2020 California EMS Medical Director of the Year: *Dr. Hernando Garzon*

The California Emergency Medical Services Authority (EMSA) recently announced its 2020 California EMS Awards. The awards program honors special accomplishments, meritorious and heroic acts, innovations or fresh ideas to improve EMS, or other unique and/or significant contributions.

EMS MEDICAL DIRECTOR OF THE YEAR:

Honors a physician who serves or has served the EMS system by providing medical direction, on-line or off-line, and who has served with distinction. A physician licensed in California who serves or has served meritoriously as an EMS physician supervisor or as an on-line medical control physician and who has made a special contribution through such activities as systems development, continuing education, quality assurance, medical community liaison, etc.

Hernando Garzon – Sacramento – Sacramento County EMS Agency

For his tireless efforts and selfless leadership during the COVID-19 response. Through a long career in disaster response Dr. Hernando Garzon learned how to best respond to, organize a systematic approach to, and efficiently mitigate a large-scale incident. Dr. Garzon assisted the state by building models and predictive theories about the pandemic, enabling local and statewide leaders to be better prepared to respond to the approaching "storm" of patients. He continued leading one of the largest EMS systems in the state, guiding the development of an "Emerging Infectious Disease" policy that provided direction and clarity to the greater EMS community about a sensible approach to preventing transmission of the COVID virus, mitigating the spread of the disease among the workforce, and safe return to work guidelines.

Source: State EMSA website:
https://emsa.ca.gov/2020_ems_awards_recipients/

PUBLIC HEALTH ADVISORY BOARD

The Honorable Sue Frost, Chair
Sacramento County Board of Supervisors
700 H Street Room 2450
Sacramento, CA 95814

April 26, 2021

Re: Letter of Support for the Emergency Services Advisory Group Recommendations for Emergency Medical Services in Sacramento County

At the Public Health Advisory Board meeting on April 7, 2021, information was provided by the Emergency Services Advisory Group (EMAG) regarding their recommendations for additional funding for Emergency Medical Services (EMS) in Sacramento County. The services provided by our EMS agency are essential for the protection of public health and critical emergency services in our county. The EMAG, consisting of leaders from the EMS providers and health systems serving the county, was formed to advise the county of potential revenue sources for these essential services.

After a thorough study, the EMAG found that as the county's population grows and ages, the number of calls for ambulance services have exploded. However, staffing of our county's EMS has not kept up and is, in fact, well behind other local EMS agencies of comparable size in Northern California. In addition, 75% of operating revenue for our EMS comes from a steadily diminishing source, the Maddy and Richie funds, programs funded by Vehicle Code fines.

The recommendations of the EMAG report to the county's leadership are "to focus closer attention on EMS issues and commit sufficient resources" that would enable the county's EMS to "fulfill its regulatory, educational, and quality improvement functions in a way that supports the lifesaving work of EMS".

On April 21st, the Public Health Advisory Board voted unanimously to support these recommendations and urges the Board of Supervisors to ensure that the county's EMS has the support and funding it needs to serve our residents in providing critical life-saving emergency medical care.

Respectfully,

F. L. Kaufman

Farla Kaufman, PhD,
Chair, Sacramento County Public Health Advisory Board

Cares Data Reports 2019 vs 2020

Destination Hospital	2019	2020
Adventist Health Lodi Memorial	2	0
Kaiser Roseville	7	8
Kaiser Sacramento	119	131
Kaiser South Sacramento	152	187
Mercy General Hospital	18	46
Mercy Hospital of Folsom	21	22
Mercy San Juan Medical Center	163	260
Methodist Hospital of Sacramento	30	56
Sutter Medical Center Sacramento	82	90
Sutter Roseville Medical Center	0	4
UC Davis	74	108
VA Medical Center of Sacramento	25	32
Dead in Field or Efforts ceased due to DNR	248	423
Grand Total	**941**	**1367**

Initiated CPR	2019	%	2020	%
Bystander	125	13.28%	132	9.66%
EMS Responder (transport EMS)	298	31.67%	500	36.58%
Family Member	295	31.35%	417	30.50%
First Responder	118	12.54%	174	12.73%
Healthcare Provider (non-911 Responder)	99	10.52%	131	9.58%
Not Applicable	6	0.64%	13	0.95%
Grand Total	**941**	**100.00%**	**1367**	**100.00%**

First Monitored Rhythm	2019	2020
Asystole	527	766
Idioventricular/PEA	244	390
Unknown Shockable Rhythm	7	5
Unknown Unshockable Rhythm	13	19
Ventricular Fibrillation	141	177
Ventricular Tachycardia	9	10
Grand Total	**941**	**1367**

Sustained ROSC	2019	2020
No	742	1031
Yes, but pulseless at end of EMS care	35	49
Yes, pulse at end of EMS care	164	287
Grand Total	**941**	**1367**

ED Outcome / Hospital Discharge / Survival Rate (Cares Data)

Emergency Room Outcome	2019	2020
Admitted to hospital	241	351
Died in the ED	231	421
Not Applicable (Dead in Field or Pronounced dead in ED)	469	595
Grand Total	**941**	**1367**

Hospital Discharge	2019	2020
Total Expired	882	1248
Home/Residence	44	90
Rehabilitation facility	9	11
Skilled Nursing Facility/Hospice	6	18
Grand Total	**941**	**1367**

Survival Rate

2019	2020
6.27%	8.71%

SCENE Calls -2021 1st Quarter Data	Incident Count	Notes
Responses	51,230	
Treated and Transported	30,239	(of Scene Calls).
Have Destination	1,613	Has Destination - Disposition is not Treated / Transported.
Coroners	316	Not included in Transported or Cancelled (of Scene Calls).
Cancelled	19,062	All incidents from Responses without a destination (of Scene Calls).
IFT's	3,302	
Air Transports	Incident Count	
Airfield to Hospital	159	Not Included in Scene calls
Airfield to Landing Zone	3	Not Included in Scene calls
Airfield to Other Location	2	Not Included in Scene calls
Primary Impressions of Scene calls Treated and Transported	Count	
Traumatic Injury	4,101	
General Weakness	3,666	
Abdominal Pain/Problems (GI/GU)	2,278	
Behavioral/Psychiatric Crisis	2,028	
Respiratory Distress/Other	1,730	
ALOC - (Not Hypoglycemia or Seizure)	1,459	
Non-Traumatic Body Pain	1,434	
Chest Pain - Suspected Cardiac	1,208	
Pain/Swelling - Extremity - non-traumatic	1,184	
Nausea/Vomiting	930	
Stroke / CVA / TIA	797	
Seizure - Post	780	
Syncope/Near Syncope	735	
Respiratory Distress/Bronchospasm	674	
Dizziness/Vertigo	657	
AMA/ Released / Refused / No Treatment of Scene Calls	Incident Count	
AMA's	3,552	
Patient Evaluated, No Treatment/Transport Required	2	
Patient Refused Evaluation/Care (Without Transport)	2,864	
Patient Treated, Released (per protocol)	826	
incidents miscoded as AMA/ Released / Refused / No Treatment	22	These incidents not included in above count, all had documented destination
Average Response Time ALS Capable	0:08:44	

Emergency Medical Services (EMS) Agency
EMS Staffing Roadmap – Revised April 15, 2021

Brief Timeline

August 2, 2019 – Emergency Medical Advisory Group (EMAG) was created and began meeting. The group consists of EMS providers and health system leaders serving Sacramento County.

August 6, 2019 – Emergency Medical Services (EMS) presented a fee package to the Board of Supervisors. The letter addressed new programs and new and/or revised fees. One of the actions taken was to establish and maintain an advisory committee with stakeholder representatives to explore identification of potential sustainable sources of revenue, quality improvement and program planning.

October 8, 2020 – EMAG members discussed convening a work group to draft a letter regarding EMS funding and staffing to the Board of Supervisors. This work group drafted a paper that was presented at the December 10, 2020 and February 11, 2021 meetings.

February 9, 2021 – Brian Jensen, Hospital Council, presented the paper entitled, *Emergency Medical Services in Sacramento County: Solving the Budget and Staffing Shortfalls to Protect Public Health and Safety* on behalf of the EMAG work group. EMAG followed up with staff on February 11, 2021 requesting staff write a roadmap of staffing needs.

At the request of the EMAG, the following document outlines current staffing and future staffing needs in order to improve local EMS systems, including prehospital services and relevant hospital services such as trauma, stroke and heart attack.

EMS Current Staffing

Position	FTE	Overview of Responsibilities
EMS Administrator	1.0	Administers the EMS program and functions as the Medical/Health Operational Area Coordinator (MHOAC).
Medical Director (Contracted)	0.5	Provides medical oversight and direction of EMS programs, policies, procedures and quality improvement efforts. Facilitates the stakeholder EMS Committees.
EMS Coordinator	1.0	Administers the hospital critical care programs (STEMI-Cardiac, Stroke Critical Care Programs), functions as MHOAC and supervises EMS Specialists responsible for the following programs: ALS providers, QI, Trauma, and Training/Continuing Education.
EMS Specialist Lv2	3.0	EMS Specialists administer specified programs: 1) ALS Providers, 2) Training/Education, and 3) Quality Improvement/Data. All assist in policy development/revision and complete investigations as assigned.
Administrative Services Officer II	1.0	Administrative functions such as budget, contracts, board letters, billing, online application system, and general administrative support.

Senior Office Assistant	1.0	Administrative functions including but not limited to reception, processing certifications/accreditations, processing payments, data entry and clerical support.
Total Staff	7.5	7.0 FTE County staff / .5 Contracted Medical Director

As noted in the EMAG Briefing document, EMS is understaffed in comparison to other counties. For example, other comparable county EMS programs have more staff to manage the workload - Alameda County EMS (24 FTE), Santa Clara County (21 FTE), and Contra Costa County (15 FTE). While San Joaquin County is not comparable in size, the EMS Program has 10.3 FTE.

EMS Program & Staffing Needs

Statutory Function	Required / Permissive	Requested Position	FTE	Cost	Request Status	Rationale/Duties
Professional Standards H&S Code 1798.200 et. al	Required – Partially meeting	EMS Specialist Lv2	1.0	$132,885	Submitted with FY 21-22 Budget	EMS is currently completing the minimum level of investigations. This position will: • Be the lead and primary investigator for the Personnel Standards Program. • Coordinate and develop the EMS Professional Standards Program. • Investigate allegations of statute/policy violations, inappropriate medical care and public complaints. Investigations on Emergency Medical Technicians (EMT), Paramedics, Emergency Medical Responders (EMR), and all Sacramento County approved hospitals, ambulance and non-ambulance providers.
Basic Life Support (BLS) Provider H&S Code 1797.220 CCR, Division 9, Chapter 2	Required – Not meeting	EMS Specialist Lv2	1.0	$132,885	Future	EMS does not have BLS program oversight or policies. Currently there are several agencies providing BLS services and some requesting to provide BLS services. This position will: • Develop and implement the new BLS ambulance provider program. • Conduct annual BLS vehicle and equipment inspections. • In addition to BLS, develop/update EMS Agency policies.
		TOTAL	2.0	$265,770		

Emergency Medical Services (EMS) Agency
EMS Staffing Roadmap – Revised April 15, 2021

Statutory Function	Required / Permissive	Requested Position	FTE	Cost	Request Status	Rationale/Duties
Training & Education H&S Code 1797.214	Required – Partially meeting	EMS Coordinator	1.0	$169,689	Future	EMS does not offer all required training programs. This proposed new position will: • Oversee the existing Training Programs (EMT, Paramedic, MICN, EMR and Narcan), the CE Provider Program, and the new Public Education Program. • Develop policies and procedures for training programs. • Monitor compliance with policies and perform audits. • Investigate and respond to complaints regarding the training programs.
Training & Education H&S Code 1797.214	Required – Not meeting	Health Educator, Range B	1.0	$133,285	Future	The position will: • Coordinate and oversee evidence-based and quality improvement guided training and education of prehospital personnel, such as, Pediatric Advanced Life Support, Advanced Cardiac Life Support for prehospital personnel. • Coordinate, oversee and provide education/certification classes for EMT Training, First Aid, CPR, AED use for the public. (Public training is required but not currently offered.)
Training & Education	Required – Partially meeting	Administrative Services Officer I	1.0	$128,295	Future	This position will offer necessary support for the training and education program. It will: • Be the primary contact for registration of education classes, coordinating the scheduling, collecting payments, coordinating classes. • Provide support to the Health Educator/EMS Coordinator positions.
		TOTAL	3.0	$431,269		

Emergency Medical Services (EMS) Agency
EMS Staffing Roadmap – Revised April 15, 2021

Statutory Function	Required / Permissive	Requested Position	FTE	Cost	Request Status	Rationale/Duties
Medical Oversight H&S Code 1797.202	Required – Partially meeting	Medical Director Increase contracted position from 0.5 to 1.0 FTE. Could be increased incrementally.	0.5	$120,000	Future	EMS is meeting the minimum level of medical control oversight. The proposed increase in hours is necessary to expand QI, policy/training review, compliance activities, and for program oversight: • Quality Improvement & data analysis • Training and education • Implementation of process changes based on data review.
		TOTAL	0.5	$120,000		

Statutory Function	Required / Permissive	Requested Position	FTE	Cost	Request Status	Rationale/Duties
Critical Care Programs CCR, Title 22, Division 9, Chapters 7.1 & 7.2	Required – Not meeting	EMS Coordinator	1.0	$169,689	Submitted with FY 21-22 Budget	This position will be dedicated to program oversight for critical care programs: • Trauma, STEMI-Cardiac, Stroke), Cardiac Arrest Registry to Enhance Survival (CARES) registry and any future additional programs. • Quality Improvement/data
Quality Improvement/Data CCR, Title 22, Division 9, Chapter 12	Required – Partially meeting	EMS Specialist Lv2	1.0	$132,884	Future	This position will be dedicated to: • Data reporting and analysis, which will enhance the mandatory QI program. • Analyze data for EMS Dispatch, Core Measures, Cardiac Arrest Registry to Enhance Survival (CARES), Critical Care programs (STEMI-Cardiac, Stroke and Trauma), and other indicators. • Identify trends, quality improvement measures, and implement process improvement as indicated by the Medical Director.
Critical Care Programs CCR, Title 22, Division 9, Chapters 7.1 & 7.2	Required – Partially meeting	EMS Specialist Lv2	1.0	$132,884	Future	This position will be dedicated to: • Full implementation of the STEMI-Cardiac and Stroke Critical Care programs.
		TOTAL	3.0	$435,457		

Emergency Medical Services (EMS) Agency
EMS Staffing Roadmap – Revised April 15, 2021

Statutory Function	Required / Permissive	Requested Position	FTE	Cost	Request Status	Rationale/Duties
Emergency Preparedness California Emergency Services Act of 1970. Chapter 7	Required – Not meeting	Health Services Program Planner *Position could be placed in PRI or Pub Health. Public Health submitted a request for this position through grant funding.*	1.0	$183,685	Future	Department of Health Services (DHS) currently does not have a position that coordinates emergency preparedness. This position will be responsible for ensuring plans, policies and procedures are developed and maintained; describing operational roles and procedures; assess employees' level of preparedness; represents DHS in county, regional or state planning; prepares and coordinates response within the department; and assists with coordination of the MHOAC and other departments and agencies involved in emergency preparedness.
		TOTAL	1.0	$183,685		

Statutory Function	Required / Permissive	Requested Position	FTE	Cost	Request Status	Rationale/Duties
Staff Support H&S Code, Division 2.5, et.al. CCR, Title 22, Division 9, et.al.	Required – A*s program expands*	Sr. Office Assistant (Admin. Support)	1.0	$86,842	Future	This position will provide: • Clerical support to staff. • Public counter coverage.
		TOTAL	1.0	$86,842		

Emergency Medical Services (EMS) Agency
EMS Staffing Roadmap – Revised April 15, 2021

Future Operational Needs	Requested Item (Function)	Annual Cost	Request Status	Rationale
Emergency Preparedness	Mobile Medical Shelter (MMS) Warehouse	$23,000	Future	Future lease cost for MMS warehouse. Estimated annual lease cost includes warehouse ($12,000) and exterior gated storage area ($11,000). *Currently, the warehouse lease ($12,000) is funded via County Office of Emergency Services for a (3) year period ending November 30, 2023.*
Office Space	Larger Suite at Micron Avenue Building	$86,046	Submitted with FY 21-22 Budget	Current space is insufficient for additional staff. • Move in costs include tenant improvements ($73,000) and additional first year lease cost ($13,046) which has been requested in the SCEMSA FY 21-22 Budget. • Ongoing annual lease cost after FY 21-22 is $56,784.
Training & Education	Equipment & Supplies	$25,000	Future	If training and education programs are approved, there is approximately a one-time cost of $25,000 for equipment and supplies.
	TOTAL	$134,046		

Areas for Future Exploration

During stakeholder discussions in 2019, a few programs were briefly discussed and require more stakeholder/program review. These include the following:

- EMS for Children: This is an optional specialty program defined by the State EMSA and adopted by many counties. The goal of the program is to ensure that acutely ill and injured children have access to high quality, coordinated, and comprehensive emergency and critical care services appropriate for the special needs of children. This is a continuum of care beginning with the detection of sick or injured children and transport to the appropriate emergency department through rehabilitation. *Health & Safety Code, Chapter 12, Section 1799.202 et.al. and CA Code of Regulations, Title 22, Division 9, Chapter 14.*
- Critical Care Transport-Paramedic Program: This is an optional program that allows EMS providers to provide inter-facility critical care transport. These services provide a higher level of prehospital emergency care which reduces the impact on local emergency departments. *CA Code of Regulations, Title 22, Division 9, Chapter 4.*
- Electronic Patient Care Report (ePCR): During the Board of Supervisors Hearing in February, a board member asked if utilization of a single ePCR would help the hospital systems. Currently, there are seven different ePCR platforms. ePCR data submission is required in the H&S Code 1797.227. This item requires stakeholder discussion since public and private entities have invested in their individual ePCR platforms and would be a major change.

Vehicle Code Fine (VCF) Revenue Reduction Impact
May 28, 2021

Staff outlined declining Vehicle Code Fine (VCF) revenue in a Board of Supervisors (BOS) report (Reso. 2017-0533) on July 25, 2017 when Richie Fund revenue was added to the VCF revenue, again on August 6, 2019 when fees were approved (Reso. 2019-0555 – 0558), and recently in a stakeholder presentation on the need to support additional positions and funding on February 9, 2021. All concur that revenue for the Emergency Medical Services (EMS) program needs to be sustainable but there are no easy answers. This document outlines the impact of the revenue reduction and/or potential loss of the revenue source.

VCF revenue designated for the Emergency Medical Services (EMS) "Maddy" and "Richie" Fund, accounts for 76% of EMS revenue. It has been on a continual decline and is not expected to recover. The decline is due to legislative changes leading to the courts inability to collect on vehicle code fines designated for the EMS Maddy/Richie Fund.

- In 2018-2019 legislative years, SB 185 waived payment of VCF for anyone who identified the inability to pay the court fines.
- Currently, SB 586 is another piece of legislation that allows for non-payment of fines without penalty.

VCF (known as the Maddy/Richie Fund) are used to partially fund EMS program operations, support for trauma hospitals, and emergency physicians. The Maddy EMS Fund and its distribution is described in California Health and Safety Code 1797.98 et.al.

Maddy Fund Revenue Distribution:

The initial 10% is utilized for administration. The remaining 90% is allocated to:

- 58% Physicians Services Account – Payments made to physicians who care for patients who have no insurance coverage or are otherwise unable to pay for the emergency room visit;
- 25% Trauma Center Account – Funds distributed to Sacramento County trauma hospitals.
- 17% Discretionary Account – Payments made for other EMS purposes, determined by each county.

Richie Fund Revenue Distribution:

The initial 10% is utilized for administration and 15% utilized to support pediatric trauma hospitals. The remaining 75% is allocated to:

- 58% Physicians Services Account – Payments made to physicians who care for patients who have no insurance coverage or are otherwise unable to pay for the emergency room visit;
- 25% Trauma Center Account – Funds distributed to Sacramento County trauma hospitals.
- 17% Discretionary Account – Payments made for other EMS purposes are determined by each county.

VCF Distribution per Statutory Formula (For illustration purposes)

VCF Distribution Formulas per Statute	Maddy	Richie	VCF Revenue*	Total VCF per category (Combined Maddy and Richie)
	$500,000	$500,000	$1,000,000	
10% Administration	**$50,000**	**$50,000**	**$100,000**	**10%**
15% Pediatric Trauma	$0	$75,000	$75,000	7%
REMAINING	$450,000	$375,000	$825,000	
58% Physician Claims	$261,000	$217,500	$478,500	48%
25% Trauma Centers	$112,500	$93,750	$206,250	21%
17% EMS Discretionary	**$76,500**	**$63,750**	**$140,250**	**14%**
TOTAL Revenue under EMS control			$240,250	24%
* Current VCF: Projected to receive $1.69M for FY 20/21				
TOTAL VCF Revenue under EMS Control			$406,023	24%
Less Payment to Vendor for Claims Administration			-$126,000	7.6%
VCF Revenue Supporting "true" EMS Operations			$280,023	16.6%

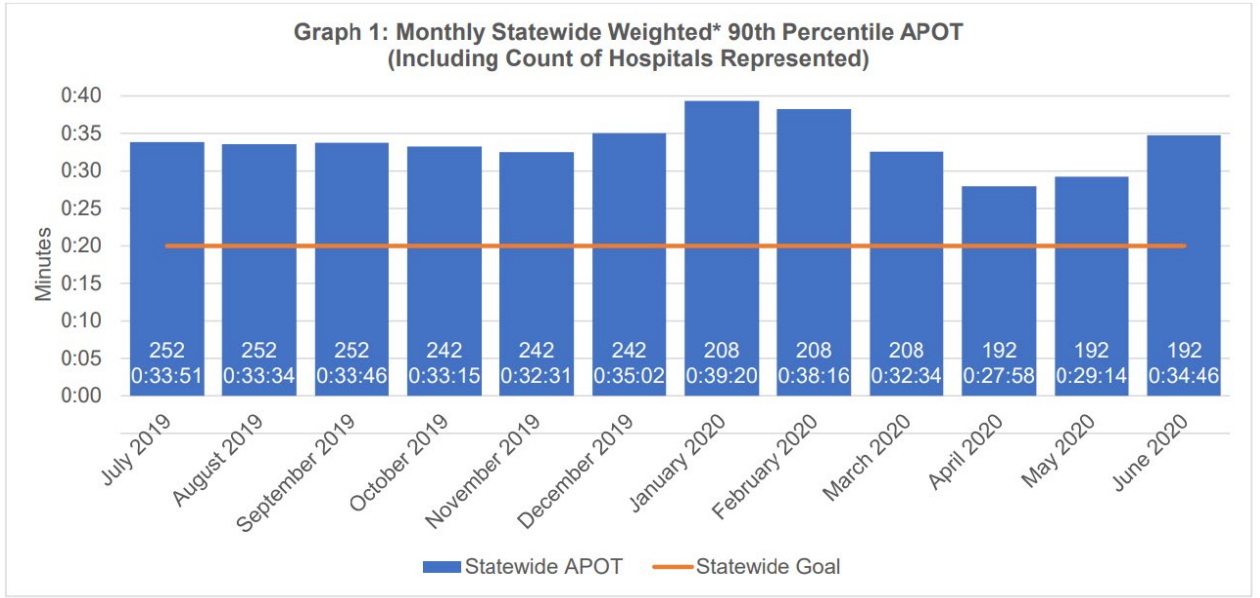
EMS impact current budget: VCF continues to decline. For FY 2021-22, VCF revenue is projected to decline by $50,000. This is a loss to Trauma Hospital and Emergency Physician payments ($37,975) and EMS operations ($12,025).

In addition, EMS had unavoidable cost increases that they had to absorb. Other revenues were insufficient to cover this increase, resulting in additional reductions ($11,101). Proposed reductions would be in operating expenses such as conferences or return of the EMS vehicle.

The EMS program is understaffed with only 7.0 FTEs and cannot make further significant reductions without cutting a position. If EMS were to cut a position, it would subsequently have to eliminate the fee-based programs administered with that position which would lead to further reductions.

VCF Erosion: As VCF continues to decline or is eliminated it would impact EMS staffing, operations and funding distribution per statute to hospitals or physicians.

CA vs. Sac APOT-1



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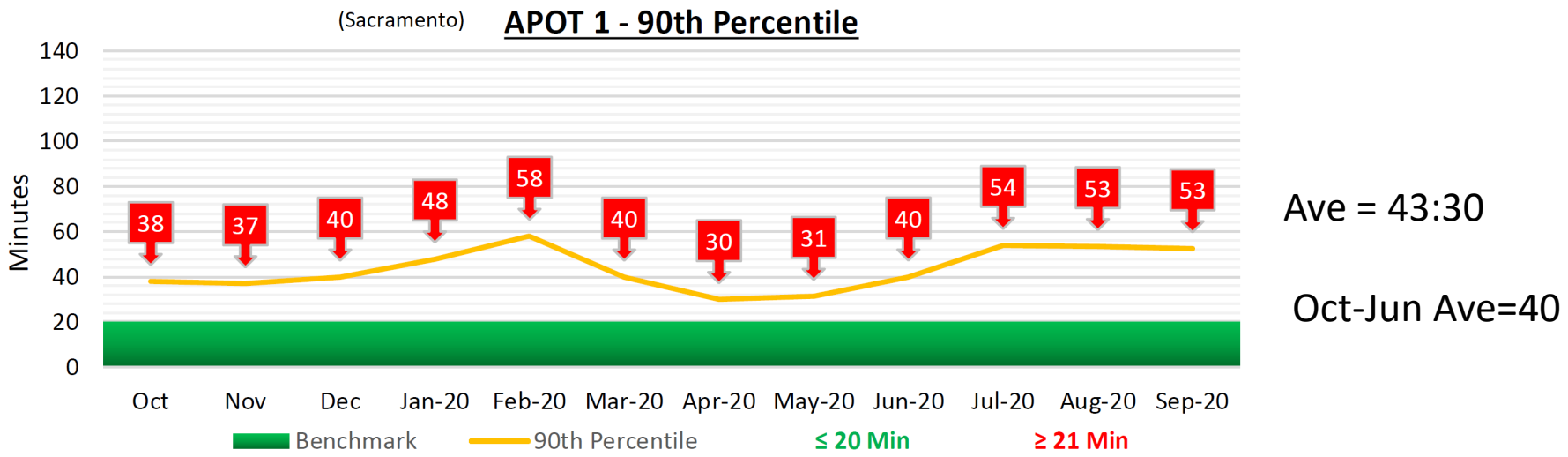

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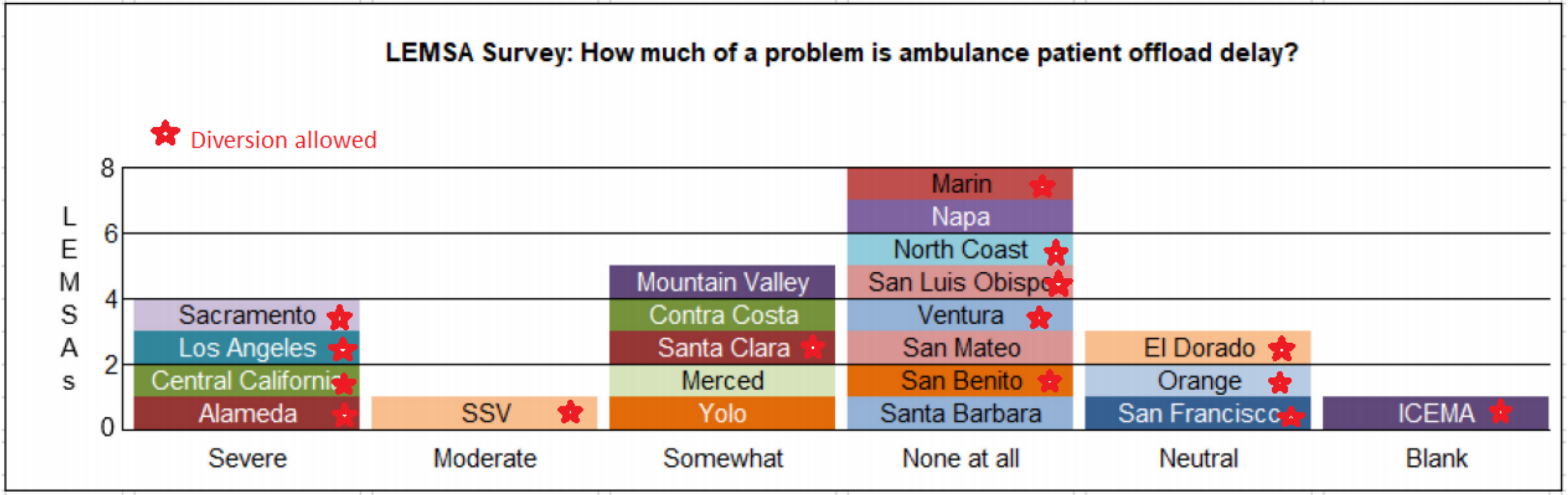
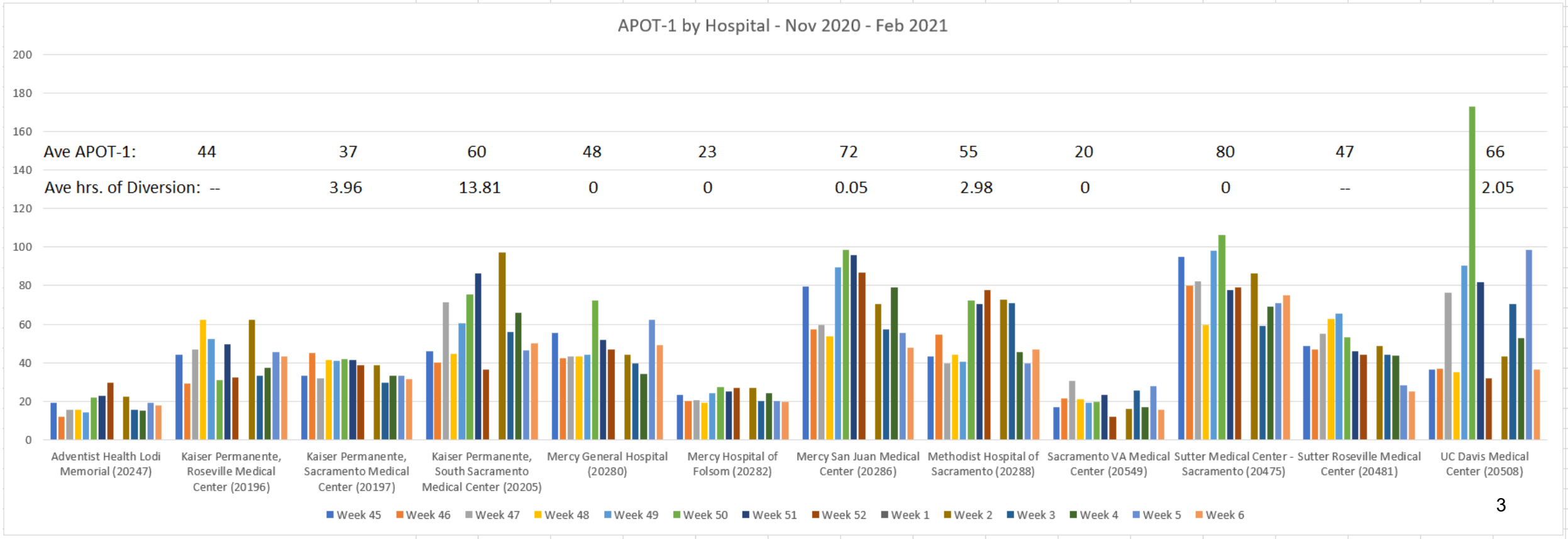
Source: California APOT Report (Dec 2020)

- Diversion is not associated with improved APOT-1



APOT-1 and Diversion utilization in SCEMSA

- Hospital with the 4th worst APOT-1 used Diversion 5 x more than any other hospital (KHS)
- Hospital with the 3rd best APOT-1 used diversion the second most (KHN)



APOT-1 and Diversion

- Additional factors
  - Monitoring of hospital saturation indicates that when one hospital is heavily impacted, all others are as well. It is RARE that a neighboring hospital is not impacted when another is heavily impacted.
  - The hospital with the lowest APOT-1 times (MGH, MHF, VA) are small and would be overwhelmed if tasked to decompress the ambulance volume of the larger impacted hospitals by greater use of diversion.
  - Ambulance traffic accounts for < 15% of most EDs total census.
  - **Diversion for overcrowding is a safety valve to protect patient safety when EDs are heavily impacted, but increasing diversion would do little to improve overall APOT.**

DECOMPRESSION PROTOCOL

Preserving Patient Safety in Emergency Departments

WHY

The volume of patients being treated in Sacramento County emergency departments (ED) increased by two/thirds in the decade between 2007 and 2017. Multiple hospitals reported all-time high patient volumes in 2019. Patient demand is straining ED capacity more than ever. There are even moments when senior medical and administrative leaders determine ED overcrowding to endanger patient safety.

WHAT

All local hospitals, in conjunction with the Sacramento County Emergency Services Agency, developed the Decompression Protocol. This status temporarily diverts some ambulance traffic for a limited time in order to allow a hospital to restore safe conditions for patients.

WHEN

Starting June 1, 2018, hospitals may go on decompression status not to exceed 120 minutes only if all of the following circumstances occur:

1) The number of patients seeking care in the ED exceeds 175 percent of designated ED bed capacity
2) The NEDOCS score exceeds 220 (black)
3) 40 percent of designated ED beds are boarding medical and/or behavioral health holds
4) The authorized senior administrator and ED Medical Director concur that decompression is appropriate and have consulted with the Sacramento County Medical and Health Operational Area Coordinator (MHOAC)

HOW

During periods of decompression, adult trauma centers, can only receive critical trauma patients who meet physiologic (step 1) or anatomic (step 2) criteria

The following patients may not be diverted for decompression: cardiac arrest, unable to establish airway, shock, not responsive to field treatment, third trimester obstetric patients with imminent delivery

UC Davis will remain open to burn and pediatric trauma while on decompression

Any EMS unit that determined its destination prior to ED decompression shall continue to that destination, regardless of ED decompression status.

When one facility activates decompression, every other facility submits EMResource status reports hourly during the activation to help determine impacts on the system (as of June 1, 2019).

The hospital must rescind the decompression status after two hours.

Decompression may be used no more than six hours in any 24-hour period. A hospital must remain open for two hours before can go on decompression again.

No more than two facilities can go on decompression at one time. If a third facility seeks to initiate decompression, decompression status at all facilities ends

No more than one facility can go on decompression in a two-mile radius. If a second facility within a two-mile radius seeks to initiate decompression, decompression status at all facilities ends.

Updated: January 30, 2020

Preserving Patient Safety in Emergency Departments

Coping with the Surging Demand for Emergency Medical Services

Updated January 30, 2020

Hospital Council
Northern & Central California

Demand for Emergency Services Increasing

- In December 2007, Sacramento County hospital emergency departments received **33,823** patients
- In October 2017, they treated **55,215** patients – a 2/3 increase over a decade
- The number of ED beds has not increased at the same rate
- Hospitals often activate surge plans on "average" days

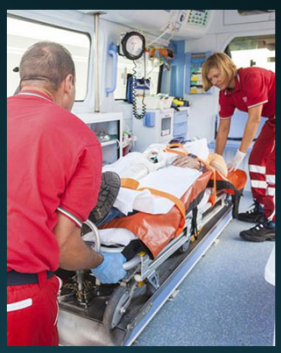
Wall Times Reduce Community Protection

Ambulance Patient Offload Times (APOT), "wall times," measure how long it takes to transfer patient care from EMS to ED

The surge in ED usage has contributed to APOT duration

APOT have increased over the years, leaving many ambulances parked in hospital bays when they are needed in the community

Many days, the EMS system must activate reserve units designed for catastrophes



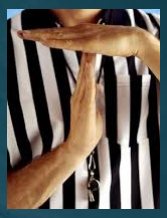
Internal Disaster: The Wrong Tool for ED Crowding

On rare occasions when ED crowding jeopardizes patient safety, hospitals used to have one imprecise tool – declaring internal disaster

An internal disaster is an event that occurs within the hospital (i.e., bomb scare, power failure, water system failure, fire, etc.) – <u>not extraordinarily high census</u>

It is a burdensome process and requires reporting to the state, which attracts regulatory scrutiny

Decompression: A Safety Timeout



Starting June 1, 2018, hospitals may go on decompression status not to exceed 120 minutes only if all of the following circumstances occur:

1) The number of patients seeking care in the ED exceeds 175 percent of designated ED bed capacity

2) The NEDOCS score exceeds 220 (black)

3) 40 percent of designated ED beds are boarding medical and/or behavioral health holds

4) The authorized senior administrator and ED Medical Director concur that decompression is appropriate and have consulted with the MHOAC

Decompression: A Safety Timeout

During periods of decompression, adult trauma centers, can only receive critical trauma patients who meet physiologic (step 1) or anatomic (step 2) criteria

The following patients may not be diverted for decompression:

- Cardiac arrest
- Unable to establish airway
- Shock, not responsive to field treatment
- Third trimester obstetric patients with imminent delivery

Decompression: A Safety Timeout

UC Davis will remain open to burn and pediatric trauma while on decompression

Any EMS unit that determined its destination prior to ED decompression shall continue to that destination, regardless of ED decompression status.

Decompression: A Safety Timeout

When one facility activates decompression, every other facility submits EMResource status reports hourly during the activation to help determine impacts on the system (as of June 1, 2019)

The hospital must rescind the decompression status after two hours

Decompression may be used no more than six hours in any 24-hour period – a hospital must remain open for two hours before can go on decompression again

Decompression: A Safety Timeout

No more than two facilities can go on decompression at one time; if a third facility seeks to initiate decompression, decompression status at all facilities ends

No more than one trauma center can be on decompression at one time

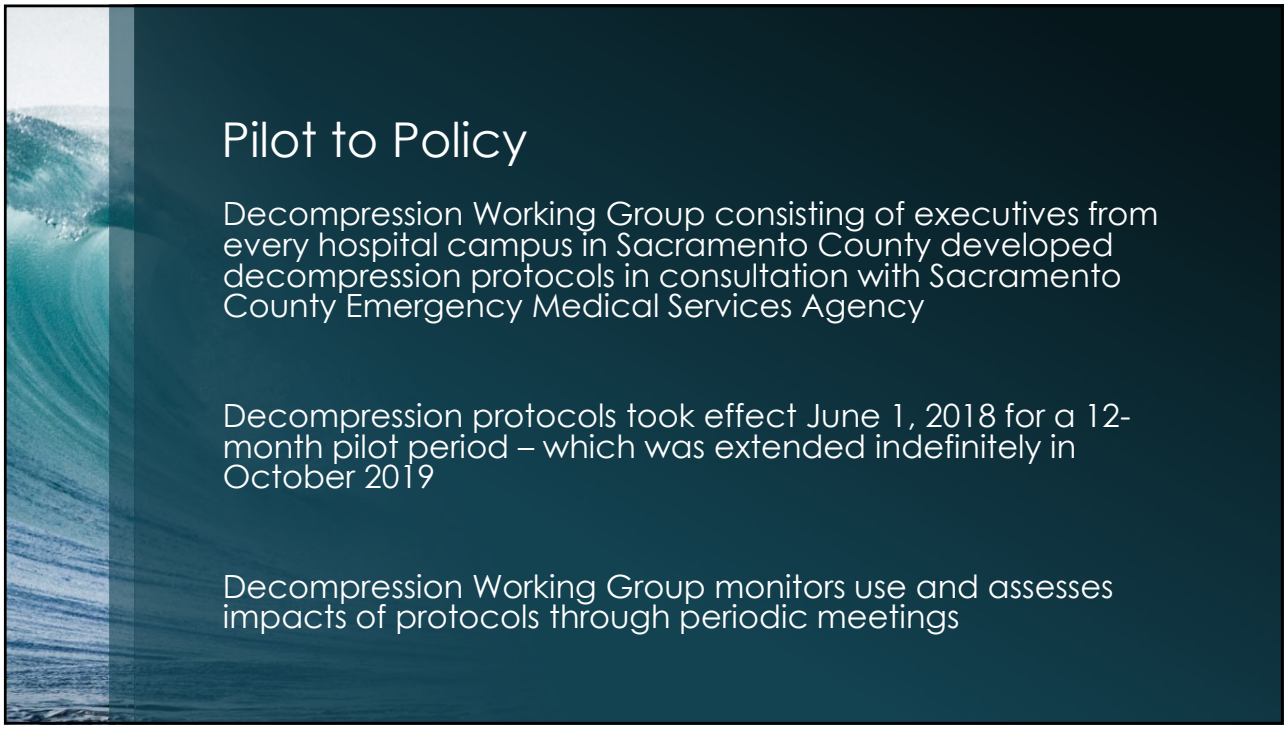
No more than one facility can go on decompression in a two-mile radius; if a second facility within a two-mile radius seeks to initiate decompression, decompression status at all facilities ends

ED Census/Hold Data Transparency: Sparking Improvement

Sacramento County MHOAC has tracked medical and behavioral health holds is local EDs since 2015, increasing the reporting frequency over time

NEDOCS scores for all hospitals are now visible to staff in all hospitals

The greater timeliness and transparency of ED data informs hospital improvement strategies and guides the MHOAC in consulting with senior hospital administrators before making the decision to use decompression


Pilot to Policy
Decompression Working Group consisting of executives from every hospital campus in Sacramento County developed decompression protocols in consultation with Sacramento County Emergency Medical Services Agency
Decompression protocols took effect June 1, 2018 for a 12-month pilot period – which was extended indefinitely in October 2019
Decompression Working Group monitors use and assesses impacts of protocols through periodic meetings