

Cal Hospital Compare Board of Directors Meeting Agenda

Wednesday, June 9, 2021, 10:00am – 12:00pm PT

Webinar Information

Webinar link: https://zoom.us/j/4437895416 | Phone: 1-669-900-6833

Access code: Code: 443 789 5416 | Passcode: cyno#

Time	Agenda Item	Presenters and Documents
10:00-10:05	Welcome and call to order	- Ken Stuart
5 min.	- Approval of past meeting summary	Board Chair
		- Bruce Spurlock
		Executive Director, CHC
10:05-10:20	Organizational updates	- Alex Stack
15 min.	 Meeting schedule 	Director, CHC
	– Updates to BOD bylaws	- Bruce Spurlock
	 Covered CA Network Analysis 	Executive Director, CHC
10:20-11:20	COVID-19 in CA hospitals	- Mahil Senathirajah
60 min.	- Study results	Senior Director, IBM
	- Healthy places index	Watson Health
	- Qualitative interviews	- Hal Skinner
	- Recommendations	Consultant, IBM Watson
	- Discussion	Health
11:20-11:30	Opioid Care Honor Roll 2021	- Alex Stack
10 min.	- Assessment updates	Director, CHC
	- Proposed 2021 honor roll threshold	
	- Next steps	
11:30–11:50	Cal Hospital Compare Analytics	- Mahil Senathirajah
20 min.	- Review historical trends	Senior Director, IBM
	 Mortality 	Watson Health
	 Readmissions 	
11:50-11:55	Business Plan	- Bruce Spurlock
5 min.	- Financial report	- Executive Director, CHC
11:55-12:00	Wrap-up	- Ken Stuart
5 min.	Adjourn	Board Chair
	– Next meeting: Wednesday, August 4, 10:00am -	
	12:00pm PST (Zoom Call)	





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Cal Hospital Compare Board of Directors Meeting Summary Wednesday, April 14, 2021 10:00am – 12:00pm PST via Zoom

Attendees: Ashrith Amarnath, Seth Glickman, David Hopkins, Chris Krawczyk, Parker Lewis, Helen Macfie, Joan Maxwell, Mahil Senathirajah, Bruce Spurlock, Alex Stack, Kristof Stremikis, Ken Stuart, Kevin Worth, Tracy Fisk

Summary of Discussion:

Agenda Items	Discussion
Welcome & call to order	The meeting formally commenced at 10:04am Pacific Time. The meeting summary of February 10, 2021 was motioned, seconded, and approved as submitted.
Organizational Updates	 Ashraf Gulzar, Quality Improvement Manager with Santa Clara Valley Medical Center has joined the TAC, replacing Carolyn Brown. US News and World Report is interested in creating a composite measure for maternity. The composite would include overall HCAP scores from the hospitals. In the past, CMQCC has been reluctant to use a composite measure. Elliott Main and Bruce Spurlock will participate on a measure composite workgroup and based on progress, report back to the TAC about sharing CHC's data with US News and World Report. CHC is still exploring analyses on hospital price transparency. Currently, data is insufficient to draw a clear conclusion. Kristof and Helen will share their organization's work with the Board.
COVID-19 in Hospitals	 A new workgroup will convene for a 2-part meeting in April and May to conduct a deeper dive into what type of hospitals and populations were most impacted by COVID-19 and to what extent. All board members are invited to join the workgroup. Bruce and Mahil gave an overview of the study design. The goal of the study is to gain a deeper understanding about impact during a public health emergency, not hospital performance. How can health care and policy makers be better prepared and what can we learn about culture and decision-making processes. OSHPD will be releasing a new dashboard series of 3 visualizations in early to mid-May: looking at trends in utilization – ambulatory surgery and ED (includes COVID cases), diagnosis codes, and mortality for diagnosis codes. The data will include the first six months of 2020 inpatient, first 3 quarters of 2020 for ambulatory surgery and ED. The complete annual 2020 data file will be published in mid to late summer. It is important to be mindful of the time horizon and consider the COVID case surges/peaks (ie. Sept 2020 vs. Jan. 2021) when analyzing variables.



CHC Analytics	Mahil provided an overview on AMI mortality and readmissions measures. The background rate of health care's innovation and advancement is more profoundly directed to AMI compared to other conditions.
COVID-19 in CA Nursing Homes	For profit vs non-profit SNFs had dramatically higher COVID cases and deaths. Once vaccines were distributed, any disparity went to zero. This was most likely the largest equitable distribution in nursing homes in CA for the impact on cases and deaths. Kristof offered to support additional discussions/blog if CHC bandwidth allows. Due to time constraints, additional discussion on this topic was deferred for the next Board meeting.
Financials	Bruce reviewed the current financial reports for Q1 (January – March 2021). CHC is ahead of schedule with collecting payments from sponsors and health plans.
Next Meeting/Meeting Adjournment	 The next Board of Directors meeting is scheduled on Wednesday, June 9th at 10:00am PST via Zoom. The meeting formally adjourned at 12:00pm PST.

Cal Hospital Compare Board of Directors

June 9, 2021

10:00am-12:00pm Pacific Time

Join Zoom Meeting: https://zoom.us/j/4437895416

Passcode: cyno#

Proposed Agenda

- ▶ Welcome & call to order
- Organizational Updates
- ► COVID-19 in CA Hospitals
- ▶ Opioid Care Honor Roll 2021
- ► Cal Hospital Compare Analytics
- Business plan
- Wrap Up

Welcome!

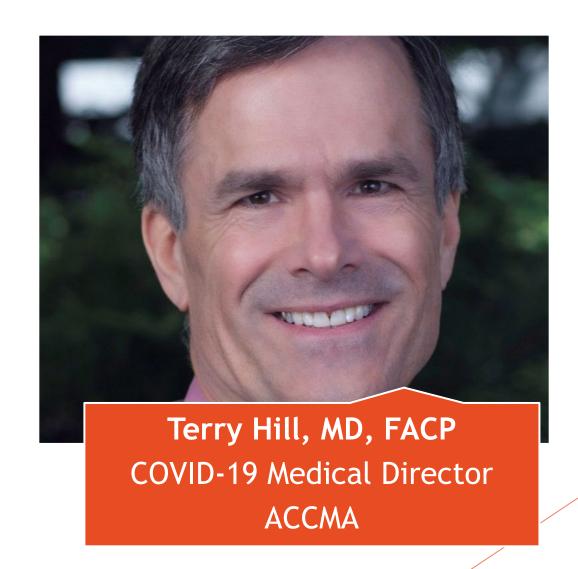


Jamie Chan, PharmD
Vice President, Clinical Quality
Blue Shield of California

BOD Bylaws

- i. Effective March 17, 2015, the Board shall be eleven (11) members. The existing Board shall elect from its members or from new candidates, two (2) representatives of health plans providing healthcare coverage to subscribers or enrollees, two (2) representatives of acute care hospitals licensed under Section 1250(a) or (b) of the California Healthcare Safety Code, three (3)representatives of consumers of health care, one of which may be from the California Healthcare Foundation, two (2) representatives of purchasers of healthcare, i.e., employers or organizations representing employers which purchase healthcare coverage, one (1) representative of the an integrated health entity and the Executive Director of the corporation.
- ii. Effective July 1, 2021, the Board shall be thirteen (13) members. Along with the members identified in Section 2 subsection iii above, the Board shall elect two (2) representatives involved in the Long-Term Services & Supports Organizations in California.
- iii. The Board at its discretion may invite representatives from state or federal agencies as ex officio members of the Board.

Proposed BOD Changes (Cal Quality Care)



Covered CA Network Analysis

General updates

Examining COVID-19 in Hospitals

DRAFT - additional revisions to slides in this section are in progress

Study Design

Goal

• To understand what type of hospitals and patient populations were most impacted by COVID-19 and hospital responses. Goal is <u>not</u> to assess hospital performance

Why?

- Identify which hospitals were most "stressed" by COVID-19 and characteristics of hospitals that were most able to respond to that stress
- Identify what else we need to know to drive data driven decision making during next PHE e.g., data gaps
- Make recommendations that support hospitals in the next PHE

How?

- Quantitative analysis
- Interviews with hospitals to provide context and insights (2-3 hospitals)

Deliverable:

• Issue brief for California Health Care Foundation by end of July



Advisory Committee

Patient Advisors

Health Plans/Payers

Quality Improvement Organizations

Hospital representatives

Emergency management representatives Subject Matter Experts/ Researchers

Two Key Analytic Questions

- ► Stress what type of hospitals and populations were most impacted by COVID-19?
 - Metrics:
 - ► ICU Bed Occupancy > 85% (Covid + non-Covid)*
 - ► Percent Adult Bed Occupancy All (Covid + non-Covid)
- ▶ **Resiliency -** what type of hospitals were able to **respond** to the winter surge?
 - Metrics:
 - ► Percent Increase in Adult Staffed ICU Beds
 - ▶ Percent Increase in Adult Staffed Beds
 - ► Increase over Nov. 6, 2020: Pre-surge

Outcome Variables Used in Model and Definition

Category	Metric (adult patient pop.)	Numerator / Denominator
Cı	% ICU Bed Occupancy > 85%	Num: Average of total number of staffed inpatient adult ICU beds that are occupied at peak Denom: Average number of total number of staffed inpatient ICU beds at peak
Stress	% Bed Occupancy	Num: Average of total number of staffed inpatient adult beds that are occupied at peak / Denom: Average of total number of staffed inpatient adult beds in the hospital at peak
	% <u>Increase</u> in Staffed ICU Beds	Num: Average number of total number of staffed adult ICU beds reported at peak / Denom: Average number of total number of staffed adult ICU beds reported in the 7-day period on 11/6/20
Resiliency	% Percent <u>Increase</u> in Staffed Beds	Num: Average number of total number of staffed adult beds reported at peak / Denom: Average number of total number of staffed adult beds reported in the 7-day period on 11/6/20

Explanatory Variables Included in Statistical Modeling

Domain	Variable	What it Measures	Units	Type of Variable	Source
Financial	Net Income	Financial Resources	Dollars	Continuous	OSHPD Financial
	Total Margin	Profitability	Percent	Continuous	
Facility Characteristics	Occupancy Rate	Busyness	Percent	Continuous	
	Total Census Days	Size of Hospital	Bed Days	Continuous	OSHPD Utilization
	Part of System, Size	Size of System Hospital Is In	Number of hospitals	Continuous	OSHPD Financial
	DSH Hospital	Serve Low Income/Uninsured	Yes/No	Categorical	OSHPD Financial
	Teaching Hospital	Whether hospital is a teaching hospital	Yes/No	Categorical	
	Hospital License Category	Type of hospital	Non-Profit, Investor, District, City or County, University of California	Categorical	OSHPD Utilization
Patient Characteristics	Patient Days by Payer	Mix of Payers	Medicare, Medi-Cal, Commercial	Categorical	OSHPD Financial
	Gender	Patient Gender	Male/Female	Percent of Total Discharges, Continuous with Category	OSHPD IP DC Characteristics
	Race	Patient Race	White, Asian, Black	Percent of Total Discharges, Continuous with Category	OSHPD IP DC Characteristics
	Ethnicity	Patient Ethnicity	Hispanic, Non-Hispanic	Percent of Total Discharges, Continuous with Category	
County	Weekly Case Rate	Weekly County-Level COVID Case Rate - New	Cases per 100,000 population	Continuous	CDPH COVID Cases

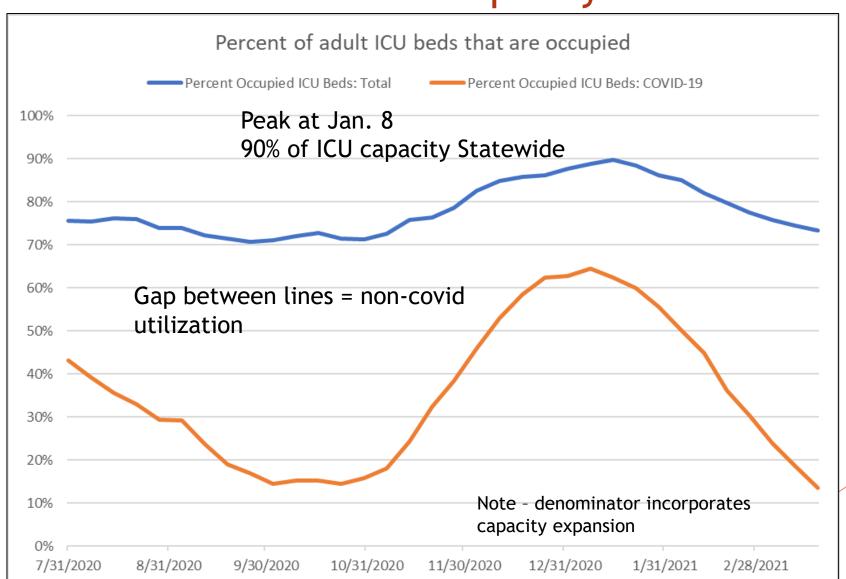
Data limitations/feedback from TAC

- Data accuracy
 - ▶ Used CY2019 data for a number of explanatory variables
 - ► Changes in ICU bed definitions
 - ▶ ICU level care was not confined to the ICU
 - ► "Borderline" patients
- Data granularity
 - ► Case rate by county vs zip code; geography matters
 - Transfers in and out of the hospital
 - ▶ Bed capacity changes as a result of canceling elective surgeries, enhanced discharge planning, end of life planning/ventilator management
- Hospital level data vs patient level data
 - ► Cannot assess impact of age and comorbid conditions
 - ► Impacts ability to make assumptions regarding disparities
- Hospital preparedness
 - ▶ Lots of lessons learned early in the pandemic that streamlined hospital operations
 - ► Changes in EMR, leadership, etc. also impacts readiness

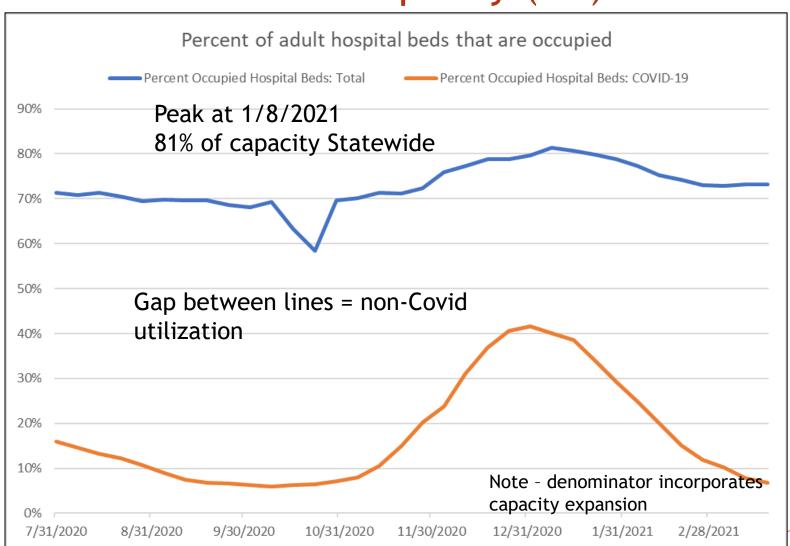
Descriptive Statistics

Examining COVID-19 in Hospitals

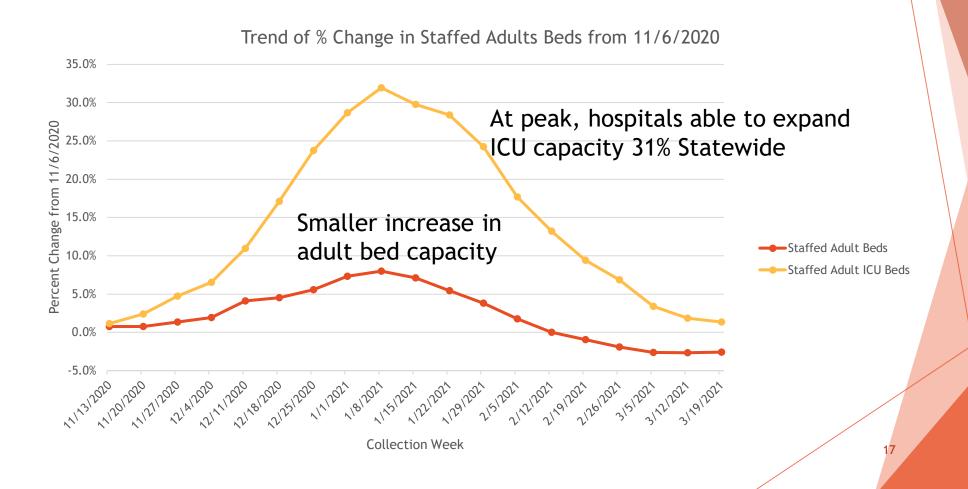
Stress: statewide trends Percent ICU Adult Bed Occupancy



Stress: statewide trends Percent Adult Bed Occupancy (All)



Resiliency: statewide trends (11/6/20 baseline) Percent Increase in Adult Staffed ICU Beds and Adult Beds



Statistical Analyses

		Stress				Resilience			
		Adult Bed Occupancy				Adult Beds Percent		ICU Beds	Percent
		(%)		ICU Occupancy 85%+		Change		Change	
	Characteristic	Estimate	P-Value	Odds Ratio	P-value	Estimate	P-Value	Estimate	P-Value
	Intercept	0.79				0.07		0.26	
	Non-DSH Hospital (vs DSH)	0.06	0.02	0.85	0.78	-0.01	0.32	0.04	0.63
\	Teaching Hospital (vs Non)	-0.02	0.65	8.45	0.06	-0.01	0.44	-0.16	0.20
	License Type								
	Non-Profit	Ref.		Ref.		Ref.		Ref.	
	City or County	0.06	0.16	0.31	1.30	0.02	0.58	0.14	0.30
	District	0.04	0.31	3.05	1.27	0.00	0.90	-0.12	0.31
	Investor	-0.06	0.04	0.88	2.29	0.05	0.54	0.01	0.92
	Smoothed Terms		P-Value		P-Value		P-Value		P-Value
	County COVID-19 Case Rate (per 100,000)		<0.01		0.04		0.26		<0.01
	Medicare Days (%)		0.08		0.06		0.32		0.30
	Medi-Cal Days (%)		0.15		0.85		0.44		0.33
	Total Census Days (per SD)		<0.01		0.66		0.58		0.38
	Net Income (per SD)		0.18		0.70		0.90		0.38
	Total Margin (per SD)		0.01		0.75		0.54		0.05
>	System Size (N Hospitals)		<0.01		0.02		0.04		<0.01
	Male Discharges (%)		0.43		0.34		0.91		0.88
	Race - Black Discharges (%)		0.35		0.45		0.71		0.02
	Race - Asian Discharges (%)		0.41		0.38		0.55		0.36
	Ethnicity Hispanic Discharges (%)		0.26		0.35		0.45		0.03

?

Key findings

Response	Metric	Teaching hospital	System size	Margin & Net Income
Chross	% ICU Bed Occupancy > 85%	Teaching hospitals ~8.4 times as likely to exceed an 85% ICU occupancy threshold	Hospitals in larger systems were more likely to exceed an 85% ICU occupancy threshold than hospitals in smaller systems	Hospitals at the top of the total margin range tended to have higher occupancy.
Stress	% Bed Occupancy		Hospitals in the middle range of system size had higher adult bed occupancy	
D 111	% <u>Increase</u> in Staffed ICU Beds	No statistically significant increase in staffed ICU beds, in fact, there was a nominal decrease	On average, hospitals in systems comprised of ~15 hospitals had greater ICU expansion	Hospitals with higher total margin tended to have lower ICU capacity expansion.
Resiliency	% Percent Increase in Staffed Beds		Hospitals in the middle range of system size had a somewhat greater adult bed expansion	

^{*}Adjusting for a range of administrative and demographic characteristics and county case rate/

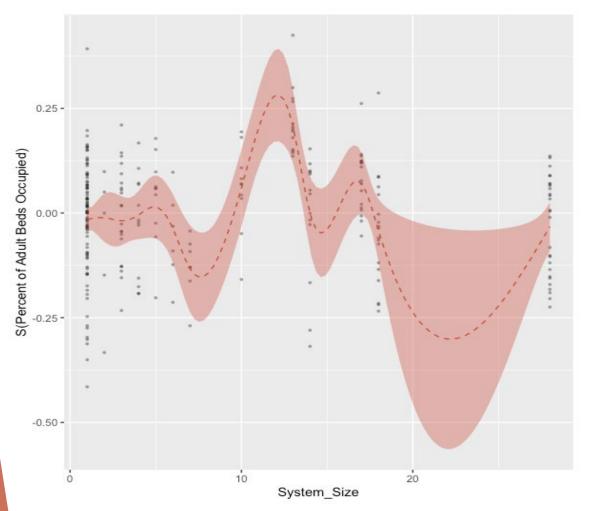
Reading between the lines

- Teaching hospital
 - ► Likely, larger tertiary care centers with higher transfer volume
 - Greater ICU capacity and capability to start with (larger ICUs, residents, etc.)
 - Did not have to expand ICU care into the hospital setting
 - Assume safer care?
- System size
 - Larger systems had greater stress but also resiliency...more experienced capabilities to handle a surge
 - Assume system hospitals have greater resources, ability to transfer within the system, and a more standardized approach to care
- Margin & Net Income
 - ► Hospitals with higher margin had higher occupancy but did not need to expand to meet the demand (e.g., higher stress but lower resiliency)
- Patient demographics
 - Did not observe a correlation between race/ethnicity and payor mix with stress and resiliency...does not mean it is not there

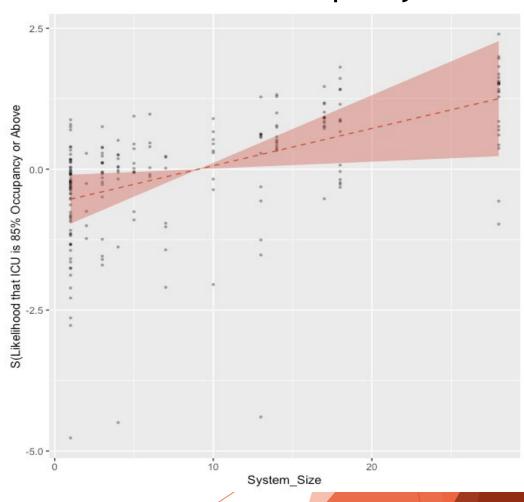
System Size

A deep dive

Stress: Adult Bed Occupancy

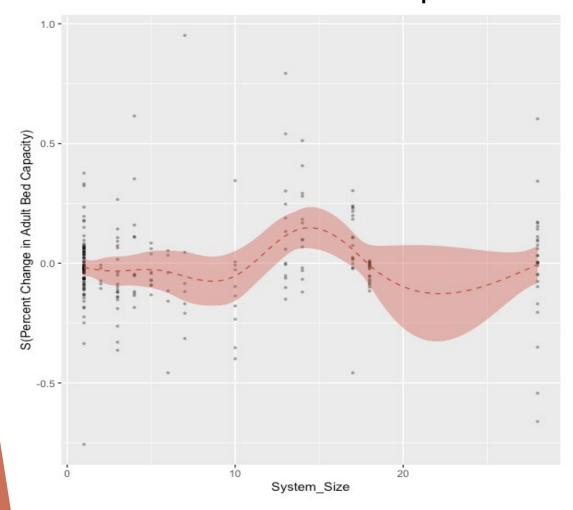


Stress: ICU Occupancy ≥85%

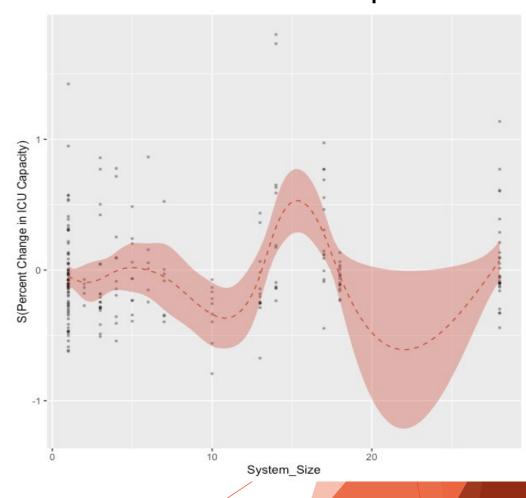


System Size (Number of Hospitals)

Resilience: Adult Bed Expansion



Resilience: ICU Expansion



System Size (Number of Hospitals)

Systems: Hospitals in North and South

	North	South
No. of hospitals in health system	70	151
DIGNITY HEALTH	17	11
KAISER FOUNDATION HOSPITALS	16	12
SUTTER HEALTH	19	
PROVIDENCE ST. JOSEPH HEALTH	5	12
PRIME HEALTHCARE SERVICES	1	13
TENET HEALTHCARE CORPORATION	6	7

Notes:

- Kaiser and Dignity: largest systems serving both North and South
- Sutter: serves only North
- Providence and Prime: serve mostly South
- Tenet: serves both North and South

Hospital System Preliminary Results

		Stress			Resilience				
Health System	Number of Hospitals in Data	Adult Bed Occupancy		ICU Occupancy 85%+		Adult Bed Percent Change		ICU Bed Per	cent Change
All Other Hospitals (reference)		Estimate	P-value	Odds Ratio	P-value	Estimate	P-value	Estimate	P-value
Dignity Health	28	-3.3%	0.35	2.19	0.19	-0.6%	0.87	14.7%	0.13
Kaiser Foundation Hospitals	28	6.4%	0.08	9.15	0.00	-1.0%	0.81	40.7%	<0.01
Prime Healthcare Services	14	0.8%	0.87	Inf.	1.00	15.2%	<0.01	48.6%	<0.01
Providence St. Joseph Health Services	17	9.5%	0.03	16.41	0.02	7.2%	0.13	34.7%	0.01
Sutter Health	18	-10.5%	0.02	2.36	0.24	-3.5%	0.46	-0.1%	0.99
Tenet Healthcare Corporation	13	18.5%	0.00	0.76	0.71	18.9%	<0.01	-7.2%	0.58

Adjusted for COVID-19 County Case Rate and Demographics (Asian Race, Black Race, Hispanic Ethnicity)

Tenet
reported the
highest peak
adult bed
occupancy.
Sutter
reported the
lowest.

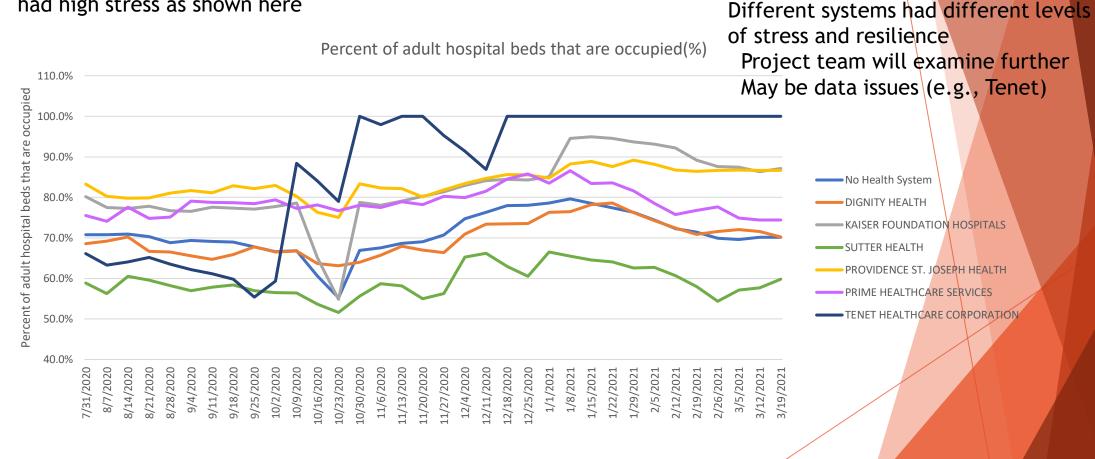
Prime reported the highest peak ICU bed occupancy.

Tenet reported the highest peak adult bed expansion.

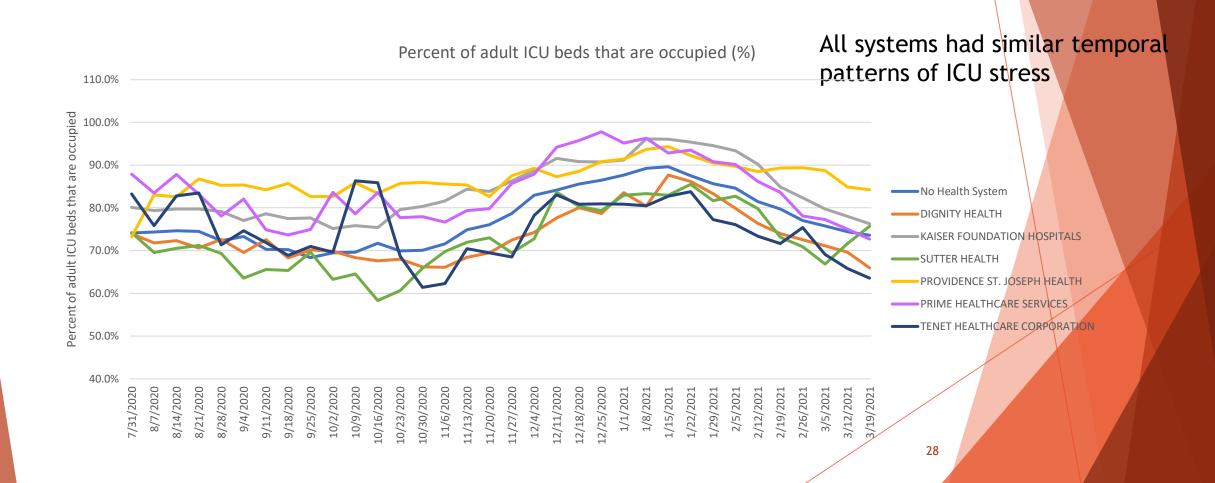
Prime reported the highest peak ICU bed expansion.

Stress: Adult Bed Occupancy by System

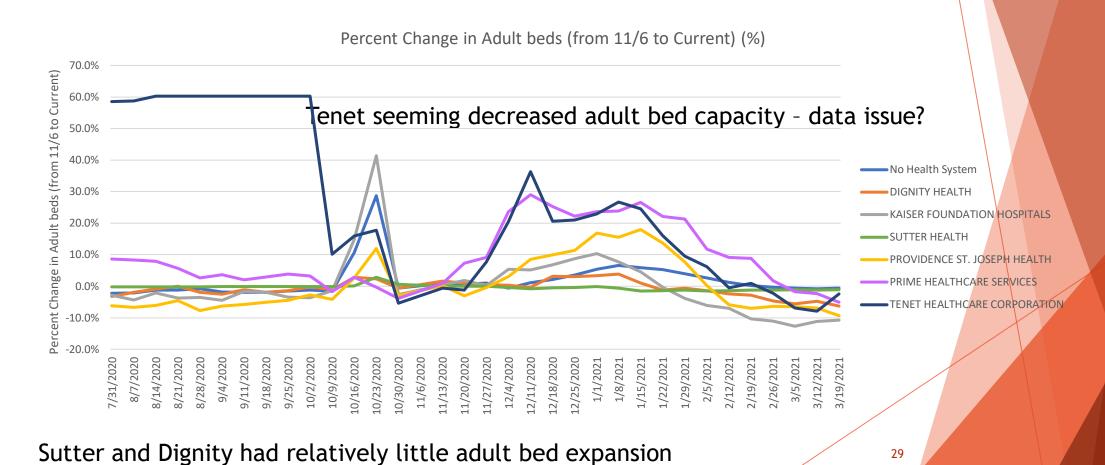
Tenet seemed to lower adult bed capacity but had high stress as shown here



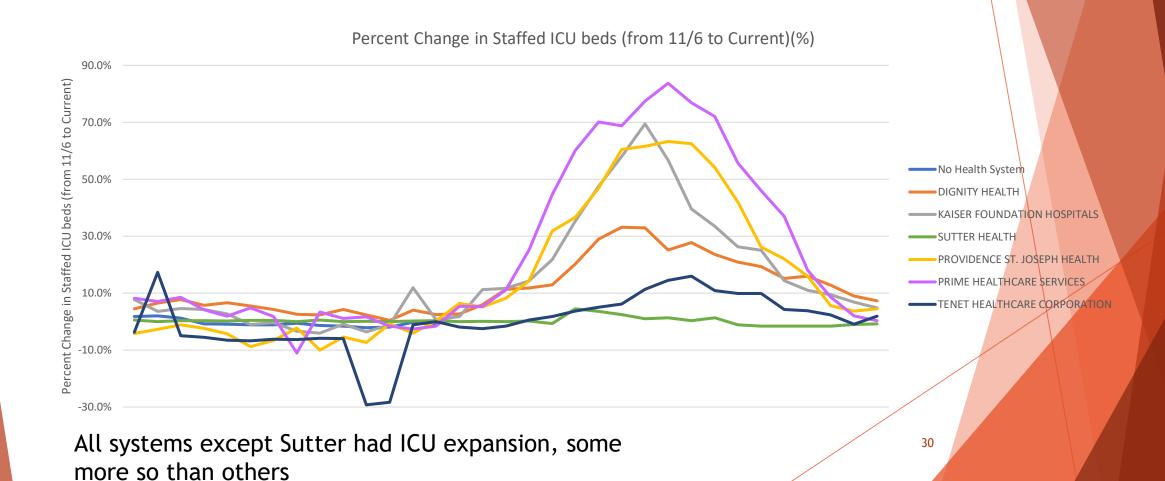
Stress: ICU Bed Occupancy by System



Resiliency: Adult Bed Expansion by System

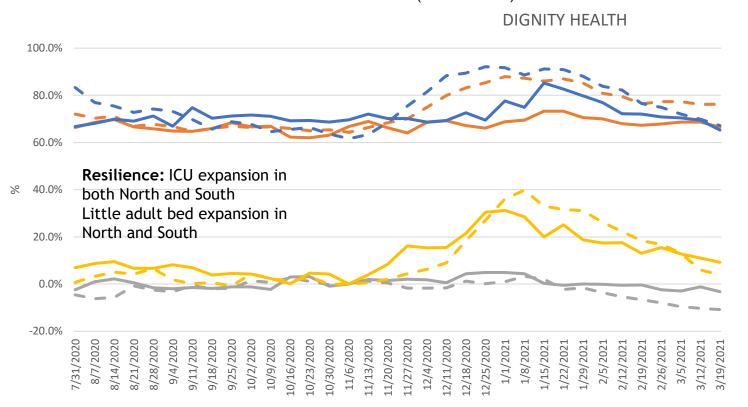


Resiliency: ICU Bed Expansion by System



Stress and Resilience: Dignity Health Example, North and South





North = solid lines
South = dashed lines

- Percent of adult hospital beds that are occupied (North)
- Percent of adult hospital beds that are occupied (South)
- Percent of adult ICU beds that are occupied (North)
- Percent of adult ICU beds that are occupied (South)
 - Percent Change in Adult beds (from 11/6 to Current) (North
- Percent Change in Adult beds (from 11/6 to Current) (South)
- Percent Change in Staffed ICU beds (from 11/6 to Current) (North)
- Percent Change in Staffed ICU beds (from 11/6 to Current) (South)

Project team will examine North vs South patterns for other systems

Disparities?

Looked at HPI and a few other things
Add in correlations here
Did the scatter but don't show them

Recommendations

- ► Contextualize the data with expanded qualitative interviews and/or focus groups
 - Most other recommendations should be on hold until these are completed

Next PHE

- How to think about teaching/system hospitals differently...does that change the emergency management game or how systems support their individual hospitals?
- "Micro geography" probably plays a role number of staffed beds/capita, next closest hospital

Data needs

- What's missing from the resilience story is transfers. A centralized resource for understanding the magnitude of patient movement (and also to track any quality concerns)
- Covid case rates at the zip code or HSA level
- An evaluation of HPI at the HSA level for individual hospitals
 - ▶ An updated HPI (to address gentrification, factor weighting, health outcomes)
- In an ideal world race/ethnicity (with more categories of granularity) on admission. Could connect with test positive results.

Areas of future study

- Disparities on admission vs care
- System capabilities
- Geographical impact

Qualitative Interviews

What is important to know?

Who should we ask?

Small vs large system Geographic regions

High COVID-19 case rates

Teaching/
non-Teaching

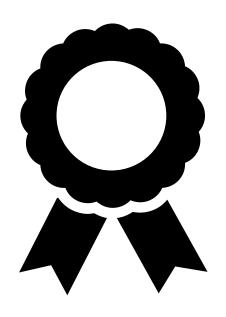
Large Medicaid population

Opioid Care Honor Roll

2021 Program

Opioid Care Honor Roll Program Programmatic Goals

- Activate hospitals to accelerate care redesign in service of reducing OUD related deaths
- Recognize hospitals for their performance
 & commitment to this effort
- Create the space for quality improvement
 & the sharing of best practices



Measure Trajectory

Year 2: process and structural measures throughout the hospital

performance measure development & implementation

Address SUD

Year 3-4:

quantitative

Year 1: process and structural measures in one unit of the hospital

Workgroup recommendations

Self-assessment criteria

- Minimize changes to the 2021 selfassessment
- Focus on hardwiring best practices
- Adapt timeline

Provide measurement guidance

- Level 4 "actively
 measuring &
 developing
 strategies to
 improve..."
- Collect measure specifications in a standardized way
- Share list of suggested measures by domain

Assess SUD

- Assess areas of focus & progress (alcohol, meth., heroin, etc.)
- Weave SUD into 2022 assessment

Set honor roll threshold in advance

- Tool to increase hospital engagement
- 1 extra credit point to "honroll" another hospital

Proposed 2021 Honor Roll Threshold

2020 Opioid Management Hospital Self-Assessment Results

Count	25 th %ile (14 pts)	50 th %ile (21 pts)	75 th %ile (27 pts)	90 th %ile (30 pts)	95 th %ile (31 pts)
# Hospitals	13 (79)	22 (66)	23 (44)	15 (21)	6
# Hospitals w/Extra Credit	12 (79)	18 (67)	24 (49)	6 (25)	19

Excellent Progress

Superior Performance

TAC Recommendations:

- ► Keep honor roll threshold at 75%ile or 27 points
- Also recognize
 - ▶ 50%ile or 21 points for excellent progress
 - Most improved

Honor Roll Timeline

May 2021

Launch updated self-assessment

Jun - Dec 2021

Host webinar on the 2021 Opioid Care Honor Roll

Peer learning opportunities on key topics (sprint approach)

On-demand resources

Provide office hours on how to apply for the 2021 Opioid Care Honor Roll

March 2022

Hospitals submit results by Mar 30

Announce honor roll recipients in partnership with CHHS Agency by Jun 2022

Cal Hospital Compare Analytics

Historical trends

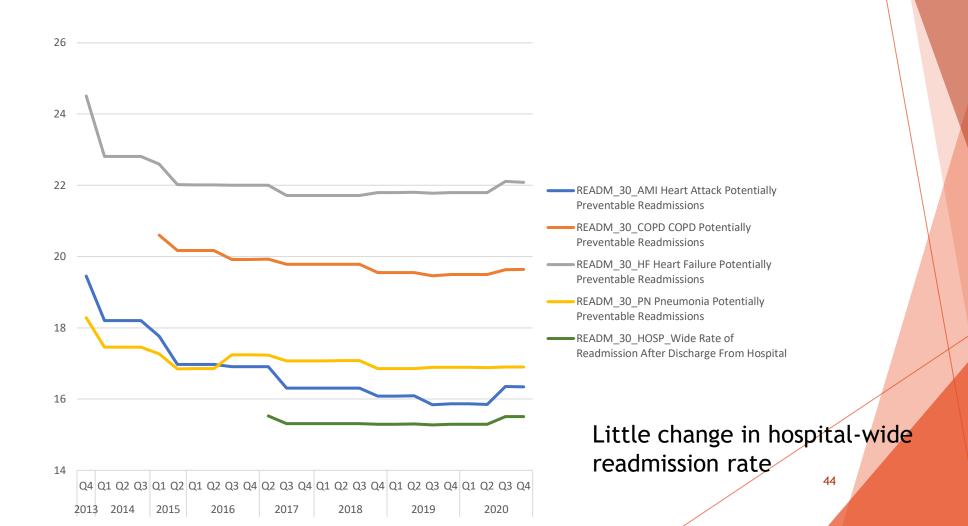
Cal Hospital Compare Analytics

- Goal of Comprehensive Measure Analysis
 - ► To examine longitudinal trends in both the measure set and performance to provide actionable insights
 - Review measure set and methodology and consider enhancements to improve consumer reporting
- ► In depth examination of CalHospitalCompare's performance history
 - ► Changes in the measure set over time; migrating from process to outcome measures, including impact of specification changes and rebasing
 - ► Examine the absolute changes in performance over time
 - Examine hospital and/or demographic factors that are associated with the most improved/worsened performance.
 - Hospital size, system ownership, urban vs rural, occupancy, payer mix, financial performance, staffing etc.
 - ▶ Could also include sociodemographic information in the hospitals geographic area
 - Multivariate regression can be run to more precisely quantify the factors driving both 1) performance differences across hospitals and 2) changes in performance over time

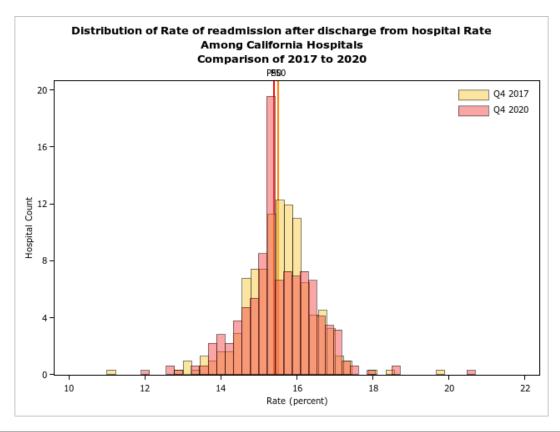
Hospital-Wide Readmissions

Historical trends

Hospital Readmissions Measures - Historical Trends



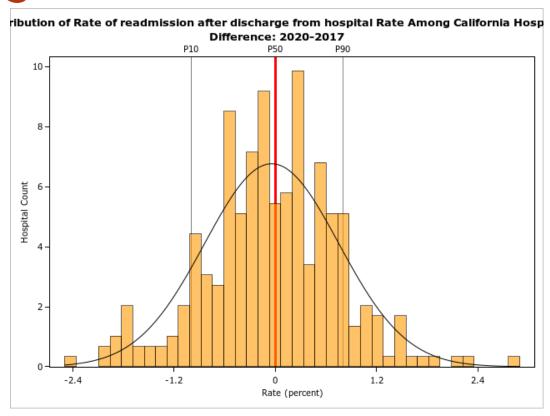
Hospital-Wide Readmissions- Change in Distributions



Very little improvement

					Sum	mary statis	stics				
Variable	Label	N	Mean	Std Dev	Minimum	10th Pctl	25th Pctl	75th Pctl	90th Pctl	Maximum	
t1	Q4 2017	310	15.5%	0.9%	11.0%	14.5%	15.1%	15.5%	16.1%	16.6%	19.9%
t2	Q4 2020	317	15.5%	1.0%	11.9%	14.4%	15.0%	15.4%	16.1%	16.7%	20.7%

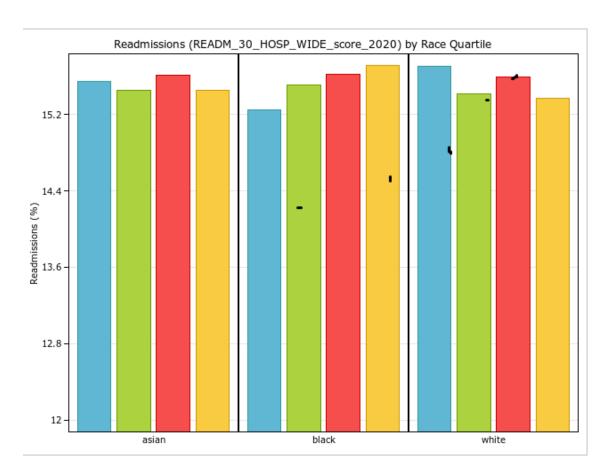
Hospital-Wide Readmissions- Distribution of Change



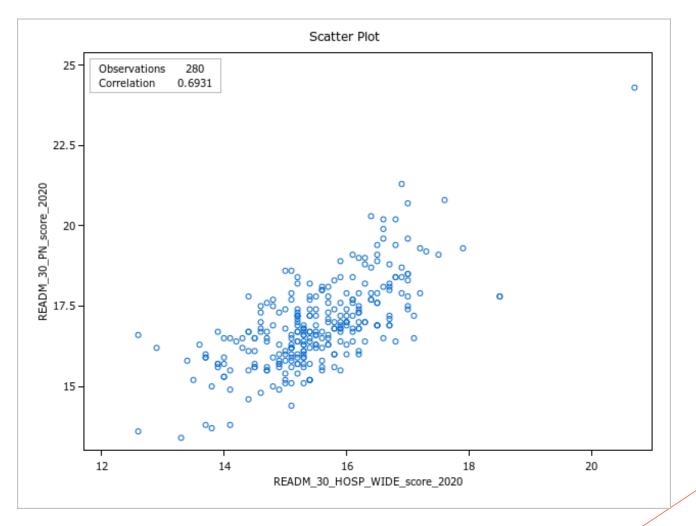
As many hospitals decreased as improved

			Ana	alysis Varia	able: diff (2	020 - 2017)			
N	Mean	Std Dev	Minimum	10th Pctl	25th Pctl	50th Pctl	75th Pctl	90th Pctl	Maximum
294	(0.0%)	0.8%	(2.5%)	(1.0%)	(0.5%)	0.0%	0.5%	0.8%	2.9%

Hospital-Wide Readmission: Race



Slightly higher rates in hospitals in highest quartile of percent black admissions



Relatively strong correlation between condition-specific readmissions measures and hospital-wide readmissions measures

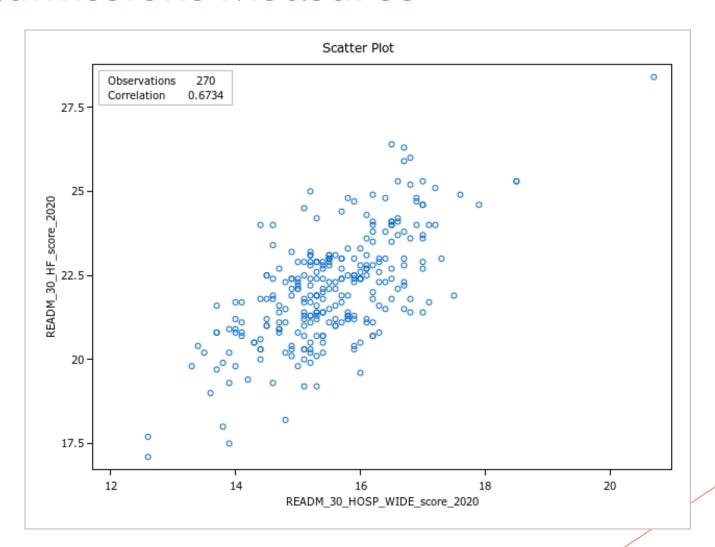
Correlations in decreasing order of strength (see subsequent slides):

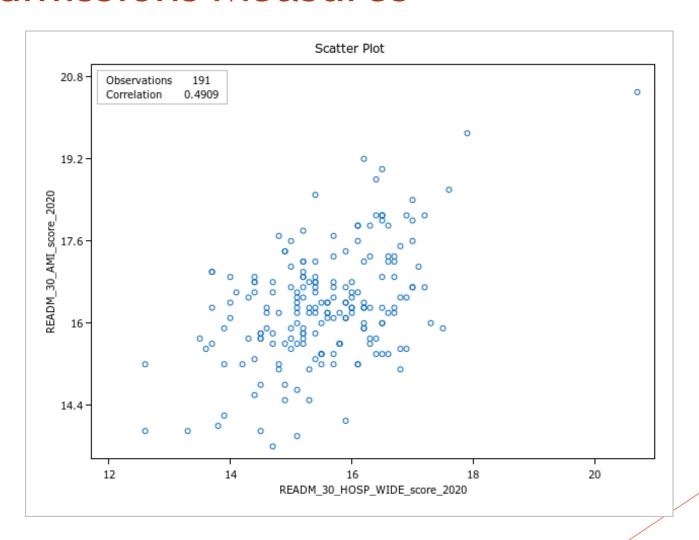
Pneumonia

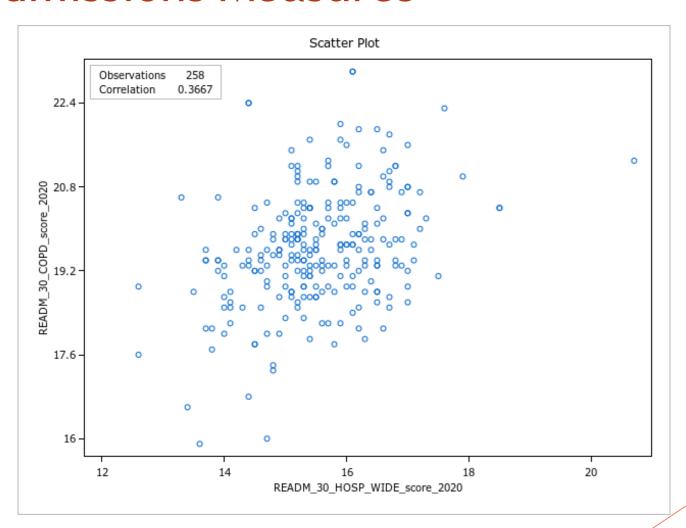
Heart Failure

AMI

COPD







Pancreatic and Esophageal Cancer Surgery Volumes

Historical trends

Minimum Cancer Surgery Volumes

- June 2017 CHCF Issue Brief examined hospitals with low cancer surgery volumes
 - https://www.chcf.org/wp-content/uploads/2017/12/PDF-SmallNumbersCancerSurgeries.pdf
- Standards developed by Dartmouth-Hitchcock Medical Center, Johns Hopkins Hospital and Health System and University of Michigan Health System
- Only 4 hospitals meet esophagus standard of 20; 15 meet pancreatic standard of 20

	Minimum Standard
Pancreatic	20
Esophagus	20
Lung	40
Rectum	15

Identification of Low Volume Hospitals

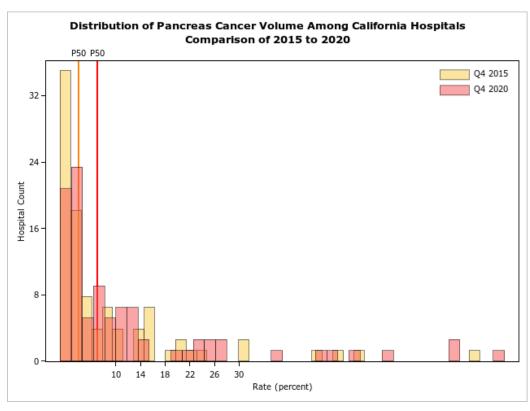
Number of hospitals doing few esophageal cancer surgeries decreased substantially from 2015 to 2020

Number of hospitals performing one pancreatic surgery increased from 2015 to 2020. Number performing two surgeries decreased

Number Of Surgeries	Number of Esophageal C	=	Number of Hosp Cancer	itals - Pancreatic Surgery
	2015	2020	2015	2020
1	45	30	17	35
2	28	8	24	12
3	10	8	13	12
4	9	9	4	15
5	6	1	5	1
6-10	10	9	17	20
10-20	11	11	13	10
20+	5	4	12	15

Note: Dates are "reporting years" cover measurement period of prior CY.

Distribution of Pancreatic Cancer Surgeries



Variable	N	Mean	Std Dev	Minimum	10th Pctl	Lower Quartile	Median	Upper Quartile	90th Pctl	Maximum	
Pancreas Cancer Volume (without zeros)	Q4 2015	40	9.2	12.4	1	1	2	4	10	23	69
Pancreas Cancer Volume (without zeros)	Q4 2020	40	12.5	16.1	1	1	3	7	12	36	73
Pancreas Cancer Volume (without zeros)	2020-2015	40	3.3	8	-12	-4	-1	2	6	12	34

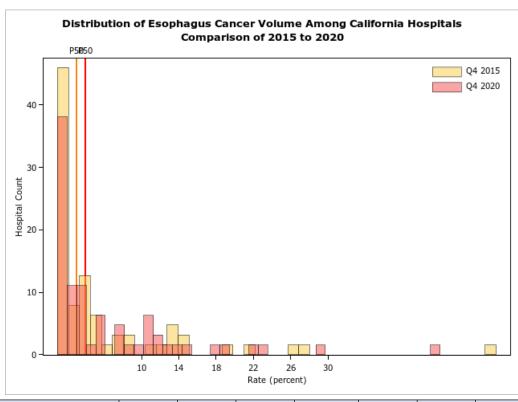
Many Hospitals Performing One Pancreatic Cancer Surgery in 2020

Health Service Area	Hospital [Hospital Demographics Hospital Name Health Service Area Hospital Size Urban/Rural													
St. Joseph Hospital, Eureka	Hospital Name	enhower Medical Center 12 - Inland Counties Small													
Valley Presbyterian Hospital	Eisenhower Medical Center	12 - Inland Counties	Small		5	1	1		1						
Arrowhead Regional Medical Center 12 - Inland Counties Large 1: Large metro areas 2 2 2 3 1	St. Joseph Hospital, Eureka	01 - Northern California	Medium	3: Micropolitan areas	3	2	4	1	1						
2	Valley Presbyterian Hospital	11 - Los Angeles	Large	1: Large metro areas	2	8	3	2	1						
Eden Medical Center	Arrowhead Regional Medical Center	12 - Inland Counties	Large	1: Large metro areas	2	2	2	3	1						
	Zuckerberg San Francisco General Hospital and Trauma Center		Medium	1: Large metro areas	2	1	1		1						
Caiser Permanente Baldwin Park Medical Center 11 - Los Angeles Large 1 : Large metro areas 1 2 1		05 - East Bay	Medium	1: Large metro areas	1		1	1	1						
Adventist Health St. Helena 03 - North Bay Small 2 : Small metro areas 1 Mercy General Hospital 02 - Golden Empire Medium 1: Large metro areas 1 6 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	UCLA Medical Center - Santa Monica	11 - Los Angeles	Medium	1: Large metro areas	1	1			1						
Mercy General Hospital	Kaiser Permanente Baldwin Park Medical Center	11 - Los Angeles	Large	1: Large metro areas	1		2		1						
Regional Medical Center of San Jose	Adventist Health St. Helena	03 - North Bay	Small	2: Small metro areas	1				1						
Alta Bates Surmint Medical Center - Alta Bates Campus 05 - East Bay Large 1: Large metro areas 0 1 2 2 1	Mercy General Hospital	02 - Golden Empire	Medium	1: Large metro areas	1	6	1	3	1						
Sutter Delta Medical Center	Regional Medical Center of San Jose	07 - Santa Clara	Medium	1: Large metro areas	1			2	1						
John Muir Medical Center - Concord Campus 1	Alta Bates Summit Medical Center - Alta Bates Campus	05 - East Bay	Large	1: Large metro areas	0	1	2	2	1						
Pioneers Memorial Healthcare District		05 - East Bay	Medium	1: Large metro areas	0			2	1						
Bakersfield Memorial Hospital 09 - Central Large 2: Small metro areas 0 1 1 1 1 1 1 1 1 1	John Muir Medical Center - Concord Campus	05 - East Bay			0	1			1						
Mercy Hospital Downtown	Pioneers Memorial Healthcare District	14 - San Diego/Imperial	Medium	2: Small metro areas	0				1						
Alhambra Hospital Medical Center	<u> </u>		Large	2: Small metro areas		1	1								
Lakewood Regional Medical Center	7				0	1	1								
Monterey Park Hospital					0										
St. Francis Medical Center Adventist Health White Memorial In Los Angeles In Large metro areas In Large me	•				0	3	2	1	1						
Adventist Health White Memorial 11 - Los Angeles Large 1: Large metro areas 0 2 1 1 1 1 1 Kaiser Permanente Woodland Hills Medical Center 11 - Los Angeles Medium 1: Large metro areas 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		11 - Los Angeles	Medium		0				1						
Kaiser Permanente Woodland Hills Medical Center 11 - Los Angeles Medium 11 - Large metro areas 0 1 1 Palmdale Regional Medical Center 11 - Los Angeles Small Sierra Nevada Memorial Hospital 02 - Golden Empire Small 33 - Micropolitan areas 0 1 Placentia-Linda Hospital 13 - Orange Small Kaiser Permanente Roseville Medical Center 02 - Golden Empire Large 11 - Large metro areas 0 1 1 1 1 1 1 1 1 1 1 1 1					0		1		1						
Palmdale Regional Medical Center 11 - Los Angeles Small 02 - Golden Empire Small 3: Micropolitan areas 0 11 Placentia-Linda Hospital 13 - Orange Small 13 - Orange Small 13 - Orange Small 14 - San Diego/Imperial 15 - Large metro areas 16 - Large metro areas 17 - Large metro areas 18 - Large metro areas 19 - Large metro areas 10 - Large metro areas 10 - Large metro areas 11 - Large metro areas 12 - Inland Counties 13 - Orange 14 - Large metro areas 15 - Large metro areas 16 - Large metro areas 17 - Large metro areas 18 - Large metro areas 19 - Large metro areas 10 - Large metro areas 10 - Large metro areas 11 - Large metro areas 12 - Inland Counties 13 - Inland Counties 14 - Inland Counties 15 - Inland Counties 16 - Inland Counties 17 - Inland Counties 18 - Inland Counties 19 - Inland Counties 10 - Inland Counties 10 - Inland Counties 10 - Inland Counties 11 - Inland Counties 12 - Inland Counties 13 - Inland Counties 14 - San Diego/Imperial 15 - Large metro areas 16 - Inland Counties 17 - Inland Counties 18 - Inland Counties 19 - Inland Counties 10 - Inland Counties 10 - Inland Counties 11 - Inland Counties 12 - Inland Counties 13 - Inland Counties 14 - San Diego/Imperial 15 - Large metro areas 16 - Inland Counties 17 - Inland Counties 18 - Inland Counties 19 - Inland Counties 10 - Inland Counties 10 - Inland Counties 11 - Inland Counties 11 - Inland Counties 12 - Inland Counties 13 - Inland Counties 14 - San Diego/Imperial 15 - Large metro areas 16 - Inland Counties 17 - Inland Counties 18 - Inland Counties 19 - Inland Counties 10 - Inland Counties 10 - Inland Counties 10 - Inland Counties 11 - Inland Counties 11 - Inland Counties 12 - Inland Counties 13 - Inland Counties 14 - San Diego/Imperial 15 - Inland Counties 16 - Inland Counties 17 - Inland Counties 18 - Inland Counties 19 - Inland Counties 10 - Inland Counties 10 - Inland Counties 10 - Inland Counties 11 - Inland Counties 11 - Inland Counties 12 - Inland Counties 13 - Inland Counties 14 - Inland Counties 15 - Inland Counties 16 - Inland Counties 17 - I					0	2	1	1	1						
Sierra Nevada Memorial Hospital O2 - Golden Empire Small 13 - Orange Small I3 - Orange Small I4 - Inland Counties I5 - Inland Counties I6 - Inland Counties I7 - Inland Counties I8 - Inland Counties I8 - Inland Counties I9 - Inland Counties II - Inland Counties				1: Large metro areas	0			1	1						
Placentia-Linda Hospital 13 - Orange Small 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					0			2	1						
Kaiser Permanente Roseville Medical Center 02 - Golden Empire Large 1: Large metro areas 0 1 1 1 1 1 1 Corona Regional Medical Center 12 - Inland Counties Medium 1: Large metro areas 0 1 1 1 1 1 1 Mercy San Juan Medical Center 02 - Golden Empire Large 1: Large metro areas 0 1 1 1 1 1 1 Redlands Community Hospital 12 - Inland Counties Large 1: Large metro areas 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•			3: Micropolitan areas	0				1						
Corona Regional Medical Center 12 - Inland Counties Medium 1: Large metro areas 0 1 Mercy San Juan Medical Center 02 - Golden Empire Large 1: Large metro areas 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Small		0		1		1						
Mercy San Juan Medical Center02 - Golden EmpireLarge1: Large metro areas011Redlands Community Hospital12 - Inland CountiesLarge1: Large metro areas011St. Bernardine Medical Center12 - Inland CountiesMedium1: Large metro areas0311St. Mary Medical Center - Apple Valley12 - Inland CountiesMedium1: Large metro areas0311Palomar Medical Center Downtown Escondido14 - San Diego/Imperial1: Large metro areas011Sutter Tracy Community Hospital06 - North San JoaquinSmall2: Small metro areas01					0	1	1	1	1						
Redlands Community Hospital 12 - Inland Counties Large 1: Large metro areas 0 1 St. Bernardine Medical Center 12 - Inland Counties Medium 1: Large metro areas 0 3 1 1 1 St. Mary Medical Center - Apple Valley 12 - Inland Counties Medium 1: Large metro areas 0 3 1 1 1 1 Sutter Tracy Community Hospital 1: Large metro areas 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Medium		0	1			1						
St. Bernardine Medical Center St. Mary Medical Center - Apple Valley 12 - Inland Counties Medium 1: Large metro areas 0 3 1 1 St. Mary Medical Center - Apple Valley 12 - Inland Counties Medium 1: Large metro areas 0 1 1 1 Sutter Tracy Community Hospital 1: Large metro areas 0 1 1: Large metro areas 0 1 1 1 1 1 1 1 1 1 1 1 1		•	Large		0		1	1	1						
St. Mary Medical Center - Apple Valley 12 - Inland Counties Medium 1: Large metro areas 0 1 1 Palomar Medical Center Downtown Escondido 14 - San Diego/Imperial 1: Large metro areas 0 1 1 Sutter Tracy Community Hospital 06 - North San Joaquin Small 2: Small metro areas 0 1 1		_			0	1			1						
Palomar Medical Center Downtown Escondido 14 - San Diego/Imperial 1: Large metro areas 0 1 Sutter Tracy Community Hospital 06 - North San Joaquin Small 2: Small metro areas 0 1					0	3	1		1						
Sutter Tracy Community Hospital 06 - North San Joaquin Small 2: Small metro areas 0 1			Medium	1: Large metro areas	0				1						
		• •			0		1		1						
Kaweah Delta Health Care District 09 - Central Large 2: Small metro areas 0 2 2 3 1			Small	2: Small metro areas	0				1						
	Kaweah Delta Health Care District	09 - Central	Large	2: Small metro areas	0	2	2	3	1						

Top 10 Highest Volume Hospitals -Pancreatic Cancer Surgery in 2020

Hospit	tal Demographics				Pancrea	atic Surgery	Volume	
Hospital Name	Urban/Rural	2016	2017	2018	2019	2020		
Stanford Health Care	07 - Santa Clara	Small		69	100	73	71	73
UCSF Medical Center - Moffitt/Long	04 - West Bay	Small		31	34	57	60	65
Ronald Reagan UCLA Medical Center	11 - Los Angeles	Medium	1: Large metro areas	42	62	62	58	64
Cedars-Sinai Medical Center	11 - Los Angeles	Large	1: Large metro areas	49	56	49	47	54
UC San Diego Health - LA Jolla, Jacobs Medica Center and Sulpizio Cardiovascular Center	ll 14 - San Diego/Imperial	Medium	1: Large metro areas	24	29	38	37	48
Keck Hospital of USC	11 - Los Angeles			31	41	48	39	45
Hoag Memorial Hospital Presbyterian	13 - Orange	Large	1: Large metro areas	19	20	28	30	44
UC Irvine Health	13 - Orange	Medium	1: Large metro areas	46	32	42	38	36
UC Davis Medical Center	02 - Golden Empire	Medium	1: Large metro areas	20	20	27	28	27
Kaiser Permanente San Jose Medical Center	07 - Santa Clara	Large	1: Large metro areas	4	7	10	15	27

Distribution of Esophageal Cancer Surgeries



Variable		N	Mean	Std Dev	Minimum	10th Pctl	Lower Quartile	Median	Upper Quartile	90th Pctl	Maximum
Esophagus Cancer Volume (without zeros)	Q4 2015	40	6.1	8.1	1	1	2	3	7	14	48
Esophagus Cancer Volume (without zeros)	Q4 2020	40	6.6	7.7	1	1	1	4	10	15	42
Esophagus Cancer Volume (without zeros)	2020-2015	40	0.5	5.6	-26	-3	-1	0	3	5	18

Many Hospitals Performing One Esophageal Cancer Surgery in 2020

Hospital De		Esophage	al Cancer S	Surgery Vol	ume			
Hospital Name	Health Services Area	Size	Urban/Rural	2016	2017	2018	2019	2020
Sutter Roseville Medical Center	02 - Golden Empire	Large	1: Large metro areas		5	1		1
Alta Bates Summit Medical Center - Summit Campus (Hawthorne)	05 - East Bay	Small			4		6	5
Sharp Grossmont Hospital	14 - San Diego/Imperial	Large	1: Large metro areas		4	1	3	2
Kaiser Permanente Fremont Medical Center	05 - East Bay	Small			4			
O'Connor Hospital	07 - Santa Clara	Medium	1: Large metro areas		4			1
LAC+USC Medical Center	11 - Los Angeles	Medium	1: Large metro areas		3		2	4
Kaiser Permanente South San Francisco Medical Center	04 - West Bay				3		2	1
St. Joseph Hospital, Eureka	01 - Northern California	Medium	3: Micropolitan areas		2			1
Highland Hospital	05 - East Bay	Medium	1: Large metro areas		2	3	2	
Scripps Mercy Hospital	14 - San Diego/Imperial	Large	1: Large metro areas		2	1	1	
Sharp Chula Vista Medical Center	14 - San Diego/Imperial	Large	1: Large metro areas		2	1	3	
MemorialCare Saddleback Medical Center	13 - Orange	Large	1: Large metro areas		2	1		
UCLA Medical Center - Santa Monica	11 - Los Angeles	Medium	1: Large metro areas		1	2		
Harbor - UCLA Medical Center	11 - Los Angeles	Medium	1: Large metro areas		1			2
El Camino Hospital	07 - Santa Clara	Large	1: Large metro areas		1	1		
Washington Hospital Healthcare System	05 - East Bay	Medium	1: Large metro areas		1	1	3	
Citrus Valley Medical Center - Inter-Community Campus	11 - Los Angeles	Small			1			
Olive View - UCLA Medical Center	11 - Los Angeles	Medium	1: Large metro areas		1	1	3	1
Eisenhower Medical Center	12 - Inland Counties	Small			0	1		
Riverside University Health Systems	12 - Inland Counties	Medium	1: Large metro areas		0		1	
Hollywood Presbyterian Medical Center	11 - Los Angeles	Large	1: Large metro areas		0			
Fountain Valley Regional Hospital and Medical Center	13 - Orange	Large	1: Large metro areas		0		2	1
Sherman Oaks Hospital and Health Center	11 - Los Angeles				0			
Madera Community Hospital	09 - Central	Medium	2: Small metro areas		0			
Desert Valley Hospital	12 - Inland Counties	Medium	1: Large metro areas		0			
NorthBay Medical Center	03 - North Bay	Medium	2: Small metro areas		0			
Kaiser Permanente Vacaville Medical Center	03 - North Bay	Medium	2: Small metro areas		0			
Sutter Santa Rosa Regional Hospital	03 - North Bay	Medium	2: Small metro areas		0	3	3	2
Kaiser Permanente Santa Rosa Medical Center	03 - North Bay	Medium	2: Small metro areas		0			
Community Memorial Hospital	10 - Santa Barbara/Ventura	Large	2: Small metro areas		0			
	· · · · · · · · · · · · · · · · · · ·				/			

Top 10 Highest Volume Hospitals - Esophageal Cancer Surgery in 2020

	Hospital Demograph	Esoph	ageal Ca	ncer Surgery	Volun	ne		
Hospital Name	Health Services Area	Hospital Size	Urban/Rural	2016	2017	2018	2019	2020
Stanford Health Care	07 - Santa Clara	Small		28	21	48	43	42
UC San Diego Health - LA Jolla, Jacobs Medical Center and Sulpizio Cardiovascular Center	14 - San Diego/Imperial	Medium	1: Large metro areas	11	11	19	12	29
UCSF Medical Center - Moffitt/Long	04 - West Bay	Small		21	11	28	25	23
Keck Hospital of USC	11 - Los Angeles			48	16	26	23	22
City of Hope Helford Clinical Research Hospital	11 - Los Angeles			15	15	10	18	19
UC Irvine Health	13 - Orange	Medium	1: Large metro areas	13	4	6	12	18
Cedars-Sinai Medical Center	11 - Los Angeles	Large	1: Large metro areas	26	9	14	16	15
Ronald Reagan UCLA Medical Center	11 - Los Angeles	Medium	1: Large metro areas	19	8	20	9	14
Huntington Hospital	11 - Los Angeles	Large	1: Large metro areas	2	2	6	4	13
Kaiser Permanente Fontana Medical Center	12 - Inland Counties	Large	1: Large metro areas	13	13	12	16	12

Wrap Up

2021 BOD Call Schedule

(all times are Pacific Time Zone)

Wednesday, August 4, 2021 10:00am to 12:00pm

Wednesday, September 29, 2021 10:00am to 12:00pm

▶ Wednesday, December 1, 2021 10:00am to 12:00pm

Thank you!

Appendix I

Heat Maps by Region

Available Data: Integrated State-Federal Hospital Database

OSHPD IP DC Characteristics

- Race / Ethnicity
- Age
- Gender
- Principal Dx & Proc
- Admission Source & Route
- Discharge Disposition

OSHPD Utilization File

- Facility Type & Ownership
- Bed Days by Floor
- Total Discharges
- EMT Diversion
- ER Admits
- Surgery Type & Volume

OSHPD Financial File

- Revenue (Gross, Net Pt, Total, etc.)
- Salaries & Wages
- FTE & Staff
- Prod & Paid Hours
- Occupied Rate & Census by Floor

CMS Hospital COVID Data

- Weekly HospitalBed Count &Occupancy
- Weekly ICU BedCount & Occupancy
- Weekly ConfirmedCOVID PatientCount

CDPH County COVID Data

- County Populations
- Weekly County Cases & Deaths
- Weekly AvailableICU Beds
- Weekly ICUConfirmed Patients

Augmented CHC Crosswalk

- Uses the existing CHC Crosswalk *and* the CDPH Licensed and Certified Healthcare Facility Crosswalk
- Includes general, acute care and critical access hospitals only

Statistical Regression Modeling Steps

- Identify outcome variables
- Identify potential explanatory variables
- Examine collinearity between explanatory variables
 - ► If explanatory variables are highly correlated, their impact on the outcome variable may be masked
- Identify the type of statistical model that best fits the characteristics of the data
- Run the models and examine model performance characteristics
- Adjust model and rerun if necessary

Multivariable Regression Generalized Additive Models (GAMs)

- Generalized additive models (regression) relate multiple independent (explanatory) variables to each dependent (outcome) variable.
- ► Generalized additive models can be fit like typical multivariable linear models (and interpreted the same way), but have the additional benefit of smoothed non-linear relationships.
- For categorical variables (DSH Hospital, Teaching Hospital, and License Type), each variable is included as it would be in a linear regression.
- For continuous variables, thin-plate regression splines are fit to the data using generalized cross validation. Think of a bendy sheet of metal that is formed to the data points. The rigidity prevents fitting the data too well (a problem with other non-linear approaches).
- ► These non-linear terms are useful for describing more complex relationships between explanatory variables and outcomes.
- GAMs can also be used for different families of regression (linear, logistic, Poisson, etc.)

Heat Map: COVID Case & Death Rates by Re-opening Region

Southern California higher and for a longer period 2 - 3 week shift between case and death rates

Covid Case Rate/1,000,000

Bay Area Greater Sacramento Northern California San Joaquin Valley Southern California

		Collection Week																																
											202	20																202	21					
	July		Aug	ust			Septen	nber			C	October				Noven	nber			Decer	mber			Ji	anuary				Febru	uary			March	
	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	5	12	19
	115.8	165.7	164.9	122.9	109.5	79.3	77.6	74.9	63.8	62.2	58.8	67.0	71.2	83.6	120.4	163.3	204.6	257.2	416.1	568.8	554.9	499.6	562.1	622.4	479.1	327.0	245.6	191.5	135.6	112.1	85.0	68.0	59.1	52.5
to	82.0	205.9	137.8	136.4	136.3	92.5	90.7	75.6	53.6	58.4	48.2	72.2	77.9	106.7	169.7	247.8	324.4	402.5	598.0	639.5	651.5	479.9	581.0	583.3	346.8	304.6	207.6	197.6	132.6	125.0	88.7	84.8	78.3	80.3
1	54.9	105.9	67.6	65.3	50.3	54.9	68.6	82.6	92.4	114.3	104.5	90.1	88.8	151.2	165.8	408.6	517.2	411.1	621.9	532.7	484.5	426.9	441.5	461.3	377.9	283.6	215.0	208.1	127.2	113.5	80.7	80.3		* /
/	263.7	466.2	354.0	233.7	208.4	125.1	113.1	101.1	84.2	75.5	76.9	79.4	98.7	119.3	165.6	252.5	358.5	385.6	680.6	940.4	1079.2	745.9	847.3	914.6	691.5	486.4	380.8	297.1	211.8	173.7	123.3	114.2	111.6	105.6
a	168.6	202.9	152.7	126.0	105.0	79.4	80.7	88.8	92.9	82.1	94.2	103.5	126.0	137.2	187.2	298.8	404.8	472.3	839.1	1206.2	1198.3	1129.6	1229.9	1287.3	873.7	618.1	431.3	288.4	175.2	133.8	98.8	106.1	58.7	51.8

Covid Death Rate/1,000,000

Bay Area Greater Sacramento Northern California San Joaquin Valley Southern California

		Collection Week																																
		2020																2021																
	July	August				September				October				November				December				January					February				March			
	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	5	12	19
	1.00	1.11	0.91	1.13	1.13	1.71	2.22	1.19	1.86	1.23	1.14	1.24	1.49	1.36	0.68	0.73	0.83	1.14	1.86	2.36	2.99	2.95	5.21	5.23	6.20	6.88	6.19	5.89	5.18	4.59	2.85	2.62	1.89	2.49
nto	1.83	3.51	2.31	3.37	2.84	1.88	1.73	2.12	1.25	1.59	1.20	1.49	1.01	0.38	0.63	1.97	2.31	2.79	4.57	4.81	6.16	4.33	7.65	7.74	6.16	5.96	6.83	5.92	5.48	3.75	2.45	1.78	2.26	2.55
a	0.21	1.67	0.83	0.21	1.67	0.21	2.29	0.42	2.09	0.83	0.83	2.29	1.04	1.25	1.04	2.09	0.21	2.71	1.46	3.13	1.25	2.92	5.84	2.92	4.59	3.96	6.88	3.55	1.67	3.75	1.67	2.09	*	*
y	3.96	7.61	4.37	4.41	7.29	3.42	3.71	4.69	2.98	2.25	1.62	2.03	1.24	1.52	1.30	1.39	1.97	1.68	3.23	5.32	7.16	8.27	6.56	7.73	10.30	10.36	13.47	12.30	8.43	7.42	8.18	4.66	2.82	4.79
а	3.94	3.89	3.14	3.63	2.85	2.57	2.24	2.22	2.57	1.21	1.62	1.79	1.27	1.27	1.01	1.78	2.17	2.32	3.95	6.19	6.75	9.39	11.35	15.58	15.49	16.84	16.96	13.60	10.72	15.54	9.69	8.15	5.79	5.24

Heat Map: Adult ICU Occupancy by Health Service Area

Southern California hospital ICU occupancy impacted more intensely and for a longer period

																		Collectio	n Week																
												20	20																20	21					
		July		Aug	gust			Septe	mber				October				Nove	mber			Dece	mber				January				Febru	uary			March	
		31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	5	12	19
Northern Californi	iN= 29	66.1%	70.7%	82.4%	79.7%	78.6%	83.9%	78.7%	77.8%	84.1%	77.0%	78.9%	83.4%	79.7%	78.3%	81.1%	80.8%	82.0%	82.6%	81.3%	67.5%	70.4%	70.3%	70.1%	82.0%	74.3%	66.8%	68.6%	61.2%	66.1%	70.5%	68.5%	57.3%	68.5%	73.5%
Golden Empire	N= 20	79.2%	78.0%	78.9%	79.8%	80.8%	78.5%	81.8%	79.3%	81.2%	81.5%	82.9%	82.5%	81.6%	80.8%	80.1%	81.1%	81.1%	79.4%	79.7%	84.5%	80.4%	79.4%	80.6%	81.6%	86.4%	88.7%	83.6%	85.3%	81.9%	79.4%	81.0%	83.4%	82.7%	79.2%
North Bay	N= 12	74.0%	78.4%	78.6%	82.8%	71.0%	75.5%	62.3%	71.5%	64.5%	70.3%	72.1%	71.0%	72.0%	66.9%	65.9%	70.8%	66.8%	67.9%	78.7%	82.0%	81.3%	79.8%	83.9%	91.3%	91.4%	91.2%	89.0%	81.2%	67.5%	80.3%	78.6%	80.6%	73.7%	71.8%
West Bay	N= 19	68.9%	69.9%	72.2%	68.9%	71.9%	63.9%	66.1%	63.0%	65.9%	59.5%	67.0%	70.5%	66.8%	66.4%	70.0%	68.7%	71.0%	70.0%	72.8%	74.7%	77.9%	75.7%	81.2%	77.0%	80.0%	79.1%	74.5%	72.6%	67.0%	71.3%	70.9%	68.9%	68.4%	63.1%
East Bay	N= 18	72.5%	75.5%	72.6%	72.1%	72.5%	70.1%	69.5%	69.3%	66.7%	67.2%	65.7%	66.4%	65.8%	64.7%	69.6%	73.1%	71.6%	73.8%	75.6%	79.3%	78.2%	80.6%	82.1%	84.8%	84.6%	83.3%	80.8%	80.4%	77.7%	76.1%	69.8%	73.8%	74.8%	76.6%
North San Joaquin	N= 18	79.1%	77.9%	78.2%	79.9%	70.5%	72.9%	74.4%	74.8%	69.9%	68.1%	73.6%	75.5%	76.3%	74.2%	78.4%	73.3%	76.1%	76.7%	84.6%	88.2%	95.4%	88.7%	91.1%	88.4%	90.8%	92.1%	90.6%	94.7%	91.2%	82.6%	84.9%	80.4%	81.4%	82.6%
Santa Clara	N= 8	76.9%	74.5%	78.1%	73.2%	74.7%	74.4%	75.0%	74.6%	73.6%	72.3%	71.7%	68.1%	71.2%	72.9%	76.0%	76.4%	77.9%	82.7%	85.9%	88.2%	87.0%	87.1%	86.9%	87.5%	88.9%	86.4%	87.1%	83.0%	83.1%	81.7%	82.1%	81.2%	81.5%	82.3%
Mid-Coast	N= 11	74.9%	75.2%	81.4%	76.8%	76.5%	71.6%	64.5%	65.2%	70.5%	79.5%	79.3%	69.0%	63.3%	60.3%	62.6%	71.6%	74.7%	64.4%	76.8%	80.8%	78.0%	77.0%	76.6%	75.4%	86.3%	79.7%	73.5%	68.3%	74.5%	72.0%	82.1%	66.9%	64.8%	60.7%
Central	N= 24	76.6%	74.5%	75.6%	76.8%	75.7%	72.0%	69.5%	68.0%	67.6%	67.7%	65.1%	70.8%	74.6%	71.4%	67.3%	70.3%	69.8%	79.5%	87.9%	88.0%	86.2%	89.9%	92.0%	92.4%	91.4%	84.4%	87.1%	84.5%	82.2%	78.4%	77.4%	76.2%	73.5%	74.9%
Santa Barbara/Ver	1N= 12	80.3%	75.2%	79.0%	84.0%	79.5%	76.7%	75.3%	74.0%	73.7%	70.6%	68.7%	67.0%	68.3%	74.5%	76.8%	76.5%	83.5%	86.0%	76.9%	72.3%	82.5%	83.9%	87.4%	87.8%	87.0%	88.4%	87.8%	82.1%	77.0%	77.5%	75.9%	76.3%	74.8%	70.4%
Los Angeles	N= 85	74.4%	74.9%	73.8%	73.5%	71.4%	71.3%	68.9%	69.1%	67.8%	67.7%	67.5%	69.3%	69.5%	69.7%	69.0%	74.2%	75.0%	79.5%	84.7%	86.7%	88.5%	88.8%	90.1%	90.1%	92.3%	91.2%	90.5%	89.9%	86.4%	81.8%	77.1%	77.2%	74.8%	74.1%
Inland Counties	N= 39	79.4%	76.4%	77.9%	78.0%	76.8%	79.0%	80.6%	77.4%	76.9%	78.0%	78.8%	75.3%	73.9%	75.8%	77.1%	82.9%	84.4%	86.9%	87.5%	92.8%	90.4%	92.4%	92.8%	95.9%	94.2%	92.7%	87.8%	89.7%	87.2%	84.4%	80.3%	77.7%	74.1%	71.9%
Orange	N= 28	76.4%	77.8%	81.2%	78.9%	75.3%	79.4%	72.7%	71.5%	68.9%	73.7%	78.0%	76.9%	73.0%	70.0%	72.3%	75.5%	74.7%	78.2%	82.8%	87.3%	86.2%	88.5%	90.2%	90.6%	91.8%	89.6%	86.2%	85.6%	85.4%	82.6%	79.5%	77.8%	75.1%	75.3%
San Diego/Imperia	a N= 20	72.2%	66.7%	66.8%	72.7%	66.7%	70.4%	70.1%	67.8%	66.1%	70.1%	69.3%	72.2%	69.4%	72.9%	75.3%	76.6%	75.5%	76.3%	80.0%	86.7%	86.8%	91.8%	89.3%	95.7%	93.8%	92.6%	91.0%	86.7%	82.8%	78.8%	75.9%	69.8%	69.1%	62.8%

Heat Map: Adult Bed Occupancy by HSA Region

Southern California adult bed occupancy impacted more intensely and for a longer period

																	(Collectio	n Week																
												202	.0																202	21					
		July		Aug	ust			Septen	nber			C	October				Noven	nber			Decei	mber				January				Febru	uary			March	
		31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	5	12	19
· Northern California	i:N= 29	3.9%	6.7%	2.2%	0.6%	2.5%	0.7%	1.0%	1.4%	2.2%	1.6%	0.2%	1.2%	1.5%	0.7%	2.4%	3.2%	9.9%	15.0%	15.1%	20.9%	25.5%	22.2%	18.7%	16.1%	20.5%	14.7%	7.6%	7.6%	7.2%	4.4%	6.0%	9.2%	2.0%	1.6%
· Golden Empire	N= 20	13.7%	13.8%	12.4%	11.4%	8.7%	6.8%	5.7%	6.1%	6.3%	4.9%	3.6%	3.9%	5.2%	5.6%	7.9%	11.6%	17.0%	21.1%	24.1%	29.0%	29.4%	29.5%	27.2%	27.6%	24.1%	20.6%	16.7%	12.5%	10.8%	9.7%	8.8%	6.7%	6.1%	4.8%
· North Bay	N= 12	12.2%	11.8%	12.3%	11.3%	8.9%	9.3%	6.9%	5.4%	5.5%	6.8%	6.1%	6.0%	6.4%	6.4%	7.1%	8.2%	10.6%	12.7%	14.0%	21.8%	21.1%	25.3%	25.2%	26.5%	24.9%	23.3%	20.9%	18.2%	11.1%	9.1%	7.3%	5.3%	3.7%	3.0%
· West Bay	N= 19	10.8%	8.7%	10.8%	10.1%	7.6%	7.8%	7.5%	7.1%	6.6%	5.7%	3.7%	2.7%	2.6%	2.6%	2.6%	3.2%	5.9%	8.5%	11.1%	16.5%	19.6%	18.7%	21.3%	20.1%	24.6%	21.5%	17.7%	14.6%	13.0%	10.7%	10.0%	8.6%	5.6%	3.6%
· East Bay	N= 18	12.6%	11.5%	11.7%	12.5%	11.2%	9.8%	8.1%	6.3%	5.3%	4.6%	4.7%	4.6%	5.0%	6.1%	6.5%	7.3%	10.3%	12.9%	15.3%	20.3%	25.0%	27.7%	27.7%	26.7%	27.7%	25.4%	20.4%	17.2%	13.1%	11.0%	9.4%	9.1%	6.8%	5.4%
· North San Joaquin	N= 18	28.5%	24.5%	20.5%	20.2%	16.5%	14.6%	11.4%	8.9%	6.9%	5.6%	4.8%	7.2%	6.4%	5.5%	8.7%	12.7%	19.0%	22.7%	26.1%	36.9%	39.8%	37.5%	36.8%	39.3%	37.3%	33.2%	28.0%	24.5%	21.7%	17.6%	13.5%	12.9%	14.0%	13.9%
· Santa Clara	N= 8	10.0%	9.7%	9.2%	8.4%	7.8%	7.0%	6.5%	6.5%	5.8%	5.3%	5.3%	5.6%	5.7%	5.8%	7.0%	9.2%	12.2%	17.2%	20.4%	26.0%	31.2%	34.2%	35.1%	35.1%	31.9%	28.2%	24.3%	18.8%	16.3%	12.8%	11.1%	9.2%	7.5%	7.0%
· Mid-Coast	N= 11	7.2%	10.1%	11.6%	10.3%	6.6%	4.2%	6.1%	5.1%	7.8%	6.9%	5.9%	5.7%	4.0%	6.3%	5.9%	8.4%	12.5%	22.6%	21.1%	27.4%	33.1%	34.3%	38.4%	38.0%	37.9%	36.0%	27.4%	24.4%	20.6%	11.3%	8.3%	7.8%	6.0%	5.9%
· Central	N= 24	26.3%	25.1%	22.3%	21.0%	14.5%	12.0%	11.1%	8.9%	8.2%	7.9%	7.4%	7.7%	7.0%	7.0%	8.7%	12.9%	20.1%	25.5%	34.5%	41.2%	39.7%	44.6%	46.6%	46.0%	43.1%	36.7%	33.8%	31.4%	27.0%	22.2%	15.8%	13.3%	11.8%	10.7%
· Santa Barbara/Ver	rN= 12	12.1%	11.3%	9.9%	9.8%	9.1%	7.9%	6.6%	5.7%	5.9%	5.2%	5.1%	4.7%	4.6%	3.6%	5.0%	5.7%	7.6%	11.0%	14.1%	19.7%	27.1%	32.4%	34.3%	37.8%	39.7%	40.9%	34.3%	32.0%	26.7%	19.3%	14.0%	12.3%	9.9%	7.8%
· Los Angeles	N= 85	17.7%	14.8%	13.8%	12.2%	11.7%	9.9%	8.2%	8.1%	7.2%	7.1%	7.6%	7.6%	7.7%	8.7%	9.4%	11.6%	15.3%	20.2%	25.1%	33.4%	41.6%	49.8%	52.4%	49.1%	46.7%	42.4%	37.1%	30.2%	23.2%	17.5%	13.3%	10.8%	8.5%	6.9%
Inland Counties	N= 39	20.7%	18.9%	15.1%	14.0%	12.8%	9.5%	7.6%	7.4%	7.3%	7.4%	7.6%	7.7%	8.8%	9.8%	10.6%	16.2%	21.5%	30.2%	31.9%	41.0%	48.2%	53.5%	53.1%	50.0%	47.0%	39.6%	34.7%	30.4%	23.4%	17.2%	11.8%	10.6%	8.1%	6.8%
- Orange	N= 28	16.2%	14.8%	14.9%	13.1%	10.6%	8.1%	6.3%	5.4%	6.3%	6.0%	5.7%	5.3%	5.3%	5.8%	6.4%	8.5%	13.7%	20.8%	25.1%	34.0%	44.0%	45.3%	47.6%	45.3%	41.7%	34.9%	29.2%	26.3%	20.1%	14.8%	11.7%	9.4%	6.5%	5.6%
San Diego/Imperia	a N= 20	11.6%	10.8%	9.6%	9.3%	8.9%	8.5%	8.5%	7.6%	6.9%	7.6%	7.7%	7.8%	9.0%	10.8%	10.7%	12.8%	16.6%	23.3%	27.5%	34.1%	39.7%	41.8%	41.7%	40.4%	39.0%	34.1%	31.3%	24.4%	20.1%	15.7%	12.7%	9.7%	8.3%	7.3%

Heat Map: ICU Capacity by Health Service Area (Percent Change in adult ICU beds from 11/6 to Current)

Southern California expanded ICU capacity to a greater extent Inland Counties had notably higher ICU expansion

																	Collect	ion Wee	k															
											2020																	20	21					
	July		Aug	ust			Septe	mber			(October				Nove	mber			Dece	mber				January				Febr	uary			March	
	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	5	12	19
Northern Californi N= 29	-3.3%	-3.1%	-0.5%	0.1%	-2.6%	-1.7%	-1.6%	1.1%	-1.1%	1.0%	0.6%	1.7%	0.7%	1.4%		-1.7%	-3.4%	-2.4%	0.1%	4.6%	3.7%	4.2%	4.2%	4.0%	6.0%	5.7%	5.4%	6.2%	6.0%	6.0%	10.7%	5.7%	5.8%	5.8%
Golden Empire N= 20	3.2%	3.0%	6.3%	3.1%	0.8%	1.7%	-0.2%	-1.1%	-0.6%	-1.8%	-1.1%	0.9%	3.3%	2.0%		0.9%	3.2%	14.2%	11.2%	13.3%	18.8%	28.4%	30.0%	28.8%	17.3%	17.1%	14.3%	8.5%	10.0%	9.5%	8.6%	7.9%	1.0%	1.9%
North Bay N= 12	-8.7%	-11.9%	-6.7%	-26.0%	-13.0%	-10.7%	-2.6%	-6.6%	-9.9%	-13.4%	-8.2%	-5.8%	6.0%	-4.3%		6.5%	4.5%	5.9%	2.9%	11.2%	14.2%	18.9%	18.2%	6.9%	-3.5%	1.9%	4.2%	0.5%	2.0%	5.5%	4.2%	-1.6%	-6.4%	-2.9%
West Bay N= 19	-1.8%	0.0%	-2.7%	5.2%	1.4%	1.7%	-2.9%	-0.9%	0.5%	8.9%	-1.6%	0.3%	4.9%	-0.6%		3.6%	4.9%	-0.4%	0.0%	2.0%	4.5%	-0.1%	4.5%	6.9%	9.1%	9.5%	7.2%	9.0%	8.9%	7.4%	4.9%	4.0%	2.2%	0.4%
East Bay N= 18	4.9%	3.1%	4.0%	2.1%	3.5%	1.4%	1.1%	-0.8%	-0.7%	0.3%	-3.4%	-2.0%	6.9%	0.0%	rt	-2.6%	2.5%	5.6%	3.5%	5.7%	4.9%	10.2%	9.8%	16.2%	13.5%	10.0%	7.0%	7.9%	7.2%	1.1%	1.6%	0.8%	-1.0%	-1.2%
North San Joaquin N= 18	6.7%	10.7%	11.0%	7.5%	6.0%	2.5%	3.2%	-1.6%	-1.1%	0.2%	-7.9%	-6.4%	0.3%	1.5%	β	1.3%	5.3%	5.4%	4.4%	6.5%	12.6%	14.7%	18.9%	13.0%	13.4%	12.9%	10.8%	4.6%	4.7%	0.7%	-3.8%	-4.5%	-1.9%	-3.9%
Santa Clara N= 8	-2.5%	-9.4%	-6.6%	0.3%	-0.9%	2.0%	-0.2%	1.0%	-2.9%	-2.1%	-2.6%	-2.8%	5.0%	-1.9%	u	0.8%	1.4%	-6.4%	-5.9%	-4.8%	-1.0%	3.2%	5.0%	11.2%	9.0%	10.2%	10.0%	2.6%	2.5%	-0.5%	1.7%	-5.6%	-3.3%	-0.5%
Mid-Coast N= 11	9.1%	11.3%	6.8%	4.5%	6.7%	7.7%	5.3%	3.6%	2.8%	1.3%	-14.1%	-9.8%	11.1%	8.1%	aris	7.1%	9.1%	14.2%	14.9%	15.3%	18.2%	22.4%	35.8%	24.3%	16.3%	17.3%	23.3%	19.7%	10.1%	0.5%	7.7%	-0.2%	-2.4%	-6.0%
Central N= 24	-1.4%	-2.7%	-1.4%	-0.5%	0.4%	-1.3%	-1.1%	-1.5%	-2.6%	-1.0%	-0.3%	-0.2%	0.4%	-1.1%	np	-1.2%	-3.3%	3.8%	3.8%	4.4%	13.6%	21.8%	17.9%	26.7%	26.6%	21.4%	19.9%	14.4%	13.7%	9.7%	7.5%	3.4%	5.7%	1.5%
Santa Barbara/Ver N= 12	0.8%	0.6%	4.3%	-0.7%	1.0%	-2.5%	-2.1%	0.0%	-0.6%	-1.3%	-0.2%	0.4%	1.0%	-0.4%	Ö	-0.2%	1.0%	4.1%	3.4%	13.4%	12.9%	18.6%	28.1%	36.2%	17.1%	32.6%	32.4%	24.1%	4.7%	2.9%	4.8%	14.2%	0.4%	11.0%
Los Angeles N= 85	3.8%	5.4%	2.9%	0.7%	0.3%	-0.4%	-0.1%	-1.0%	-0.4%	-1.1%	-2.1%	-0.8%	-1.4%	-0.2%	_	1.7%	2.8%	4.2%	5.5%	11.2%	20.0%	29.6%	37.0%	42.3%	40.6%	37.7%	32.4%	23.6%	15.2%	10.9%	5.2%	0.3%	-0.6%	-1.1%
Inland Counties N= 39	7.2%	12.5%	6.0%	2.5%	0.0%	-0.8%	-0.3%	-0.9%	0.5%	-1.0%	-0.7%	-4.3%	-0.4%	-1.4%		3.2%	5.5%	8.8%	17.6%	24.0%	38.3%	49.6%	58.3%	63.3%	64.8%	54.6%	51.1%	39.1%	33.7%	24.7%	18.5%	15.4%	10.7%	9.6%
Orange N= 28	-2.5%	-4.8%	-9.2%	-7.6%	-9.7%	-9.8%	-9.9%	-9.5%	-10.3%	-9.1%	-8.6%	-10.3%	-5.1%	-4.4%		-1.2%	0.0%	2.7%	4.3%	9.7%	15.4%	21.1%	24.5%	32.1%	30.8%	28.0%	16.4%	10.6%	6.5%	3.7%	6.7%	2.3%	-1.0%	-2.2%
San Diego/ImperiaN= 20	-1.5%	0.1%	-0.2%	-1.7%	-1.3%	-2.0%	-3.7%	-1.4%	-2.7%	-2.2%	-1.3%	-2.2%	-0.5%	-0.7%		-0.2%	0.6%	0.2%	6.0%	7.2%	12.6%	20.8%	30.4%	38.4%	37.8%	36.4%	26.6%	17.4%	13.0%	8.1%	3.8%	0.8%	-0.2%	0.6%

Appendix II

Healthy Places Index

Healthy Places Index

- Question for Advisory Committee:
 - Should analysis include consideration of Healthy Places Index and, if so, how?
- ► Healthy Places Index was developed by the Public Health Alliance of Southern California in partnership with the Virginia Commonwealth University's Center on Society and Health
- ► HPI combines 25 community characteristics into a single indexed HPI score
- ► Level of granularity: Census tracts, counties, congressional districts, cities, etc.
- ▶ Data are from 2011 2015 depending on the metric

Healthy Places Index Identifiers

- ► **Economic** (Above Poverty, Employed, Median Household Income)
- Education (Bachelor's Education or Higher, Preschool Enrollment, High School Enrollment)
- ► Transportation (Automobile Access Active Commuting)
- Social (Voting, Two Parents Household)
- Neighborhood (Tree Canopy, Supermarket Access, Retail Density, Park Access, Alcohol Availability)
- ► Healthcare Access (Insured Adults)
- Housing (Low-Income Homeowner Severe Housing Cost Burden, Homeownership, Housing Habitability, Low-Income Renter Severe Housing Cost Burden, Uncrowded Housing)
- Clean Environment (Safe Drinking Water Contaminants, Clear Air Ozone, Clean Air PM, Clean Air - Diesel PM)
- Race/Ethnicity (Two or More Races, Native Hawaiians or Other Pacific Islanders, Whites, American Indians/Alaskan Natives, Latinos, Blacks, Some Other Races, Asians)

Healthy Places Index



Healthy Places Index & Health Equity Re-Opening Criteria

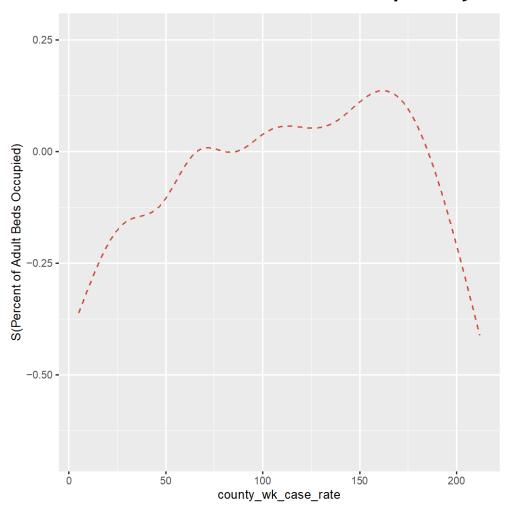
- CA implemented the Blueprint for a Safer Economy on August 30, 2020 to reduce COVID-19 rates
- Every county is assigned a tier based on test positivity and adjusted case rate for tier assignment
 - ► A health equity metric took effect on October 6, 2020; in order to advance to the next less restrictive tier, each county must meet an equity metric and/or demonstrate targeted investments to eliminate disparities in levels of COVID-19 transmission, depending on its size

Equity Metric

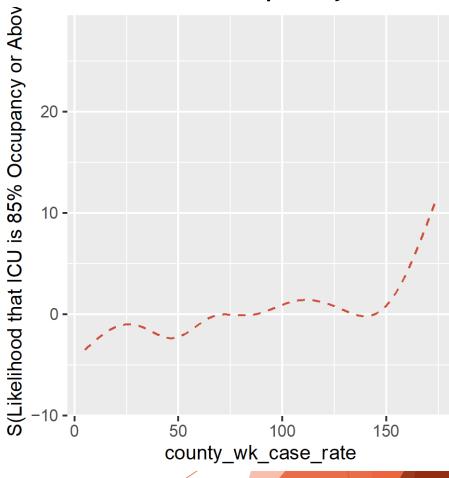
- ► Counties with populations greater than 106,000 must ensure that the test positivity rates in its most disadvantaged neighborhoods do not significantly lag behind its overall county test positivity rate
- Targeted Investments
 - ▶ All counties must submit plans that:
 - ▶ (1) define its disproportionately impacted populations
 - ▶ (2) specify the percent of its COVID-19 cases in these populations
 - ▶ (3) shows that it plans to invest Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases grant funds at least at that percentage to interrupt disease transmission in these populations

Appendix III

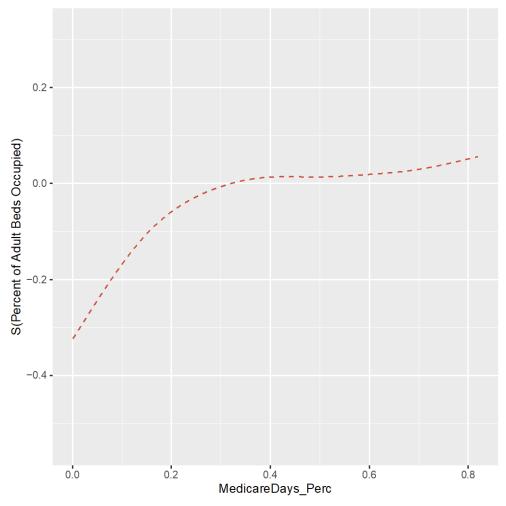
Additional stress plots



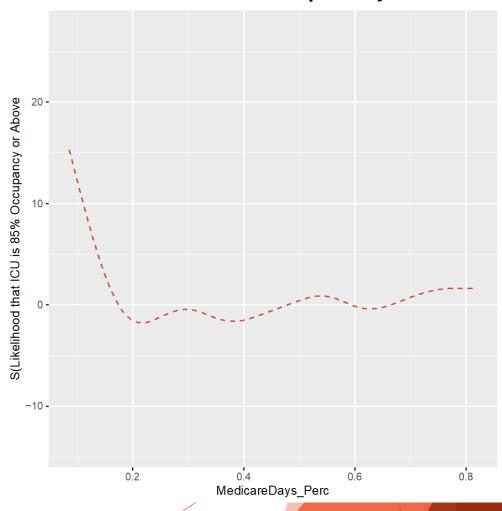




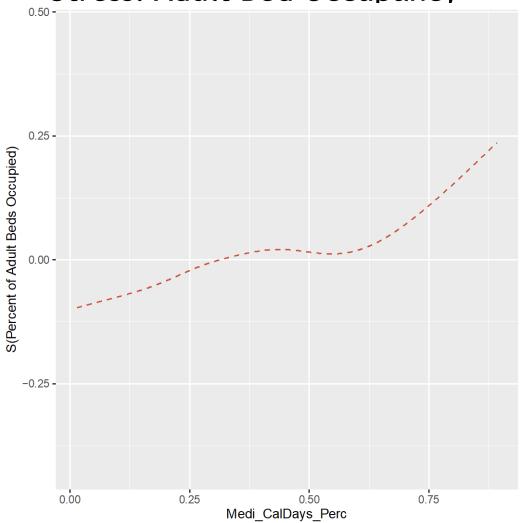
County COVID-19 Case Rate (per 100,000)



Stress: ICU Occupancy ≥85%



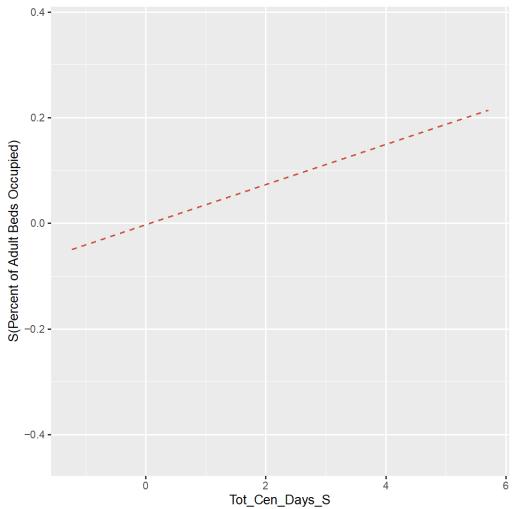
Medicare Days (%)



Stress: ICU Occupancy ≥85%

Result not shown P-value >0.2

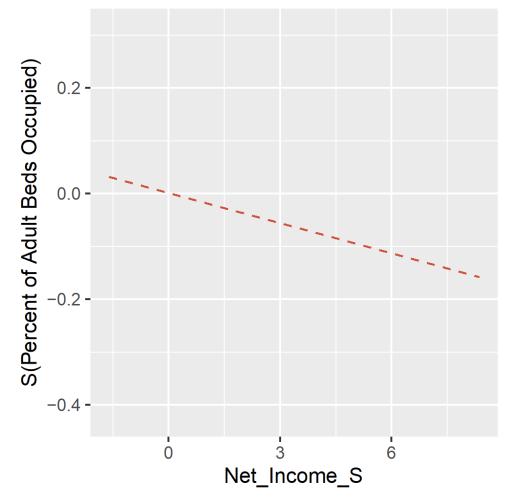
Medi-Cal Days (%)



Stress: ICU Occupancy ≥85%

Result not shown P-value >0.2

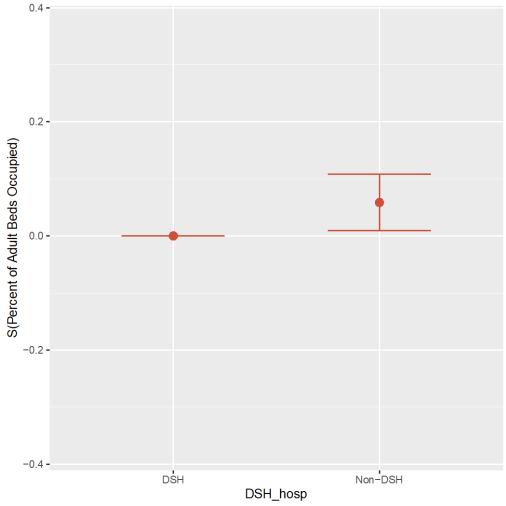
Total Census Days (per SD)



Stress: ICU Occupancy ≥85%

Result not shown P-value >0.2

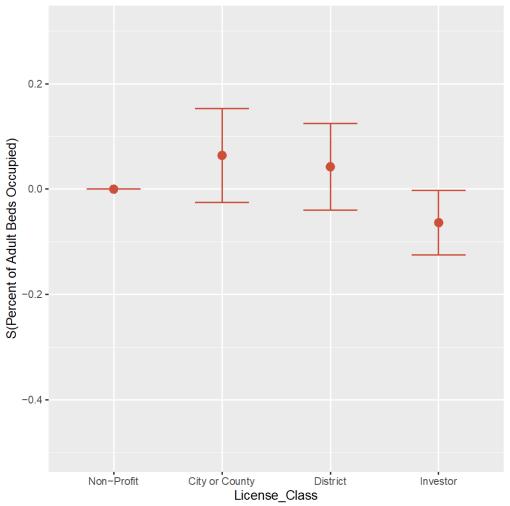
Net Income (per SD)



Stress: ICU Occupancy ≥85%

Result not shown P-value >0.2

Non-DSH Hospital (vs DSH)



Stress: ICU Occupancy ≥85%

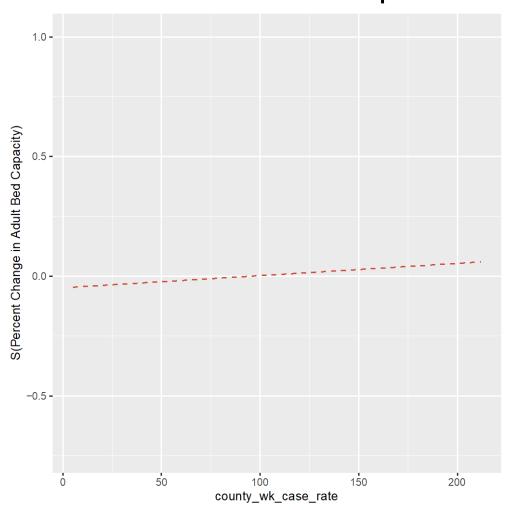
Result not shown P-value >0.2

License Type(vs Non-Profit)

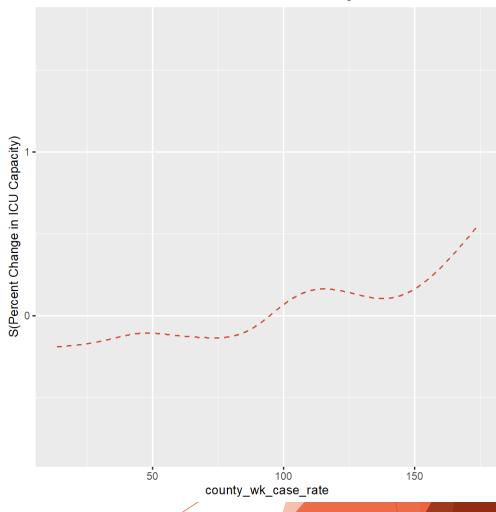
Appendix V

Additional resilience plots

Resilience: Adult Bed Expansion



Resilience: ICU Expansion

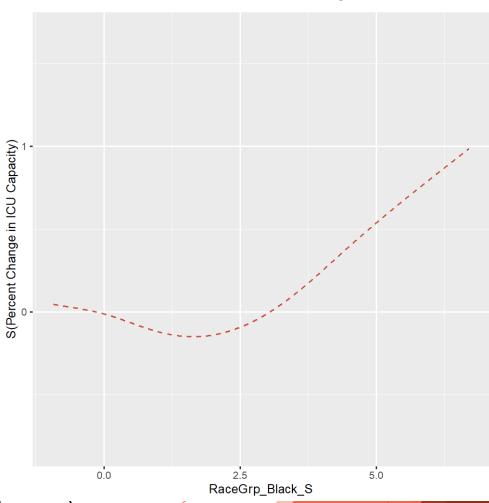


County COVID-19 Case Rate (per 100,000)

Resilience: Adult Bed Expansion

Result not shown P-value >0.2

Resilience: ICU Expansion

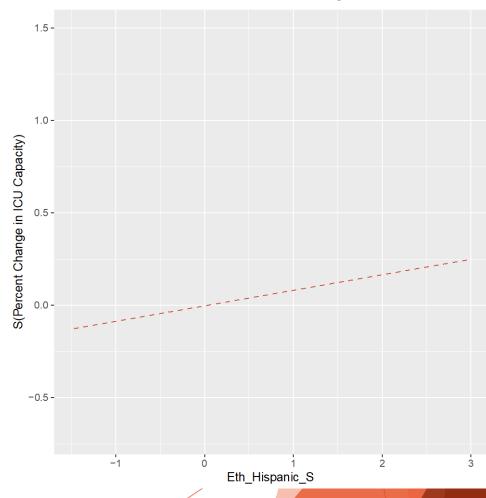


Race - Black (% Discharges)

Resilience: Adult Bed Expansion

Result not shown P-value >0.2

Resilience: ICU Expansion



Ethnicity-Hispanic (% Discharges)

Appendix VI

Opioid Care Honor Roll

2022 Results Summary

Safe & effective

- Spread & scale of discharge prescribing remains a challenge (30% in the ED only)
- Others have discharge prescribing across ED, Surgery, and OB
- Offering alternatives to opioids for pain management continues to be area with greatest progress, consistent with findings from last year

Identification & treatment

- Most hospitals are offering MAT in at least 2 services lines (ED & IP)
- Surprised how many are considering themselves as "universally" offering MAT
- Most participants have invested in a dedicated resource to accelerate their work (FT or PT)
- Most are actively building community partnerships & supporting care transitions
- At least 50% are supporting practitioners to obtain the x-waiver

Overdose prevention

- ~55% of hospitals have implemented a Naloxone Distribution program!!
- Only 1 hospital is looking at SDOH

Cross cutting best practice

- Opioid stewardship teams in place, opioids are a strategic priority
- 10% of hospitals are involved in a learning collaborative, think this is underreported
- Continued opportunity to address stigma & PFE
- Surprised how many hospitals are providing POC decision support - EMR is key to this work
- Small percentage of hospitals providing stigma reduction training
- No one is regularly assessing stigma
- Hospitals have improved engaging patients in care at the bedside vs quality improvement activities

Opioid Management Hospital Self-Assessment (2021)

			- (- /	
Measure	Level 1 Basic Mgmt. (1 pt)	Level 2 Hospita Standa (2 pts)	al Wide	Level 3 Integration & Innovation (3 pts)	Level 4 Practice Improvement (4 pts)
Safe & Effective • Appropriate guidelines	ve Opioid Use e opioid discharge pres	cribing		Prevention ne education & distrib	oution program

Identification & Treatment

Medication Assisted Treatment (MAT)

Alternatives to opioids for pain management

Timely follow up care

Cross-cutting Opioid Management Best Practices

- Organizational infrastructure
- Address stigma with physicians & staff
- Patient & family engagemen

Optional: Select one related measure and provide the measure name, numerator and denominator specifications, and any inclusion/ exclusion criteria.

Source: Opioid Management Hospital Self-Assessment

The following table has been adapted from the American Hospital Association, CA Bridge, and hospitals participating in the Opioid Care Honor Roll programs and includes suggested measures to track regarding hospital-based opioid treatment. Hospitals are encouraged to choose those most relevant to their processes and goals, as some of these metrics may not be applicable to every hospital.

For additional details regarding metrics and evaluation, refer to the American Hospital Association's <u>Stem the Tide: Opioid Stewardship Measurement Implementation Guide.</u>

Definitions of Abbreviations for Federal Programs: TJC: The Joint Commission, HEDIS: Healthcare Effectiveness Data and Information Set, MIPS (QM or IA): Merit Based Incentive Payment System (Quality Measure or Improvement Activity) (CMS), MSSP: Medicare Shared Savings Program (CMS), HIQRP: Hospital Inpatient Quality Reporting Program (CMS), Medicaid ACS: Medicaid Adult Core Set

Measure Description	Numerator	Denominator	Desired QI Trend	Alignment with Federal Quality or Accountability Programs
Safe & effective opioid use for pain manag	ement			
Total MME per prescription	Total MME	Number of opioid prescriptions	Reduction in average total MME	Medicaid ACS, MSSP
Opioid prescriptions ≤ 5 days	Number of opioid prescriptions ≤ 5 days	Total number of opioid prescriptions	Reduction in total <u>days</u> supply of opioids	
Number of opioid pills prescribed	Total number of opioid pills prescribed	Number of opioid prescriptions	Decrease in total number of opioid pills in the community	
Opioid prescriptions per prescriber at discharge	Number of opioid prescriptions at discharge	Patient volume per prescriber	Decrease in total number of opioid prescriptions	Medical Board of California
Patients receiving opioid only for pain management	Patients discharged with only an opioid medication for pain relief	Patients discharged with a prescription for a pain medication of any kind	Decrease in patient receiving opioids only for pain	TJC

Assess SUD

Addressing Substance Use Disorder (OPT	IONAL & progress in this	domain does not count to	ward the 2021 Opioid Car	e Honor Roll)		
Measure	Level 0 (0 pt.)	Level 1 (1 pt.)	Level 2 (2 pts.)	Level 3 (3 pts.)	Level 4 (4 pts.)	Score
	Getting started	Basic management	Hospital wide standards	Integration & innovation	Practice Improvement	
Many patients misuse more than one	No standardized	Standardized process	Medications required	Treatment is offered	Actively refer patients	
drug. Cal Hospital Compare is	process to identify	in place to identify	for treatment on	& initiated in at least	to a community	
considering whether and how to	patients misusing	patients misusing	formulary, if	1 service line (ED or	provider for ongoing	
address substance use disorder as part	selected substance	selected substance in	applicable (e.g.,	inpatient)	treatment (e.g.,	
of the Opioid Care Honor Roll program		the ED and on	naltrexone bupropion,		residential treatment	
in subsequent years. If applicable,		admission (e.g.,	nicotine replacement		facility, outpatient	
please select the substance that you		Alcohol Use Disorders	therapies, etc.)		clinic, telehealth, etc.)	
would most like us to address most and		Identification Test,				
select the level that best describes your		Brief Screener for	If primary treatment		Provide culturally	
hospital's work in that area.		Alcohol, Tobacco, and	medications are not		competent care (e.g.,	
		other Drugs, NIDA	on formulary, other		translation services,	
Alcohol		single question	treatment options are		translated materials,	
 CNS depressants (e.g., 		screener, Screening to	made available (e.g.,		etc.)	
barbiturates, benzodiazepines,		Brief Intervention,	topiramate, baclofen,			
etc.)		etc.)	gabapentin, etc.)			
Illicit fentanyl						
Heroin		Process to manage				
Methamphetamine		withdrawal in the				
Marijuana/synthetic		hospital setting for				
cannabinoids		selected substance, if				
Tobacco/nicotine		applicable (e.g.,				
Other		alcohol withdrawal				
- Other		protocol in place)				



Jamie Chan, PharmD
Vice President, Clinical Quality
Blue Shield of California

Jamie Chan is the Vice President, Clinical Quality for Blue Shield of California. In this role, Jamie is responsible for the development and execution of the organization's clinical quality strategy and operations.

Previously she has served as Senior Director, Clinical Quality at Blue Shield of California responsible for overseeing the Medicare Stars and Member Experience strategy. Prior to joining Blue Shield of California, Jamie worked at Kaiser Permanente as their National Executive Director for Pharmacy Quality and Medication Safety. She has managed Kaiser Permanente's California Drug Information and Professional Services Department, was the California Pharmacy Benefits Leader, and the Drug Use Management Leader for Kaiser Permanente's Northern California Region.

Jamie attended undergraduate studies at the University of California, Berkeley then earned her PharmD degree from the University of California, San Francisco. She is also a graduate of the Advanced Leadership Program from the University of North Carolina, Kenan-Flagler Business School. Jamie currently serves on the Board of Directors for the Pharmacy Quality Alliance.

Updated: 6/7/2021



The following table includes suggested measures to track hospital-based opioid treatment from the American Hospital Association, CA BRIDGE, and hospitals participating in the Opioid Care Honor Roll program. Hospitals are encouraged to choose those most relevant to their processes and goals, as some of these metrics may not be applicable to every hospital.

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Patients receiving opioid only for pain management	Patients discharged with only an opioid medication for pain relief	Patients discharged with a prescription for a pain medication of any kind	Decrease in patient receiving opioids only for pain	TJC



Measure Description	Numerator	Denominator	Desired QI Trend	Alignment with Federal Quality or Accountability Programs
ALTO medications dispensed per 1,000 ED visits	Total mg of ALTO medications administered	Number of ED visits	Increase in alternatives to opioids for pain management	
MME per 1,000 ED visits	Total MMEs dispensed in the ED	Number of ED visits	Decrease opioid use for pain management in the ED	
Patients with opioids and benzodiazepines co-prescribed	Patients prescribed both opioids and benzodiazepines	All patients	Decrease in number of patients co-prescribed	HEDIS, Medicaid ACS, HIQRP, MSSP
Rates of accessing prescription drug monitoring program (PDMP)	Number of patients on opioids of any length or dose	Number of patients on opioids of any length or dose	Increased rate of PDMP utilization	MIPS IA, Leapfrog
Identifying & treating patients with opioid	use disorder			
Screening for OUD on admission	Number of risk assessments documented in EHR on admission	Number of inpatient admissions	Increase in number of screens	MIPS QM
New patient starts for OUD treatment	MAT initiated	Number of patients identified with OUD	Increase in number of new starts	Medicaid ACS, CA Bridge
Referrals for OUD treatment	Number of referrals ordered	Number of patients identified with untreated OUD	Increase in referrals	Medicaid ACS, TJC
Completed/successful referrals for OUD treatment	Number of referrals completed	Number of referrals ordered	Increase in number of completed referrals	Medicaid ACS, TJC
Number of referred patients still in treatment 30 days later	Number of patients still in active treatment program	Number of treatment referrals completed	Increase in number of patients still engaged in treatment	Medicaid ACS



Measure Description	Numerator	Denominator	Desired QI Trend	Alignment with Federal Quality or Accountability Programs
Percent readmissions among patients started on MAT	Number of patients admitted for any cause within 90 days after initial MAT	Number of individuals started on MAT	Decrease in number of readmitted patients who were started on MAT	Readmission reduction programs
Overdose prevention				
Naloxone prescribed for opioid overdoses or high-risk patients	Number of naloxone prescriptions	Number of patients presenting with OD or opioid MME>50	Increase in naloxone prescriptions	CDC guidelines
Opioid prescriptions > 50 or 90 MMEs daily	Prescriptions > 50 or 90 MMEs daily	All prescriptions	Decrease in opioid prescriptions > 50 or 90 MME	
Applying cross-cutting opioid management	best practices			
Percent of patients continuing opioids after 30 days	Number of patients on opioids after 30 days	Total number of patients prescribed opioids	Appropriate pain management	
Proportion of hospitalized patients who have documentation of patient defined comfort and function goals	Patients with documented comfort a function goals	Admitted patients receiving a dose of any pain medication	Increase in percentage of patients with defined goals	TJC
Patient pain management planning and education	Number of plans documented	Number of patients expected to experience pain	Increase in patients documented as having planning and education	MIPS IA, TJC
Identification and planning for patients with OUD on admission	Number of plans documented	Number of patients with OUD diagnosis	Increase in number of documented plans	Medicaid ACS
Baseline assessment of pain and opioid utilization upon admission	Number of assessments documented in EHR	Number of patients on opioids of any length or dose	Increase in number of baseline assessments	TJC



				Alignment with Federal Quality
Measure Description	Numerator	Denominator	Desired QI Trend	or Accountability Programs
Number of patients with an acceptable	Number of patients	Number of patients	Setting realistic pain	
pain score > 0	with an acceptable	with pain	management expectations	
	pain score > 0			
Functional outcomes and quality of life	PROM score over	Baseline PROM	Improvement in score of	
patient-reported outcomes measures	time		PROM over patient baseline	
(PROMs) fir treatment engaged patients				



Background: For more than a decade, Cal Hospital Compare (CHC) has been providing Californians with objective hospital performance ratings. CHC is a non-profit organization that is governed by a multi-stakeholder board, with representatives from hospitals, purchasers, consumer groups, and health plans. CHC uses an open and collaborative process to aggregate multiple sources of public data, and to establish relevant measures and scoring.

To address California's opioid epidemic and accelerate hospital progress to reduce opioid related deaths, CHC publishes an annual Opioid Care Honor Roll to support continued quality improvement and recognize hospitals for their contributions fighting the epidemic. CHC uses the *Opioid Management Hospital Self-Assessment* to assess performance and progress across the following 4 domains of care:

- 1. Safe & effective opioid use
- 2. Identifying and treating patients with Opioid Use Disorder
- 3. Overdose prevention
- 4. Applying cross-cutting opioid management best practices

Instructions: For each measure, please read through the measure description then select the level that best describes your hospital's work in that area. Please note that the levels build on each other e.g., to achieve a Level 3 score your hospital must have also implemented the strategies outlined in Levels 1 and 2. Similarly, if your hospital has addressed some of the components outlined in Level 4 but not Level 3 then your hospital may fall into the Level 3 or even the Level 2 category. CHC recommends each hospital convene a multi-stakeholder team to complete the *Opioid Management Hospital Self-Assessment* to ensure accuracy and completeness. To reduce variability in results year over year, CHC recommends hospitals follow a similar process each year.

Special note: For hospitals at any level of performance, we invite you to share detail on measures that you are currently reporting on. This will help us to understand and align future iterations of the *Opioid Management Hospital Self-Assessment* with the work that you are already doing. Providing this information is optional but highly encouraged.

For more information on the Opioid Care Honor Roll Program, register for upcoming events, and <u>access tactical resources</u> to support your quality improvement journey check out the Cal Hospital Compare website <u>here</u>.

Performance period: CY 2021

Assessment period: Jan 1, 2022 – Mar 31, 2022

Stay tuned for information on how to submit your Opioid Management Hospital Self-Assessment results!

Questions? Contact Alex Stack, Director, Programs & Strategic Initiatives via email at astack@cynosurehealth.org

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Level 0 (0 pt.) Getting started Developed and implemented evidence-based	Level 1 (1 pt.) Basic management Developed and implemented	Level 2 (2 pts.) Hospital wide standards	Level 3 (3 pts.) Integration & innovation	Level 4 (4 pts.)	Score
Developed and implemented evidence-based	Developed and	·	Integration & innovation		
implemented evidence-based			-	Practice Improvement	
evidence-based	implemented	Developed and	Developed and	Your hospital is	
	•	implemented	implemented	actively measuring	
	evidence-based	hospital wide	evidence-based	and developing	
opioid discharge	opioid discharge	opioid discharge	opioid discharge	strategies to	
prescribing	prescribing	prescribing	prescribing	improve	
guidelines in 1	guidelines across 2	guidelines	guidelines for	appropriate opioid	
service line, the	service lines, the		surgical patients in	prescribing at	
Emergency	Emergency		at least one surgical	discharge	
Department OR 1	Department AND 1		specialty as part of		
Inpatient Unit (e.g.,	Inpatient Unit (e.g.,		an Enhanced		
Burn Care, General	Burn Care, General		Recovery After	Optional: Select one	
Medicine,	Medicine,		Surgery (ERAS)	related measure	
Behavioral Health,	Behavioral Health,		program	that your hospital is	
OB, Cardiology, etc.)	OB, Cardiology, etc.)			already reporting on	
				and provide the	
				measure name,	
				numerator and	
				denominator	
				specifications, and	
				any inclusion/	
				exclusion criteria	
				(see <u>measurement</u>	
				guide for list of	
				suggested	
				measures)	
					1
					1
					1
					1
					1
					1
					1
	guidelines in 1 service line, the Emergency Department OR 1 Inpatient Unit (e.g., Burn Care, General Medicine, Behavioral Health,	guidelines in 1 service line, the Emergency Department OR 1 Inpatient Unit (e.g., Burn Care, General Medicine, Behavioral Health, guidelines across 2 service lines, the Emergency Department AND 1 Inpatient Unit (e.g., Burn Care, General Medicine, Behavioral Health,	guidelines in 1 service line, the Emergency Department OR 1 Inpatient Unit (e.g., Burn Care, General Medicine, Behavioral Health, guidelines across 2 service lines, the Emergency Department AND 1 Inpatient Unit (e.g., Burn Care, General Medicine, Behavioral Health, guidelines guidelines	guidelines in 1 service line, the Emergency Department OR 1 Inpatient Unit (e.g., Burn Care, General Medicine, Behavioral Health, Behavioral Health, guidelines surgical patients in at least one surgical specialty as part of an Enhanced Recovery After Surgery (ERAS) program	guidelines in 1 service line, the Emergency Department OR 1 Inpatient Unit (e.g., Burn Care, General Medicine, Behavioral Health, OB, Cardiology, etc.) By guidelines guidelines guidelines guidelines guidelines guidelines guidelines guidelines guidelines guidelines for surgical patients in at least one surgical specialty as part of an Enhanced Recovery After Surgery (ERAS) program Optional: Select one related measure that your hospital is already reporting on and provide the measure name, numerator and denominator specifications, and any inclusion/ exclusion criteria (see measurement quide for list of suggested

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Measure	Level 0 (0 pt.) Getting started	Level 1 (1 pt.) Basic management	Level 2 (2 pts.) Hospital wide standards	Level 3 (3 pts.) Integration & innovation	Level 4 (4 pts.) Practice Improvement	Score
Alternatives to Opioids for Pain Management	Your hospital does	Developed and	Developed and	Developed	Your hospital is	
	not have a	implemented a non-	implemented a non-	supportive	actively measuring	
Use an evidence based, multi-modal, non-	standardized	opioid analgesic	opioid analgesic	pathways that	and developing	
opioid approach to analgesia for patients with	approach to	multi-modal pain	multi-modal pain	promote a team-	strategies to	
acute and chronic pain.	providing	management in the	management	based care	improve use of	
	alternatives to	Emergency	guideline in the	approach to	opioid alternatives	
Guidelines should address the following:	opioids for pain	Department OR 1	Emergency	identifying opioid	for pain	
Utilize non-opioid approaches as first line	management	Inpatient Unit (e.g.,	Department AND 1	alternatives (e.g.,	management	
therapy for pain while recognizing it is not		Burn Care, General	Inpatient Unit (e.g.,	integrated		
the solution to all pain		Medicine, General	Burn Care, General	pharmacy, physical		
 Provide pharmacologic alternatives (e.g., 		Surgery, Behavioral	Medicine, General	therapy, family	Optional: Select one	
NSAIDs, Tylenol, Toradol, Lidocaine		Health, OB,	Surgery, Behavioral	medicine,	related measure	
patches, muscle relaxant medication,		Cardiology, etc.)	Health, OB,	psychiatry, pain	that your hospital is	
Ketamine, medications for neuropathic			Cardiology, etc.)	management, etc.)	already reporting on	
pain, nerve blocks, etc.)					and provide the	
• Offer non-pharmacologic alternatives (e.g.,			Hospital offers at	Aligned standard	measure name,	
TENS, comfort pack, heating pad, visit			least at least 1 non-	order sets with non-	numerator and	
from spiritual care, physical therapy,			pharmacologic	opioid analgesic,	denominator	
virtual reality pain management,			alternative for pain	multi-modal pain	specifications, and	
acupuncture, chiropractic medicine,			management	management	any inclusion/	
guided relaxation, music therapy,				program (e.g.,	exclusion criteria	
aromatherapy, etc.)				changes to EHR	(see <u>measurement</u>	
• Provide care guidelines for common acute				order sets, set order	<u>quide</u> for list of	
diagnoses e.g., pain associated with				favorites by	suggested	
headache, lumbar radiculopathy,				provider, etc.)	measures)	
musculoskeletal pain, renal colic, and						
fracture/dislocation (ALTO Protocol)						
 Opioid use history (e.g., naïve versus 						
tolerant)						
 Patient and family engagement (e.g., 						
discuss realistic pain management goals,						
addiction potential, and other evidence-						
based pain management strategies that						
could be used in the hospital or at home)						

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Identification and Treatment							
Measure	Level 0 (0 pt.)	Level 1 (1 pt.)	Level 2 (2 pts.)	Level 3 (3 pts.)	Level 4 (4 pts.)	Score	
	Getting started	Basic management	Hospital wide standards	Integration & innovation	Practice Improvement		
Medication Assisted Treatment (MAT)	Methadone and	MAT is offered,	MAT is offered,	MAT is universally	Your hospital is		
	buprenorphine on	initiated, and	initiated, and	offered* to all	actively measuring		
Provide MAT for patients identified as having	hospital formulary	continued for those	continued for those	patients presenting	and developing		
Opioid Use Disorder (OUD), or in withdrawal,		already on MAT in	already on MAT in	to the hospital	strategies to		
and continue MAT for patients in active		at least 1 service	at least 2 service		improve access to		
treatment.		line (ED, Burn Care,	lines (ED, Burn Care,	One or more	MAT		
		General Medicine,	General Medicine,	hospital staff has			
Components of a MAT program should include:		General Surgery,	General Surgery,	the time and skills to			
 Identifying patients eligible for MAT, on 		Behavioral Health,	Behavioral Health,	engage with	Optional: Select one		
MAT, and/or in opioid withdrawal		OB, Cardiology, etc.)	OB, Cardiology, etc.)	patients on a	related measure		
 Treatment is accessible in the emergency 				human level,	that your hospital is		
department and in all other hospital		Hospital provides		motivating them to	already reporting on		
departments		support to care		engage in treatment	and provide the		
 Treatment is provided rapidly (same day) 		teams in		(e.g., a hospital	measure name,		
and efficiently in response to patient		understanding risk,		employee	numerator and		
needs		benefits, and		embedded within	denominator		
 Human interactions that build trust are 		evidence of		either an emergency	specifications, and		
integral to treatment		buprenorphine in		department or an	any inclusion/		
integral to treatment		MAT		inpatient setting to	exclusion criteria		
*Suggested guidelines for how to universally				help patients begin	(see measurement		
offer MAT to all patients:				and remain in	guide for list of		
Do not screen patients for OUD				addiction treatment	suggested		
 Do <u>not</u> ask patients if they are interested 				– commonly known	measures)		
				as a Substance Use			
in MAT services				Navigator, Case			
May be time consuming for				Manager, Social			
providers and stigmatizing for				Worker, Patient			
patients				Liaison, Chaplain,			
Do promote MAT services using signage in				etc.)			
waiting and exam rooms, badge flare, and				2.0.7			
patient forms							
During the exam, providers routinely let							
patients know that their site offers MAT							
 So that patients can choose to 							
disclose whether and when they							
need support							

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Identification & Treatment							
Measure	Level 0 (0 pt.) Getting started	Level 1 (1 pt.) Basic management	Level 2 (2 pts.) Hospital wide standards	Level 3 (3 pts.) Integration & innovation	Level 4 (4 pts.) Practice Improvement	Score	
Timely follow up care	Hospital identifies X- waivered providers	Hospital provides support to	Hospital has an agreement in place	Actively refer MAT and OUD patients to	Your hospital is actively measuring		
Hospital coordinates follow up care for patients	within the hospital	practitioners* in the	with at least one	a community	and developing		
initiating MAT within 72 hours either in the	and/or within the	ED and IP units to	community provider	provider for ongoing	strategies to		
hospital or outpatient setting. Hospital based	community	obtain X-waiver	to provide timely	treatment (e.g.,	improve patient		
providers and practitioners must have a X-		(e.g., provides	follow up care	primary care,	access to timely		
waiver to prescribe buprenorphine at discharge	Provides list of	education on		outpatient clinic,	follow up care		
under the Drug Addiction Treatment Act of	community-based	changes to x-waiver		outpatient			
2000 (DATA 2000). As of 2021 for providers	resources for follow	education		treatment program,			
treating ≤30 patients the X-waiver education	up care to patients,	requirement,		telehealth treatment	Optional: Select one		
requirement is waived.	family, caregivers,	supports application		provider, etc.)	related measure that		
	and friends (e.g.,	process, education			your hospital is		
If hospital <u>does not</u> have X-waivered providers:	primary care,	on how to use			already reporting on		
 Providers may provide a loading dose for 	outpatient clinics,	buprenorphine,			and provide the		
long effect, provide follow up care in the	outpatient	hospital's process			measure name,		
ED that is in alignment with the <u>DEA Three</u>	treatment programs,	for providing MAT,			numerator and		
Day Rule or connect patient to X-waivered	telehealth treatment	etc.)			denominator		
community provider for immediate follow	providers, etc.)				specifications, and		
care		Hospital is actively			any inclusion/		
		building			exclusion criteria		
If hospital <u>has X-waivered providers:</u>		relationships and			(see <u>measurement</u>		
 Prescribe sufficient buprenorphine until 		coordinating with			guide for list of		
patient's follow up appointment with		post-acute services			suggested measures)		
community provider within 24 to 72 hours		to support care					
		transitions					
*Practitioners= MDs, physician extenders,							
Clinical Nurse Specialists, Certified Registered							
Nurse Anesthetists, and Certified Nurse							
Midwives (see <u>SUPPORT Act</u> for details)							

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Overdose prevention								
Measure	Level 0 (0 pt.) Getting started	Level 1 (1 pt.) Basic management	Level 2 (2 pts.) Hospital wide standards	Level 3 (3 pts.) Integration & innovation	Level 4 (4 pts.) Practice Improvement	Score		
Naloxone education and distribution program Provide naloxone prescriptions and education to all patients, families, caregivers, and friends discharged with an opioid prescription and/or at risk of overdose. *Staff include MD, PA, NP, Pharmacist, RN, LVN, Health Coach, Substance Use Navigator, Clinical Social Worker, Research Staff, Emergency Department Technician, Clerk, Medical Assistant, Security Guard, etc. trained to distribute naloxone and provide education						score		
on how to use it		coalitions, California Naloxone Distribution Program, etc.)	patient's pharmacy of choice (e.g., naloxone incorporated into a standard order set for appropriate opioid prescriptions, and/or referral to low or no cost distribution centers, etc.)	be an ED led process in collaboration with pharmacy (see CA BRIDGE Guide to Naloxone Distribution for details)	measure name, numerator and denominator specifications, and any inclusion/ exclusion criteria (see measurement quide for list of suggested measures)			

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Measure	Level 0 (0 pt.) Getting started	Level 1 (1 pt.) Basic management	Level 2 (2 pts.) Hospital wide standards	Level 3 (3 pts.) Integration & innovation	Level 4 (4 pts.) Practice Improvement	Score
Opioid stewardship is a strategic priority with multi-stakeholder buy in and programmatic support to drive continued/sustained improvements in appropriate opioid use (e.g., executive leadership, Pharmacy, Emergency Department, Inpatient Units, General Surgery, Information Technology, etc.)	Opioid stewardship is not a quality improvement	Multi-stakeholder team identified opioid stewardship as a strategic priority and set improvement goals in one or more of the following areas: safe and effective opioid use, identifying and treating patients with OUD, overdose prevention, applying cross-cutting opioid management best practices (e.g.,	Communicated program, purpose, goal, progress to goal to appropriate staff (e.g., a dashboard, all staff meeting, annual competencies, etc.) Opioid stewardship is included in strategic plan Hospital/health system leadership plays an active role in reviewing data,	Hospital participates in local opioid coalition	Your hospital is actively measuring and developing strategies that support opioid stewardship as an organizational priority Optional: Select one related measure that your hospital is already reporting on and provide the measure name, numerator and	
	opioid stewardship committee, medication safety committee, a dedicated quality improvement team, subcommittee of the Board, etc.) Executive sponsor/project champion identified	advising and/or designing initiatives to address gaps		denominator specifications, and any inclusion/ exclusion criteria (see measurement quide for list of suggested measures)		

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Measure	Level 0 (0 pt.) Getting started	Level 1 (1 pt.) Basic management	Level 2 (2 pts.) Hospital wide standards	Level 3 (3 pts.) Integration & innovation	Level 4 (4 pts.) Practice Improvement	Score
Address stigma with physicians and staff	Hospital does not	Provides passive,	Provides point of	Trains appropriate	Your hospital is	
	address stigma with	general education	care decision	providers and staff	actively measuring	
Hospital culture is welcoming and does not	physicians and staff	on hospital opioid	making support	on, some	and developing	
stigmatize substance misuse. Hospital actively		prescribing	(e.g., MME flag for	combination of, the	strategies to	
addresses stigma through the education and		guidelines in at least	providers, automatic	medical model of	addresses physician	
promotion of the medical model of addiction,		2 service lines,	pharmacy review for	addiction, harm	and staff stigma	
trauma informed care, harm reduction		identification, and	long-term opioid	reduction	towards OUD	
principles including, motivational interviewing		treatment, and	prescription, auto	principles,	patients	
across all departments to facilitate disease		overdose prevention	prescribe naloxone	motivational		
recognition and the use of non-stigmatizing		to appropriate	with any opioid	interviewing and		
language/behaviors (e.g., words matter).		providers and staff	prescription,	how to provide	Optional: Select one	
		(e.g., M&M, lunch	reminder to check	trauma informed	related measure	
		and learns,	CURES, flag	care to normalize	that your hospital is	
		flyers/brochures,	concurrent opioid	opioid use disorder	already reporting on	
		CME requirements,	and benzo	and treatment (e.g.,	and provide the	
		RN annual	prescribing, etc.)	M&M, lunch and	measure name,	
		competencies, etc.)		learns, CME	numerator and	
				requirements, RN	denominator	
				annual	specifications, and	
				competencies, etc.)	any inclusion/	
					exclusion criteria	
				Regularly assesses	(see <u>measurement</u>	
				stigma among	guide for list of	
				providers and staff	suggested	
				(e.g., audit of	measures)	
				existing materials		
				for stigmatizing		
				language - internal		
				documentation,		
				forms, brochures,		
				signs, annual survey,		
				focus groups,		
				focused leader		
				rounding, etc.)		

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Cross Cutting Opioid Management Best Practices								
Measure	Level 0 (0 pt.) Getting started	Level 1 (1 pt.) Basic management	Level 2 (2 pts.) Hospital wide standards	Level 3 (3 pts.) Integration & innovation	Level 4 (4 pts.) Practice Improvement	Score		
Patient and family engagement	Patients and	Provides general	Provides focused	Provides	Your hospital is			
	families are not	education to all	education to opioid	opportunities for	actively measuring			
Actively engage patients, families, and friends	actively engaged in	patients, families,	naïve and opioid	patients and	and developing			
in appropriately using opioids for pain	OUD prevention,	and friends in at	tolerant patients via	families to engage	strategies to			
management (opioid prescribing, treatment,	treatment, and/or	least 2 service lines	conversations with	in hospital wide	improve patient and			
and overdose prevention via naloxone, hospital	quality improvement	(e.g., ED, Burn Care,	care providers (e.g.,	opioid management	family engagement			
quality improvement initiatives, etc.)	initiatives	General Medicine,	MAT options, opioid	activities (Patient				
		Behavioral Health,	risk and alternatives,	Family Advisory				
		OB, Cardiology,	naloxone use, etc.)	Council, peer	Optional: Select one			
		Surgery, etc.)		navigator, program	related measure that			
		regarding opioid	Patients are part of a	design, etc.)	your hospital is			
		risk, alternatives,	shared decision-		already reporting on			
		and overdose	making process for		and provide the			
		prevention (e.g.,	acute and/or chronic		measure name,			
		posters about	pain management		numerator and			
		preventing or	(e.g., develop a pain		denominator			
		responding to an	management plan		specifications, and			
		overdose,	pre-surgery, set pain		any inclusion/			
		brochures/fact	expectations, risk		exclusion criteria			
		sheets on opioid risk	associated with		(see <u>measurement</u>			
		and alternative pain	opioid use, etc.)		guide for list of			
		management			suggested measures)			
		strategies, general						
		information on						
		hospital care						
		strategies on						
		website or portal,						
		etc.)						

Addressing Substance Use Disorder (OPTIONAL: Progress in this domain does not count toward the 2021 Opioid Care Honor Roll)

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Level 0 (0 pt.)	Level 1 (1 pt.)	Level 2 (2 pts.)	Level 3 (3 pts.)	Level 4 (4 pts.)	Score
No standardized process to identify patients misusing selected substance	Level 1 (1 pt.) Basic management Standardized process in place to identify patients misusing selected substance in the ED and on admission (e.g., Alcohol Use Disorders Identification Test, Brief Screener for Alcohol, Tobacco, and other Drugs, NIDA single question screener, Screening to Brief Intervention, etc.) Process to manage withdrawal in the hospital setting for	Level 2 (2 pts.) Hospital wide standards Medications required for treatment on formulary, if applicable (e.g., naltrexone bupropion, nicotine replacement therapies, etc.) If primary treatment medications are not on formulary, other treatment options are made available (e.g., topiramate, baclofen, gabapentin, etc.)	Level 3 (3 pts.) Integration & innovation Treatment is offered and initiated in at least 1 service line (ED or inpatient)	Level 4 (4 pts.) Practice Improvement Actively refer patients to a community provider for ongoing treatment (e.g., residential treatment facility, outpatient clinic, telehealth, etc.) Provide culturally competent care (e.g., translation services, translated materials, etc.)	Score
	withdrawal in the				
	No standardized process to identify patients misusing	No standardized process to identify patients misusing selected substance Standardized process in place to identify patients misusing selected substance in the ED and on admission (e.g., Alcohol Use Disorders Identification Test, Brief Screener for Alcohol, Tobacco, and other Drugs, NIDA single question screener, Screening to Brief Intervention, etc.) Process to manage withdrawal in the hospital setting for selected substance, if applicable (e.g.,	No standardized process to identify patients misusing selected substance Standardized process in place to identify patients misusing selected substance selected substance Standardized process in place to identify patients misusing selected substance in the ED and on admission (e.g., Alcohol Use Disorders Identification Test, Brief Screener for Alcohol, Tobacco, and other Drugs, NIDA single question screener, Screening to Brief Intervention, etc.) Process to manage withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal	No standardized process to identify patients misusing selected substance Standardized process in place to identify patients misusing selected substance Standardized process in place to identify patients misusing selected substance in the ED and on admission (e.g., Alcohol Use Disorders Identification Test, Brief Screener for Alcohol, Tobacco, and other Drugs, NIDA single question screener, Screening to Brief Intervention, etc.) Process to manage withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal)	Rostandardized process to identify patients misusing selected substance Standardized process to identify patients misusing selected substance in the ED and on admission (e.g., Alcohol Use Disorders Identification Test, Brief Screener for Alcohol, Tobacco, and other Drugs, NIDA single question screener, Screening to Brief Intervention, etc.) Process to manage withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Acohol withdrawal in the hospital setting for selected substance, if applicable (e.g., alcohol withdrawal) Actively refer patients and initiated in at least 1 service line (ED or inpatient) Actively refer patients and initiated in at least 1 service line (ED or inpatient) Actively refer patients and initiated in at least 1 service line (ED or inpatient) Actively refer patients and initiated in at least 1 service line (ED or inpatient) Actively refer patients and initiated in at least 1 service line (ED or inpatient) Actively refer patients and initiated in at least 1 service li

Open ended responses:

Briefly describe the steps your hospital has taken to improve opioid stewardship across the 4 domains assessed in the 2021 Opioid Management Hospital Self-Assessment.

What would you like to learn more about in 2021 that would help you to close a gap in your work?

What else do you want us to know?

2021 Opioid Management Hospital Self-Assessment Results

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Measures	Score
Safe & effective opioid use	
Appropriate opioid discharge prescribing guidelines	
Alternatives to opioids for pain management	
Identification & treatment	
Medication Assisted Treatment (MAT)	
Timely follow-up care	
Overdose prevention	
Naloxone education and distribution program	
Cross cutting opioid management best practices	
Organizational infrastructure	
Address stigma with physicians and staff	
Patient and family engagement	
Addressing substance use disorder (OPTIONAL: Progress in this domain does not count toward the 2021 Opioid Care Honor Roll)	NA
"Hon-rolled" a friend Share the Opioid Care Honor Roll opportunity with another hospital that did not participate in 2020. If they apply for the 2021 Opioid Care Honor Roll you both get 1 additional point.	Provide hospital name(s)
Total score (out of 32 points)	

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