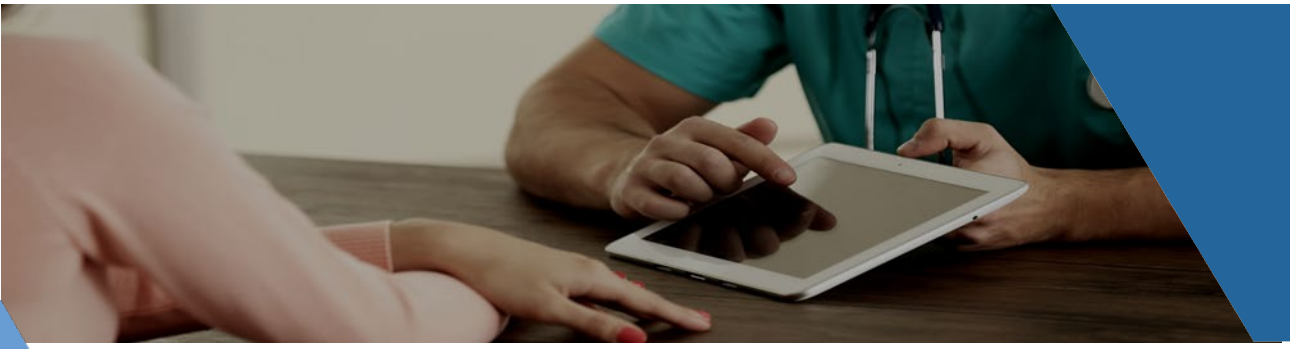


OSHPD Healthcare Payments Database Review Committee

Multi-Payer Claims Data Collection in California: Lessons Learned from the Field

California Healthcare Performance Information System

May 16, 2019

Rachel Brodie
Director, Performance Information

PBGH
PACIFIC BUSINESS GROUP ON HEALTH

CHPI's Mission

To serve as a trusted source of healthcare information by accurately measuring the quality and cost of care, reporting performance ratings, educating the public about healthcare value, and helping drive improvements in healthcare in California.

Data Sources

- Full-insured and self-funded commercial HMO, PPO, POS and Medicare Advantage claims and encounters from 3 insurers
- Medicare fee-for-service claims from CMS as part of the Qualified Entity (QE) Program
- Aggregated data for approximately 10 million Californians

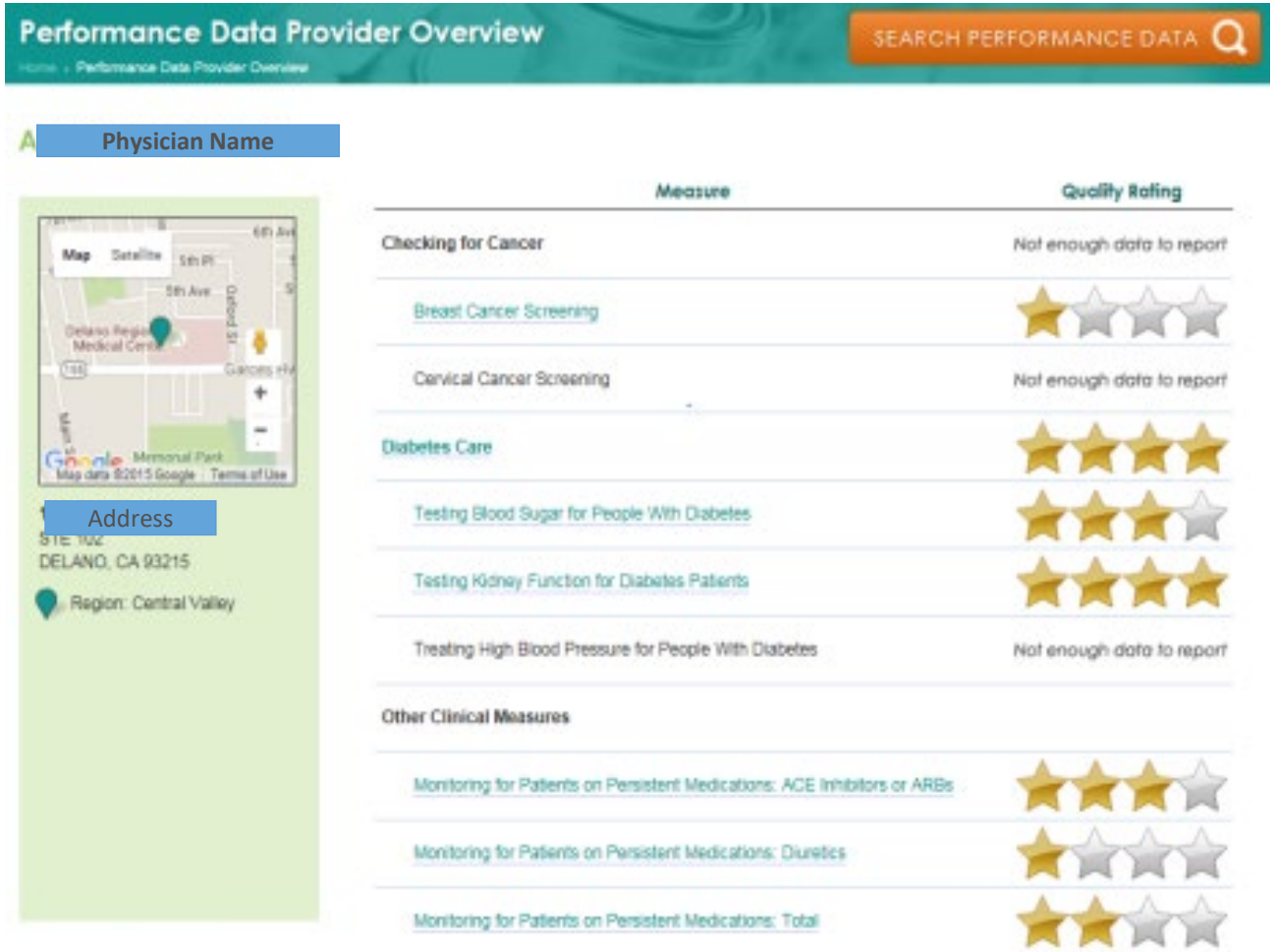
CHPI's Clinical Quality Measures

Nationally endorsed measures selected by Physician Advisory Group

- Breast Cancer Screening
- Cervical Cancer Screening
- Cervical Cancer Overscreening*
- Chlamydia Screening
- Hemoglobin A1c Testing
- Statin Therapy for Patients with Diabetes*
- Nephropathy
- Hypertension***
- Imaging for Low Back Pain**
- CAD: ACE Inhibitor or ARB Therapy-Diabetes***
- Beta-Blocker Treatment After a Heart Attack**
- Cardiac Stress Imaging*
- DMARD Therapy for RA
- Use of Opioids from Multiple Providers or at High Dosage in Persons without Cancer*
- Adolescent Well-Care Visits
- Immunizations for Adolescents
- Childhood Immunization Status*
- Human Papillomavirus for Adolescents*
- Well-Child Visits
- Children with URI
- Pediatric Pharyngitis
- Proportion of Days Covered (PDC)
- Asthma Medication Ratio**
- Medication Management for People with Asthma*
- Monitoring for Persistent Medications**
- Acute Bronchitis
- Osteoporosis Management*
- Appropriate Work Up Prior to Endometrial Ablation Procedure*

CHPI Ratings Methodology

- Attribution methodology
- Physician and practice site results must meet 0.70 reliability threshold
- Reportable measures must have 100 doctors; each with a minimum of 11 patients
- Assign 1 – 4 star ratings



Challenges for CHPI Quality Measurement

CHPI reported 13 clinical quality measures for ~ 10,000 California physicians and 8,000 practice sites in Spring 2017

Length of time to generate results

- Medicare FFS claims not available for 11 months
- QE review and corrections requirement added additional 5 months to production timeline
- Quality and completeness of commercial claims required multiple submissions
- Complex nature of work with sophisticated attribution, reliability and risk adjustment methodologies

Low proportion of reportable physicians

- 25% of PCPs and 60% of specialists had at least one reportable result
- Rigorous methodology required for public reporting and other high stakes uses

Lessons Learned & Recommendations for CA APCD

- Use the APCD-CDL to streamline data submission and reduce burden
- Consider relationship of use cases and level of measurement (e.g., regional, provider organization, practice site, individual physician)
- Larger scale of APCD will increase potential for individual physician measurement
- Require submission of at least 3 years' of historical data – many quality measures have lookback periods of 3-5 years
- Accelerate data submission and production timelines to reduce time lag when possible
- For long term development, enhance APCD with supplemental clinical data, patient-reported data, wasteful/inefficient care measures, social determinants of health, etc.

COVERED CALIFORNIA'S HEALTHCARE EVIDENCE INITIATIVE (HEI)

May 16, 2019 Meeting of the
Healthcare Payments Data (HPD) Review Committee

Isaac Menashe – Associate Director, Evaluation and Research
Policy, Evaluation and Research Division, Covered California

HEALTHCARE EVIDENCE INITIATIVE (HEI): PURPOSE

Covered California's Healthcare Evidence Initiative (HEI) relies on enrollment and utilization data to:

1. Provide actionable information supporting Covered California's operations and policy – improving care, lowering costs, and improving health.
2. Provide evidence to inform public and private policies so that purchasing strategies and benefit designs can improve quality, access, and value throughout the health care delivery system.

The initiative furthers Covered California's vision: To improve the health of all Californians by assuring their access to affordable, high quality care.

HEI DATABASE CONTENTS AND ACCESS

Data Collected by IBM Watson Health

- Claims / Encounters
- CalHEERS and Issuer Enrollment
- Capitation
- Providers
- Plans / Products

- On-Exchange individual market enrollment since 2014
  - Almost 4M consumers
  - $15B in expenditures
  - 79M claims / encounters, for both medical and Rx
- Layouts are quite similar to APCD CDL, but augmented by Covered California administrative data
- IBM secures PHI and may not share it with Covered CA. It may provide only de-identified data under HIPAA.
- Project initiated in 2014, procurement in 2015, first results in 2017, first *major* analyses in late 2018.

HEI IMPLEMENTATION CHALLENGES

Data Collected by IBM Watson Health

- Claims / Encounters
- CalHEERS and Issuer Enrollment
- Capitation
- Providers
- Plans / Products

- Limitations on financial data imposed by some issuers:
  - Charge submitted, allowed, and net paid amounts
  - Consumer out-of-pocket costs, esp. deductibles
  - Some issuers provide proxy costs. IBM generates proxy costs for others using MarketScan data.
- Reliant on the issuers' capabilities re: implementation timing and data quality / completeness
- Issuers' own system changes, e.g., in claims processing and data warehousing, may require extract re-engineering

CONSIDERATIONS for CA HPD

Covered California's experiences and recommended considerations for the HPD Review Committee are grounded in the research and analytic vision that led to our Healthcare Evidence Initiative, but tempered by some of the challenges we have experienced building a smaller, but similar, analytic tool over the past few years.

Our experiences reinforce many of the recommendations already provided to the Committee, including:

- Producing initial products that increase project buy-in both from data suppliers and users
- Importance and difficulty of data quality -> which is especially hard when correlated with explanatory variables of interest for many analyses!
- Phasing in use cases based on data availability

(These experiences are summarized in our cover letter for a set of proposed Use Cases submitted to the HPD Review Committee.)

CRITICAL DATA ATTRIBUTES

- Allowed Cost: insurer / payer paid amounts and consumer cost share amounts
- Standardized Payer, Provider, and Facility Names / IDs:
  - One-to-many roll-up of practitioners to medical practices / need to show composition of delivery system entities (e.g., ACOs)
- Distinguishing each carrier's products and networks
- Alternative Payment Model (APM) non-claims financial payments and penalty amounts
- Premium amounts and benefit coverage information for commercial market

Other data attributes added over time:

- Social determinants of health:
  - Age, gender, race, ethnicity, language, income, and location
  - Education, physical environment, etc., and census linkages
- Clinical and patient-reported outcomes data

ANALYTIC ENHANCEMENTS

Analytic capabilities and enhancements:

- Patient severity of illness / risk adjustment system
- Mapping of claims to medical services categories (e.g., imaging, lab, preventive care, primary care, specialty office visits, etc.)
- Measures engine to produce standard cost and quality measures
- Groupers to organize services into acute and chronic episodes of care
- Master Patient Index to allow for longitudinal analysis of the same individual across coverage sources (and claims feeds)
- Wasteful / inefficient care measures
- ZIP Code to census tract mapping

DATA GOVERNANCE CONSIDERATIONS

Like many of the potential HPD stakeholders, we anticipate being both a supplier *and* a user.

- Safeguard information security and the privacy of all Californians
- Clear user approval and data governance framework
- Public and private contributors and / or consumers of data
- Tiered data user framework with appropriate controls to balance data suppliers' data sensitivities with making data available to the public:
  - Submitting data must not hamper a contributor's relationships with or obligations to its own data suppliers, e.g., QHP Issuers
  - Accommodate direct access to data for the data consumers' own analyses

BREAK

Data Collection

Ted Calvert, OSHPD Consultant

Emily Sullivan, Deputy Director, NAHDO

Agenda

- Review: types of data needed for an APCD
- California's payer/submitter landscape
- APCD-CDL™
- Feedback on proposed approach to data sources and formats

Review: APCD Data Types

Four “Core” Data Files

- Member Eligibility
  - Information on all persons covered by a particular Health Payer
  - Includes details regarding the Payer, Health Plan, Subscriber/Members, Coverage Status, and Eligibility Time Spans
- Medical Claims and Encounters
  - Information on all services rendered or supplies provided
  - Includes details regarding the Payer, Provider, Patient/Member, Diagnoses, Procedures and Services Rendered, and Payment Details (claims only)
  - Encounters can include FFS-equivalents for capitated arrangements or ACO members
- Pharmacy Claims
  - Information on all prescription drugs, biologics, and vaccines provided
  - Includes details regarding the Payer/Pharmacy Benefit Manager, Provider, Pharmacy, Patient, Drug Name/NDC Code, and Payment Details (claims only)
- Provider File
  - Information for all rendering/servicing, billing, and prescribing providers
  - Includes details regarding Name, Address/Location, Specialty, NPI, License #, Tax ID, etc.

Payments That Do Not Appear on Claims

- Alternative Payment Model Payments
  - Population-Based Payment/Capitation – comprehensive, condition specific, or integrated finance and delivery systems
  - Bundled/Episode-based payment
  - Performance Incentives/Penalties
  - Shared Savings/Risk
- Pharmacy Rebates

Importance of Non-Claims Based Data

Distribution of Commercial Plan Payments ($ Per Member Per Year)

Fee For Service
$4,405 PMPY

Capitation
$839 PMPY

Source: Integrated Healthcare Association, Cost & Quality Atlas, 2017, based on 13.7 million members in commercial plans. Excludes behavioral health costs.
Note: most Kaiser Permanente (KP) payments are included in fee for service categories; KP assigns fee schedule amounts to the detailed encounter records when calculating costs.

California’s Payer Landscape

Health Insurance Coverage for Californians*

- Approximately 36 million Californians have health insurance
- Medicare covers approx. 6 million (17% of insured)
  - 3.5M Original Medicare (FFS)
  - 2.6M Medicare Advantage (Managed Care)
- Medi-Cal covers approx. 13 million (36% of insured)
  - 2.4M FFS
  - 10.6M Managed Care
- Other purchasers and payers cover approx. 20 million (55% of insured)

*Sources: U.S. Census Bureau, 2017 American Community Survey (civilian noninstitutionalized population) and 2017 California Health Interview Survey. Totals add to more than 100% due to overlapping coverage

Medicare Formats

- Original Medicare
  - CMS provides two application pathways to Medicare data
    - State Agency Request
    - Certified Qualified Entity
  - Data formats are the same regardless of pathway: quarterly and/or annual files in CMS-specified formats
- Medicare Advantage
  - APCDs collect directly from participating plans

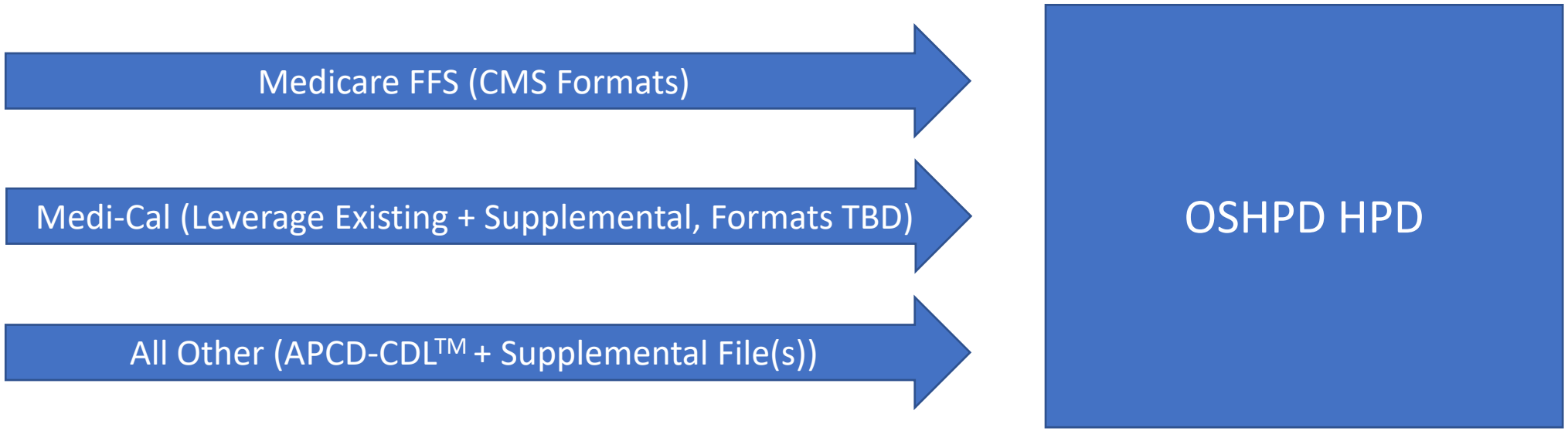
Medi-Cal Formats

- Managed Care
  - 22 Medi-Cal managed care plans send transactions-based data (post-adjudicated medical and pharmacy formats) on a flow basis to DHCS
    - Plan contracts are county-based, so actual number of submitting “plans” is much higher
    - Model types and specific plans have changed over time; will likely continue
  - DHCS systems receive, edit, monitor, and provide feedback to plans
    - Incentives and penalties for Completeness, Accuracy, Reasonability, and Timeliness (CART)
- Fee for Service and Other Core Data
  - FFS, eligibility, and provider information available from DHCS
- DHCS uses data for their Data Warehouse and also shares with CMS (via T-MSIS, Transformed Medicaid Statistical Information System)

All Other Submitter Formats

- Mix of small and large group insured plans, self-funded plans, Medicare Advantage, and plans sponsored by public organizations (e.g., Covered California, CalPERS)
- Most have experience submitting APCD-like data for other purposes (e.g., IHA, CalPERS, Covered California, other private data warehouses)

Summary: Sources and Formats



APCD-CDL™

The HPD should use the APCD-CDL™

As a new entrant to the APCD community, California has an opportunity to learn from the work in other states

Use of the APCD-CDL™ will

- reduce the burden on national health plans that submit data to multiple states, and also
- reduce the burden on OSHPD to maintain and update a proprietary format and data submission guide

APCD-CDL™ Overview

- Developed by consensus (States, Payers, Vendors)
  - Largely aligns with existing state APCD data submission guides
  - Fields were added, deleted and definitions and formats were aligned across states

- States are moving towards adopting APCD-CDL™
  - Virginia updated their submission rules
  - Most states will require rule/reg changes
  - Is a cost associated with converting existing format to the APCD-CDL™

APCD-CDL™ Format

- Selecting the flat file format by using the APCD-CDL™
  - Payers supportive of the flat file
  - Vendors in space familiar/have capacity
- Both the Post Adjudicated Claims Data Reporting (PACDR) guide and the National Council for Prescription Drug Programs (NCPDP) developed by consensus as the transactional HIPPA standard guides
  - NY adopted
- APCD-CDL™ includes references to the PACDR/NCPDP and national standards code sets
  - When National Standards are updated APCD-CDL™ will update
- Not all APCD-CDL™ elements included in the PACDR/NCPDP-and vice versa. Can be considered to be added

NEW CDL Data Element #	Original Data Element #	Data Element Name	Type	Max Length	Description/Codes/Sources	PACDR References
CDLMC032	MC036	Type of Bill – Institutional	char	3	Required for institutional claims. Not to be used for professional claims. As defined by the National Uniform Billing Committee. Do not include the leading zero. Type of Bill codes are maintained by NUBC. See Appendix H: External Code Source, National Uniform Billing Committee.	2300 CLM 05-2 & CLM05-3 (I)
CDLMC033	MC037	Place of Service – Professional	char	2	Required for professional claims. Not to be used for institutional claims. Place of Service codes are maintained by CMS. See Appendix H: External Code Source, Center for Medicaid and Medicare Services.	2300 CLM05-01 (P)
CDLMC034	MC039	Admitting Diagnosis	varchar	7	The ICD code describing the patient's diagnosis at the time of admission. Required on all inpatient admission claims and encounters. Codes found in ICD-9-CM or ICD -10-CM. Do not code decimal point. See Appendix H: External Code Source, World Health Organization.	2300 HI01-2 (I)
CDLMC035	MC040	First External Cause Code	varchar	7	The ICD diagnosis codes pertaining to environmental events, circumstances, and conditions as the cause of injury, poisoning, and other adverse effects. As submitted by provider in the first external cause field- if not submitted by the provider or captured by the carrier leave	2300 HI01-2 where HI01-1 = BN (ICD-9) or = ABN (ICD-10)

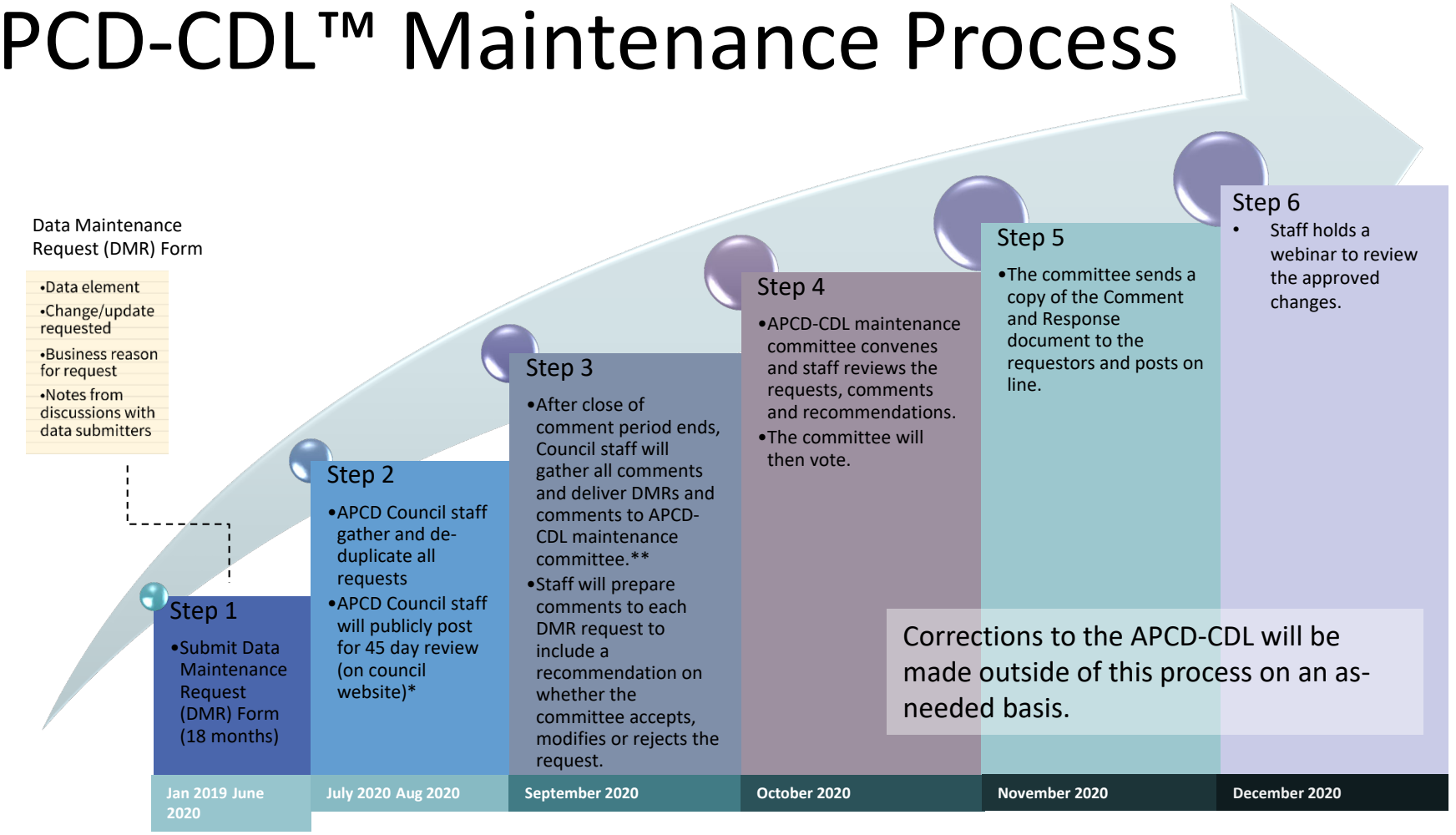
Phasing in of the APCD-CDL™

- Group that worked on developing the APCD-CDL™ agreed that all fields that meet the specifications are required if available (many caveats)
  - Special Conditions- e.g. Admitting diagnosis are only required for inpatient, Medicaid AID category only required for Medicaid claims
  - Not expected that all diagnosis and present on admission fields would be complete as there are 25 of each
  - States to leave blank if data was not collected- for example with R/E definition requires that unknown is only reported when members answers unknown or refuses to answer.

- Thresholds were not set for this reason. As the APCD-CDL™ is adopted more broadly it may be possible to develop common set of thresholds that vendors, states and payers agree on
- National Payers are familiar with the APCD-CDL™ elements-should be able to provide estimates to CA HPD on what is in their system to establish thresholds. California payers may take a little longer to get up to same %

  Test data for up to three years of historical data will assist develop the thresholds- these may change over time
- Request for exceptions to the threshold-vendors can automate these to approve or deny

APCD-CDL™ Maintenance Process



*Reflecting APCD-CDL™ development process. ALL states, payers, vendors, and data users may submit comments.
**Council staff and state members of NAHDO
Posted at https://www.apcdcouncil.org/common-data-layout

Review Proposed Approach / Draft Recommendations

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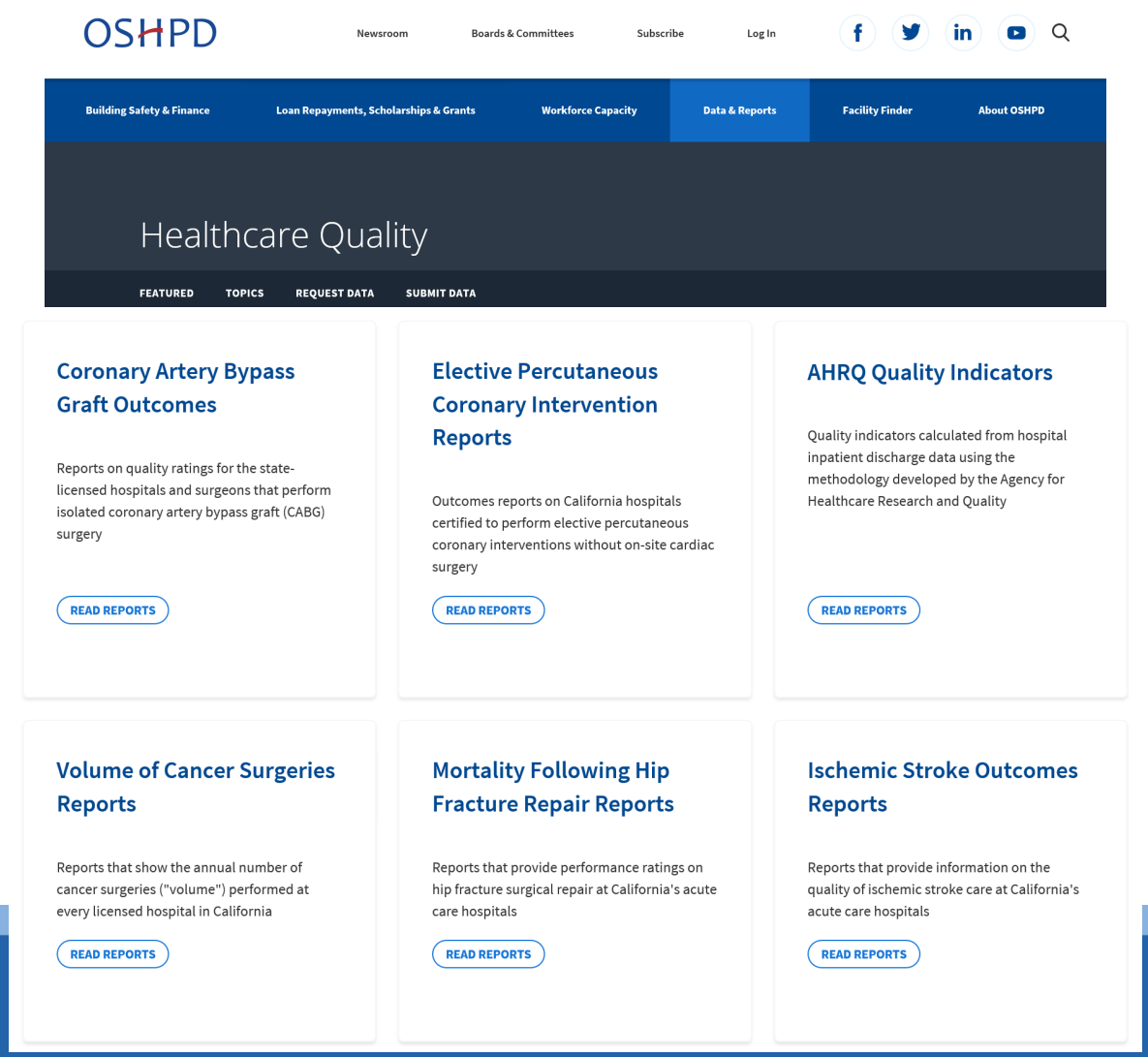
7. **Flexibility to adjust**: Additional legislation should provide OSHPD the authority to specify data collection formats for HPD submitters through regulation.

Healthcare Analytics and Data Linkages

Christopher Krawczyk, Ph.D.
Chief Analytics Officer
OSHPD

Risk-Adjusted Performance Reports



Performance Report Products

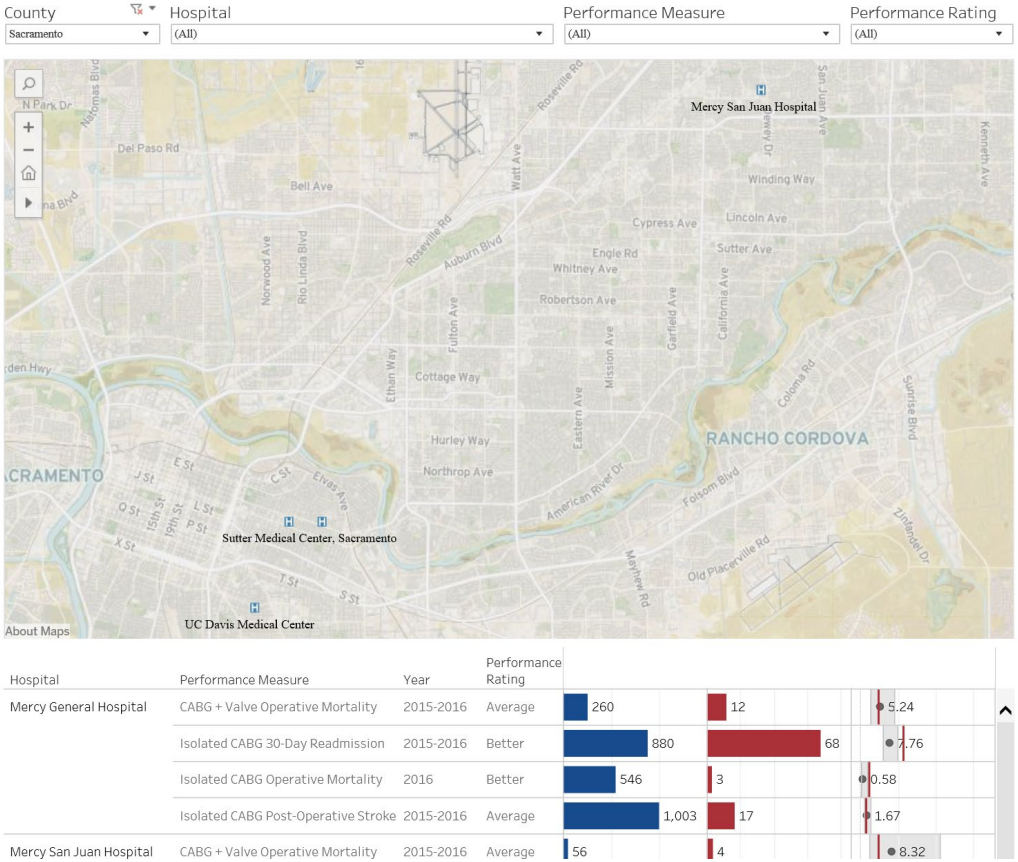
Coronary Artery Bypass Graft Outcomes

Reports on quality ratings for the state-licensed hospitals and surgeons that perform isolated coronary artery bypass graft (CABG) surgery

READ REPORTS

California Hospital Performance Ratings for Coronary Artery Bypass Graft (CABG) Surgery by Region, 2015-2016*

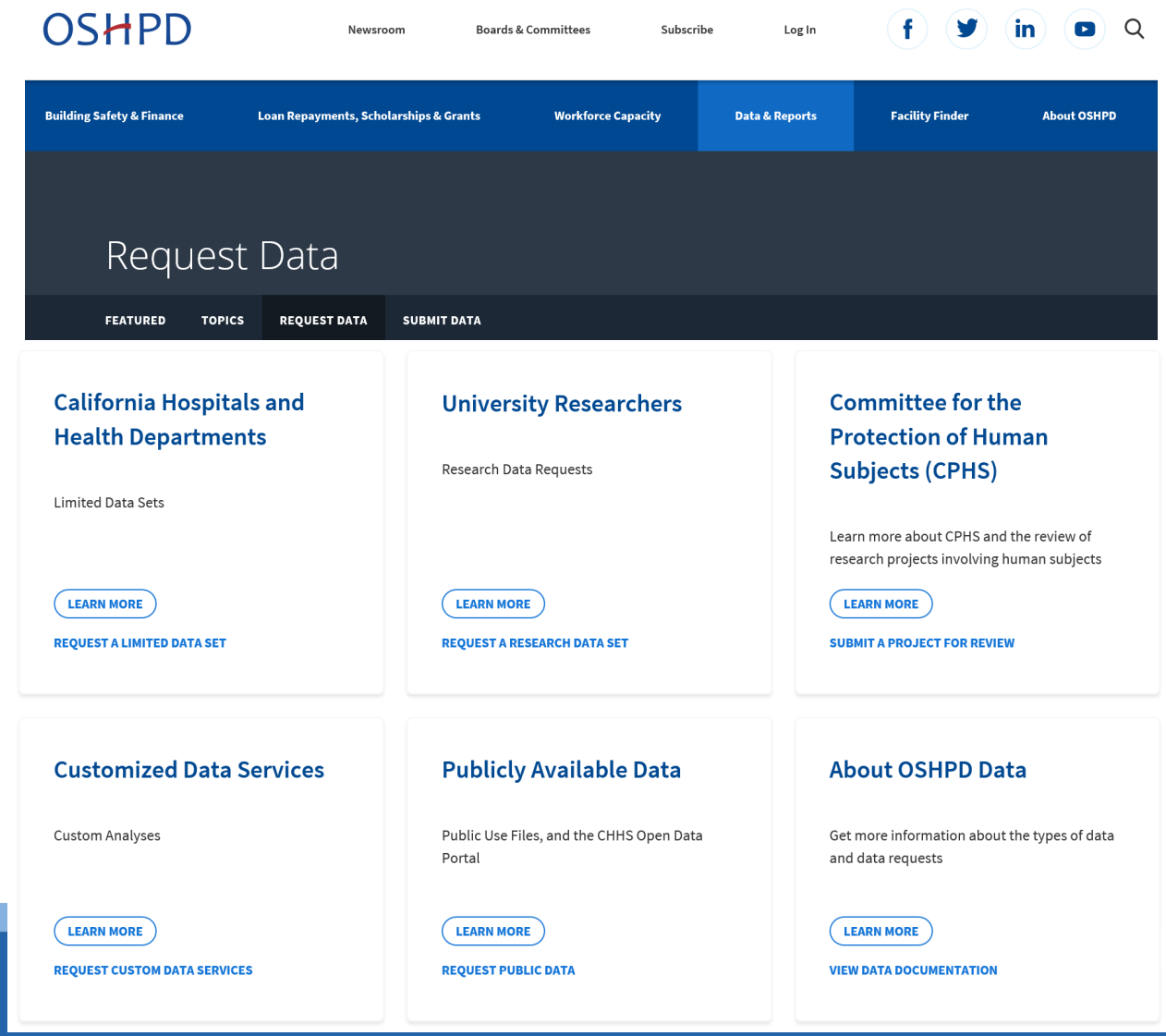
Region	Hospital	Isolated CABG Operative Mortality[1] 2016			CABG + Valve Operative Mortality[2] 2015-2016			Post-Operative Stroke[3] 2015-2016			30-Day Readmission[4] 2015-2016			Internal Mammary Artery Use[5] 2016		
		Cases (Deaths)	Risk-Adjusted Rate	Performance Rating†	Cases (Deaths)	Risk-Adjusted Rate	Performance Rating†	Cases (Strokes)	Risk-Adjusted Rate	Performance Rating†	Cases (Readmissions)	Risk-Adjusted Rate	Performance Rating†	Cases	Percent IMA Use	Performance Rating
Statewide		**12,867 (305)**	**2.37**		**4,805 (237)**	**4.93**		**25,443 (369)**	**1.50**		**22,136 (2531)**	**11.43**		**12,050**	**97.89%**	
Sacramento Valley & Northern California Region	Enloe Medical Center - Esplanade Campus	149 (3)	2.41	Average	31 (3)	9.05	Average	295 (4)	1.44	Average	278 (34)	12.55	Average	140	96.43%	Acceptable
	Mercy General Hospital	547 (4)	0.76	Better	260 (12)	5.24	Average	1004 (17)	1.67	Average	880 (68)	7.76	Better	511	99.61%	Acceptable
	Mercy Medical Center - Redding	74 (5)	4.21	Average	40 (4)	9.84	Average	191 (4)	1.91	Average	166 (20)	11.38	Average	59	100.00%	Acceptable
	Mercy San Juan Hospital	91 (1)	1.21	Average	56 (4)	8.32	Average	162 (1)	0.66	Average	152 (20)	13.44	Average	85	98.84%	Acceptable
	Rideout Memorial Hospital	91 (6)	6.58	Worse	23 (4)	11.30	Average	202 (6)	2.69	Average	185 (21)	11.07	Average	84	97.62%	Acceptable
	Shasta Regional Medical Center	84 (1)	1.41	Average	31 (1)	1.90	Average	154 (0)	0.00	Average	148 (16)	10.96	Average	76	98.68%	Acceptable
	St. Joseph Hospital - Eureka	18 (1)	3.01	Average	5 (0)	0.00	Average	38 (0)	0.00	Average	35 (2)	5.35	Average	16	100.00%	Acceptable
	Sutter Memorial Hospital - Sacramento	338 (8)	1.93	Average	213 (10)	4.58	Average	633 (9)	1.33	Average	557 (47)	8.87	Average	315	98.73%	Acceptable
	UC Davis Medical Center‡	67 (4)	10.61	Worse	35 (3)	11.66	Average	164 (3)	2.09	Average	140 (11)	8.22	Average	65	98.46%	Acceptable
& San Jose	Alta Bates Summit Medical Center - Summit Campus	118 (1)	0.84	Average	31 (1)	1.95	Average	226 (2)	0.86	Average	197 (22)	10.39	Average	113	100.00%	Acceptable
	California Pacific Medical Center - Pacific Campus	68 (3)	4.63	Average	24 (1)	5.41	Average	136 (2)	1.54	Average	115 (22)	19.63	Worse	64	98.44%	Acceptable
	Community Hospital of the Monterey Peninsula	101 (3)	3.40	Average	44 (0)	0.00	Average	194 (4)	2.18	Average	180 (8)	4.88	Better	94	100.00%	Acceptable
	Dominican Hospital - Santa Cruz/Soquel	57 (1)	0.82	Average	52 (8)	8.51	Average	132 (0)	0.00	Average	113 (13)	11.22	Average	49	100.00%	Acceptable
	El Camino Hospital	93 (2)	1.88	Average	41 (1)	2.78	Average	178 (3)	1.66	Average	135 (19)	13.96	Average	88	100.00%	Acceptable
	Good Samaritan Hospital - San Jose	75 (0)	0.00	Average	20 (1)	4.79	Average	151 (1)	0.57	Average	135 (21)	14.86	Average	64	100.00%	Acceptable
	John Muir Medical Center - Concord Campus	191 (0)	0.00	Better	66 (2)	3.82	Average	377 (8)	2.11	Average	332 (41)	12.26	Average	184	99.46%	Acceptable
	Kaiser Foundation Hospital - San Francisco	405 (5)	2.37	Average	131 (3)	4.03	Average	778 (5)	0.81	Average	761 (47)	7.53	Better	392	100.00%	Acceptable
	Kaiser Foundation Hospital - Santa Clara	259 (4)	1.53	Average	195 (10)	5.97	Average	542 (10)	2.00	Average	519 (43)	7.83	Better	245	100.00%	Acceptable
	Marin General Hospital	28 (2)	13.20	Average	16 (0)	0.00	Average	56 (2)	4.33	Average	46 (5)	14.08	Average	27	100.00%	Acceptable
	Mills Peninsula Medical Center	44 (1)	4.82	Average	14 (0)	0.00	Average	102 (2)	2.59	Average	88 (11)	14.44	Average	42	100.00%	Acceptable
	North Bay Medical Center	38 (4)	8.75	Worse	5 (2)	31.60	Average	91 (0)	0.00	Average	85 (18)	21.60	Worse	37	97.30%	Acceptable



Hospital	Performance Measure	Year	Performance Rating			
Mercy General Hospital	CABG + Valve Operative Mortality	2015-2016	Average	260	12	5.24
	Isolated CABG 30-Day Readmission	2015-2016	Better	880	68	7.76
	Isolated CABG Operative Mortality	2016	Better	546	3	0.58
	Isolated CABG Post-Operative Stroke	2015-2016	Average	1,003	17	1.67
Mercy San Juan Hospital	CABG + Valve Operative Mortality	2015-2016	Average	56	4	8.32

OSHPD
Office of Statewide Health Planning and Development

Data Request Services



Feature Topics

OSHPD
Office of Statewide Health Planning and Development

Data Pulse

October 2018

Severe Sepsis: 30-Day Mortality

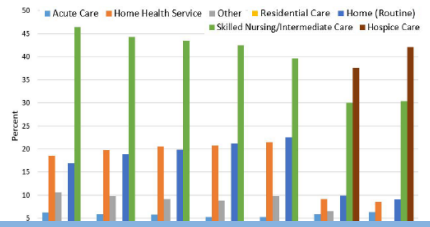
Sepsis is caused by the body's inflammatory response to uncontrolled infections, and it impacts over 1.5 million people in the United States yearly (CDC basic information sepsis, updated September 2016; CDC Vital Signs 2016). In California alone, sepsis charges totaled $36.8 billion in 2016. Sepsis is a preventable, life threatening medical condition for which the number of cases and deaths has increased over the past several years. If not treated properly, sepsis can result in a severe condition with multiple organ failure (severe sepsis) and death.

This Data Pulse presents information on patients who were alive at discharge and died within 30 days of discharge from 2010 to 2016.

Key Findings:

- From 2010 to 2016, the majority of severe sepsis patients who died within 30 days following discharge died at a skilled nursing facility. Although the percent gradually declined over the years, a notable decrease occurred in 2015 with the introduction of Hospice Care as a discharge category.
- In 2016, Hospice Care was the most common discharge category, surpassing skilled nursing facility.
- The percent of hospital-acquired severe sepsis patients who died within 30 days of discharge decreased appreciably while the percent of non-hospital-acquired severe sepsis patients increased slightly.

Figure 1. Place/Location where Severe Sepsis Patients were Discharged or Transferred to Among those who Died within 30 days of Discharge, 2010-2016**



OSHPD Home | CHHS Open Data

Information About Sepsis

The following symptoms are signs of sepsis: shivering, fever, or very cold; extreme pain or discomfort, clammy or sweaty skin, confusion or disorientation, shortness of breath, and high heart rate (CDC: making healthcare safer updated July 2017, CDC Vital Signs 2016).

Although any person can contract sepsis, some people are at an increased risk, including those over the age of 65, persons with chronic medical conditions, and those with weakened immune systems (www.CDC.gov/sepsis/what-is-sepsis.html).

Sepsis can be acquired while a patient is hospitalized for another illness or procedure; these are referred to as hospital-acquired cases.

OSHPD
Office of Statewide Health Planning and Development

Data Pulse

January 2019

Alcohol-Related Emergency Department (ED) Encounters in California, 2008-2017

A recent national study on alcohol-related visits to emergency departments (ED) found a nearly 50 percent increase in these visits between 2006 and 2014 (White et al., 2018.)[1] In response to this report, the Office of Statewide Health Planning and Development (OSHPD) explored whether a similar trend was occurring in California and found a 66.7 percent increase in alcohol-related ED visits from 2008 to 2017.

OSHPD examined both types of ED encounters: (a) "ED visits," where a patient was treated for an alcohol-related episode and then released; and (b) "ED admissions," where a patient was seen in the ED and directly admitted to that hospital for inpatient treatment of an alcohol-related episode.

Key Findings:

- There was a 66.7 percent increase in alcohol-related ED visits from 2008 to 2017, and a 36.9 percent increase for alcohol-related ED admissions (Figure 1). There was a decrease in the numbers of ED visits between the end of 2015 and 2017; however, this may be attributed to the implementation of the International Classification of Diseases, 10th revision, Clinical Modification (ICD-10-CM), which provides codes to identify medical conditions.
- The total number of alcohol-related ED visits and admissions for males was almost twice as high as the number for females in 2017 (389,992 vs. 215,493) (Figure 2).
- The number of alcohol-related ED visits and admissions increased for all four race/ethnicity groups (Non-Hispanic Whites, Hispanics, Blacks and Asian/Pacific Islander) between 2008 and 2017 (Figure 3). Asian/Pacific Islander and Hispanics showed the highest increases, 119.7 and 75.0 percent, respectively.

OSHPD Home | CHHS Open Data

The rate of alcohol-related inpatient stays in the United States increased by 33 percent between 2013 and 2014 (from 81.4 to 108.0 stays per 100,000 population). However, the proportion of the U.S. population with alcohol dependence decreased by 14 percent between 2002 and 2013 (from 7.7 percent to 6.6 percent).

(HCUP Statistical Brief #245, https://www.hcup-us.ahrq.gov/reports/statbriefs/sb245-Substance-Inpatient-Stays-Across-US-Counties.pdf)

Data Linkage

- Previous Contractor
  - OSHPD administrative data to vital statistics data
    - Cross-sectional and longitudinal

- Previous OSHPD
  - California Coronary Artery Bypass Graft Outcomes Reporting Program (CCORP)
  - Risk-adjusted analyses involving mortality
  - Analyses of readmissions

Data Linkage - Current

- Machine learning
- Learning phases:

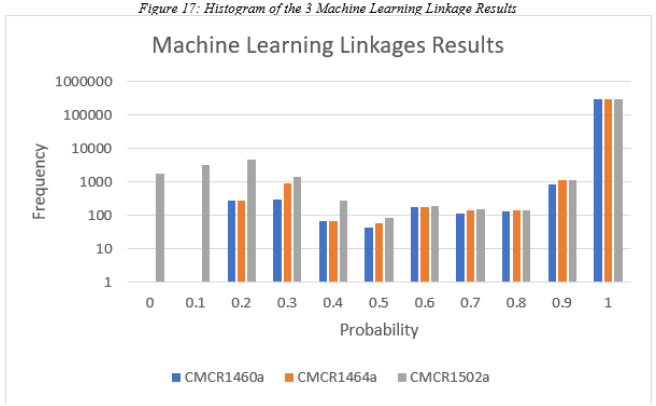
Phase I	Phase II	Phase III
• 2016 PDD with 2016 Death	• 2017 PDD with 2017 Death • 2015 PDD with 2015 Death • 2014 PDD with 2014 Death	• 2013-2018 PDD with Death
	• 2016 ED with 2016 Death	• 2013-2018 ED with Death
	• 2016 CCORP* data with PDD and Death	• 2013-2018 CCORP* data with PDD and Death
	• 2016 PDD with 2016 Birth	• 2013-2018 PDD with Birth
	• 2016 ED with 2016 Birth	• 2013-2018 ED with Birth

- CHHSA Record Reconciliation Project

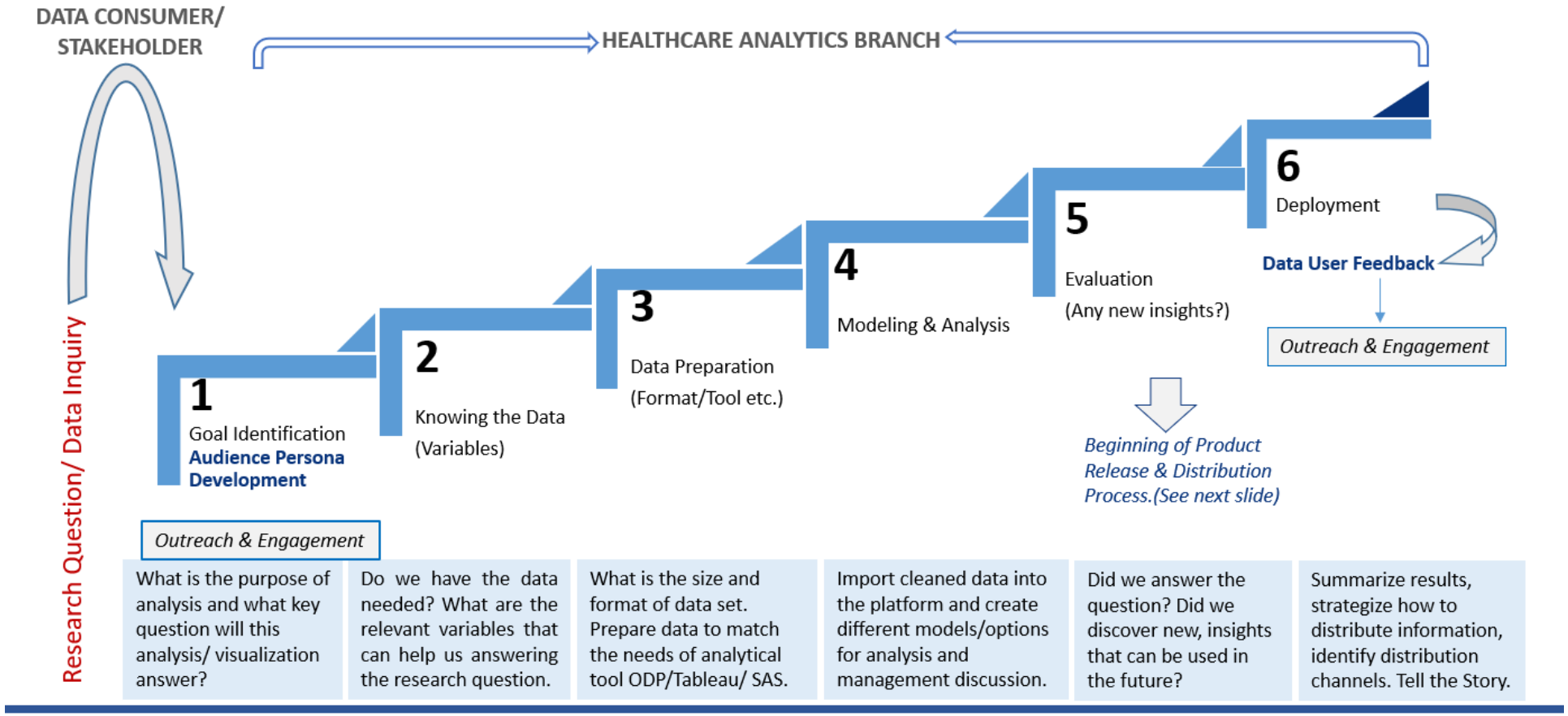
Table 3: Comparison Results between CMCR1460a linkage, CMCR1464a linkage, and CMCR1502a linkage

Probability	CMCR1460a	CMCR1464a	CMCR1502a
0			1856
0.1			3311
0.2	280	282	4727
0.3	309	950	1390
0.4	66	66	279
0.5	43	60	88
0.6	182	183	191
0.7	113	148	150
0.8	133	141	147
0.9	878	1167	1185
1	305939	305959	307723

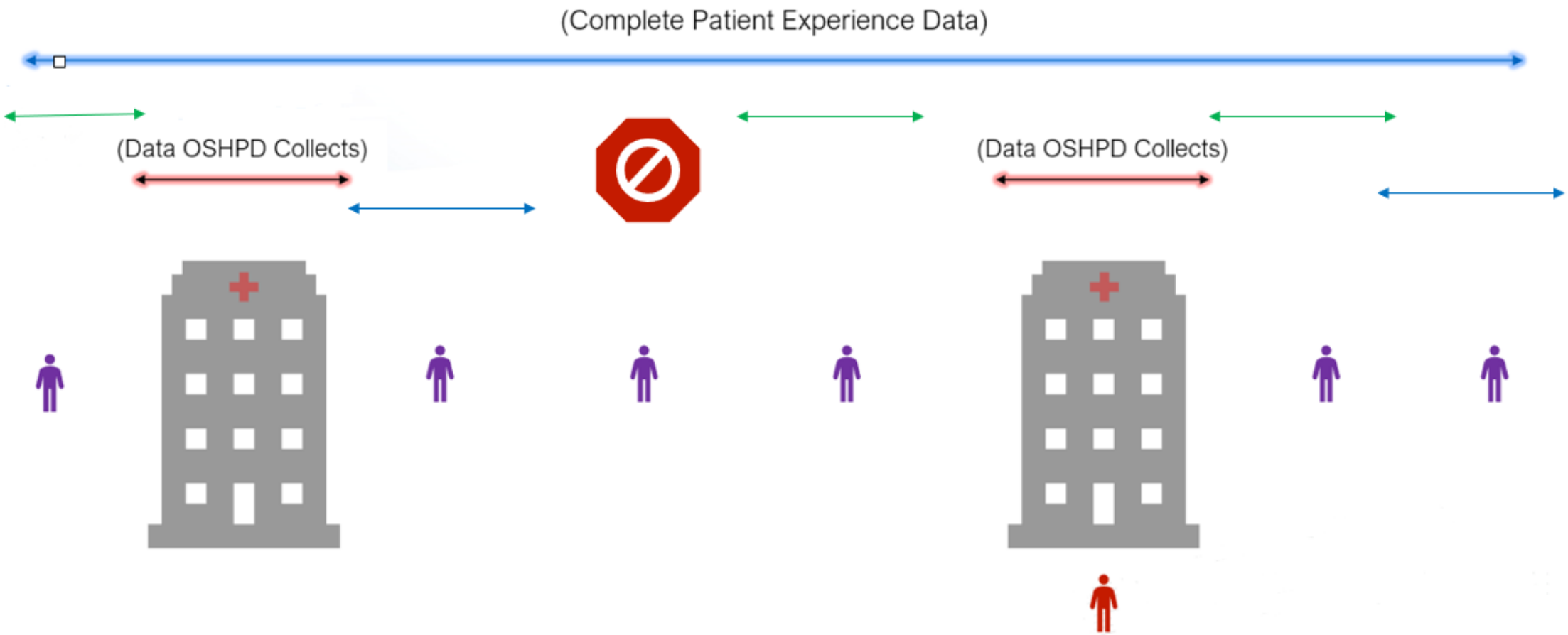
Figure 17: Histogram of the 3 Machine Learning Linkage Results



Core Analytics Framework



Developing the Infrastructure



Healthcare Analytics

- Administrative and Facility Data [Inpatient, ED, Ambulatory Surgery (limited)]
- Limited Clinical Data
- Limited Registry Data
- Financial Data
- Vital Statistics Data
- Population and Geographic Data

- Data Request Services
  - Researcher data sets, Limited data sets, custom analyses
- Risk-Adjusted Performance Reporting
- Volume and Utilization Reporting – Procedures and Conditions
- Data and Information Products
- Aggregated Data Products
- Open Data Portal

State FY 2019/2020

- Outreach visits to hospitals, partners, stakeholders
- Engagement of audience influencers and innovators
- White papering new collaborations
- New risk adjusted indicators
- Mapping and linking data assets
- Developing geospatial algorithms
- New product pilots (some with social determinants)
- Digitizing Data Request Services
- Product analytics and business intelligence
- Incorporating advancements via technology

Public Comment

Upcoming Review Committee Meeting : June 20, 2019

Updated Healthcare Payments Data Program Review Committee Meeting Topics

March

Kickoff

- Welcome & Introductions
- Background on APCDs
- Goals for the Committee

April

Data Types and Use Cases

- Types of Data in the System
- Claims Data 101
- Use Case Categories
  - Cost & Utilization
  - Quality
  - Coverage & Access
  - Population Health
  - System Performance

May

Data Collection

- Data collection format options
- Streams of data collection (Medicare, Medicaid, Commercial)
- Data collection considerations in California's complex managed care environment

June

Enhancing Database Analytics

- What other relevant data sets can be linked to the HPD data system.
- Opportunities for additional enhancements to the database

July

Data Submitters

- Considerations of who will submit data to the database
- Differences between voluntary and mandatory submitters
- Requirements for frequency of data submission

Healthcare Payments Data Program Review Committee Meeting Topics

August

Data Quality

- Roles and responsibilities in ensuring data quality throughout its lifecycle
- Effective collaborations with submitters to ensure data quality
- Documentation processes for data quality

September

Data Governance and Privacy

- California privacy landscape
- Privacy considerations for data collection, use and dissemination

October

Technology Alternatives

- Technology options to receive, store, and structure data
- Technology options to incorporate other data sets for research
- Technology options to analyze data and publish reports

November

Governance: Administrative Plan for Operating the Database

- Considerations for effectively governing a data management system
- Opportunities to leverage existing data governance structures

December

Sustainability

- Discussion on associated costs of the database
- Role of fees for data usage or data submission
- Recommended business plan elements to fund the operations of the database