



# Emergency Medical Services/Trauma Committee Meeting

Wednesday, June 27, 2018

California Hospital Association - Boardroom

1215 K Street, Ste 800

Sacramento, CA, 95814

Conference Call Option:

(800) 882-3610 Access Code: 1953936#

# Meeting Book - Emergency Medical Services/Trauma Committee Meeting

## AGENDA

10:00

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### I. CALL TO ORDER/INTRODUCTIONS

Pam Allen

#### A. Membership

- 1. Roster Page 4
- 2. Member Updates Page 7
- 3. Member Map Page 20
- 4. CHA Member Breakdown Page 21
- 5. Goals and Objectives Page 22
- 6. Guidelines Page 24

10:20

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### II. REVIEW OF PREVIOUS MEETING MINUTES

Pam Allen

#### A. Draft Minutes

Recommendation:  
Approval

- 1. Meeting Minutes - March 7, 2018 Page 28

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### III. NEW BUSINESS

- A. Behavioral Health Action Page 32  
Sheree Lowe
- B. HQI - Emergency Department Discharge Data Page 33  
Scott Masten
- C. Emergency Rooms Not Prepared for Disaster Page 52  
Cheri Hummel

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### IV. OLD BUSINESS

- A. ED SAFE-T Page 56  
Aaron Wolfe
- B. EMSA - EMS-C, Stroke and STEMI Page 57  
BJ Bartleson
- C. APOT Page 98  
Bruce Barton
- D. Community Paramedicine Page 107

12:00

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V. LUNCH

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VI. LEGISLATION  
BJ Bartleson

A. Legislation

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VII. REPORTS

A. EMSA  
Dan Smiley

B. ENA  
Susan Smith

C. TMAC  
Heather Venezia

D. CDPH  
Ron Smith

E. Ground Ambulance

F. Air Ambulance

G. Cal ACEP

H. EMS-C  
Heather Venezia

1:45

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VIII. INFORMATION ONLY

A. Article: ER Spending Rises with Increasing Prices, Severity of  
Visits

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B. 2018 ED Forum

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2:00

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IX. ADJOURNMENT

A. Next Meeting: Wednesday, August 29, 2018

## EMS/TRAUMA COMMITTEE 2018 ROSTER

### Officers

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#### Chair

**Pam Allen, RN, MSN, CEN**  
**Director, Emergency Department/Critical Care**  
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### Members

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## EMS/Trauma Committee Roster

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Jun 27, 2018

**TO:** EMS/Trauma Committee Members

**FROM:** BJ Bartleson, RN, MS, NEA-BC, Vice President, Nursing and Clinical Services

**SUBJECT:** Retiring Member and New Members

**SUMMARY**

Carla Schneider, MSN, MICN, CEN, former Emergency Department Director at Hoag Memorial Presbyterian Hospital, retired at the end of May this year. She served on the CHA EMS/T Committee for several years and was co-chair since August, 2016. Her valuable contribution is greatly appreciated and will be missed.

Christopher Childress, BSN, RN, CEN, Director Emergency Department Newport Beach at Hoag Memorial Hospital Presbyterian has been named as Carla's replacement at Hoag. We welcome him to our committee today and look forward to his feedback on committee member status.

Karen Sharp, RN, MSN, is presently the Director of Emergency Services at Saddleback Memorial Medical Center in San Clemente, and is a new member of the CHA EMS/Trauma Committee.

Carla Spencer, MSN, RN, CCRN, Director, Emergency Services at Salinas Valley Memorial Healthcare System has also joined the CHA EMS/Trauma Committee as a new member.

**ACTION REQUESTED**

- Information Only

**Attachments:** Christopher Childress Resume  
Karen Sharp Resume  
Carla Spencer Resume

BJB:br

# Christopher Childress, BSN, RN

## Summary

Registered Nurse skilled in providing safe, compassionate and quality care for over 11 years in the Emergency Department. Adherence to California's Nurse Practice Act placing a high value on ethics and accountability.

## Areas of Expertise

Super user for development of the first Emergency Department electronic charting system in 2012 and again with the current implementation of EPIC and RTLS. Worked in position of charge nurse with both day and night team. Included in team for Provider in Triage pilot with subsequent implementation of model of care. Proficient with education on EMTALA, DNV, CDPH, and CMS regulatory standards. Attended Hoag professional development courses for leaders, including Crucial Confrontations and Greenbelt Certification in the Lean Process.

## Experience

Hoag Hospital, Newport Beach, CA

### Charge Nurse

2013 to Present

As a charge nurse responsibilities include the supervision of staff to ensure safe and quality care is delivered. This involves many roles, which include; creating nursing assignments, rounding on patients/staff, performing other duties as radio nurse, triage and assisting with care of critical patients. In addition an important part of the role involves being a liaison between physicians, staff and patients.

With Transformational Leadership as the preferred management style it has been important to ensure development and competency of new employees along with completion of annual evaluations where both areas of excellence and opportunities for growth are identified and agreed upon.

### Clinical Nurse II (MICN)

2011 to 2013

As an MICN for Nine years (radio nurse) responsibilities include communication with paramedics via the Radio to determine both hospital destination and treatment orders relevant to the stated assessment. During this time other roles included triage, primary RN, and relief charge nurse.

### Staff Nurse / Clinical Nurse I

2007 to 2011

This role involved the direct care of patients of all ages and acuity levels, adhering to the nurse practice act and hospital policies.

### Emergency Care Technician

2004 to 2007

As an ECT (Emergency Care Technician) for over two years supportive role included assisting RNs and physicians in the care and treatment of patients.

## Education

Western Governors University - BSN.

2017

Santa Ana College – ADN

2006

## Professional Affiliations

E.N.A. - Emergency Nursing Association, since 2010

## Licenses

Registered Nurse, Board of Registered Nursing, CA, 2007 to 2018. License # 698841

## Professional Certifications

CEN, Board of Certification for Emergency Nursing 2018



## Curriculum Vitae

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### Profile

Over thirty years in health care with accomplished clinical, administrative, and education experience in critical care and emergency services. Highly enthusiastic people oriented leader, coach, mentor, and educator with experience in overall patient care operations, quality improvement, state and federal regulatory compliance, cost-effective program design, budget, and project planning using LEAN principles.

Proficient in developing positive interpersonal relationships and promoting teamwork between colleagues including private, public, and volunteer organizations. Committed to promoting quality patient care utilizing clinical experience, evidence based practice, and by leading with integrity and a clear and inspiring vision. Experience in creating leadership development and clinical educational programs, research activities, quality improvement projects, and trauma consulting services. Demonstrates excellent problem solving abilities and seeks opportunities to develop others to reach their potential.

### Professional Experience

#### **Saddleback Memorial Medical Center**

Director, Emergency Services  
Manager, Emergency Services  
Manager, Critical Care and Emergency Services  
Manager, Emergency Services

**6/06-present**

7/13- present  
2/11-7/13  
8/08-2/11  
6/06-8/08

Responsible for the overall direction and daily operations of a high acuity, fast paced 31 bed emergency department. Responsible for the design and development of clinical programs, fiscal performance targets, organizational strategic plan and service line initiatives. Maintain oversight and responsibility for staff performance, compliance to state and county regulations, and operations for the emergency department, across the continuum of care. Active participation on Best Practice Teams, Business Development Teams-Stroke, Emergency and Critical Care, MC21 LEAN Leader, Facilitative Leadership, Graduate of MemorialCare Leadership Academy and Magnet Steering and writing teams.

#### **University of Utah Health Care, Salt Lake City, Utah**

Trauma Coordinator-Educator

**10/03-6/06**

Responsible for planning, coordinating, and evaluating trauma related activities in collaboration with physicians throughout the intermountain west. Oversee planning, implementation, and evaluation of community education and injury prevention programs. Develop collaborative relationships with internal and external departments to facilitate and support quality trauma care. Accountable for acquiring, evaluating, and training new knowledge and skills in the area of trauma care.

#### **Utah Department of Health, Salt Lake City, Utah**

Trauma System Coordinator-Bureau of Emergency Medical Services

**1/01-10/03**

Accountable for the implementation, coordination, and evaluation of the statewide inclusive trauma system. Provide consultation, training, and technical assistance for hospitals and EMS providers throughout the State of Utah. Conduct site visits, designations, and verifications to ensure compliance with established rules and statute. Responsible for providing expertise in state administrative issues, education, injury prevention, quality improvement, research, and the trauma registry to all hospitals. Responsible for monitoring compliance and statistical analysis with trauma registry data submission for

statewide quality improvement reports. Responsible for preparation and submission of federal grant applications. Act as the bureau expert on state and local government committees, boards, and in public communications through speaking engagements at the state, national, and international level. Perform annual verification process for designated trauma centers and conducted site visits to hospitals wishing designation. Participate in the development and implementation of emergency preparedness and disaster planning activities including the Utah Olympic Committee in 2002.

**Sandy City Fire Department, Sandy, Utah**  
Medical Officer

**9/96-1/01**

Responsible for supervision, coordination, and operation of the medical division. Prepare state and federal grant applications. Act as medical expert in data review and legal documentation. Liaison with hospitals and member of state and local advisory committees. Responsible for all coordinated disaster planning activities and field exercises. Respond as EMS provider to emergency 911 calls to evaluate firefighter performance and assist in medical operations. Other duties include Infectious Disease Control Designated Agent, OSHA Fit Test validation and verification, Utah EMS Training Officer, and EMT/Paramedic Instructor, and American Heart instructor in all disciplines.

**Intermountain Health Care, Salt Lake City, Utah**  
Registered Nurse

**8/92-9/97**

Staff RN, Shock/Trauma ICU, Thoracic ICU, Cardiac Care Unit, Emergency Department, Life Flight

**Life Flight, Intermountain Health Care, Salt Lake City, Utah**  
Flight Crew/Communications Specialist

**1/90-12/92**

Responsible for flight operations, coordination of medical flight teams, and flight following for adult, pediatric, and neonatal flight crews throughout the intermountain west catchment area. Additional responsibilities included medical billing and patient referral services.

**Salt Lake City Fire Department, Salt Lake City, Utah**  
Emergency Medical Dispatcher/Technician

**3/83-8/92**

Responsibilities included answering 911 calls, dispatching appropriate apparatus and personnel to fire and emergency medical calls. First of thirteen dispatchers worldwide to develop program and be certified as an Emergency Medical Dispatcher.

### **Education**

Master of Science in Nursing (MSN), Walden University	2010
Bachelor of Science in Nursing (BSN), University of Utah	1992
Physical Education, California State University, Chico	1979

### **Professional Licenses**

Registered Nurse, Utah	#225119-3102	1992
Registered Nurse, California	#686769	2006

### **Professional Associations**

Air and Surface Transport Nurses Association  
American Association of Critical Care Nurses  
Association of California Nurse Leaders  
Emergency Nurses Association-Utah State Council, California member  
Sigma Theta Tau, National Honor Society of Nursing-Gamma Rho  
Society of Trauma Nurses

Health Care Educators Association  
 National Association of EMS Educators  
 National Association of Emergency Medical Technicians  
 Traumatic Brain Injury State Council

**Certifications**

Emergency Medical Dispatcher, Utah,	1983
Basic Cardiac Life Support, AHA	1983
Emergency Medical Technician, Utah,	1988
Advanced Cardiac Life Support, AHA	1988
Basic Life Support Instructor, AHA,	1993
Buckle Up Kids, Certified Child Passenger Safety Instructor	1996
Bureau of EMS, Utah Certified Training Officer	1996
Trauma Nursing Core Course-provider, Instructor	1996
Advanced Cardiac Life Support Instructor, AHA	1996
Pediatric Advance Life Support-PALS, AHA	1997
Emergency Medical Technician, Instructor	1998
Certified OSHA Respiratory Fit Tester	1999
American Heart Association AED Instructor	1999
Advanced Cardiac Life Support Instructor Trainer, AHA	1999
Pediatric Advanced Life Support Instructor, AHA	1999
Basic Life Support Instructor Trainer, AHA	2000
Emergency Medical Services for Children, Instructor,	2000
Pediatric Education for Prehospital Providers (PEPP), Instructor	2001
Prehospital Trauma Life Support, Instructor	2001
Prehospital Trauma Life Support, State Coordinator, Affiliate Faculty	2002
Brain Trauma Foundation, Instructor	2003
Transport Nurse Advanced Trauma Course	2003
Assoc. for the Adv. of Automobile Medicine, Injury Scaling	2004
Trauma Nursing Core Course (TNCC)	2004
Advanced Trauma Life Support, Course Coordinator May	2004
Volunteer Associate Instructor, University of Utah, College of Nursing	2004
Advanced Trauma Care for Nurses, Provider/Coordinator	2005
Advanced Trauma Care for Nurses, Instructor	2005
Advisory Board-Center for Frontline Nursing Leadership-Coach, UUHC	2005
Director, Advanced Trauma Care for Nurses	2006
Disaster Preparedness and Incident Management for Leaders	2008
Transformational Leadership	2010
Lean Leader Training	2010
MHS-Facilitative Leadership	2011
SMMC- Med teams and Lean Training	2012
Certified Lean Leader- MemorialCare Health System	2013
Just Culture Certification Course	2015

**Awards**

South Orange County Selfless Service Award	2007
Avatar National Most Improved Emergency Services-Patient Satisfaction	2007
Leader of the Quarter-Winter 2007, Saddleback Memorial	2007
VHA Patient Satisfaction Award	2008
VHA Reduction in Time from Door to Balloon Award	2008
VHA Rapid Response Team, Reduction of Codes Outside the ICU	2008
California Emergency Physicians, Outstanding Customer Service Award	2009
Significant Achievement Award SC ED for HCAHPS Q3	2010
Exceptional Achievement Award LH ED for Q4	2012

Significant Achievement Award LH ED for HCAHPS Q3	2012
Exceptional Achievement Award SC ED for Q1	2013
Exceptional Achievement Award LH & SC ED for Q4	2013
Significant Achievement Award SC ED for HCAHPS Q4	2014
Significant Achievement Award LH ED for HCAHPS Q4	2014
MemorialCare Health System- Leadership Academy Graduate	2014

### **Community Outreach**

Regional Paramedic Advisory Committee-Orange County, Ca.	2006-present
Facility Advisory Committee Orange County EMS- member	2006-2009
OC Nurse Leaders Committee, Orange County EMS-member	2006- present
DEAG Committee, Orange County EMS	2013-present
Drive-By Flu Clinic, Saddleback Memorial Medical Center,	2006-2015
Surf and Sand Campaign, Saddleback Memorial Medical Center,	2010
I-Hope. Serving the needs of the homeless. San Clemente,	2010-present
ENCARE-Emergency Nurses Association Injury Prevention Program	2003
Intermountain Trauma Network, Chairperson	2004-2005.
Safe Kids Coalition, Salt Lake County	2003
Think First National Injury Prevention, Utah State Director	2003
Advanced Trauma Care for Nurses- Course Director	2004
Operation Stroke, volunteer consortium, AHA	2001
Salt Lake Medical Directors committee-Chair	2001
Vice-chair Paramedic Advisory Committee, Salt Lake County	2001
Salt Lake IIB District Council-Vice Chair	2001
2002 Utah Olympics Emergency Services Committee	1999
Local Emergency Planning Committee (LEPC), Sandy, Utah.	1997

### **Presentations**

5/30/92	What Will Your Verse Be? University of Utah, Commencement Speaker 1992 College of Nursing Salt Lake City, UT
9/20/96	Anatomy Sandy City Fire Department Sandy. UT
10/28/96	Cerebral Vascular Accidents Sandy City Fire Department Sandy. UT
11/15/96	Cardiovascular Emergencies Sandy City Fire Department Sandy. UT
12/18/96	12 Charting Rules to Keep You Legally Safe/ Aspects of Documentation Sandy City Fire Department Sandy. UT
1/11/97	Buckle up Kids Sandy City Fire Department Sandy. UT
2/7/97	Pulmonary Assessment Sandy City Fire Department

3/23/97	Sandy. UT OB\Neonate (Emergency Birth) Sandy City Fire Department Sandy. UT
4/14/97	Critical Incident Stress Debriefing and Multiple Causality Incidents Sandy City Fire Department Sandy. UT
5/5/97	EMT Airway\Assisted medications Sandy City Fire Department Sandy. UT
6/28/97	Burns Sandy City Fire Department Sandy. UT
7/22/97	IV skills Sandy City Fire Department Sandy. UT
8/11/97	CPR & GCS Sandy City Fire Department Sandy. UT
9/9/97	Pharmacology Sandy City Fire Department Sandy. UT
10/8/97	IDC & Influenza Sandy City Fire Department Sandy. UT
11/18/97	Air Transport & Landing Zone Operations Sandy City Fire Department Sandy. UT
12/12/97	Pediatric Assessment Sandy City Fire Department Sandy. UT
1/6/98	Airway and Automatic External Defibrillation Sandy City Fire Department Sandy. UT
2/3/98	Advanced Airway Techniques Sandy City Fire Department Sandy. UT
3/5/98	Patient Assessment and Medications Sandy City Fire Department Sandy. UT
4/13/98	Test Your Knowledge of Closed Head Injuries Sandy City Fire Department Sandy, UT
5/7/98	Patient Assessment for the Trauma Patient Sandy City Fire Department Sandy. UT
7/10/98	Bandaging and Non-traction Splinting Sandy City Fire Department Sandy. UT
9/12/98	Spinal Immobilization Sandy City Fire Department Sandy. UT
12/14/98	Environmental Emergencies Sandy City Fire Department Sandy, UT
2/23/99	Hypothermia

6/17/99	Brighton Ski Patrol Brighton Ski Resort, UT Endocrine Emergencies Sandy City Fire Department Sandy, UT
7/10/99	General Principles of Toxicological Management Sandy City Fire Department Sandy, UT
8/25/99	Thoracic Trauma Sandy City Fire Department Sandy, UT
10/10/99	Scene Release Protocols and Procedures Sandy City Fire Department Sandy, UT
10/23/99	Affective Teaching, Leadership Skills for Managers Sandy City Fire Department Sandy, UT
12/19/99	Crashing Asthmatics Sandy Fire Department Sandy, UT
1/18/00	PALS- Vascular Access Sandy City Fire Department Sandy, UT
2/16/00	Senior Moments, Geriatric Emergencies Sandy City Fire Department Sandy, UT
3/16/00	PALS-Airway Management Sandy City Fire Department Sandy, UT
4/12/00	Radio and Hospital Communications Sandy City Fire Department Sandy, UT
4/19/00	Advanced Cardiac Life Support Sandy City Fire Department Sandy, UT
5/5/00	PALS- Newborn Resuscitation Sandy City Fire Department Sandy, UT
6/16/00	Protocol reviews/run reviews Sandy City Fire Department Sandy, UT
7/29/00	PALS-Pediatric Trauma Immobilization & Modified GCS Sandy City Fire Department Sandy, UT
8/10/00	Recruit Training Program Sandy City Fire Department Sandy, UT
8/24/00	Obstetrics/ Gynecology Sandy City Fire Department Sandy, UT
9/13/00	Pediatric-common emergencies Sandy City Fire Department Sandy, UT
10/11/00	The Detailed Assessment Sandy City Fire Department Sandy, UT

11/19/00 AED and ZOLL  
Sandy City Fire Department  
Sandy, UT

12/29/00 Emergency Neurological Examination  
Sandy City Fire Department  
Sandy, UT

1/22/01 ACLS  
Salt Lake City Fire Department  
Salt Lake City, UT

8/9/01 You're Critical Link to Trauma Patient  
67<sup>th</sup> Annual APCO International Conference and Exposition  
Salt Lake City, UT

8/19/01 TEAM- Together Everyone Achieves More  
Castle View Hospital, Price, UT

8/19/01 TEAM- Together Everyone Achieves More  
Nephi, UT

8/22/01 Utah Trauma Systems, Where We Are Now.  
2<sup>nd</sup> Annual Emergency Medical Services Management and Leadership Seminar  
Park City, UT

11/29/01 Trauma Triage Poster  
Great Western Pediatric Symposium  
Salt Lake City, UT

4/26/02 Utah Trauma System, Opening Comments  
Injury Prevention and ENA Update 2002  
Park City, UT

5/3/02 Prehospital Trauma Triage  
EMT Instructor Conference  
Southern Utah University, Cedar City, UT

5/20/02 Prehospital Trauma Management  
EMS Week Awards Ceremony  
Provo, Utah

8/10/02 TEAM- Together Everyone Achieves More  
Fillmore, UT

8/11/02 TEAM- Together Everyone Achieves More  
Delta, UT

8/21/02 Trauma Assessment Poster and Hospital Triage Guidelines  
3<sup>rd</sup> Annual Emergency Medical Services Management and Leadership Seminar  
Park City, UT

1/09/03 TEAM- Together Everyone Achieves More  
Tremonton, UT

2/26/03 The "TEAM" Concept in Trauma Care  
2003 Management Conference  
Ogden Eccles Conference Center  
Ogden, UT

3/21/03 Utah Trauma System  
EMT Instructor Seminar  
Southern Utah University, Cedar City, UT

3/23/03 Medical Directors and the Trauma System: You're Responsibilities  
Bi-annual Medical Directors Conference  
Southern Utah University, Cedar City, UT

3/27/03 Utah Trauma System Update  
Utah ENA Emergency Update 2003  
18<sup>th</sup> Annual Scientific Assembly  
Ogden, UT

4/11/03 TEAM- Together Everyone Achieves More  
Kanab, UT

7/14/03	The Three 'R's' of Trauma Intermountain Trauma Network 2003 Salt Lake City, UT
9/06/03	Utah Trauma System EMT Instructors Conference Park City, UT
9/03	TEAM-Together Everyone Achieves More Roosevelt Hospital and EMS Roosevelt, UT
09/03	TEAM-Together Everyone Achieves More Ashley Valley Medical Center and EMS Vernal, UT
1/06/04	Trauma Service RN Orientation UUHSC (teach monthly) Salt Lake City, UT
4/4/04	ATLS Coordinator University of Utah School of Medicine Salt Lake City, UT
5/12/04	Trauma Assessment and Management Burn Trauma ICU Salt Lake City, UT
5/18/04	Pediatric Advanced Life Support (PALS) University of Utah PA Program Salt Lake City Utah
7/08/04	TEAM Refresher Course Primary Children's Medical Center
7/01/04	TEAM- Ephraim Fire and EMS Service Ephraim, UT
7/22/04	TEAM- Gunnison Fire and EMS Gunnison, UT
10/20/04	Trauma Assessment and Management Burn Trauma ICU University of Utah Hospitals and Clinics Salt Lake City, UT
10/26/04	PEPP Weber State University Ogden, UT
01/22/05	ATLS University of Utah School of Medicine Salt Lake City, Utah
01/22/05	ATCN (Advanced Trauma Care for Nurses) University of Utah Hospitals and Clinics Salt Lake City, UT
01/26/05	Trauma Assessment and Management Burn Trauma ICU University of Utah Hospitals and Clinics Salt Lake City, UT
05/03/05	PHTLS-University of Utah Salt Lake City, UT
05/23/05	ENCARE- Hunter High School Taylorsville, UT
05/25/05	Trauma Assessment Burn Trauma ICU Salt Lake City, UT
06/01/05	Readiness Frontier-PHTLS Air National Guard



07/30/05	Snowbird, UT Advanced Trauma Life Support Advanced Trauma Care for Nurses Salt Lake City, UT
10/23/05	ENCARE- Jordan High School Sandy, UT
09/21/05	PALS Instructor Course University of Utah, SLC
10/14/05	PALS Provider course University of Utah, SLC
10/25/05	Trauma Assessment Burn Trauma ICU Salt Lake City, UT
11/05/05	Advanced Trauma Life Support Advanced Trauma Care for Nurses Salt Lake City, UT
02/03/06	Advanced Trauma Life Support Advanced Trauma Care for Nurses Salt Lake City, UT
02/07/06	Trauma Assessment Burn Trauma ICU Salt Lake City, UT
02/17/06	ENCARE West High Salt Lake City, UT
3/8/2008	Specialty Care Transport Team Training Saddleback Memorial Medical Center San Clemente, CA
6/30/2008	Specialty Care Transport Team Training Saddleback Memorial Medical Center San Clemente, CA
2/15/2010	Transformational Leadership Course SMMC Management Staff Laguna Hills, CA.
8/11/2010	Specialty Care Transport Team Training Saddleback Memorial Medical Center San Clemente, CA
12/15/2011	Specialty Care Transport Team Training Saddleback Memorial Medical Center San Clemente, CA
7/23/2014	Specialty Care Transport Team Training Saddleback Memorial Medical Center San Clemente, CA



## PROFESSIONAL MEMBERSHIPS:

American Association of Critical Care Nurses  
American Heart Association  
Emergency Nurses Association  
American Nurses Association  
American Organization of Nurse Executives  
Association of California Nurse Leaders

## EMPLOYMENT HISTORY:

01/14-present      Director of Emergency Services, ED and Emergency Management  
Salinas Valley Memorial Healthcare System  
450 East Romie Lane, Salinas, CA 93901  
CNO: Christie Gonder, MSN, RN  
    \*manage approximately 70 FTE's/95 people  
    \*co-manage the Emergency Management program for system (hospital and clinics)  
    \*manage all budgeting (capital and operational)  
    \*manage all staffing and scheduling  
    \*manage all personnel concerns among employees  
    \*manage all other duties/projects as assigned  
    \*manage all quality concerns and improvement projects

8/11-1/14          Clinical Nurse Manager, Critical Care  
Salinas Valley Memorial Healthcare System  
450 East Romie Lane, Salinas, CA 93901  
Nurse Director: Tanya Osborne-McKenzie, RN, MSN, MBA  
    \*responsible for ICU/CCU and Heart Center Stepdown Unit  
    \*manage approximately 80 FTE's/120 people  
    \*responsible for all investigations and disciplinary meetings  
    \*managed daily productivity and operational budget  
    \*managed all staffing and scheduling  
    \*managed all personnel concerns among employees  
    \*managed all other duties/projects as assigned  
    \*managed all quality concerns and improvement projects

10/02- 8/11        Critical Care Registered Nurse, Intensive Care Unit  
Salinas Valley Memorial Healthcare System  
450 East Romie Lane, Salinas, CA 93901  
Nurse Director: Tanya Osborne-McKenzie, RN, MSN, MBA  
    \*hold a Staff Nurse III  
    \*precept new Intensive Care Nurses  
    \*act as Charge Nurse for the Intensive Care Unit  
    \*care of the post open heart patient  
    \*care of the trauma/neuro patient  
    \*care of a multiple organ problem patient  
    \*care of the pediatric patient  
    \*care of the IABP patient  
    \*care of the CVVHDF patient  
    \*hemodynamic monitoring with Swan-Ganz  
    \*member of the code blue team

# EMS/T Committee Hospital Representation

## BY COUNTY and HOSPITAL TYPE

As of June 19, 2018



Denotes number of hospitals/health systems represented within that county.

**ED TYPE BY MEMBER:**

Pam Allen, RN, MSN, CEN	Redlands Community Hospital	Emergency Services
Carla Spencer, MSN, RN, CCRN	Salinas Valley Memorial Healthcare System	Emergency Services
Cheryl Heaney, MSN, RN, NEA-BC	St. Joseph's Medical Center	Emergency Services
Claude Stang, RN, BSN, MA, CEN	Cedars-Sinai Medical Center	Emergency/Trauma
Connie Cunningham, RN, MSN	Loma Linda University Health	Emergency/Trauma
Fred Hawkins	Ridgecrest Regional Hospital	Emergency/Trauma
Jackie Saucier, PhD(c), MBA, MSN	Palomar Medical Center Poway	Emergency Services
Jason Zepeda	Hoag Memorial Hospital Presbyterian	Emergency Services
Karen L. Murrell, MD	Kaiser Permanente South Sacramento Medical Center	Emergency/Trauma
Karen Sharp, RN, MSN	Saddleback Memorial Medical Center - San Clemente	Emergency Services
Marlena Montgomery, MBA, MSN, RN, CEN	Sharp Memorial Hospital	Emergency/Trauma
Neal Cline, RN, JD, CFRN	Enloe Medical Center - Esplanade Campus	Emergency/Trauma
Rose Colangelo, RN, MSN	Scripps Memorial Hospital La Jolla	Emergency/Trauma
Rupy Sandhu	UC Davis Medical Center	Emergency/Trauma

**EX-OFFICIO COMMITTEE MEMBER:**

Bruce Barton	Riverside County EMS Agency
Chi Perloth	CAL ACEP
Daniel Smiley	California EMS Authority
Eric Morikawa	California Department of Public Health
Heather Venezia	TMAC
James Pierson	Medic Ambulance
Lawrence Stock	Antelope Valley Hospital
Ron Smith	California Department of Public Health
Susan Smith	CalENA

**CHA/REGIONAL STAFF**

BJ Bartleson, MS, RN, NEA-BC	California Hospital Association
David Serrano Sewell	Hospital Council of Northern and Central California
Judith R. Yates	Hospital Association of San Diego and Imperial Counties
Keven Porter, RN	Hospital Association of Southern California
Barbara Roth	California Hospital Association

**STATE REPRESENTATION**

Northern California	<b>4</b>
Southern California	<b>10</b>



## CHA Emergency Services/Trauma Committee Goals and Objectives, 2017-2019

### CHA EMS/T Committee Mission

The mission of the CHA EMS/Trauma Committee is to represent CHA members that provide emergency medical and or trauma services in the state of California, and serve in an advisory capacity to CHA Board of Trustees regarding EMS/Trauma member needs, policy and advocacy to promote an optimally health society.

### Goals and Objectives 2017- 2019

1. Develop guidance, tools, information and strategies to support emergency department and trauma services of the future that enhance quality patient care.
  - a. Connect local and regional best practices with toolkits or web connections.
  - b. Explore new technologies and applications to streamline and improve emergency and trauma care practices.
  - c. Continue to monitor APOT and work collaboratively with prehospital providers on performance improvement and reengineering efforts.
2. Successfully launch the Emergency Care Systems Initiative to resolve California's overburdened emergency care system with a roadmap for change.
  - a. Use performance measures, technology and new modalities to assess ED crowding and strategize solutions across systems of care.
  - b. Develop both provider and consumer education vehicles to improve ED crowding.
  - c. Develop public policy and advocacy strategies to address ED crowding, particularly alternate destination policies for behavioral health patients.
3. Implement a successful annual ED Forum that assists members to become agents of change during health care reform.
  - a. Use state and national experts that emphasize a collaborative, multi-stakeholder level of involvement.
  - b. Focus on member evidence based practices that are affecting change.
4. Represent Trauma issues on the EMSA trauma regulatory review task force.
  - a. Appoint CHA EMS/T member to head the trauma subcommittee workgroup and present issues at the EMSA trauma task force.
  - b. Assist with funding and solutions to maximize trauma care and provisions across the state.
  - c. Select CHA EMS/T member to represent EMSC issues and report to the committee
5. Understand HIE systems and how they will benefit transitions of care for patients between systems of care.
  - a. Work closely with HIE networks to understand connections and linkages to improved care transitions.
  - b. Work with EMSA on HIE prehospital pilot work.

6. Closely monitor federal and state health care reform changes and their effect on emergency services and systems of care.
  - a. Continue to monitor changes in the financial landscape that have a direct effect on emergency department visits.
  - b. Monitor statutory and regulatory changes affecting hospital emergency /trauma services.

**GUIDELINES FOR THE  
CALIFORNIA HOSPITAL ASSOCIATION'S  
EMS/TRAUMA COMMITTEE**

*Updated  
09/23/15*

**I. NAME**

The name of this committee shall be the CHA EMS/Trauma Committee.

**II. MISSION**

The EMS/Trauma Committee represents CHA members that provide emergency medical and/or trauma services in the State of California, and serves in an advisory capacity to the CHA Board of Trustees regarding EMS/Trauma member needs, policies and legislation.

Recognizing the diverse organizations and providers that work in emergency systems across the state, the mission of the committee also includes representation from diverse multidisciplinary health care organizations and associations that include professional associations, regulatory agencies, emergency services organizations, prehospital providers and others, that promote quality emergency services in the state of California. This multidisciplinary group will act as a collaborative source of emergency services expertise, providing a venue for the coordination of emergency and trauma services to advocate for the highest standards of emergency trauma care services across the state.

The purposes of the Committee shall be:

1. to serve as a forum for all CHA members and associated groups interested in EMS/Trauma to receive and exchange information, adopt policies and positions, guide management, adopt strategies and serve as the primary public policy arm of CHA for emergency medical services and trauma issues;
2. to provide CHA member EMS/Trauma providers with a statewide structure dealing with the issues important to their interests;
3. to create a representative form of leadership which is based on participation of all its members;
4. to provide direct input to the CHA Board of Trustees; and
5. to provide a unified voice on behalf of CHA members, taking into account the multiple diverse organizations that interact with hospital emergency/trauma services

**III. COMMITTEE**

The committee shall consist of a maximum of 22 representatives from California hospital/health system organizations, and organizations with related interests.

**A. MEMBERSHIP**

1. Membership on the CHA EMS/Trauma Committee shall be based upon membership in



CHA, and reserved for those members.

2. The Committee shall consist of various representatives from large hospital systems, public institutions, private facilities, free-standing facilities, small and rural facilities, university/teaching facilities, specialty facilities and a representative from a professional group specializing in EMS/Trauma issues.
3. Membership by EMS related organizations will be considered Ex-officio members. Ex-officio members will be determined by committee input and CHA determination.
4. Appointment of members to the Committee will follow the CHA Guidelines for Committee Membership.

#### B. TERMS OF THE COMMITTEE MEMBERS

1. As members leave the Committee, vacancies shall be filled. It is understood that a member forfeits his/her seat if they no longer serve in the capacity, or represent a facility that is not a CHA member.
2. Committee members with specialized skills, knowledge, or professional associations may serve on the committee as ex-officio members. Ex-officio members are not subject to the above terms. These determinations shall be made by CHA.
3. Provider representatives who transition from one position to another are welcome to attend committee meetings during their transition; however, this should not exceed two consecutive meetings.
4. Provider representatives who misrepresent their organization's position are subject to review and dismissal from the committee.

#### C. COMMITTEE MEETINGS

1. Meetings of the Committee shall be held quarterly.
2. Provider representatives may send an appropriate substitute to the meetings when they are unable to attend. To maintain continuity for Committee meetings, this should be used sparingly, not to exceed two consecutive meetings.
3. Three consecutive unexcused absences by a Committee member may initiate a review by the Chair and CHA staff for determination of the Committee member's continued service on the Committee.
4. Special meetings may be scheduled by the Chair, majority vote or CHA staff.
5. Membership is based on one's ability to be physically present at quarterly meetings and conference call only as needed for emergency situations.

#### D. VOTING

1. Voting rights shall be limited to members of the Committee, and each member present shall have one vote. Voting by proxy is not acceptable.
2. All matters requiring a vote of the Committee must be passed by a majority of a quorum of the Committee members only at a duly called meeting or telephone conference call.

#### E. QUORUM

Except as set forth herein, a quorum shall consist of the majority of the Committee

membership in attendance.

#### F. MINUTES

Minutes of the Committee shall be recorded at each meeting, disseminated to the membership, and approved as disseminated or as corrected at the next meeting of the Committee.

### IV. OFFICERS

The officers of the Committee shall be the committee chair, co-chair, and CHA staff. Except as provided herein, the chair and co-chair shall be elected by the Committee for a two-year term.

The chair officers vacate their Committee positions upon election, and their seats shall be filled through the nominating and election process. The past-chairs will be invited by the Committee to serve as ex-officio members.

Should a chair or co-chair vacate his/her position prior to the end of the term, a nominating committee will convene to select a replacement, and assume a two-year term of office.

### V. COMMITTEES

For special and specific purposes, the chair or CHA staff may appoint a committee or ad hoc on task force. Membership may be expanded to non-members of the Committee.

### VI. GENERAL PROVISIONS

The strategic plan defining the goals, objectives, and work plans shall be developed annually by the CHA staff and approved by the Committee. Quarterly updates and progress reports shall be completed by the Committee and CHA staff.

Staff leadership at the state level shall be provided by CHA with local staff leadership provided by HCNCC, HASD&IC, and HASC. The primary office and public policy development and advocacy staff of the Committee shall be located within the CHA office.

The Committee staff shall be an employee of CHA.

### VII. AMENDMENTS

These Guidelines may be amended by a majority vote of the members of the Committee at any regular meeting of the Committee.

### VIII. LEGAL LIMITATIONS

Any portion of these Guidelines which may be in conflict with any state or federal statutes or regulations shall be declared null and void as of the date of such determination.

Any portion of these Guidelines which are in conflict with the Bylaws and policies of CHA shall be

considered null and void as of the date of the determination. Information provided in meetings is not to be sold or misused.

**IX. CONFIDENTIALITY FOR MEMBERS**

Many items discussed are confidential in nature, and confidentiality must be maintained. All Committee communications are considered privileged and confidential, except as noted.

**X. CONFLICT OF INTEREST**

Any member of the Committee who shall address the Committee in other than a volunteer relationship excluding CHA staff and who shall engage with the Committee in a business activity of any nature, as a result of which such party shall profit pecuniarily either directly or indirectly, shall fully disclose any such financial benefit expected to CHA staff for approval prior to contracting with the Committee and shall further refrain, if a member of the Committee, from any vote in which such issue is involved.

**CHA EMS/TRAUMA COMMITTEE**  
**MEETING MINUTES**  
*March 7, 2018 / 10:00 a.m. – 2:00 p.m.*

1215 K Street, Suite 800  
Sacramento, CA

**Members Present:** Pamela Allen, Bruce Barton, Neal Cline, Rose Colangelo, Fred Hawkins, James Pierson, Carla Schneider, Dan Smiley, Ron Smith, Heather Venezia, Jason Zepeda

**Members Attending by Call:** Connie Cunningham, Ross Fay, Chi Perloth, Jacqueline Saucier, Susan Smith, Claude Stang

**Guests:** Lou Meyer, Aimee Moulin

**Staff:** BJ Bartleson, Barb Roth, Bill Emmerson, Sheree Lowe, Pat Blaisdell, Keven Porter, David Serrano-Sewell, Judith Yates

**I. CALL TO ORDER/INTRODUCTIONS**

Ms. Bartleson introduced Carmela Coyle, new President & CEO at CHA and Claude Stang from Cedars-Sinai as the newest member of the EMS/Trauma Committee.

The committee will be seeking new members, particularly those from the central California area.

William Emmerson with CHA's Legislative Team presented CHPAC. CHA is encouraging everyone to contribute to the CHA Political Action Committee. Any level of donation is acceptable.

**II. REVIEW OF PREVIOUS MEETING MINUTES**

The minutes of the August 30, 2017, EMS/Trauma Committee meeting were reviewed.

***IT WAS MOVED, SECONDED AND CARRIED:***

➤ *Minutes approved as submitted.*

**III. OLD BUSINESS**

**A. Inpatient Discharge Delay (Blaisdell)**

The CHA Case Management Committee has a task force working with CHA members to track patients experiencing discharge issues, particularly those experiencing difficulty discharged back to a skilled nursing facility. The Task Force is putting together some suggested best practices. CMS is increasingly concerned about involuntary discharges. Technically, a Skilled Nursing Facility (SNF) can only involuntarily discharge a resident in a few very specific instances, such as: no payment, facility is being closed, facility cannot provide the necessary level of care for the resident. If a resident is sent to the hospital, CMS regulations require the SNF tell the resident about their bedhold policy (usually for about 10 days) and that they have a right to return to the facility in the next available bed (even if the bedhold has expired).

AB 940 requires notification to the Long Term Care Ombudsman by the SNF when there is an involuntary discharge. If the SNF will not take the resident back after a trip to the hospital, CMS considers it to be an involuntary discharge. Hospitals must be made aware of this regulation so they can advise the SNF and the patient that these notifications must take place. Hospital case managers are not responsible for this notification – it is the SNFs responsibility. This will not solve the problem, it is just one element so that hospitals will know what the patients' rights are.

The goal is that if the SNF is unable to care for the health needs of a resident, the SNF should look for another facility able to care for that resident rather than sending them to the ER. SNFs will sometimes say that they cannot accept a patient who is on specific psychiatric medications because they will lose a "Star" on their rating.

Assisted living and memory care facilities are licensed differently than a SNF and are cited if they accept someone whose needs exceed what they are able to provide.

➤ *ACTION: Information only.*

B. EDIE Update (Raven/Kanzaria)

Dr. Raven and Dr. Kanzaria are publishing work on frequent utilizers. This work has the potential to be a resource for ECSI. They are involved with the Whole Person Care pilot in SF and work with EDIE at their respective hospitals. They helped with the Northern California implementation of EDIE. There is a Bay Area Consortium of EDIE users creating best practices and examples for users.

➤ *Ms. Raven to provide a copy of EDIE Care Guidelines.*

C. Community Paramedicine (Meyer/Smiley/Pierson/Cline)

Mr. Meyer, the EMSA Community Paramedicine Director has provided technical advice to Assembly Member Gipson's staff regarding upcoming community paramedicine legislation. The pilot projects in his area are cost effective and readmission rates are decreasing.

Mr. Pierson reported their pilot project is doing medication reconciliations and medical assessments instead of alternate destination or other types of procedures. Patients are identified and referred to the program by the hospital. (NorthBay).

Mr. Cline discussed that the program in their area is providing post discharge follow up with an emphasis on patients with heart failure diagnosis at discharge. Specially trained paramedics will visit the patient while still in the hospital prior to discharge and follow up at home after discharge. The home visit is key.

Mr. Smiley informed the group that the pilot programs have received an extension from EMSA through 11/14/18. The OSHPD Director has concern about another extension as it could be seen as an underground regulation (over-extending the authority of the organization).

Ms. Bartleson spoke about the AB 1795 Special Lobby Day on April 4.

➤ *ACTION: Information only.*

D. ED Forum (Bartleson)

CHA received positive feedback from participants, particularly regarding the panel discussions. For 2018, the date was changed so the ED Forum will not conflict with EMSA conference. The goal is to have more information regarding ESCI to present by that time and to have multiple different emergency system providers at the conference

➤ *ACTION: Information only.*

E. Emergency Care Systems Initiative (ECSI) (Bartleson)

CHA issued an RFP and has received seven proposals. Funding for the program is anticipated for April 2018.

➤ *ACTION: Information only.*

F. Leading the Way (Lowe)

The Leading the Way Coalition will be meeting on April 4 at which time they will have a full mission statement and agenda. The Coalition now has an Executive Committee, which consists of the co-chairs of the four committees and CHA staff.

The Canadian government has created a program for children and youth with mental illness called the Foundry Model. This program started in 2017, so it is early to evaluate results, but the model is promising.

➤ *ACTION: Information only.*

G. Ambulance Patient Offload Times (APOT) Update (Barton)

Statewide Data Collection Update (Barton)

Sixteen of the 33 LEMSAs have reported data for at least one quarter. All are caught up, however, not all initiatives are completely implemented yet. Not one LEMSA has said they have no intention of reporting. All are in different phases of the process. EMSA collects the data and reports it out using APOT 1 and APOT 2 methodologies. The date/time stamp process for transfer of care needs to be improved so the data is accurate. Nemsis 3.4 data set is what should be used.

➤ *ACTION: information only.*

**IV. NEW BUSINESS**

A. AB 1795/ SB 944 (Bartleson)

Ms. Bartleson gave a brief report on the two community paramedicine bills.

➤ *ACTION: Information only.*

**V. LEGISLATION**

A. 2018 Bills (Bartleson)

➤ *ACTION: DEFERRED UNTIL NEXT MEETING*

**VI. REPORTS**

A. EMSA (Smiley)

Hearings on the Kern County EMS Plan appeal next week. Alameda County has a request for ambulance services.

Regarding the status of HIE for EMS funding, they have been trying to get funding for HIE through grants to create a continuous statewide model. State Department of Health Services has submitted an application of funding to CMS. As part of the 90/10 match they need a 10% non-federal fund match and have applied to CARESTAR and other agencies. Between now and Sept 2018 the budget will be \$40 million. EPIC is working on connections with the EMS PULSE system.

The Sacramento region, because of the four major players (UC Davis, Kaiser, Sutter, Adventist), has no real hub. It would be ideal to have one of them serve as a hub and be a base to s for sharing information.

B. ENA (Susan Smith)

ENA has submitted a letter of support for AB 1795. They are taking two resolutions to their Board. Their Legislative Day in Sacramento will also be on March 21.

C. TMAC (Venezio)

TMAC is interested in hearing more about CARES from Mr. Barton to learn more about TQIP. They would like to be supportive of the TQIP collaborative, but there are several issues to be clarified. TMAC is preparing an infographic about difference between a Trauma Center and a hospital ED. The TMAC conference will be held in July 2018 in Santa Clara Valley.

D. CDPH (Ron Smith)

No report.

E. Air Ambulance (Fay)

AB 2393 will restructure state support reimbursement for air ambulance charges currently under-reimbursed for Medi-Cal patients. They are looking for co-sponsors.

F. Cal ACEP

G. EMS-C (Venezio)

The group is making progress. Candy Schoenheit is the new director.

H. CARES (Barton)

Coastal Valley EMS is hosting and all local agencies have agreed to work with them. Statewide participation in CARES is on its way.

I. Aimee Moulin reports that substance use disorders is a focus at UC Davis. They are seeing an increase in the number of overdoses. She is creating a toolkit, which includes having substance abuse counselors in the ER.

**VII. NEXT MEETING**

June 13, 2018

➤ *ACTION: Informational Only.*

**VIII. ADJOURNMENT**

Having no further business, the meeting adjourned at 2:00 p.m.



June 27, 2018

**TO:** CHA EMS/Trauma Committee Members

**FROM:** BJ Bartleson, MS, RN, NEA-BC, Vice President, Nursing & Clinical Services  
Sheree Lowe, Vice President, Behavioral Health

**SUBJECT:** Behavioral Health In Action

### **SUMMARY**

The “Leading the Way” Behavioral Health Initiative has changed its name to, “Behavioral Health in Action”. Events in Sacramento and San Francisco showcased the coalition’s expertise and diversity, while also underscoring the campaign’s goal through November to urge candidates and elected officials to elevate behavioral health issues.

Earlier this week the [Behavioral Health Action website launched](https://behavioralhealthaction.org), (<https://behavioralhealthaction.org>) and if you’re located in Sacramento, you may have also seen coalition advertisements online.

In Sacramento Tuesday and in San Francisco, the coalition came together to represent the voices of health care, law enforcement, education, labor, the court system, local government and business as well as individuals and families. The communications team is also exploring event options in San Diego and will keep everyone apprised of updates.

In addition to the Capitol press conference and resource fair, coalition members delivered informational collateral to lawmaker offices through an organized literature drop. Coalition members also shared photos and information on their social media channels, helping to amplify traditional media coverage.

### **DISCUSSION QUESTIONS**

- 1) What is the purpose of the Behavioral Health Action Initiative?
- 2) How do we get involved?
- 3) What does the initiative hope to accomplish?
- 4) How do emergency services intersect with the initiative?

### **ACTION REQUESTED**

- Information Only

BJB:br





June 27, 2018

TO: EMS/Trauma Committee Members

FROM: Scott Masten, Senior Biostatistician, Hospital Quality Institute  
Steve Pon, Project Manager, Hospital Quality Institute

SUBJECT: Emergency Department Discharge Data

**SUMMARY**

The Hospital Quality Institute (HQI) will be building reports from Emergency Department (ED) discharge data collected via MIRCAL files sent directly to HQI from CHA member hospitals as part the the Hospital Quality Intelligence Initiative ([HQI<sup>2</sup>](#)). Attached are the available variables and definitions from which HQI can build reports of the ED data for presentation in the system. The table below from Page 4 shows the available variables in tabular format. Persons who are admitted via the ED are not reported in the ED discharge file; rather they are reported in the inpatient discharge file. Because tracking all persons who touch the ED (those discharged from ED and those discharged after admission) is important, HQI will build reports that includes all discharges. While the data do not include times of visit or discharge, persons who visit the ED multiple times, or across multiple hospitals, can be tracked and reported.

**ED and AS FORMAT AND FILE SPECIFICATIONS  
FOR ONLINE TRANSMISSION**

**Standard Record Format**

Data Element	Start	End	Type & Size <sup>1</sup>
Facility Identification Number	1	6	N (6)
Abstract Record Number (Optional)	7	18	A/N (12)
Patient's Social Security Number	19	27	N (9)
ZIP Code	28	32	N (5)
Date of Birth	33	40	N (8)
Sex	41	41	A (1)
Race	42	43	A/N (2)
Ethnicity	44	45	A/N (2)
Service Date	46	53	N (8)
Disposition of Patient	54	55	N (2)
Expected Source of Payment	56	57	A/N (2)
Principal Diagnosis	58	64	A/N (7)
Other Diagnoses	65	232	A/N (7) <sup>2</sup>
Principal External Cause of Morbidity	233	239	A/N (7)
Other External Causes of Morbidity	240	267	A/N (7) <sup>3</sup>
Principal Procedure	268	272	A/N (5)
Other Procedures	273	372	A/N (5)
National Provider Identifier No.	373	382	N (10)
Preferred Language Spoken	383	406	A/N (24)

**ACTION REQUESTED**

- Make recommendations to HQI regarding what reports based upon the available data would be of interest to hospitals

**DISCUSSION QUESTIONS**

1. What data do you presently collect?
2. How is it used?
3. What comparative data collection do you use?
4. How do you see this supporting our work?

Attachments: Emergency Department and Ambulatory Surgery Data  
HQI ED Wireframes

BJB:br

**FORMAT and FILE SPECIFICATIONS  
for  
MIRCaI ONLINE TRANSMISSION:  
EMERGENCY DEPARTMENT and AMBULATORY SURGERY DATA**

**Effective with encounters occurring on or after  
January 1, 2015**

**Version 1.9**  
Revised January 26, 2015



Medical Information Reporting for California

State of California  
Office of Statewide Health Planning and Development (OSHPD)  
Patient Data Section  
400 R Street, Suite 270  
Sacramento, CA 95811  
(916) 326-3935

# **ED and AS FORMAT AND FILE SPECIFICATIONS FOR ONLINE TRANSMISSION**

**Effective with encounters occurring on and after January 1, 2015**

## **SUMMARY OF CHANGES**

### **Title Page**

Added 'Version 1.9'

Changed Revision Date from April 14, 2014 to January 26, 2015

### **Page 3**

Removed 'Minimum PC Configuration' and 'File Compression' requirements

# **ED and AS FORMAT AND FILE SPECIFICATIONS FOR ONLINE TRANSMISSION**

## **STANDARD RECORD FORMAT**

Deviation from the format will not be accepted

- One reporting facility and report period per file
- Standard ASCII character coding
- Record length 406 characters followed by a carriage return and line feed
- All fields are left-justified and padded with spaces on the right

## **ADDITIONAL requirements**

- No packed or binary data
- No Null Values
- The data file must be a text file with the extension of ".txt" (if zipped, submit the zipped file with a ".zip" extension)

**ED and AS FORMAT AND FILE SPECIFICATIONS  
FOR ONLINE TRANSMISSION**

**Standard Record Format**

<b>Data Element</b>	<b>Start</b>	<b>End</b>	<b>Type &amp; Size<sup>1</sup></b>	
Facility Identification Number	1	6	N	(6)
Abstract Record Number (Optional)	7	18	A/N	(12)
Patient's Social Security Number	19	27	N	(9)
ZIP Code	28	32	N	(5)
Date of Birth	33	40	N	(8)
Sex	41	41	A	(1)
Race	42	43	A/N	(2)
Ethnicity	44	45	A/N	(2)
Service Date	46	53	N	(8)
Disposition of Patient	54	55	N	(2)
Expected Source of Payment	56	57	A/N	(2)
Principal Diagnosis	58	64	A/N	(7)
Other Diagnoses	65	232	A/N	(7) <sup>2</sup>
Principal External Cause of Morbidity	233	239	A/N	(7)
Other External Causes of Morbidity	240	267	A/N	(7) <sup>3</sup>
Principal Procedure	268	272	A/N	(5)
Other Procedures	273	372	A/N	(5)
National Provider Identifier No.	373	382	N	(10)
Preferred Language Spoken	383	406	A/N	(24)

**Footnotes are on the next page**

# ED and AS FORMAT AND FILE SPECIFICATIONS FOR ONLINE TRANSMISSION

## FOOTNOTES

<sup>1</sup>Type & Size indicates data type and field length (in parentheses). Data type is defined as:

A = Alpha

N = Numeric

A/N = Alphanumeric

<sup>2</sup>Principal and Other Diagnoses

- For encounters through September 30, 2015, International Classification of Diseases, 9<sup>th</sup> Revision, Clinical Modification (ICD-9-CM) codes will be reported and consist of 5 alphanumeric characters, without the decimal point, left-justified, and spaced-filled.
- For encounters on and after October 1, 2015, International Classification of Diseases, 10<sup>th</sup> Revision, Clinical Modification (ICD-10-CM) codes shall be reported and consist of 7 alphanumeric characters, without the decimal point, left-justified and space-filled.

<sup>3</sup>Principal and Other External Causes of Morbidity

- For encounters through September 30, 2015, ICD-9-CM codes will be reported and consist of 5 alphanumeric characters, without the decimal point, left-justified, and space-filled.
- For encounters on and after October 1, 2015, ICD-10-CM codes shall be reported and consist of 7 alphanumeric characters, without the decimal point, left-justified and space-filled.

## ED and AS FORMAT AND FILE SPECIFICATIONS FOR ONLINE TRANSMISSION

### FACILITY IDENTIFICATION NUMBER

Record Position:	1 through 6
Data Length:	6
Data Type:	Numeric
Codes:	Facility Identification Number (the unique facility number assigned by OSHPD) This field is required for each record

### ABSTRACT RECORD NUMBER (OPTIONAL)

Record Position:	7 through 18
Data Length:	12
Data Type:	Alphanumeric
Codes:	If not reported, the default value is all spaces

### PATIENT'S SOCIAL SECURITY NUMBER

Record Position:	19 through 27
Data Length:	9
Data Type:	Numeric
Codes:	Enter the full 9-digit SSN including zeroes <b>DO NOT</b> use hyphens Enter 000000001 (Unknown) if the SSN is not recorded in the patient's medical record

### ZIP CODE

Record Position:	28 through 32
Data Length:	5
Data Type:	Numeric
Codes:	5-digit ZIP Code 99999 (Unknown)



**ED and AS FORMAT AND FILE SPECIFICATIONS  
FOR ONLINE TRANSMISSION**

**DATE OF BIRTH**

Record Position: 33 through 40  
Data Length: 8  
Data Type: Numeric

Codes: 9999      99      99  
Year      Month      Day

Special Instructions: Single-digit months and days must include a preceding zero  
The transmittal process will populate the database field by moving the first 4 digits to the end of the field  
EXAMPLE: Field in File equals 20040301  
Database value will contain 03012004  
The database value represents the date format mmddccyy

**SEX**

Record Position: 41  
Data Length: 1  
Data Type: Alpha

Codes: M Male  
F Female  
U Unknown

**RACE**

Record Position: 42 through 43  
Data Length: 2  
Data Type: Alphanumeric

Codes: R1 American Indian or Alaska Native  
R2 Asian  
R3 Black or African American  
R4 Native Hawaiian or Other Pacific Islander  
R5 White  
R9 Other Race  
99 Unknown

**ETHNICITY**

Record Position: 44 through 45  
Data Length: 2  
Data Type: Alphanumeric

Codes: E1 Hispanic or Latino  
E2 Non-Hispanic or Non-Latino  
99 Unknown

## ED and AS FORMAT AND FILE SPECIFICATIONS FOR ONLINE TRANSMISSION

### SERVICE DATE

Record Position: 46 through 53  
Data Length: 8  
Data Type: Numeric

Codes: 9999      99      99  
Year      Month      Day

Special Instructions: Single-digit months and days must include a preceding zero. The transmittal process will populate the database field by moving the first 4 digits to the end of the field.

EXAMPLE: Field in File equals 20040301. Database value will contain 03012004. The database value represents the date format mmddccyy.

### DISPOSITION OF PATIENT

Record Position: 54 through 55  
Data Length: 2  
Data Type: Alphanumeric

Codes: New disposition codes 69 and 81 through 95, and changes to existing codes are effective with encounters on and after January 1, 2015

- 01 Discharged to home or self care (routine discharge)
- 02 Discharged/transferred to a short term general hospital for inpatient care
- 03 Discharged/transferred to skilled nursing facility (SNF) with Medicare certification in anticipation of skilled care
- 04 Discharged/transferred to a facility that provides custodial or supportive care (includes Intermediate Care Facility)
- 05 Discharged/transferred to a designated cancer center or children's hospital
- 06 Discharged/transferred to home under care of an organized home health service organization in anticipation of covered skilled care
- 07 Left against medical advice or discontinued care
- 20 Expired
- 21 Discharged/transferred to court/law enforcement
- 43 Discharged/transferred to a federal health care facility
- 50 Hospice - Home
- 51 Hospice - Medical facility (certified) providing hospice level of care

**ED and AS FORMAT AND FILE SPECIFICATIONS  
FOR ONLINE TRANSMISSION**

**DISPOSITION OF PATIENT (continued)**

- Codes:
- 61 Discharged/transferred to a hospital-based Medicare approved swing bed
  - 62 Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital
  - 63 Discharged/transferred to a Medicare certified long term care hospital (LTCH)
  - 64 Discharged/transferred to a nursing facility certified under Medicaid (Medi-Cal), but not certified under Medicare
  - 65 Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital
  - 66 Discharged/transferred to a Critical Access Hospital (CAH)
  - 69 Discharged/transferred to a designated Disaster Alternative Care Site
  - 70 Discharged/transferred to another type of health care institution not defined elsewhere in this code list
  - 81 Discharged to home or self care with a planned acute care hospital inpatient readmission
  - 82 Discharged/transferred to a short term general hospital for inpatient care with a planned acute care hospital inpatient readmission
  - 83 Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission
  - 84 Discharged/transferred to a facility that provides custodial or supportive care (includes Intermediate Care Facility) with a planned acute care hospital inpatient readmission
  - 85 Discharged/transferred to a designated cancer center or children's hospital with a planned acute care hospital inpatient readmission
  - 86 Discharged/transferred to home under care of organized home health service organization with a planned acute care hospital inpatient readmission
  - 87 Discharged/Transferred to court/law enforcement with a planned acute care hospital inpatient readmission
  - 88 Discharged/transferred to a federal health care facility with a planned acute care hospital inpatient readmission

**ED and AS FORMAT AND FILE SPECIFICATIONS  
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**DISPOSITION OF PATIENT (continued)**

- Codes:
- 89 Discharged/transferred to a hospital-based Medicare approved swing bed with a planned acute care hospital inpatient readmission
  - 90 Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital with a planned acute care hospital inpatient readmission
  - 91 Discharged/transferred to a Medicare certified long term care hospital (LTCH) with a planned acute care hospital inpatient readmission
  - 92 Discharged/transferred to a nursing facility certified under Medicaid (Medi-Cal) but not certified under Medicare with a planned acute care hospital inpatient readmission
  - 93 Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital with a planned acute care hospital inpatient readmission
  - 94 Discharged/transferred to a critical access hospital (CAH) with a planned acute care hospital inpatient readmission
  - 95 Discharged/transferred to another type of health care institution not defined elsewhere in this code list with a planned acute care hospital inpatient readmission
  - 00 Other
- Special Instructions: Single digit values must include a preceding zero

**EXPECTED SOURCE OF PAYMENT**

Record Position: 56 through 57  
Data Length: 2  
Data Type: Alphanumeric

- Codes:
- 09 Self Pay
  - 11 Other Non-federal programs
  - 12 Preferred Provider Organization (PPO)
  - 13 Point of Service (POS)
  - 14 Exclusive Provider Organization (EPO)
  - 16 Health Maintenance Organization (HMO)  
Medicare Risk
  - AM Automobile Medical
  - BL Blue Cross/Blue Shield
  - CH CHAMPUS (TRICARE)
  - CI Commercial Insurance Company
  - DS Disability
  - HM Health Maintenance Organization

**ED and AS FORMAT AND FILE SPECIFICATIONS  
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**EXPECTED SOURCE OF PAYMENT (continued)**

Codes	MA Medicare Part A
	MB Medicare Part B
	MC Medicaid (Medi-Cal)
	OF Other federal program
	TV Title V
	VA Veteran's Affairs Plan
	WC Workers' Compensation Health Claim
	00 Other

**PRINCIPAL DIAGNOSIS**

Record Position:	58 through 64
Data Length:	7
Data Type:	Alphanumeric

Codes:	For encounters through September 30, 2015, use the ICD-9-CM code set
	For encounters on and after October 1, 2015, use the ICD-10-CM code set

Special Instructions:	Code must be left-justified and space-filled Do not include the decimal point in the data file
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**OTHER DIAGNOSES**

Record Position:	For each Other Diagnosis code: 65-71; 72-78; 79-85; 86-92; 93-99; 100-106; 107-113; 114-120; 121-127; 128-134; 135-141; 142-148; 149-155; 156-162; 163-169; 170-176; 177-183; 184-190; 191-197; 198-204; 205-211; 212-218; 219-225; and 226-232. Maximum of 24 Other Diagnoses codes, ending in position 232
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Data Length:	7
Data Type:	Alphanumeric

Codes:	For encounters through September 30, 2015, use the ICD-9-CM code set
	For encounters on and after October 1, 2015, use the ICD-10-CM code set

## ED and AS FORMAT AND FILE SPECIFICATIONS FOR ONLINE TRANSMISSION

### OTHER DIAGNOSES (continued)

Special Instructions: Codes must be left-justified and space-filled  
Fill from the left-most position and **DO NOT** skip fields  
Do not include the decimal point in the data file  
When there are no Other Diagnoses, the default value is all spaces  
Do not include External Cause codes in Other Diagnoses fields

### PRINCIPAL EXTERNAL CAUSE OF MORBIDITY

Record Position: 233 through 239  
Data Length: 7  
Data Type: Alphanumeric

Codes: For encounters through September 30, 2015, use the ICD-9-CM code set  
Include the 'E' in the data file

For encounters on and after October 1, 2015, use the ICD-10-CM code set

Special Instructions: Code must be left-justified and space-filled  
Do not include the decimal point in the data file  
When there is no Principal External Cause code, the default value is all spaces

### OTHER EXTERNAL CAUSES OF MORBIDITY

Record Position: For each Other External Cause of Morbidity code:  
240-246; 247-253; 254-260; and  
261-267  
Maximum of 4 Other External Cause codes, ending in position 267

Data Length: 7  
Data Type: Alphanumeric

Codes: For encounters through September 30, 2015, use the ICD-9-CM code set  
Include the 'E' in the data file

For encounters on and after October 1, 2015, use the ICD-10-CM code set

Special Instructions: Codes must be left-justified and space-filled  
Fill from the left-most position and **DO NOT** skip fields  
Do not include the decimal point in the data file  
When there are no Other External Cause codes, the default value is all spaces

## ED and AS FORMAT AND FILE SPECIFICATIONS FOR ONLINE TRANSMISSION

### PRINCIPAL PROCEDURE

Record Position: 268 through 272  
Data Length: 5  
Data Type: Alphanumeric

Codes: CPT-4 code set (Current Procedural Terminology, 4<sup>th</sup> Edition)

Special Instructions: When there is no Principal Procedure, the default value is all spaces

### OTHER PROCEDURES

Record Position: For each Other Procedure code:  
273-277; 278-282; 283-287; 288-292; 293-297; 298-302;  
303-307; 308-312; 313-317; 318-322; 323-327; 328-332;  
333-337; 338-342; 343-347; 348-352; 353-357; 358-362;  
363-367; and 368-372.  
Maximum of 20 Other Procedure codes, ending in  
position 372

Data Length: 5  
Data Type: Alphanumeric

Codes: CPT-4 code set (Current Procedural Terminology, 4<sup>th</sup> Edition)

Special Instructions: Fill from the left-most position and **DO NOT** skip fields  
When there are no Other Procedures, the default value is all spaces

### NATIONAL PROVIDER IDENTIFIER (NPI)

Record Position: 373 through 382  
Data Length: 10  
Data Type: Numeric

Codes: Assigned by the CMS National Provider and Provider Enumeration System (NPPES)

Special Instructions: This is a placeholder for the National Provider Identifier.  
Facilities may report their NPI, but it is not required by OSHPD  
The default value is all zeroes

**ED and AS FORMAT AND FILE SPECIFICATIONS  
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**PREFERRED LANGUAGE SPOKEN**

Record Position: 383 through 406

Data Length: 24

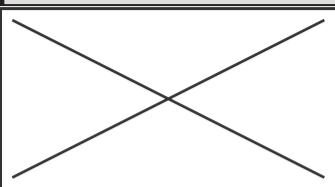
Data Type: Alphanumeric

Codes: Refer to Section 97267, of the California ED and AS Data Reporting Manual

Special Instructions: This is a free-text field  
Enter one 3-character PLS code listed in Section 97267 of the ED & AS Reporting Manual  
If the Preferred Language Spoken is not one of the codes listed enter the full name of the language, up to 24 characters

3-character PLS Codes from the ISO 639-2 Code List are also accepted





### Emergency Department // Demographics

#### FILTERS

##### Hospitals

ABC Hospital

##### Patient Type

All  
Super-Utilizer

##### Visit Type

All  
Medical  
Mental Health  
Injury  
Maternal/Neonatal

##### Payer Type

All

##### Age

All

##### Discharge Setting

All

##### Discharge Diagnosis

All

##### Comparison Group

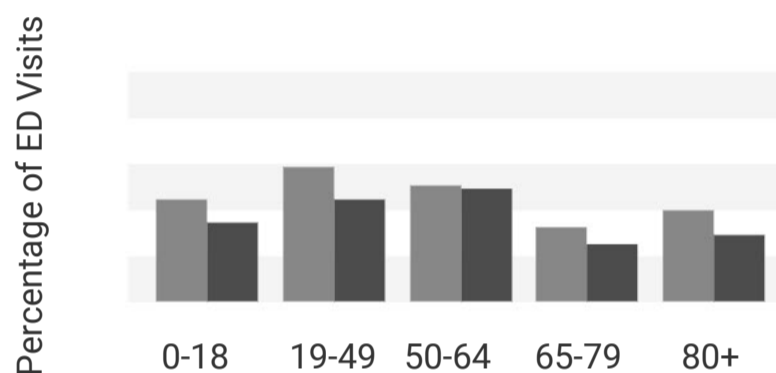
HQI - All

##### Service Year

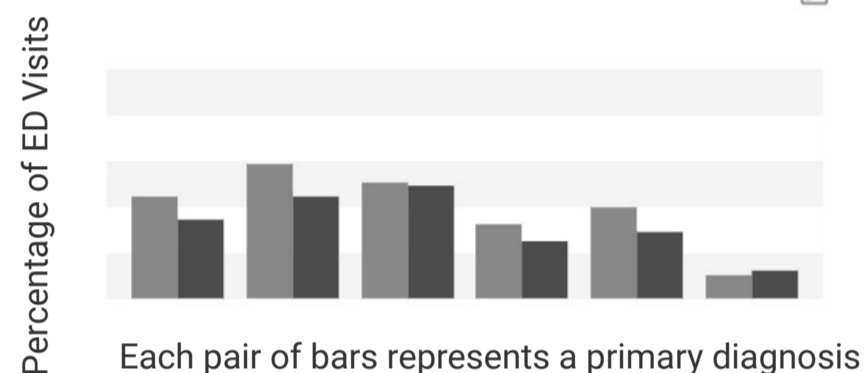
All  
 2014  
 2013  
 2012

LEGEND ABC Hospital HQI - All

#### Age Distribution

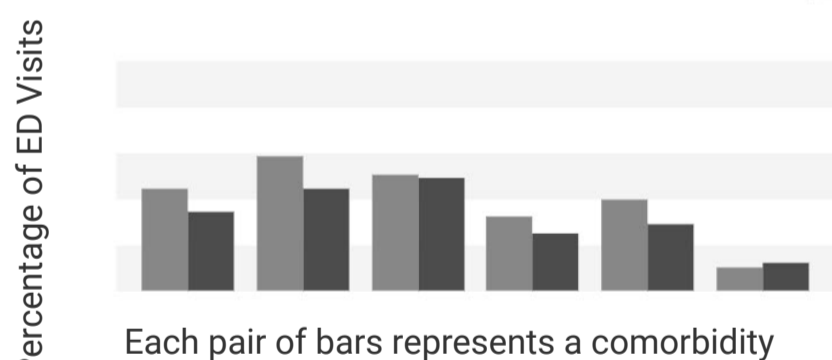


#### Top Primary Diagnoses

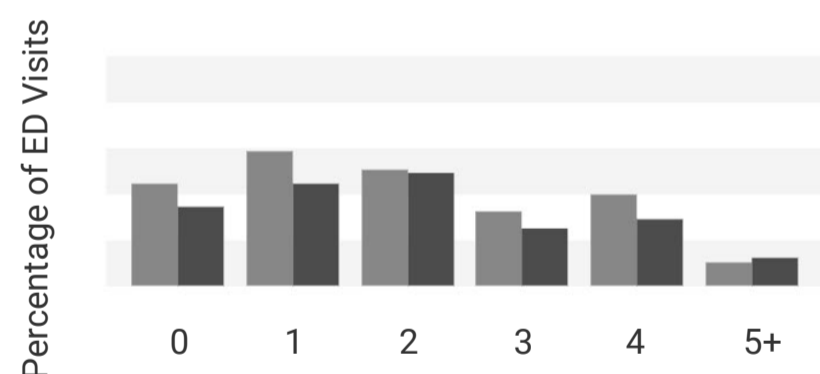


Top by volume?  
Top by opportunity?

#### Top Comorbidities



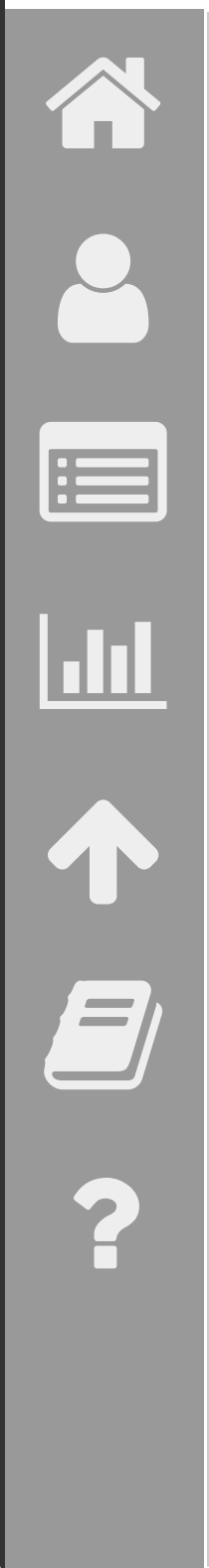
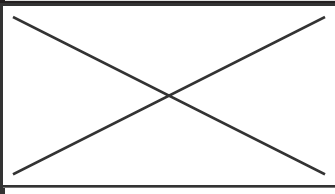
#### Number of Chronic Conditions Distribution



Is this distinct enough from top comorbidities to bring value?

Is it more helpful to have an Age Distribution frame or an Age filter? If we keep both, the first frame will be set to 100% when filtered to anything but 'All'

Maybe add Emergency Department as a service line to existing Comorbidities report, if users want to view ED visit rates for all comorbidities?



Emergency Department // Volume

**FILTERS**

**Hospitals**

**Patient Type**

**Visit Type**

**Payer Type**

**Age**

**Discharge Setting**

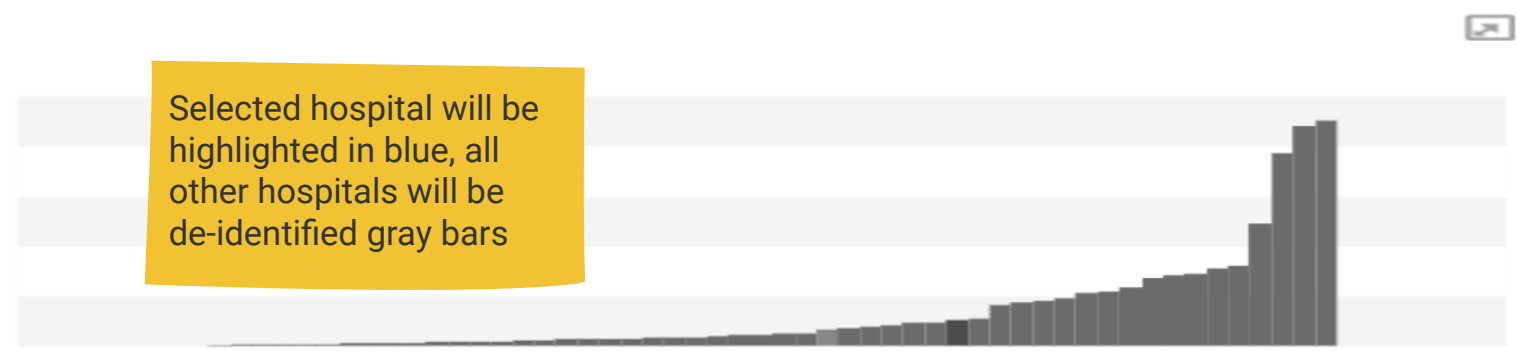
**Discharge Diagnosis**

**Comparison Group**

**Service Year**  
 All  
 2014  
 2013  
 2012

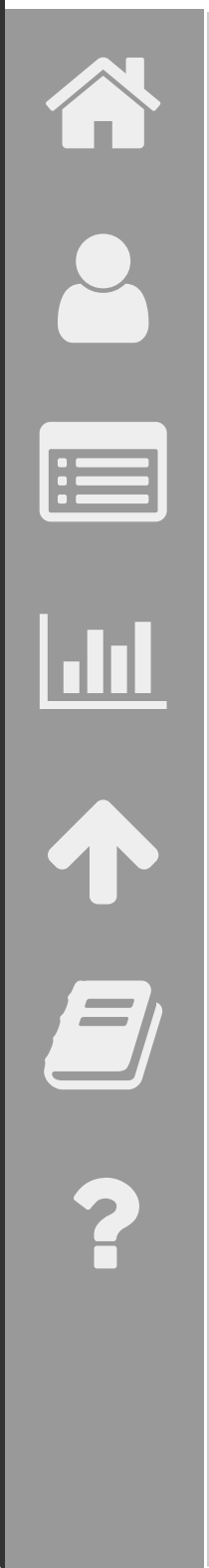
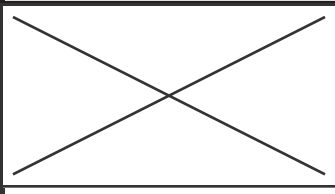
**LEGEND**  ABC Hospital  HQI - All

**Volume of ED Visits**



**Trended Volume of ED Visits**





### Emergency Department // Revisits

**FILTERS**

**Hospitals**

**Patient Type**

**Visit Type**

**Payer Type**

**Age**

**Discharge Setting**

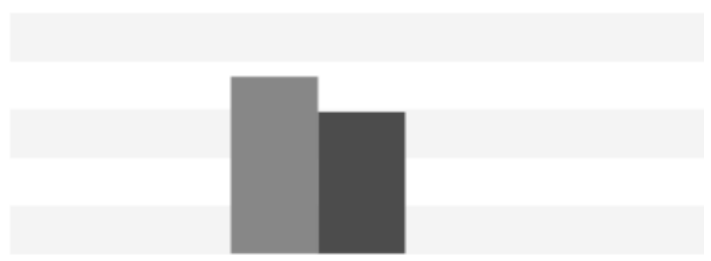
**Discharge Diagnosis**

**Comparison Group**

**Service Year**  
 All  
 2014  
 2013  
 2012

**LEGEND** ■ ABC Hospital ■ HQI - All

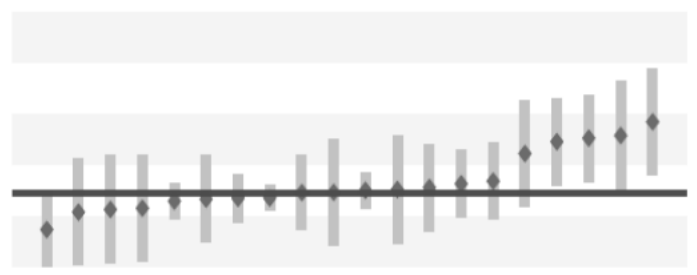
**30-Day Revisit Rate**



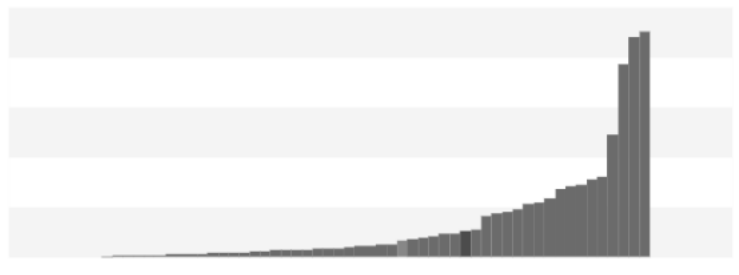
**30-Day Revisit Rate Trend**



**30-Day Revisit Rate Ranking**



**30-Day Revisit Rate Volume**





June 27, 2018

**TO:** CHA EMS/Trauma Committee Members

**FROM:** BJ Bartleson, RN, MS, NEA-BC, Vice President, Nursing and Clinical Services  
Cheri Hummel, Vice President, Emergency/Disaster Management and Facilities

**SUBJECT:** Emergency Department Disaster Preparedness

### **SUMMARY**

San Diego News (see attached article) recently reported the findings of a poll done by the American College of Emergency Physicians that stated only 6% of the emergency physicians polled felt their emergency departments were prepared for disaster, and 90% said there was a shortage or absence of critical medication in their emergency rooms.

CHA VP for Emergency/Disaster Management and Facilities is joining us today to discuss the “state of the state” of hospital disaster preparedness and her reaction/comments to the attached article.

### **DISCUSSION QUESTIONS**

- 1) How would you respond to the poll of emergency physicians that felt their emergency departments weren't prepared for a disaster?
- 2) How would you rate California's disaster preparedness/response and are there issues that need to be addressed or focused on?
- 3) How would you reassure our ED physicians that we are prepared?
- 4) How are critical medications handled in a disaster?
- 5) Have there been any recent “learnings” from the latest disasters in CA, specifically the Northern California Firestorm of last year?

### **ACTION REQUESTED**

- Information Only

Attachments: 93 Percent of Docs Say Emergency Rooms Are Not Prepared for Disaster

BJB:br

## 93 Percent of Docs Say Emergency Rooms Are Not Prepared for Disaster: Study

**"Emergency physicians are concerned that our system cannot even meet daily demands, let alone during a medical surge for a natural or man-made disaster," ACEP's president says**

By [Christina Bravo](#)

Published at 5:05 AM PDT on May 22, 2018 | Updated at 6:20 PM PDT on May 22, 2018

A new poll released says 93 percent of doctors aren't prepared for a surge of patients in the event of a disaster. NBC 7's Megan Tevrizian reports.

(Published Tuesday, May 22, 2018)

### What to Know

- **Only six percent of emergency physicians said that their emergency departments were fully prepared for a disaster**
- **Ninety percent of about 250 doctors polled said there was a shortage or absence of critical medication in their emergency rooms**

Ninety-three percent of doctors say their emergency departments are not fully prepared for a surge of patients in the event of a disaster, [according to a new poll](#) by the American College of Emergency Physicians (ACEP).

The poll released Tuesday also revealed that less than 50 percent of emergency physicians believed they were even somewhat prepared for an emergency that require drastically increased patient capacity, whether due to a natural disaster or man-made event like a mass shooting.

The study polled more than 1,300 emergency physicians from both urban and suburban hospitals from April 25 to May 6. The survey had a response rate of 18.6 percent and a 2.7 percent margin of error.

Only six percent of respondents answered that their emergency departments were fully prepared and, on the other end of the spectrum, 17 percent said their departments were not at all prepared.

### Docs Say ERs Not Prepared for Disaster: Study



A new study released Tuesday says more than 90 percent of doctors said their emergency rooms are not fully prepared for a mass casualty incident. NBC 7's Liberty Zabala reports.

(Published Tuesday, May 22, 2018)

"Emergency physicians are concerned that our system cannot even meet daily demands, let alone during a medical surge for a natural or man-made disaster," said ACEP President Dr. Paul Kivela in a release.

In another striking finding, 90 percent of about 250 doctors polled said there was a shortage or absence of critical medication in their emergency rooms and that over the last year those shortages have increased, according to the poll.

Dr. Karl Marzec, an emergency medicine specialist with Palomar Medical Center in Escondido, California, said he is often prompted to use a different medication, which may not be his first line of treatment, due to the shortage.

- [Family Mourns Mother Killed While Crossing Escondido Street](#)

"Over the last six months, there's been prolonged shortage of critical medications that we use on a daily basis, so we've been having to go to alternative medications," Marzec said. "Some of them work just as effectively but we are also in shortage of these backup alternative medications that we're using."

Marzec said pain medication, nausea treatments and saline — all of which help patients recover — are in short supply and that could slow down patient care in a mass casualty event.

The respondents were also asked whether their hospital re-evaluated procedures in light of recent events. Thirty percent of physicians said they had not really or not at all re-evaluated, while 44 percent of emergency rooms did somewhat evaluate their procedures.

[Top News: Guatemala Volcanic Debris Leaves Dead Unidentified](#)



AP

Marzec said his hospitals do prepare by thinking about what type of emergencies could occur in San Diego County, like fires, earthquakes and shootings.

"If there's large fires throughout the county, we'd be thinking, 'What are our burn facility capabilities,'" Marzec said.

ACEP said a coordinated approach to preparedness, including a region-wide data management system and tracking of resources, is key to ensuring preparedness in a mass emergency.

- [\*\*Defendants in Brutal Home Invasion Robberies Found Guilty\*\*](#)

The organization is working to get a bill approved by Congress that could increase oversight of medical resources, allowing for better tracking and ensuring supplies are there when needed, Marzec said.

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Check the box to include the list of links referenced in the article.





June 27, 2018

**TO:** EMS/Trauma Committee Members

**FROM:** BJ Bartleson, RN, MS, NEA-BC, VP Nursing & Clinical Services  
Aaron Wolff, Engagement Director, Dignity Health

**SUBJECT:** ED SAFE-T (Saturation Acuity Flow Elevation Tool)

### **SUMMARY**

The Emergency Department Saturation Acuity Flow Evaluation Tool (EDSAFE-T) is a proprietary resource for defining and improving ED crowding. The algorithm based tool objectively identifies the strain on your emergency department. Multiple aspects of care are included, such as physical space, admissions boarding, clinical acuity, and patients queued in your lobby. These aspects identify the busyness and crowding of your Emergency Department with objective data.

Aaron is a former member of CHA's Emergency Services Trauma Committee and worked with CHA on emergency department crowding tools (NEDOCs, CEDOCs) and proposed ED crowding legislation. He developed Dignity Health's emergency system's crowding algorithm and is now offering this tool to hospitals through his own business located at [www.edsafe-t.com](http://www.edsafe-t.com).

### **ACTION REQUESTED**

- Information for committee members

### **DISCUSSION QUESTIONS**

1. How is the information used to make changes within the system?
2. What insights have been gleaned from using the tool?
3. Do pre-hospital issues factor in on the algorithm?
4. Are there ways to connect this information to ambulance patient offload delay performance improvement measures?

BJB:br





June 27, 2018

**TO:** EMS/Trauma Committee Members

**FROM:** BJ Bartleson, RN, MS, NEA-BC, Vice President, Nursing and Clinical Services

**SUBJECT:** EMSA EMS-C, Stroke, STEMI

**SUMMARY**

Attached are the comments submitted to EMSA regarding EMS-C, Stroke, and STEMI. The regulations will be reviewed and resent for a 15 day comment period in June/July.

Of interest is Senate Bill 906 where CHA utilized recommendations of the Society for Cardiovascular Angiography and Interventions (SCAI), the American College of Cardiology Foundation, and the American Heart Association for performance measures as they will evolve over time.

**ACTION REQUESTED**

- Information Only

**DISCUSSION QUESTIONS**

1. Are there further issues that need to be addressed in the regulations?
2. Are hospitals using the pediatric readiness score?

**Attachments:** EMS-C Letter and Comments  
Stroke Letter and Comments  
STEMI Letter and Comments  
Coronary Artery Disease – Clinical Decision Making  
SB 906 (9.16.14)  
AFL 15-10

BJB:br



April 30, 2018

Corrine Fishman  
Legislative and Regulatory Affairs  
Emergency Medical Services Authority  
10901 Gold Center Drive, Suite 400  
Rancho Cordova, CA 95670

RE: Comments on Proposed Emergency Medical Services for Children Regulations  
Chapter 14, Division 9, Title 22, California Code of Regulation, 45-day Public Comment Period  
March 16, 2018, through April 30, 2018

Dear Ms. Fishman:

On behalf of more than 400 member hospitals and health systems, the California Hospital Association (CHA) respectfully offers the following comments on the California Emergency Medical Services Authority's (EMSA's) proposed regulatory text for California Health and Safety Code section 1799.202 – 1799.207.

CHA appreciates EMSA's pursuit of high-quality pediatric emergency care standards. CHA submitted extensive comments on Emergency Medical Services for Children (EMS-C) regulations in 2012. Further, CHA incorporates EMS-C goals into our CHA EMS/Trauma Committee, and our members have actively participated in EMSA's EMS-C Committee. CHA and its members embraced the Pediatric Readiness Project and supported its growth and maturation.

CHA has nine comments on the regulations, most of which are non-substantive and offered as opportunities to sharpen understanding of the regulatory intent. Of concern to CHA is the need to align the pediatric age limit, use pediatric advanced life support as a competency for the pediatric emergency care coordinator, include hospital authorization in data request information, and broaden the disclosure language to include all pertinent state and federal laws.

Specific recommendations are listed below and in the attached public comment grid.

#### Article 1. Definitions

1. § 100450.208. Pediatric Patient – “Pediatric patient” is defined in this proposal as a person who is less than or equal to 14 years of age.” However, Title 22, section 70537(d) states that “Patients beyond the age of 13 shall not be admitted to or cared for in spaces approved for pediatric beds unless approved by the pediatrician in unusual circumstances and the reason documented in the patient's medical record.” Because this discrepancy will cause undue burden on hospitals with patients who are 14 years of age, but are in pediatric spaces, CHA recommends changing the age **from 14 to 13** to mirror Title 22 regulations.

2. § 100450.209. Pediatric Receiving Center (PedRC) – “Pediatric Receiving Center” (PedRC) is defined in this proposal as a “licensed general acute care hospital that, at minimum, has a permit for basic or comprehensive services and has been formally designated by the local EMS agency for its role in an EMS system.” CHA recommends clarifying this definition by adding “...or comprehensive services **that has been formally designated as one of four types of PedRCs** by the local EMS agency for its role in an EMS system.”
3. § 100450.211 Pediatric Receiving Center – Level II – “Level II pediatric receiving center” is defined in this proposal as a “California Children’s Services (CCS)-approved pediatric community hospital.” A level II pediatric community hospital may be designated as a PedRC by the local EMS agency if the hospital has full, provisional, or CCS approval readily available.” CHA recommends a minor edit to add PedRC II as follows: “Level II pediatric receiving center means a CCS-approved pediatric community hospital. A level II pediatric community hospital may be designated as a **PedRC II** by the local EMS agency if the hospital has a full, provisional, or CCS approval readily available.”

#### Article 2. Local EMS Agency EMSC Program Requirements.

1. § 100450.211 (3) Line 204, “Care rendered to pediatric patients outside the hospital readily available upon request.” – CHA requests clarification of this statement — does this refer to EMS-C prehospital care, hospital emergency care outside the hospital, or both? An example would be helpful.

#### Article 3. Pediatric Receiving Centers

1. § 100450.225 (1)(C), Line 419, line 440 (B) – CHA recommends **adding Pediatric Acute Care Life Support (PALS)** to both the physician and nurse PECC personnel requirements
2. § 100450.225, Line 482-485, - (D) – CHA recommends that this section be clarified to confirm that **nurse practitioners or physician assistants may be used in place of or in addition to the registered nurse or medical doctor requirement under (3) (B) and (3)(C), but are not required.**

#### Article 4. Data Management, Quality Improvement and Evaluations

1. §100450.227, line 573-574 – “(1) The EMSC program shall include the collection of both prehospital and hospital patient care data, as determined by the local EMS agency.” **CHA recommends additional language that includes hospital PedRC in determining hospital data requests by the local EMS agency.**
2. §100450.227, line 583-612 – Since subsections a. A1. A2. and b language above these lines establish the general data requirement to comply with the most current California EMS Information System (CEMSIS) and require hospital participation, details in line 583-612 are unnecessary and prescriptive and potentially limiting. **CHA recommends deleting these lines.**
3. §100450.228, line 626-627 – CHA recommends **broadening this statement** to be consistent and compliant with all federal and state laws by adding to the beginning of line 626,

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“Consistent and compliant with all federal and state laws protecting and governing patient safety, quality, and confidentiality including but not limited to...”

CHA appreciates the opportunity to comment on this critical document that will assure statewide consistency in policy and program elements and improve pediatric patient care. Children have unique needs, and it is therefore vital that EMS providers and emergency departments provide high-quality care in a coordinated, collaborative approach. If you have any questions, please contact me at [bjbartleson@calhospital.org](mailto:bjbartleson@calhospital.org) or (916) 552-7537.

Sincerely,

BJ Bartleson  
Vice President, Nursing & Clinical Services

Comments on Proposed Emergency Medical Services for Children (EMSC) Regulations  
Chapter 14, Division 9, Title 22, California Code of Regulations  
45-day Public Comment Period  
March 16, 2018 Through April 30, 2018

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
<b>ARTICLE 1. DEFINITIONS</b>  <b>1.§100450.208.page2, line 74 – Pediatric Patient</b>	CHA	<p>There is an age discrepancy between the proposed EMS-C regulations of “less than or equal to 14”, and Title 22, “pediatric patient” definition, which states, “Patients beyond the age of 13 shall not be admitted to or cared for in spaces approved for pediatric beds unless approved by the pediatrician in unusual circumstance and the reason documented in the patient’s medical record.” This will cause undue burden on hospitals, and <b>CHA requests the age be changed to 13 to match Title 22 regulations.</b></p>	
<b>2.§100450.209, page 3, line 80-81</b>	CHA	<p>This PedRC description is not clear. Is it a separate category, or a minimum standard for all four categories? CHA recommends changing the sentence to read <b>“means a licensed general acute care hospital with at minimum, a permit for basic or comprehensive emergency services that has been formally designated as one of four types of PedRCs by the local EMS agency for its role in an EMS system.”</b></p>	

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
3.§100450.211, page 3, line101	CHA	Minor edit, <b>Add “II” after PedRC</b>	
<b>ARTICLE 2. LOCAL EMS AGENCY EMS-C PROGRAM REQUIREMENTS</b>  1.§100450.219, page 5 line 204-205	CHA	“care rendered to pediatric patients outside the hospital” is an unclear statement, <b>please clarify with an example</b>	
<b>ARTICLE 3. PEDIATRIC RECEIVING CENTERS</b>  1.§100450.225. page, 10, line 419 (C), line 440 (B)	CHA	<b>Add PALS to both the physician and nurse PECC personnel requirements in line 414 and line 440.</b>	
2.§100450.225, page 11- line 482-485	CHA	Suggest clarifying this statement. The assumption is minimum staffing for each PedRC is a NP or PA. <b>Recommend: NP/PAs be used in place of the RN or MD requirement under (3)(B) and (3)(C) or in addition to.</b>	
<b>ARTICLE 4. DATA MANAGEMENT, QUALITY IMPROVEMENT AND EVALUATION</b>  1. §100450.227, page 13 line 573-574	CHA	“The EMSC program shall include the collection of both prehospital and hospital patient care data, as determined by the local EMS agency”. <b>Recommend: “as determined by the local EMS agency and agreed upon by the PedRC”</b>	
2. §100450.227, Line 583- 612	CHA	Since subsections a. A1.A2 and b. language above these lines establish the general data requirement to be compliant/consistent with the most	

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
		current CEMSI and requires hospital participation, details in line 583-612 are unnecessary and prescriptive, and potentially limiting. CHA recommends deleting these lines.	
2.100450.228, page 14, line 626-627	CHA	Broaden confidentiality and disclosure language. <b>To beginning of line 626, add “Consistent and compliant with all federal and state laws protecting and governing patient safety, quality, and confidentiality including but not limited to”</b>	



May 21, 2018

Corrine Fishman  
Legislative and Regulatory Affairs  
California Emergency Medical Services Authority  
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Rancho Cordova, CA 95670-6073  
Corrine.fishman@emsa.ca.gov

BY ELECTRONIC CORRESPONDENCE

**RE: Stroke Critical Care System, Notice of Proposed Rulemaking, Title 22, Division 9, Prehospital Emergency Medical Services, Chapter 7.2**

Dear Ms. Fishman:

On behalf of our more than 400 member hospitals and health systems, the California Hospital Association (CHA) respectfully offers the following comments for consideration on the proposed regulatory text for the Emergency Medical Service Authority (EMSA), California Health and Safety Code sections 1797.102, 1797.103, 1797.105, 1797.176, and 1798.150.

CHA appreciates EMSA's pursuit of a highly functional stroke critical care system. Establishing these standards related to local optional acute Stroke Critical Care Systems throughout the State for the local EMS agencies (LEMSAs) to adopt will improve the care of patients suffering from life-threatening acute strokes. The regulations should provide statewide consistency and fairness, increase transparency of local and state government, and align with national standards for stroke critical care. This will assure Californians that there is a comprehensive systemic approach for care of the stroke victim that is evidence based, continuously evaluated, well-coordinated, and, driven by the most efficient and effective use of resources.

CHA offered substantive changes to the infrastructure of the document during the first public comment period, January 2017. While we acknowledge this is an unacceptable request, we encourage EMSA to continue to pursue the ability to format regulations based on the use of national standards to accommodate today's rapid changes in science and technology. CHA proposed using national stroke certification standards, principally, the American Heart Association/American Stroke Association (AHA/ASA) Standards, that represent the leading scientific, evidence based standards of practice and are updated every two years. By utilizing AHA/ASA standards as the certifying body, versus the proposed written regulations, hospitals will be held to current evidence based practice, as well as effectively complying with new changes in practice and technology that cannot be accommodated efficiently through the present state regulatory review process. Using existing AHA/ASA standards of Stroke certification, the EMSA state regulations are kept current without tedious, lengthy, regulatory review,



approval and change. AHA/ASA standards of stroke practice are reviewed every two years which coincides with the presently proposed stroke critical care hospital policy and procedure review period. Many other states have adopted this methodology and CHA suggests that California do the same.

In lieu of the inability to adopt such standards, CHA offers the following comments (outlined in the attached Public Comment Table and below).

I. Article 1. Definitions-

- a. Use of the word “diagnose” and “diagnostic” in lines 37 and 113 to affirm all components of care provided.
- b. Adding the word “prevention” as an inclusive component of the critical care system as implied in the request in line 223.
- c. Add the word “emergency” before “critical care,” in line 136, as hospitals may have multiple medical directors for emergency and or critical care duties. This implies they need to be responsible for both areas.
- d. Add the in line 181, “when clinically warranted” as a clarification statement to confirm optimal time frames and diagnosis are critical based against national standards

II. Article 3. Prehospital Stroke Critical Care System Requirements

- a. Add to line 285, “shall be used in conjunction with transfer to the most appropriate stroke center” to hasten the need for consultation and transfer.
- b. Change the term “facility” in line 292 to “hospital” for clarity.

III. Article 4. Hospital Stroke Care Requirements and Evaluations

- a. Add the wording, “based on national standards” at the end of the sentence on line 329 to reinforce use of national standards.
- b. Change wording in line 341-342 to meet national standards. “A neurointerventionalist meeting national standards, or a neurosurgeon, neurologist or radiologist who has completed neurovascular fellowship supervised by ACGME, or other appropriate body”.
- c. Change lines 393-394 per (b) above.
- d. In line 405, there is lack of clarity on the term “expanded advanced imaging”.
- e. Add to line 438 “in consultation with the Thrombectomy Capable Stroke Center” at the end of the sentence to assure appropriate communication takes place between local EMS and hospitals.
- f. Add “minimal reporting standards based on national requirements” to line 438 to reconfirm use of national standards.
- g. Add “in consultation with the Acute Stroke Ready Center” to line 617 to confirm appropriate communication exchange.
- h. Add to the end of the sentence in line 631 “in consultation with the EMS receiving hospital” to assure appropriate communication exchange.

In summary, CHA appreciates the opportunity to comment on this document to set the stage for the achievement and acceleration of exceptional quality stroke care across the state.

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Sincerely,

A handwritten signature in black ink, appearing to be 'BJ Bartleson', with a long horizontal line extending to the right.

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Comments on Proposed Stroke Critical Care System Regulations  
Chapter 7.2, Division 9, Title 22, California Code of Regulations  
45-day Public Comment Period  
April 6, 2018 through May 21, 2018

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
Article 1 §100270.203, page 1, line 36-38 Comprehensive Stroke Center	CHA	Line 37 add “diagnose” after “receive,” and, add “all “ before the word “stroke” in line 38.	
§100270.212, page 3, line 113	CHA	Add the word “diagnostic” after the word “triage.”	
§100270.213, page 3, line 126	CHA	Add the word “prevention” after “deliver” and before “treatment” as it is implied as part of the critical care system plan in line 223.	
§100270.214, page 4, line 136	CHA	Add the word “emergency” before “critical care system.” Hospitals may have multiple medical director experts. Emergency in addition to critical care adds clarity to the role	
§100270.219, page 5, line 182	CHA	Add “when clinically warranted” to confirm optimal timeframes and diagnosis are critical relative to national standards of care.	
Article 3, §100270.222, page 7 line 284-285	CHA	Add “shall be used in conjunction with transfer to the most appropriate stroke center”	
§100270.222, page 7 line 292	CHA	Change “stroke center of care facility” to “hospital stroke center of care”	
Article 4. §100270.223, page 8, line 329	CHA	Add the wording “based on national standards” at the end of the sentence	

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
§100270.223, page 8, line 341-342	CHA	Change wording to meet national standards: "A neurointerventionalist meeting national standards, or a neurosurgeon, neurologist or radiologist who has completed a neurovascular fellowship supervised by ACGME, or other appropriate body."	
§100270.223, page 10, line 393-394	CHA	Suggest change as indicated in line 341-342 above	
§100270.223, page 10, line 405	CHA	Lack of clarity on the term "expanded advanced imaging"	
§100270.223, page 11, line 438	CHA	Add "in consultation with the Thrombectomy –Cable Stroke Center", at the end of the sentence.	
§100270.225, page 13	CHA	Suggest adding minimal reporting standards based on national requirements.	
§100270.226, page 15, line 617	CHA	Add "in consultations with the Acute Stroke Ready Center"	
§100270.227, page 15 line 630-631	CHA	Add the following to the end of the sentence "in conjunction with the EMS receiving hospital"	



**CALIFORNIA  
HOSPITAL  
ASSOCIATION**

*Providing Leadership in  
Health Policy and Advocacy*

May 21, 2018

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BY ELECTRONIC CORRESPONDENCE

**RE: STEMI Critical Care System, Notice of Proposed Rulemaking, Title 22, Division 9, Prehospital Emergency Medical Services, Chapter 7.1, ST Elevation Myocardial Infarction Critical Care System**

Dear Corrine:

On behalf of our more than 400 member hospitals and health systems, the California Hospital Association (CHA) respectfully offers the following comments for consideration on the proposed regulatory text for the Emergency Medical Services Authority (EMSA), California Health and Safety Code sections 1797.103 and 1797.176.

CHA appreciates EMSA's pursuit of a highly functional ST Elevation Myocardial Infarction (STEMI) critical care system. Establishing standards related to local acute STEMI critical care systems will improve the care of patients suffering from life-threatening myocardial infarction. The regulations should provide statewide consistency and fairness, increase transparency of local and state government, and align with national standards for STEMI critical care. This will assure Californians that there is a comprehensive, systemic approach for STEMI care that is evidence-based, continuously evaluated, well-coordinated and driven by the most efficient and effective use of resources.

CHA previously submitted numerous remarks to streamline, clarify and specify hospital STEMI requirements so that they may be applied consistently statewide. Many of those comments were adopted in this draft, which CHA appreciates. However, CHA continues to emphasize the need to modernize these and future regulations according to nationally based standards of care. The present regulatory process is tedious and unable to accommodate today's rapid changes in science and technology. In our previous comments, CHA proposed that state regulatory standards of care be based on current national standards — in this case, national STEMI certification standards. The American Heart Association's (AHA) Mission Lifeline Standards represent leading scientific evidence-based standards of practice and are updated every two years, which coincides with the proposed stroke critical care hospital policy and procedure review period. National standards are mentioned in §100270.131 Data Management, relative to National EMS Information System and the National Cardiovascular Data Registry. As written in the present draft, local emergency medical services agencies and hospitals would be required to comply with the most current version. CHA suggests that this type of infrastructure be

applied to the rest of the STEMI regulations, which would mirror the methodology adopted in other states and prevent resource intensive reviews.

The comments outlined on the attached comment form (Comments for Draft STEMI Regulations) reflect changes we propose to this draft. A summary of our comments is below.

I. Article 1. Definitions

- a. §100270.111 PCI – Suggest adding a more detailed definition of Percutaneous Coronary Intervention. The present definition is narrow and does not include diagnoses. The proposed definition is based on American College of Cardiology (ACC) and includes both diagnostic and treatment characteristics.
- b. §100270.115 & §100270.118, STEMI Medical Director and STEMI Program Manager – Suggest adding the word “emergency” before critical care. Hospitals may have specialists in either emergency STEMI or critical care STEMI. It needs to be clear this is an emergency critical care position.
- c. §100270.119 STEMI Receiving Center – Change to “a licensed GACH with a special permit for a cardiac catheterization laboratory and cardiovascular surgery by the California Department of Public Health and that meets the minimum hospital STEMI care requirements, pursuant to Section §100270.127.”
- d. §100270.127 STEMI Receiving Center - Add “any changes deemed necessary by the local emergency medical services agency **should be made in consultation with the affected Stemi Receiving Center**”
- e. §100270.129 STEMI Referring Center – Change “referring” to “receiving.”
- f. §100270.129 Data Management – add “American College of Cardiology” before “National Cardiovascular Data Registry.”

CHA appreciates the opportunity to comment on this critical document that will not only modernize the development of California’s STEMI Critical Care System, but set the stage for the achievement and acceleration of exceptional quality STEMI care across the state.

Sincerely,



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Comments on Proposed ST Elevation Myocardial infarction (**STEMI**) **Critical Care System Regulations**  
 Chapter 7.1, Division 9, Title 22, California Code of Regulations  
 45-day Public Comment Period  
 April 6, 2018 through May 21, 2018

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
§100270.111 Percutaneous Coronary Intervention (PCI), Page 3, line 92	CHA, BJ Bartleson	Change wording to read, "Percutaneous Coronary Intervention or PCI means a broad group of percutaneous techniques utilized in the dilation of coronary, heart or arterial obstructions to diagnose and treat patients with STEMI"	
§100.270.115 STEMI Medical Director, page 4, line 128	CHA	Add the word "emergency" before "critical care"	
§100270.118 , STEMI Program Manager, page 4 line 152	CHA	Add the word "emergency" before "critical care system"	
§100270.119 STEMI Receiving Center (SRC), page 4, line 157	CHA	Change to, "A licensed GACH with a special permit for a cardiac catheritization laboratory and cardiovascular surgery by the California Department of Public Health and that meets the minimum hospital STEMI care requirements pursuant to Section §100270.127"	
§100270.127 STEMI Receiving Center (SRC), page 9 , line 364	CHA	Change to: "Additional requirements may be included at the discretion of the local EMS agency medical director in consultation with the SRC"	
§100270.129. STEMI Referring	CHA	Change "referring" to "receiving"	

Section/Page/Line	Commenter's Name	Comments/ Suggested Revisions	Response
Hospital, page 10, line 396			
§100270.129 Data Management, page 11, line 428	CHA	Add: "American College of Cardiology" before National Cardiovascular Data Registry	



# CORONARY ARTERY DISEASE

## Clinical Decision Making

### SCAI/ACC/AHA Expert Consensus Document: 2014 Update on Percutaneous Coronary Intervention Without On-Site Surgical Backup

Gregory J. Dehmer,<sup>1\*</sup> MD, James C. Blankenship,<sup>2</sup> MD, Mehmet Cilingiroglu,<sup>3</sup> MD, James G. Dwyer,<sup>4</sup> MD, Dmitriy N. Feldman,<sup>5</sup> MD, Timothy J. Gardner,<sup>6</sup> MD, Cindy L. Grines,<sup>7</sup> MD, and Mandeep Singh,<sup>8</sup> MD, MPH

Key words: angioplasty; coronary artery bypass surgery; consensus

#### INTRODUCTION

In 2007, the Society for Cardiovascular Angiography and Interventions (SCAI) published an Expert Consensus Document titled “The Current Status and Future Direction of Percutaneous Coronary Intervention without On-Site Surgical Backup” [1]. This document summarized the available data on the performance of percutaneous coronary intervention (PCI) without on-site surgery in the United States (US), reviewed the existing literature, examined the recommendations for the performance of PCI in this setting from several professional organizations abroad and from experienced programs in the US, defined the best practices for facilities engaged in PCI without on-site surgery and made recommendations for the future role of PCI without on-site surgery.

Since publication of that document, new studies, meta-analyses, and randomized trials have been published comparing PCI with and without on-site surgery. In addition, the total number of PCIs performed annually has decreased, reports about the overuse of PCI have emerged, and appropriate use criteria for coronary revascularization have been published. A noteworthy change occurred in the 2011 PCI guideline in which elective PCI was upgraded to Class IIb and primary PCI was upgraded to Class IIa at facilities without on-site surgery [2]. Several tables on the structure and operation of programs without on-site surgery from the 2007 SCAI Expert Consensus Document were used in the 2011 PCI guideline recommendations. Finally, new

updates of the ACCF/SCAI Expert Consensus Document on Cardiac Catheterization Laboratory Standards and the ACCF/AHA/SCAI Clinical Competence in

<sup>1</sup>Baylor Scott & White Health, Central Texas, Temple, TX. SCAI Writing Committee Member and Chair

<sup>2</sup>Geisinger Health System, Danville, PA. SCAI Writing Committee Member

<sup>3</sup>Arkansas Heart Hospital, Little Rock, AR. SCAI Writing Committee Member

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<sup>5</sup>New York Presbyterian Hospital, New York, NY. SCAI Writing Committee Member

<sup>6</sup>Christiana Care Health System, Newark, DE. AHA Writing Committee Member

<sup>7</sup>Detroit Medical Center, Detroit, MI. SCAI Writing Committee Member

<sup>8</sup>Mayo Clinic, Rochester MN. ACC Writing Committee Member

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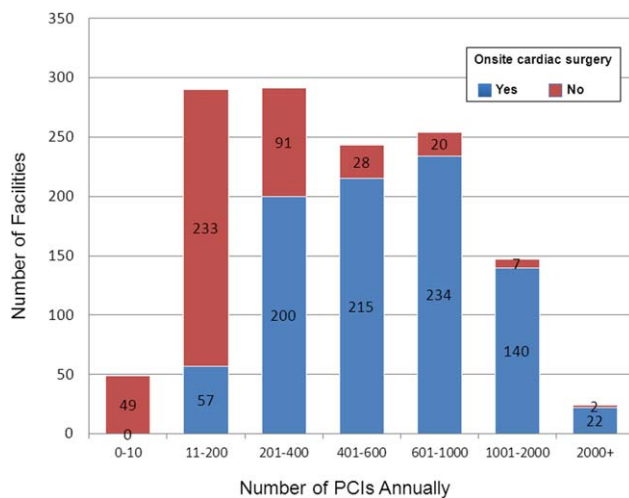
Conflict of interest: See Appendix 1.

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**Fig. 1. PCI volume at facilities with and without cardiac surgery. (Reproduced from Ref [8] with permission. [Color figure can be viewed in the online issue, which is available at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)].**

Coronary Artery Interventional Procedures have been published [3,4].

Although many of the concerns about the safety of PCI without on-site surgery have been resolved, there are new issues to consider as the delivery of PCI continues to evolve in the US. Accordingly, the SCAI, ACCF, and AHA have engaged in this effort to reevaluate the current status of PCI without on-site surgery in the US. The specific goals of this effort were to:

1. Determine current trends in the prevalence of PCI without on-site surgery in the US;
2. Summarize new literature related to the performance of PCI without on-site surgery;
3. Review existing guidelines, expert consensus documents, competency statements and other documents related to PCI without on-site surgery and summarize all relevant information into a single resource document;
4. Outline the current best practice methods and requirements for facilities engaged in performing PCI without on-site surgery; and
5. Evaluate the role of PCI without on-site surgery within the current US healthcare system.

### Trends in the Performance of PCI

Although the use of PCI in the US had grown considerably since the early 1980s, data from the Nationwide Inpatient Sample cited by the Agency for Healthcare Research and Quality shows that the annual volume of PCI procedures peaked in 2006 and has

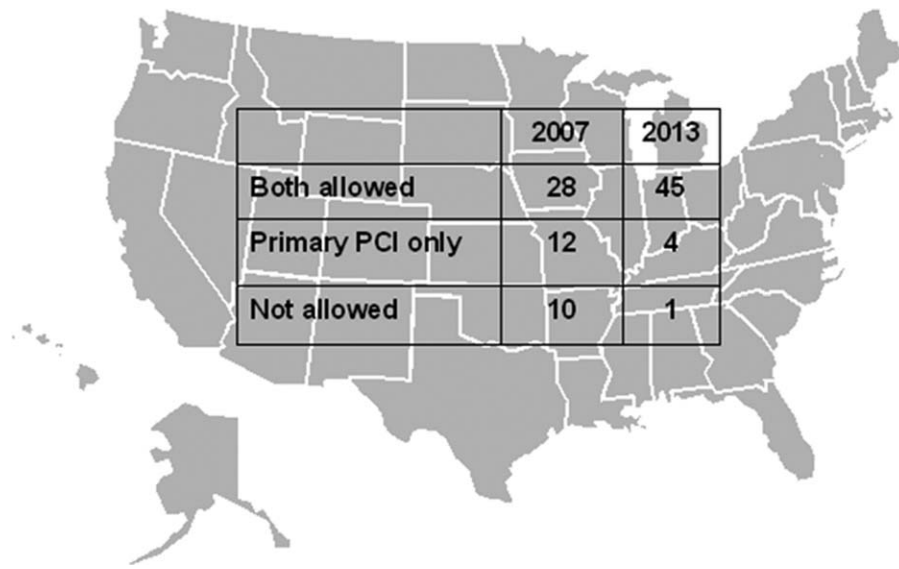
since declined by over 30% [5]. Numerous factors have contributed to this decline, including a reduction in restenosis by drug-eluting stents, a greater emphasis on medical therapy for the treatment of stable coronary artery disease, enhanced primary and secondary prevention efforts, a reduction in the incidence of ST-segment elevation myocardial infarction (STEMI), the increasing use of techniques such as fractional flow reserve to better evaluate lesion severity and the development and application of appropriate use criteria [5,6]. As a result of these factors, many operators and hospitals now have low-volume practices. Using data from 2008, Maroney et al. estimated that 61% of interventional cardiologists performed 40 or fewer Medicare fee-for-service PCIs annually [7]. Clinical data from 1298 facilities reporting to the National Cardiovascular Data Registry (NCDR) show that 49% of facilities performed  $\leq 400$  PCIs and 26% performed  $\leq 200$  PCIs annually (Fig. 1) [8]. Approximately 33% of facilities had no on-site surgery, and among these, 65% (282 facilities) had an annual case volume of  $\leq 200$  PCI procedures.

Across the US, PCI without on-site surgery has increased since 2007. The writing committee assessed the current use of PCI without on-site surgery from a survey of ACC Governors for each state, data from industry sources and direct contact with physicians in various states (Fig. 2). Currently, 45 states allow both primary and elective PCI without on-site surgery, 4 states allow only primary PCI without on-site surgery, and 1 state prohibits PCI without on-site surgery. PCI without on-site surgery is regulated by the State Department of Health in 34 states but is unregulated in the remaining 16 states. Elective PCI without on-site surgery was allowed at selected facilities in 9 states but only as part of statewide demonstration projects or to allow participation in the Cardiovascular Patient Outcomes Research Team (CPORT) Nonprimary PCI (CPORT-E) trial [9]. Since the conclusion of CPORT-E, the use of PCI without on-site surgery is being reevaluated in several of these states. PCI without on-site surgery is currently performed in 19 of the 65 cardiac catheterization laboratories within the Veterans Health Administration [10].

### Recent Literature on PCI Without On-site Surgery

Since 2006, 11 original studies and 3 meta-analyses on the topic of PCI without on-site surgery have been identified by a computerized systematic literature search using Medline (PubMed and Ovid) and Cochrane Databases [9,11–23].

**Primary PCI without on-site surgery.** Seven studies and 2 meta-analyses of primary PCI showed no



**Fig. 2.** Change in the availability of PCI without on-site surgery from 2007 to 2013. The numbers shown indicate the number of states where primary and nonprimary PCI without on-site surgery are allowed.

difference for in-hospital or 30-day mortality between sites with and without on-site surgery (Table I). None of the individual studies examining the occurrence of emergency CABG surgery after primary PCI showed a difference between sites with and without on-site surgery. However, 1 meta-analysis showed that sites without on-site surgery had a lower occurrence of emergency CABG surgery after primary PCI (odds ratio, 0.53; 95% confidence interval 0.35–0.79) [20].

**PCI without on-site surgery for conditions other than STEMI.** Eight studies examined nonprimary PCI at sites with and without on-site surgery (Table II). The majority of studies and meta-analyses showed no difference in mortality or a need for emergency CABG at sites without on-site surgery. One study at a high-volume facility performing only elective PCIs and staffed by high-volume interventionalists showed a lower mortality at the facility without on-site surgery (OR, 0.11; 95% CI 0.01–0.79) [21]. However, the baseline clinical and angiographic characteristics of the study groups with and without on-site surgery were sufficiently different that a meaningful adjusted analysis could not be performed, and there is therefore the possibility of a case selection bias.

Two randomized trials of nonprimary PCI have now been published. The CPORT-E trial randomized over 18,000 patients in a 1 : 3 ratio to undergo PCI at hospitals with and without on-site cardiac surgery, respectively [9]. High-risk patients were excluded, as was the use of atherectomy devices. The trial had 2 primary endpoints: 6-week mortality and 9-month incidence of major adverse cardiac events (composite of death,

Q-wave myocardial infarction, or target-vessel revascularization). The 6-week mortality rate was 0.9% at hospitals without on-site surgery compared with 1.0% at those with on-site surgery ( $P = 0.004$  for noninferiority). The 9-month rates of major adverse cardiac events were 11.2% and 12.1% at hospitals with and without on-site surgery, respectively ( $P = 0.05$  for noninferiority). A similar, but smaller randomized study of nonemergency PCI was performed in Massachusetts hospitals [11]. The rates of major adverse cardiac events were 9.5% in hospitals without on-site cardiac surgery and 9.4% in hospitals with on-site cardiac surgery at 30 days (relative risk, 1.00; 95% one-sided upper confidence limit, 1.22;  $P < 0.001$  for noninferiority) and 17.3% and 17.8%, respectively, at 12 months (relative risk, 0.98; 95% one-sided upper confidence limit, 1.13;  $P < 0.001$  for noninferiority). The individual rates of death, myocardial infarction, repeat revascularization and stroke did not differ significantly between the groups at either time point.

Three meta-analyses conducted primarily with registry data have examined the use of nonprimary PCI at facilities with and without on-site surgery [19,20,23]. Overall, the mortality rate and need for emergency CABG surgery did not differ between hospitals with and without on-site surgery. In 1 meta-analysis, after adjusting for publication bias, the mortality rate for nonprimary PCI was 25% higher at centers without on-site surgery compared with centers that had on-site surgery (OR, 1.25; 95% CI, 1.01–1.53;  $P = 0.04$ ) [20]. However, it is important to note that these meta-analyses preceded the publication of the 2 randomized trials [9,11]. Therefore, based on these

**TABLE I. Studies on Primary PCI Without On-site Surgery Published Since 2006**

Author (Year)	Sites	On-site Surgery	No. of Patients in Arm	Mortality		Emergency CABG		Comments
				Incidence %	OR (95% CI)	Incidence %	OR (95% CI)	
Carlsson (2007) [12]	Multicenter SCAAR Registry	No	857	7.0	1.05 (0.79–1.40)	0.1		30-day mortality is reported; Incidence of emergency CABG is for all patients (primary and nonprimary PCI)
Peels (2007) [13]	Single center	No Yes	336 103	2.1 0.97	2.17 (0.26–17.8)	0 1.0	0.10 (0.00–2.51)	
Pereira (2008) [14]	Multicenter Portuguese Registry	No Yes	1214 1470	5.0 4.0	0.79 (0.55–1.14)	1.8 2.7	1.52 (0.90–2.56)	Cardiogenic shock mortality was 53.4% with on-site surgery and 50.9% without (NS)
Kutcher (2009) [15]	Multicenter NCDR Registry	No Yes	1,934 31,099	5.1 5.2	0.97 (0.79–1.20)	0.7 1.2	0.60 (0.35–1.03)	In-hospital mortality reported. Only 42% of sites without on-site surgery performed ≥36 primary PCIs annually compared with 80% of sites with on-site surgery
Pride (2009) [16]	Multicenter NDMI Database	No Yes	1,795 1,795	3.3 3.8	0.86 (0.61–1.23)			Propensity matched patient cohort. In-hospital mortality reported and only for patients undergoing primary PCI.
Hannan (2009) [17]	Multicenter New York State Database 3 sites Mayo Clinic experience	No Yes No Yes	1,729 1,729 667 667	2.3 1.9 2.5 3.1	1.22 (0.76–1.94)	0.06 0.35 0.7 0.6	0.17 (0.02–1.38)	Incidence of emergency CABG not reported
Singh (2009) [18]					0.80 (0.42–1.54)		1.25 (0.33–4.68)	Propensity matched patient cohort. In-hospital/30-day mortality reported
<b>Meta-analyses</b>								
Zia [2011] [19]		No Yes	8703 97386	6.1 7.6	0.93 (0.83–1.05)	3.0 3.4	0.87 (0.68–1.11)	9 studies included in the analysis
Singh M [2011] [20]		No Yes	16489 107585	4.6 7.2	0.96 (0.88–1.05)	0.22 1.03	0.53 (0.35–0.79)	11 studies included in the analysis

CABG, coronary artery bypass graft surgery; NCDR, National Cardiovascular Data Registry; NDMI, National Registry of Myocardial Infarction; OR, odds ratio; PCI, percutaneous coronary intervention; SCAAR, Swedish Coronary Angiography and Angioplasty Registry.

TABLE II. Studies on Nonprimary PCI Without On-site Surgery Published Since 2006

Author (Year)	Sites	On-site Surgery	No. of Patients in Arm	Mortality		Emergency CABG		Comments
				Incidence %	OR (95% CI)	Incidence %	OR (95% CI)	
Carlsson (2007) [12]	Multicenter SCAAR Registry	No	7,981	0.81	1.23 (0.91–1.65)	0.1		30-day mortality is reported; Incidence of emergency CABG is for all patients (primary and nonprimary PCI)
Frutkin (2008) [21]	2 sites	No Yes	1,090 3,317	0.09 0.8	0.11 (0.01–0.79)	0.2 0.03	6.10 (0.55–67.3)	Nonrandomized comparison of 2 sites. Stable and unstable angina plus NSTEMI included. In-hospital mortality shown
Pereira (2008) [14]	Multicenter Portuguese Registry	No	4831	0.5	1.43 (0.85–2.41)	0.7	3.14 (2.13–4.63)	
Kutcher (2009) [15]	Multicenter NCDR Registry	Yes No	5584 6,802	0.7 0.8	0.99 (0.76–1.30)	2.1 0.2	0.69 (0.40–1.16)	72% of sites without on-site surgery performed <200 PCIs annually compared with 6% among sites with on-site surgery
Pride (2009) [22]	Multicenter NDMI Registry	No	1,282	1.0	0.76 (0.37–1.58)			Only patients with NSTEMI included in study cohort
Singh (2009) [18]	3 sites Mayo clinic	Yes No	1,282 1,842	1.3 0.2	0.57 (0.17–1.95)	0	1.00 (0.02–50.4)	Propensity matched patient cohort
Aversano (2012) [9]	Randomized Trial	Yes No Yes	1,842 14,149 4,718	0.4 0.9 1.0		0.2 0.1 0.2		Mortality reported after 6 weeks and incidence of emergency CABG shown.
Jacobs (2013) [11]	Multicenter Randomized Trial	No Yes	2774 917	0.7 0.3	1.96 (0.58–6.64)	0.3 0.1	2.30 (0.3–18.6)	All-cause and cardiac mortality at 30 days were no different. PCI without on-site surgery was not inferior
Meta-analyses								
Zia (2011) [19]		No	28552	1.6	1.03 (0.64–1.66)	1.0	1.38 (0.65–2.95)	6 studies included in the analysis
Singh M (2011) [20]		Yes	881261	2.1		0.9		
		No	30423	0.9	1.15 (0.93–1.41)	0.17	1.21 (0.52–2.85)	9 studies included in the analysis
		Yes	883865	0.8		0.29		
Singh PP (2011) [23]		No	1812	0.17	2.3 (0.60–12.97)	0.11	0.47 (0.07–3.19)	4 studies included in the analysis but only 2 with data on mortality and CABG; Risk ratios rather than OR are reported in this analysis
		Yes	4039	0.72		0.02		

CABG, coronary artery bypass graft surgery; NCDR, National Cardiovascular Data Registry; NDMI, National Registry of Myocardial Infarction; OR, odds ratio; PCI, percutaneous coronary intervention; SCAAR, Swedish Coronary Angiography and Angioplasty Registry.



recent studies, there is no indication of increased mortality or a greater need for emergency CABG for either primary or nonprimary PCI at sites without on-site cardiac surgery.

### **Guidelines, Competency Documents, Policy Statements, and Other Programs**

Since 2007, there have been several new documents published that provide guidance for the performance of PCI without on-site surgery. Each new document builds incrementally upon the recommendations from prior documents with slight modifications based on new information. The recommendations for PCI programs without on-site surgery are maturing and becoming uniform over time through the vetting of these recommendations by numerous separate writing committees and undergoing extensive external reviews during document development. Key recommendations for PCI without on-site surgery from those documents are briefly summarized below and have been combined to develop the unified recommendations in this document.

#### **2009 Focused Guideline Update on the Management of Patients with STEMI and Guideline Update on PCI**

The 2009 focused update of the ACC/AHA guidelines for the management of patients with STEMI and the ACC/AHA/SCAI guidelines on PCI has been superseded by newer separate guidelines for STEMI and PCI [2,24,25]. However, a number of the recommendations from the 2009 document regarding triage and transfer of patients and the development of local STEMI systems have been incorporated into the current document.

#### **2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention**

Compared with prior guidelines, the 2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention stipulated new classification ratings for both primary and elective PCI at hospitals without on-site cardiac surgery [2]. Primary PCI was assigned a class IIa recommendation (*Level of Evidence: B*) stating that primary PCI is “reasonable,” provided appropriate planning for program development has been accomplished. Previously, this was assigned a class IIb recommendation. Elective PCI, previously assigned a class III recommendation, was given a class IIb recommendation (*Level of Evidence: B*) stating it “might be considered in hospitals without on-site cardiac surgery, provided that appropriate planning for program development has been accomplished and rigorous clinical and angiographic criteria are used for proper patient selection”. Elective PCI without

on-site cardiac surgical backup was considered appropriate only when performed by experienced operators, with complication rates and outcomes equivalent or superior to national benchmarks. Importantly, the ACCF/AHA/SCAI PCI guidelines state, “desires for personal or institutional financial gain, prestige, market share, or other similar motives are not appropriate considerations for initiation of PCI programs without on-site cardiac surgery.” The guideline assigns a class III recommendation (*Level of Evidence: C*) to performing primary or elective PCI in hospitals without on-site cardiac surgery without a proven plan for rapid transport to a cardiac surgery operating room in a nearby hospital and without appropriate hemodynamic support capability for transfers. The 2011 PCI guideline document adapted personnel, facility, operator and structural requirements for PCI without on-site surgery from the 2007 SCAI Expert Consensus document [1]. New facility and operator volume requirements were not addressed in the 2011 PCI guidelines but deferred to the 2013 PCI Clinical Competency document [4]. In 2011, ACCF/AHA also published a Guideline for Coronary Artery Bypass Surgery that did not discuss the performance of PCI without on-site surgery [26].

#### **2012 ACCF/SCAI Expert Consensus Document on Cardiac Catheterization Laboratory Standards Update**

Similar to the 2011 PCI guidelines, this document presented requirements for PCI at facilities without on-site cardiac surgery that were derived from the 2007 SCAI expert consensus document with some modifications [3]. This document also presented criteria for excluding patients, based on risk and lesion characteristics, from PCI at facilities without on-site cardiac surgery. The document prescribed the quality assurance/quality improvement (QA/QI) program necessary for all cardiac catheterization laboratories with specific recommendations for structure, process, and outcome variables appropriate for monitoring. Moreover, it recommended that all major complications be reviewed by the QA/QI committee at least every 6 months and that any individual operator with complication rates above benchmarks for 2 consecutive 6-month intervals should have the issue directly addressed by the QA director with a written plan for remediation. The document also recommended that a random sample of cases from all operators should be reviewed at least annually.

#### **2013 ACCF/AHA/SCAI Update of the Clinical Competence Statement on Coronary Artery Interventional Procedures**

In addition to defining numerous requirements for operator competency, new operator, and facility PCI

volume requirements were established [4]. Reflecting the overall decline in PCI volumes, this document recommended that laboratories performing both primary and elective PCI, with and without on-site cardiac surgery, should perform a minimum of 200 PCIs annually. Laboratories performing <200 cases annually must have stringent systems and process protocols in place with close monitoring of clinical outcomes and additional strategies that promote adequate operator and catheterization laboratory staff experience through collaborative relationships with larger volume facilities. The existence of laboratories performing <200 PCIs annually that are not serving isolated or underserved populations should be questioned, and any laboratory that cannot maintain satisfactory outcomes should be closed. This recommendation was based on an extensive review of studies that identified a signal suggesting worse outcomes in laboratories performing <200 PCIs annually. The writing committee recommended that operators perform a minimum of 50 PCIs annually [averaged over 2 years], including no less than 11 primary PCIs annually. Ideally, these procedures should be performed in institutions performing >200 total and >36 primary PCI procedures annually. However, it was emphasized that individual operator volume is but one of several factors that should be considered in assessing operator competence, which include lifetime experience, institutional volume, the operator's other cardiovascular interventions and quality assessment of the operator's ongoing performance. Operators who cannot maintain these case volume recommendations at their primary practice site should maintain privileges and continue to perform PCI procedures at a high-volume institution with on-site surgical backup to meet annual volume requirements. It was also recommended that operators should be board certified in interventional cardiology and maintain certification, with the exception of operators who have received equivalent training outside the US and are ineligible for board certification in the US.

### **2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction**

This document did not specifically comment on PCI without on-site cardiac surgery but supported the 2011 ACCF/AHA/SCAI PCI guidelines recommendations [25]. It recommended that primary PCI be performed in high-volume, well-equipped centers with experienced interventional cardiologists, and skilled support staff.

### **2010 European Society of Cardiology and European Association for Cardio-Thoracic Surgery Guidelines**

In contrast to the 2011 ACC/AHA/SCAI PCI guidelines, the 2010 European Society of Cardiology and

the European Association for Cardio-Thoracic Surgery guidelines on myocardial revascularization do not comment on PCI without on-site surgery or issues related to institutional or operator competency [27]. However, the European guidelines continue to stress the importance of full disclosure regarding the lack of availability of on-site cardiac surgery and the inadvisability of performing PCI for high-risk patients/lesions at facilities that do not have on-site surgical backup.

The European guidelines for STEMI do not provide specific recommendations regarding PCI at centers without on-site surgery [28]. Rather, emphasis is placed on the development of networks between hospitals with differing levels of technology, connected by an efficient emergency transport system. To maximize staff experience, the guidelines recommend that primary PCI centers perform procedures 24 h a day, 7 days a week for all STEMI patients.

Other models mentioned in the European guidelines, although not ideal, include weekly or daily rotation of primary PCI centers or multiple primary PCI centers in the same region. Hospitals that cannot offer a 24/7 service for primary PCI should be allowed to perform primary PCI in patients already admitted for another reason and who develop STEMI during their hospital stay. These hospitals should, however, be discouraged from initiating a service limited to daytime or within-hours primary PCI, because this generates confusion with Emergency Medical Services (EMS) operators and is unlikely to match the door-to-balloon time and quality of intervention of focused 24/7 primary PCI centers. In a survey of European countries, the mean population served by a single primary PCI center varied between 0.3 and 7.4 million inhabitants. In countries offering primary PCI services to the majority of their STEMI patients, this population varied between 0.3 and 1.1 million per center [29]. In small service areas, experience can be suboptimal due to an insufficient number of STEMI patients, but the optimal size of a catchment area could not be clearly defined. For geographical areas where the expected transfer time to a primary PCI center makes it impossible to achieve satisfactory reperfusion times, thrombolysis with subsequent immediate transfer to a primary PCI center has been endorsed. Although there is a risk of intracranial bleeding, a potential role for this strategy in selected circumstances has been emphasized [30].

### **Other Guidelines and Recommendations**

The 2007 SCAI Expert Consensus Document summarized the recommendations from the British Cardiac Society and British Cardiovascular Intervention Society, the Cardiac Society of Australia and New Zealand

(CSANZ), the Spanish Society of Cardiology, the Brazilian Society of Hemodynamics and Interventional Cardiology (*Sociedade Brasileira de Hemodinamica e Cardiologia Intervencionista*) and from several other countries [31–39]. Since 2007, only the guidelines from CSANZ have been updated, most recently in 2011 [32]. CSANZ guidelines state that primary PCI without on-site surgery should be performed: (a) by operators and institutions meeting the overall requirements and standards of primary PCI centers; (b) by institutions with a proven plan for rapid transport to a cardiac surgical center; (c) in a timely fashion (<90 min); and (d) using rigorous case selection criteria. The CSANZ guidelines acknowledged that rural patients might have limited access to diagnostic angiography and PCI, and providing these services at institutions without on-site surgery by appropriately trained individuals facilitates equity of access, which should result in improved quality of care. However, the CSANZ guidelines also specifically state that rural and regional centers should not perform elective, high-risk PCI procedures if they are located more than 1 hour travel time from cardiac surgery centers.

#### **AHA Policy Statement on PCI Without Surgical Backup**

In March 2012, the AHA issued a policy statement on PCI without surgical backup defining two major reasons for providing PCI without on-site surgery [40]. First, PCI without on-site surgery is considered reasonable if the intent is to provide high quality timely primary PCI for patients with STEMI. The statement recommended that each community and facility in the community have an agreed-upon plan for how STEMI patients are to be treated. The plan should indicate hospitals that should receive STEMI patients from EMS units capable of obtaining diagnostic electrocardiograms, the management at the initial receiving hospital and written criteria and agreements for the expeditious transfer of patients from nonPCI-capable to PCI-capable facilities. Second, PCI without on-site surgery is a reasonable consideration for providing local care to patients and families who do not want to travel significant distances or who have certain preferred local physicians. This is an important consideration, but the policy statement emphasized that evolving evidence suggests that such centers should have mechanisms in place to ensure high quality care. In addition to emphasizing the current guideline classifications for PCI without on-site surgery, the AHA policy statement provided recommendations for states wishing to address the issue of PCI without on-site surgery through the regulation of legislation.

#### **Mission Lifeline**

The Mission Lifeline program developed in 2006 from a series of conferences sponsored by the AHA and has continued to mature [41–43]. The goal of Mission Lifeline is to improve the quality of care and outcomes for patients with STEMI and to improve healthcare system readiness and response to STEMI. An important focus of Mission Lifeline is to increase the number of patients with timely access to primary PCI. Criteria for the structure and operation of a STEMI referral and STEMI-receiving hospitals are part of the Mission Lifeline initiative and apply to facilities without on-site surgery.

#### **Door-to-Balloon Alliance**

The Door-to-Balloon [D2B™] effort began in January 2006 when the ACC recognized the need to reduce D2B times for patients with STEMI. This led to the development of a national initiative to achieve D2B times  $\leq 90$  min for at least 75% of nontransfer primary PCI patients with STEMI in participating hospitals performing primary PCI. This alliance consists of a nationwide network of hospitals, physician champions and strategic partners committed to improving D2B times. Participation in the Alliance provides the necessary tools; information and support for helping hospitals achieve the D2B treatment goals and encourages the use of real-time performance feedback on D2B times to drive the quality improvement effort [44]. The D2B program has been highly successful, having achieved its initial goals [45].

#### **Access to Primary PCI in the United States**

Data from the American Hospital Association and the 2000 US Census were used to estimate the proportion of the adult population ( $\geq 18$  years of age) who lived within 60 min of a PCI hospital [46]. An estimated 79.0% lived within a 1 hour drive of a PCI hospital, with a median driving time of 11.3 min. Even among those living closer to non-PCI hospitals, 74% would experience <30 min of additional delay with a direct referral to a PCI hospital. Approximately 5 years later, Concannon et al., using similar data sources and methodology, showed that despite a 44% relative increase in the number of facilities capable of performing PCI, the number of adults within a 1 hour drive of a PCI facility increased to only 79.9%, with the median driving time reduced by <1 min to 10.5 min [47]. Access in rural areas remained far less than in urban areas, with driving times reduced for only 9% of the population compared with the earlier survey. These findings mirrored a smaller experience in Michigan



where expansion of primary PCI to 12 hospitals without on-site surgery increased access for only 4.8% of the population [48]. Finally, Horwitz et al. showed that hospitals are more likely to introduce new invasive cardiac services when neighboring hospitals already offer such services and confirmed that the increase in the number of hospitals offering invasive cardiac services has not led to a corresponding increase in geographic access [49]. In total, these data support the argument that the addition of more PCI centers has not substantially improved access to PCI services for most patients.

### Financial Considerations for Facilities Providing PCI Without On-site Surgery

Medicare payments to hospitals for invasive cardiac procedures have generally remained favorable, although physician reimbursement has decreased. Per-case revenue margins for PCI are typically higher than the overall hospital operating margins, and PCI improves the hospital case mix index. PCI programs bring prestige to an institution, and STEMI is one of the most prestigious diseases for treatment [50,51]. The push to develop rapid STEMI care has led many to currently advocate for EMS bypassing non-PCI hospitals; there is even consideration being given to triaging patients based on D2B metrics. Exclusion from providing STEMI care might be a lesser financial concern than the loss of downstream revenue from additional testing in patients suspected of having an acute coronary syndrome. This includes not only testing performed to exclude CAD as the cause of chest pain but also testing to evaluate noncardiac causes of chest pain. This can be an additional financial motivator for developing PCI facilities [52]. How the further bundling of payments and reimbursements on a global or capitated basis by accountable care organizations (ACO) will affect PCI programs is unclear at this time, but given the concerns about the cost of healthcare, increases in payments are unlikely [53,54]. However, even in an ACO environment, hospitals might benefit from keeping cardiovascular procedures in-house where they have the ability to control costs rather than transferring patients to tertiary hospitals.

### The Volume-Outcome Relationship for PCI and the Certificate of Need

There are 26 states with Certificate of Need (CON) regulations for the development of cardiac catheterization laboratories, but the effect of such regulations is uncertain. Ho et al. found that the removal of state cardiac CON regulations was associated with an increase in the number of hospitals performing CABG and PCI,

but the statewide number of procedures was unchanged. The average procedure volume per hospital for both CABG and PCI therefore declined [55]. Despite this, they found no evidence that CON regulations lowered procedural mortality rates for CABG or PCI. In other studies, CON regulation of cardiac catheterization was associated with care that was judged more appropriate, whereas the removal of CON regulation of cardiac surgery has been associated with an increase in low-volume cardiac surgical centers and increased mortality [56,57]. Concerns have been raised that the proliferation of small centers performing complex procedures that have a small but definite risk of important complications might dilute the ability to provide efficient high quality service [52,58]. Reduced mortality has been associated with an increased volume of primary PCI procedures in centers, higher volume operators, total volume of PCIs in centers, and the commitment of a center to provide PCI rather than fibrinolytic therapy [59–63]. Lieu et al. reported that redundant or low-volume primary PCI programs were cost ineffective [64]. Elective PCI at centers without on-site surgery was more expensive than PCI at centers with on-site surgery in one case-matched study [65]. In addition, the high fixed costs of a cardiac surgery program in the face of decreasing surgical volumes is leading to the consolidation of numerous smaller surgery programs, depriving some PCI programs of surgical backup.

The issue of a PCI volume-outcome relationship was extensively reviewed in the 2013 PCI Competency document for centers with and without on-site surgery and for primary and elective PCI [4]. The document concluded that in the current era, volume-outcome relationships are not as robust as in the past when balloon angioplasty was the only treatment modality. However, an institutional volume threshold of <200 PCIs annually appeared to be consistently associated with worse outcomes. Primary PCI volume  $\leq$  the guideline-recommended minimum of 36 annually was associated with worse in-hospital mortality in a recent series of over 86,000 patients in the NCDR [66]. The cutoff points of <200 total PCIs annually and  $\leq$ 36 primary PCIs annually has important implications because 26% of the PCI facilities submitting data to the NCDR performed  $\leq$ 200 total PCIs annually and 38% performed  $\leq$ 36 primary PCIs annually [8,66]. Recent data suggested a modest volume-outcome relationship for variables other than mortality, but these data have limitations and are not consistent across all studies [4]. Although there was an association between annual PCI volumes <200 and worse outcomes, there was no association between higher annual hospital volumes and improved outcomes at higher volume PCI centers. There was less evidence to support a threshold for individual operator volume for both elective and primary PCI.

**TABLE III. Facility Requirements for PCI Programs Without On-Site Surgery**

General Recommendations	Source
Requisite support equipment must be available and in good working order to respond to emergency situations.	PCI-GL PCI-CS ML
Should demonstrate appropriate planning for program development and should complete both a primary PCI development program and an elective PCI development program. Program developments to include routine care process and case selection review.	AHA D2B
Full support from hospital administration in fulfilling the necessary institutional requirements, including appropriate support services such as intensive care, advanced imaging (CT, MR and other vascular imaging), respiratory care, blood bank and nephrology consultation with access to dialysis.	PCI-GL, PCI-CS ECD
The institution should have systems for credentialing and governing the PCI program. On-site data collection, quality assessment, quality improvement and error management are essential. Each institution must establish an ongoing mechanism for valid and continuous peer review of its quality and outcomes. A quality improvement program should routinely 1) review quality and outcomes of the entire program; 2) review results of individual operators; 3) include risk adjustment; 4) provide peer review of difficult or complicated cases; and 5) perform random case reviews. The review process should assess the appropriateness of the interventional procedures. Evaluation should include the clinical indications for the procedure, technical performance and the quality and interpretation of the coronary angiograms.	PCI-CS, AHA, PCI-GL ECD
Written agreements for emergency transfer of patients to a facility with cardiac surgery must exist. Transport protocols should be tested a minimum of 2 times per year involving both the referring and receiving facility. Develop agreements with a ground or air ambulance service capable of advanced life support and IABP transfer that guarantees a transport vehicle will be on-site to begin transport in $\leq 30$ min and arrival at the surgical hospital within 60 min of the decision to declare the need for emergency surgery. Tertiary facility must agree to accept emergent and nonemergent transfers for additional medical care, cardiac surgery or intervention. <i>Tertiary centers should be able to establish cardiopulmonary bypass on emergency transfer patients within &lt;120 min of an urgent referral.</i>	PCI-GL, AHA PCI-CS ECD New
Well-equipped and maintained cardiac catheterization laboratory with high-resolution digital imaging capability. The capability for real-time transfer of images and hemodynamic data [via T-1 transmission line] as well as audio and video images to review terminals for consultation at the facility providing surgical backup support is highly recommended.	PCI-GL PCI-CS ML
Appropriate inventory of interventional equipment, including guide catheters, balloons and stents in multiple sizes; thrombectomy and distal protection devices; covered stents; temporary pacemakers; and pericardiocentesis trays. <i>Access to other diagnostic modalities such as intravascular ultrasound and fractional flow reserve is required.</i> Rotational or other atherectomy devices and the treatment of CTOs should not be performed in facilities without on-site surgery.	PCI-GL, PCI-CS New
Meticulous clinical and angiographic selection criteria for PCI (Table V).	PCI-GL, AHA
Participation in a national data registry, such as the ACC NCDR in the United States is required. This allows benchmarking, risk adjustment and facilitates outcomes analysis of local data.	PCI-GL ECD AHA
A program should be in place to track and ensure treatments with ACC/AHA guideline-based Class I therapies, both acutely and at discharge.	PCI-CS, ML
Full service laboratories [both primary and elective PCI, with and without on-site cardiac surgery] performing <200 cases annually must have stringent systems and process protocols with close monitoring of clinical outcomes and additional strategies that promote adequate operator and catheterization laboratory staff experience through collaborative relationships with larger volume facilities. Both physicians and staff should have the opportunity to work at a high volume center to enhance their skills. The continued operation of laboratories performing <200 procedures annually that are not serving isolated or underserved populations should be questioned and any laboratory that cannot maintain satisfactory outcomes should be closed.	PCI-CS
<i>Geographic isolation exists if the emergency transport time to another facility for a STEMI patient is &gt;30 min.</i>	New
Satisfactory outcomes should be defined by each local facility as part of their quality review process and should be based on national or regional benchmarks. Programs that fail to meet their established criteria for satisfactory performance for 2 consecutive quarters must undertake efforts to improve engaging outside experts if necessary. Failure to improve quality metrics should also be grounds for program closure regardless of the location.	ML PCI-CS D2B
As part of the local continuous quality improvement program, there should be a regular review of all patients transferred for emergency surgery with the outcome of surgery and identification of improvement opportunities.	PCI-GL

TABLE III. Continued

General Recommendations	Source
<b>STEMI Treatment Recommendations</b>	
Each community should develop a STEMI system of care that follows standards at least as strong as those developed for Mission Lifeline, including:	2009 PCI-GL
<ul style="list-style-type: none"> <li>• Performance of primary PCI as the first-choice treatment for STEMI to ensure streamlined care paths and increased case volumes.</li> <li>• A process for prehospital identification and activation.</li> <li>• Protocols for triage, diagnosis and cardiac catheterization laboratory activation should be established within the primary PCI hospital/STEMI-Receiving Center.</li> <li>• A single activation phone call should alert the STEMI team. Criteria for EMS activation of the cardiac catheterization laboratory should be established in conjunction with EMS providers.</li> <li>• Transfer protocols for patients who arrive at STEMI referral centers who are in cardiogenic shock and/or are primary PCI candidates ineligible for fibrinolytic drugs.</li> </ul>	2011 PCI-GL  ML D2B
STEMI receiving centers should be available and on-call 24 hours/7 days a week (no diversion) to perform primary PCI. Primary PCI should not be performed at facilities unless it is provided on a 24/7 schedule. <sup>a</sup> The cardiac catheterization laboratory staff and interventional cardiologist should arrive within 30 min of a STEMI activation call. Facilities should have a plan for triage and treatment of simultaneous presentation of STEMI patients.	PCI-GL, AHA ML
STEMI receiving centers should perform a minimum of 36 primary PCI procedures annually, and these procedures should ideally be performed at facilities that perform a minimum of 200 total PCI procedures annually.	PCI-GL PCI-CS ML
Facilities performing only primary PCI should perform a minimum of 36 primary PCIs annually and work in collaboration with a high volume PCI facility to ensure good outcomes	PCI-GL PCI-CS
There should be a recognized STEMI-Receiving Center liaison/system coordinator to the system and a recognized physician champion.	ML
The STEMI-Receiving Centers should participate in the Mission Lifeline-approved data collection tool, ACTION Registry-Get with the Guidelines™.	ML D2B
They should also participate in the regional Mission Lifeline Stakeholder group (if available) to contribute to the development of a regional STEMI System of Care Plan	ML
Monthly multidisciplinary team meetings to evaluate outcomes and quality improvement data. Operational issues should be reviewed, problems identified, and solutions implemented. The following measurements should be evaluated on an ongoing basis:	ML
<ul style="list-style-type: none"> <li>a. Door-to-first device time, nontransfer patients</li> <li>b. STEMI Referral Hospital ED door-to-balloon [first device used] time</li> <li>c. First medical contact to balloon inflation [first device used] time, nontransfer patients</li> <li>d. First medical contact to balloon inflation [first device used] time, transfer patients</li> <li>e. Proportion of eligible patients receiving reperfusion therapy</li> <li>f. Proportion of eligible patients administered guideline-based class I therapies</li> <li>g. Proportion of patients with field diagnosis of STEMI and activation of the Cardiac Catheterization Laboratory for intended primary PCI who                             <ul style="list-style-type: none"> <li>i. do not undergo acute catheterization because of misdiagnosis</li> <li>ii. undergo acute catheterization and found to have no elevation in cardiac biomarkers and no revascularization in the first 24 h</li> </ul> </li> <li>h. In-hospital mortality</li> </ul>	

<sup>a</sup>Required for U.S. facilities but might not be possible for all facilities worldwide.

ACC, American College of Cardiology; AHA, American Heart Association policy statement; CT, computed tomography; CTO, chronic total occlusion; D2B, Door-to-Balloon Alliance; ECD, 2012 Expert Consensus Document on Cardiac Catheterization Standards; EMS, emergency medical systems; GL, Guidelines; IABP, intra-aortic balloon pump; IVUS, intravascular ultrasound; ML, Mission Lifeline; MR, magnetic resonance; New, New recommendation in this document; NCDR, National Cardiovascular Data Registry; PCI-CS, 2013 PCI Competency Statement; PCI-GL, 2011 ACCF/AHA/SCAI PCI guidelines; PCI, percutaneous coronary intervention; SCAI, Society for Cardiovascular Angiography and Interventions; and STEMI, ST-segment elevation myocardial infarction.

*Italics font:* New or modified recommendation in the document.

**Recommendations**

We have provided recommendations for PCI without on-site surgery that are a composite of recommendations from the 2007 SCAI Expert Consensus Statement, the 2011 PCI guidelines, the 2012 Expert Consensus Document on Cardiac Catheterization Laboratory Standards, the 2013 PCI Competency statement and

recommendations from the policy statement of the American Heart Association and requirements for the Mission Lifeline program and D2B Alliance [1–4,40,43,44]. Redundant recommendations from these documents were consolidated, and the writing committee included several new recommendations consistent with evolving practice standards.

**TABLE IV. Personnel Requirements for PCI Programs Without On-Site Surgery**

Personnel Recommendations	Source
Experienced nursing and technical laboratory staff with training in interventional laboratories. Personnel must be comfortable treating acutely ill patients with hemodynamic and electrical instability.	PCI-GL PCI-CS
Coronary care unit nursing staff must be experienced and comfortable with invasive hemodynamic monitoring, operation of temporary pacemaker, management of IABP, <i>management of in-dwelling arterial/venous sheaths and identifying potential complications such as abrupt closure, recurrent ischemia and access site complications.</i>	PCI-GL PCI-CS <i>New</i>
Personnel should be capable of endotracheal intubation and ventilator management both on-site and during transfer if necessary.	PCI-GL
Operators should have ABIM board certification in interventional cardiology and maintain certification, with the exception of operators who have gone through equivalent training outside the United States and are ineligible for ABIM certification and recertification exams.	PCI-CS,
Interventional cardiologists should perform a minimum of 50 coronary interventional procedures per year [averaged over a 2-year period] to maintain competency.	PCI-CS
Primary PCI should be performed by experienced operators who perform a minimum of 50 elective PCI procedures per year and, ideally, at least 11 primary PCI procedures per year. Ideally, these procedures should be performed in institutions that perform more than 200 elective PCIs per year and more than 36 primary PCI procedures for STEMI per year.	PCI-CS ML
Facilities should develop internal review processes to assess operators performing <50 PCIs annually. Individual operator level volume is one of several factors that should be considered in assessing operator competence, which include lifetime experience, institutional volume, individual operator's other cardiovascular interventions and quality assessment of the operator's ongoing performance.	PCI-CS
<i>It is unwise for a newly trained interventional cardiologist to start a new PCI program. Newly trained interventional cardiologists joining an established PCI program should be mentored by existing physicians until it is determined their skills, judgment and outcomes are acceptable.</i>	<i>New</i>

ABIM, American Board of Internal Medicine; ML, Mission Lifeline; PCI-CS, 2013 PCI Competency Statement; PCI-GL, 2011 ACCF/AHA/SCAI PCI guidelines; IABP, intra-aortic balloon pump; New, new recommendation in this document; PCI, percutaneous coronary intervention; STEMI, ST-segment elevation myocardial infarction.

*Italics font:* New or modified recommendation in the document.

### Facility Requirements for PCI Programs Without On-Site Surgery

Facility requirements are similar to those presented in past documents but now include a greater emphasis on the presence of quality review programs for facilities and operators, as described in the 2013 PCI competency document (4) (Table III). Diagnostic modalities such as IVUS and especially fractional flow reserve previously considered desirable for facilities without on-site surgery have now increased in importance and are necessary for all PCI centers.

The 2013 PCI Competency Document identified a signal suggesting that an institutional volume threshold of <200 PCIs/year was associated with worse outcomes. Therefore, the 2013 Competency Document recommended that the continued operation of laboratories performing <200 procedures annually that are not serving isolated or underserved populations be questioned and that any laboratory that cannot maintain satisfactory outcomes should be closed. Past documents have not specified any criteria for geographic isolation. The writing committee suggests it be defined not by distance but by the time required for emergency transport of a STEMI patient to another facility. Hospitals justify the creation of new PCI centers without on-site surgery by stating that they improve access for geographically under-served

populations and allow patients to be cared for in close geographic proximity to their own families and physicians. However, multiple low-volume and partial-service PCI centers within a geographic area diffuse PCI expertise, increase costs for the overall health system and have not been shown to improve access [46–49]. If the transfer time is  $\leq 30$  min, it is reasonable to assume that transfer to the nearest PCI center will provide reperfusion as rapidly as if it were available at the first hospital. For transport times longer than 30 min, performing PCI on-site is likely to be quicker than a transfer. The development of PCI facilities within a 30-min emergency transfer time to an established facility is therefore strongly discouraged.

What constitutes a reasonable transport time for a patient requiring emergency surgery has not been consistently addressed in prior documents. Both CPORT-E and MASS-COMM studies provide guidance contained in their on-line supplementary materials [9,11]. Both require a transport vehicle to be available to begin transport within 30 min and arrival at the surgical hospital within 60 min of the decision to declare the need for emergency surgery. MASS-COMM further recommends that surgical intervention begin within 120 min. Given the existing data on the distribution of PCI facilities in the US, the performance of elective PCI at facilities that cannot meet these transfer times is discouraged [46,47].



**TABLE V. Recommendations for Off-Site Surgical Backup and Case Selection**

Recommendations—Cardiologist—Cardiac Surgeon Interactions	Source
Interventional cardiologists must establish a working relationship with cardiac surgeons at the receiving facility.	PCI-GL ECD
Cardiac surgeons should have privileges at the referring facility to allow review of treatment options as time allows.	PCI-GL ECD
Ideally, face-to-face meetings between cardiothoracic surgeons and cardiologists involved should occur on a regular basis ( <i>Heart Team approach</i> ) especially for the discussion of management of patients undergoing nonprimary PCI who have left main, three-vessel CAD or two-vessel CAD with involvement of the LAD or comorbidities such as diabetes, depressed LV function or complex anatomy.	PCI-GL ECD New
Cardiac surgeon and receiving hospital agree to provide cardiac surgical backup for urgent cases at all hours and for elective cases at mutually agreed hours.	PCI-GL ECD
Surgeon and receiving facility ensure that patients will be accepted based on medical condition, capacity of surgeon to provide services at the time of request and availability of resources. If this cannot be ensured before the start of an elective procedure, the case should not be done at that time.	PCI-GL ECD
Interventional cardiologists must review with surgeons the immediate needs and status of any patient transferred for urgent surgery.	PCI-GL ECD
Interventional cardiologist should be familiar with and have immediate access to appropriate life support devices, such as intraaortic balloon pumps, and should be qualified for handling emergencies such as pericardial tamponade and embolization.	PCI-GL ECD
Hospital administrations from both facilities endorse the transfer agreement.	PCI-GL ECD
Transferring physicians obtain consent for surgery from patients or appropriate surrogates.	PCI-GL ECD
Initial informed consent for PCI discloses that the procedure is being performed without on-site surgical backup and acknowledges the possibility of risks related to transfer. The consent process should include the risk of urgent surgery and state that a written plan for transfer exists. <i>Consent for PCI should be obtained before the procedure and before any sedatives are given. Consent for PCI obtained while the patient is on the table is not informed consent and is unacceptable in non-emergency situations.</i>	PCI-GL ECD New
<b>Recommendations - Case Selection and Management</b>	
Avoid intervention in patients with:	PCI-GL ECD New
<ul style="list-style-type: none"> <li>• &gt;50% diameter stenosis of left main artery proximal to infarct-related lesion, especially if the area in jeopardy is relatively small and overall LV function is not severely impaired.</li> <li>• Long, calcified, or severely angulated target lesions at high risk for PCI failure with TIMI flow grade 3 present during initial diagnostic angiography.</li> <li>• Lesions in areas other than the infarct artery (unless they appeared to be flow limiting in patients with hemodynamic instability or ongoing symptoms).</li> <li>• Lesions with TIMI flow grade 3 in patients with left main or three-vessel disease where bypass surgery is likely a superior revascularization strategy compared with PCI.</li> <li>• Culprit lesions in more distal branches that jeopardize only a modest amount of myocardium when there is more proximal disease that could be worsened by attempted intervention.</li> <li>• <i>Chronic total occlusion.</i></li> </ul>	
<i>The management of patients with STEMI resuscitated from sudden cardiac death is complex, and decisions about the need for immediate PCI with or without therapeutic hypothermia or possible transfer to a tertiary facility for treatment should be individualized.</i>	
Emergency transfer for coronary bypass surgery patients with	PCI-GL ECD
<ul style="list-style-type: none"> <li>• High-grade left main or three-vessel coronary disease with clinical or hemodynamic instability after successful or unsuccessful PCI of an occluded vessel and preferably with IABP support.</li> <li>• Failed or unstable PCI result and ongoing ischemia, with IABP support during transfer.</li> </ul>	

CTO, chronic total occlusion; ECD, 2012 Expert Consensus Document on Cardiac Catheterization Standards; PCI-GL, 2011 ACCF/AHA/SCAI PCI Guidelines; IABP, intraaortic balloon pump; LV, left ventricle; New, new recommendation in this document; PCI, percutaneous coronary intervention; TIMI, thrombolysis in myocardial infarction.

*Italics font:* New or modified recommendation in the document.

The 2013 PCI competency document also states that any laboratory that cannot maintain satisfactory outcomes should be closed; however, there is currently no national definition for “satisfactory outcomes”. The writing committee recommends that these be defined by

each PCI center, including those with on-site surgery, as part of their quality review process, using national benchmark data. Programs failing to meet established criteria for satisfactory performance for two consecutive quarters must undertake efforts to improve their

**TABLE VI. Patient and Lesion Characteristics That Could be Unsuitable for Nonemergency Procedures at Facilities Without On-Site Cardiac Surgery**

High-risk patients	Source
<ul style="list-style-type: none"> <li>• Decompensated congestive heart failure [Killip Class <math>\geq 3</math>] without evidence for active ischemia.</li> <li>• Recent [<math>&lt; 8</math> weeks] cerebrovascular accident.</li> <li>• Advanced malignancy.</li> <li>• Known clotting disorders.</li> <li>• LVEF <math>\leq 30\%</math>.</li> <li>• Chronic kidney disease [creatinine <math>&gt; 2.0</math> mg/dl or creatinine clearance <math>&lt; 60</math> mL/min].</li> <li>• Serious ongoing ventricular arrhythmias.</li> <li>• Patients with left main stenosis [<math>&gt; 50\%</math> diameter] or three-vessel disease unprotected by prior bypass surgery [<math>&gt; 70\%</math> stenoses in the proximal or mid segments of all major epicardial coronary arteries], treatment of any or all stenoses. Scoring systems, such as SYNTAX, may be useful in defining the extent of disease and type of revascularization procedure.</li> <li>• Patients with a single-target lesion that jeopardizes an extensive amount of myocardium.</li> <li>• Patients undergoing intervention on the last remaining conduit to the heart.</li> </ul>	PCI-GL AHA ECD
<b>High-risk lesions</b> <ul style="list-style-type: none"> <li>• Unprotected left main stenosis.</li> <li>• Diffuse disease [<math>&gt; 20</math> mm in length].</li> <li>• Extremely angulated segment [<math>&gt; 90\%</math>] or excessive proximal or in-lesion tortuosity.</li> <li>• More than moderate calcification of a stenosis or proximal segment</li> <li>• Inability to protect major side branches.</li> <li>• Degenerated older vein grafts with friable lesions.</li> <li>• Substantial thrombus in the vessel or at the lesion site.</li> <li>• Any other feature that could, in the operator's judgment, impede successful stent deployment.</li> <li>• Anticipated need for rotational or other atherectomy device, cutting balloon or laser.</li> </ul>	PCI-GL ECD <i>New</i>
<p><i>The characteristics listed above identify high-risk patient and lesion features but are not absolute contraindications to performing PCI at a facility without on-site surgery. For example, an elevated creatinine levels increases the procedure risk for the patient, but this is not unique to facilities without on-site surgery and treatments to mitigate this complication can be used at all facilities. Ultimately, the operator should consider all factors and make a decision about the suitability of the patient for PCI at the facility.</i></p>	<i>New</i>
<p>Strategy for surgical backup based on lesion and patient risk</p> <ul style="list-style-type: none"> <li>• High-risk patients with high-risk lesions should not undergo nonemergency PCI at a facility without on-site surgery.</li> <li>• High-risk patients with nonhigh-risk lesions: Nonemergency patients with this profile may undergo PCI, but confirmation that a cardiac surgeon and operating room are immediately available is necessary.</li> <li>• Non-high-risk patients with high-risk lesions require no additional precautions.</li> <li>• Non-high-risk patients with nonhigh-risk lesions require no additional precautions. Best scenario for PCI without on-site surgery.</li> </ul>	PCI-GL

CTO, chronic total occlusion; ECD, 2012 Expert Consensus Document on Cardiac Catheterization Standards; PCI-GL, 2011 ACCF/AHA/SCAI PCI Guidelines; LVEF, left ventricular ejection fraction; New, new recommendation; PCI, percutaneous coronary intervention; SYNTAX, Synergy Between Percutaneous Coronary Intervention with TAXUS and Cardiac Surgery.

*Italics font:* New or modified recommendation in the document.

performance, engaging outside experts if necessary. Failure to improve quality metrics should lead to program closure regardless of the location. To ensure proper assessment and monitoring, laboratories are required to submit data to a national data registry, have regular meetings to discuss key performance metrics and develop plans for the correction of any deficiencies. Especially with facility PCI volumes decreasing, it becomes increasingly difficult to determine whether there are significant differences in the data reports from year to year. For example, to detect (with statistical certainty) a doubling of in-hospital mortality from 1% to 2% at a hospital with an annual case volume of 200 PCIs, nearly 4 years of continuous data collection would be required. This does not negate the importance of data submission to a national registry that can help identify

trends, but it emphasizes why these same data must be carefully evaluated and adjudicated at the local facility. The importance of unbiased local or external peer review cannot be overemphasized [67,68]. Implementation of the SCAI Quality Toolkit and certification by Accreditation for Cardiovascular Excellence [ACE] are recommended as resources for improving quality [69,70].

### Personnel Requirements for PCI Programs Without On-Site Surgery

Recognizing the potential for isolation and the advantage of clinical experience, the 2007 SCAI Expert Consensus Document included a recommendation that operators at PCI programs without on-site

surgery perform at least 100 total and 18 primary PCIs annually, a recommendation that might not be achievable in the current environment. The 2013 PCI Competency Document moves away from strict volume requirements to focus more on achieving quality metrics for facilities and individual operators. As noted earlier, the 2013 Competency document recommended that operators perform a minimum of 50 PCIs annually (averaged over 2 years), including no less than 11 primary PCIs annually. Ideally, these procedures should be performed in institutions performing >200 total and >36 primary PCI procedures annually (Table IV). Again acknowledging the importance of experience, the 2007 SCAI Expert Consensus Document suggested that initial operators at a new program without on-site surgery should have a lifetime experience of >500 PCIs as primary operator after completing a fellowship. In the current environment of decreasing PCI volumes and in view of the recommendations of the 2013 PCI competence document, this number would be difficult to achieve. Nevertheless, it is unwise for a newly trained interventional cardiologist to start a new PCI program. Newly trained interventional cardiologists joining an established PCI program should be mentored by more experienced physicians until it is determined that the skills, judgment and outcomes of these new cardiologists are acceptable.

### Requirements for Off-Site Surgical Backup

Recommendations for the interactions between cardiologists and cardiac surgeons are listed in Table V. A limitation of programs performing PCI without on-site surgery is the lack of on-site access to a cardiac surgeon for consultation about revascularization options. This makes the concept of a Heart Team consultation more difficult to achieve and could necessitate performing only diagnostic catheterization until a case review with a cardiac surgeon can be performed. The application of telemedicine consultations with a heart surgeon could facilitate these interactions. In reality, many of the nonemergency patients who merit discussion by a Heart Team are not optimal candidates for PCI at facilities without on-site cardiac surgery. It is important to emphasize that the role of the cardiac surgeon is not confined to the treatment of PCI complications but includes the participation in decisions about revascularization options. Recommendations for case selection at facilities without on-site surgery are shown in Table V, and criteria for identifying high-risk lesions and patients are contained in Table VI. There are statistical models for identifying PCI patients at higher risk for mortality or emergency CABG that could be helpful for identifying patients who should not undergo

PCI at facilities without on-site surgery [18,71]. However, these models have not been tested or applied on a large scale to determine the advisability of performing a PCI at facilities without on-site surgery.

### The Delivery of PCI Services in the Future

As a result of the additional randomized studies on PCI without on-site surgery and the recent change in guideline recommendations, the performance of PCI without on-site surgery in the US has gained greater acceptance, and questions about its safety in the presence of a proven, well defined, and protocol driven approach have diminished. PCI programs should be evaluated based on their ability to: (a) sustain adequate quality metrics, (b) provide access to elective and emergency PCI procedures that would otherwise be unavailable in their service area, and (c) maintain the operator and institutional volumes recommended in the 2013 PCI Competency Document. For the future, the focus must now shift to developing a rational plan for the distribution of PCI services. Small PCI programs with large fixed costs are inefficient and unnecessary if they do not improve access in areas of need. However, it is unlikely that issues of system-wide efficiency will be addressed without central planning on the state or federal level. This writing group reaffirms the statement from the 2011 ACCF/AHA/SCAI PCI Guidelines that “desires for personal or institutional financial gain, prestige, market share, or other similar motives are not appropriate considerations for initiation of PCI programs without on-site cardiac surgery” and suggests that new programs offering PCI without on-site surgery are inappropriate unless they clearly serve geographically isolated populations. The writing group recognizes the need for ongoing study and surveillance of all PCI programs through participation in national databases encourages public reporting of their results and acknowledges that further declines in PCI volumes might necessitate the closure of PCI programs in the future.

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**APPENDIX 1. SCAI/ACCF/AHA Expert Consensus Document Update on Percutaneous Coronary Intervention without On-Site Surgical Backup—Author Relationships with Industry and Other Entities (Relevant)**

Committee Member	Employment	Consultant	Speaker's Bureau	Ownership/ Partnership/Principal	Personal Research	Institutional, Organizational or Other Financial Benefit	Expert Witness
James C. Blankenship	Geisinger Medical Center—Director, Cardiac Catheterization Laboratory	None	None	None	<ul style="list-style-type: none"> <li>• Abiomed*</li> <li>• Astra-Zeneca*</li> <li>• Boston Scientific*</li> <li>• Kai Pharmaceutical*</li> <li>• Novartis</li> <li>• Schering Plough</li> <li>• The Medicines Company*</li> <li>• Volcano</li> </ul>	<ul style="list-style-type: none"> <li>• SCAI—Vice President*</li> </ul>	None
Mehmet Cilingiroglu	Arkansas Heart Hospital	None	None	None	None	None	None
Greg J. Dehmer (Chair)	Texas A&M College of Medicine, Scott & White Clinic Cardiology Division—Professor of Medicine; Director of Cardiology	None	None	None	None	None	None
James G. Dwyer	Heart and Vascular Center of Northern Arizona	None	None	None	None	None	None
Dmitriy N. Feldman	New York Presbyterian Hospital/Cornell	<ul style="list-style-type: none"> <li>• Gilead</li> <li>• Maquet</li> </ul>	<ul style="list-style-type: none"> <li>• Abbott Vascular</li> <li>• Bristol-Myers Squibb*</li> <li>• Daiichi-Sankyo</li> <li>• Eli Lilly</li> <li>• Pfizer</li> <li>• The Medicines Company*</li> </ul>	None	None	None	None
Timothy J. Gardner	Christiana Care Health System—Medical Director	None	None	None	None	None	None
Cindy L. Grines	Harper University Hospital—Vice President	<ul style="list-style-type: none"> <li>• Abbott Vascular</li> <li>• Bristol-Myers Squibb</li> <li>• Lilly USA</li> <li>• Merck</li> <li>• The Medicines Company</li> <li>• Volcano*</li> </ul>	None	None	None	<ul style="list-style-type: none"> <li>• Journal of Interventional Cardiology†</li> </ul>	None
Mandeep Singh	Mayo Clinic	None	None	None	None	None	None

This table represents all healthcare relationships of committee members with industry and other entities that were reported by authors at the time this document was under development. The table does not necessarily reflect relationships with industry at the time of publication. A person is deemed to have a significant interest in a business if the interest represents ownership of  $\geq 5\%$  of the voting stock or share of the business entity, or ownership of  $\geq \$10,000$  of the fair market value of the business entity; or if funds received by the person from the business entity exceed 5% of the person's gross income for the previous year. Relationships that exist with no financial benefit are also included for the purpose of transparency. Relationships in this table are modest unless otherwise noted. Please refer to <http://www.cardiosource.org/Science-And-Quality/Practice-Guidelines-and-Quality-Standards/Relationships-With-Industry-Policy.aspx> for definitions of disclosure categories or additional information about the ACCF Disclosure Policy for Writing Committees.

\*No financial benefit.

†Significant relationship.

ACC indicates American College of Cardiology; AMA, American Medical Association; FDA, Food and Drug Administration; NHLBI, National Heart Lung and Blood Institute; SCAI, Society for Cardiovascular Angiography and Intervention.

## Senate Bill No. 906

### CHAPTER 368

An act to add Section 1256.01 to the Health and Safety Code, relating to health facilities.

[Approved by Governor September 16, 2014. Filed with  
Secretary of State September 16, 2014.]

#### LEGISLATIVE COUNSEL'S DIGEST

SB 906, Correa. Elective Percutaneous Coronary Intervention (PCI) Program.

Existing law establishes, until January 1, 2015, the Elective Percutaneous Coronary Intervention Pilot Program in the State Department of Public Health, which authorizes up to 6 eligible acute care hospitals that are licensed to provide cardiac catheterization laboratory service in California, and that meet prescribed, additional criteria, to perform scheduled, elective primary percutaneous coronary intervention (PCI), as defined, for eligible patients. Existing law establishes an advisory oversight committee to oversee, monitor, and make recommendations to the department concerning the pilot program. Existing law also imposes various reporting requirements on the advisory oversight committee and the department, including recommendations as to whether the pilot program should be continued or terminated and whether elective PCI without onsite cardiac surgery should be continued in California.

This bill would create the Elective Percutaneous Coronary Intervention Program in the State Department of Public Health to certify an unlimited number of general acute care hospitals that are licensed to provide urgent and emergent cardiac catheterization laboratory service in California, and that meet prescribed, additional criteria, to perform scheduled, elective PCI. The bill would authorize a hospital that was participating in the Elective PCI Pilot Program as of December 31, 2014, to continue to perform elective PCI, but would require the hospital to obtain a certification under the bill's provisions by January 1, 2016. The bill would require the Office of Statewide Health Planning and Development to annually develop and make available to the public a report regarding each certified hospital's performance on mortality, stroke rate, and emergency coronary artery bypass graft rate and would authorize the department to form an advisory oversight committee for the purpose of analyzing those reports and recommending changes to the data to be included in the reports. The bill would also authorize the department to charge each certified hospital a supplemental licensing fee not to exceed the reasonable cost to the department of overseeing the program.

*The people of the State of California do enact as follows:*

SECTION 1. Section 1256.01 is added to the Health and Safety Code, to read:

1256.01. (a) The Elective Percutaneous Coronary Intervention (PCI) Program is hereby established in the department. The purpose of the program is to allow the department to certify general acute care hospitals that are licensed to provide urgent and emergent cardiac catheterization laboratory service in California, and that meet the requirements of this section, to perform scheduled, elective percutaneous transluminal coronary angioplasty and stent placement for eligible patients.

(b) For purposes of this section, the following terms have the following meanings:

(1) "Certified hospital" means an eligible hospital that is certified by the department to participate in the Elective Percutaneous Coronary Intervention (PCI) Program established by this section.

(2) "Elective Percutaneous Coronary Intervention (elective PCI)" means scheduled percutaneous transluminal coronary angioplasty and stent placement. Elective PCI does not include urgent or emergent PCI that is scheduled on an ad hoc basis.

(3) "Eligible hospital" means a general acute care hospital that has an approved cardiac catheterization laboratory, does not have onsite cardiac surgery, and is in substantial compliance with all applicable state and federal licensing laws and regulations.

(4) "Interventionalist" means a licensed cardiologist who meets the requirements for performing elective PCI.

(c) To participate in the Elective PCI Program, an eligible hospital shall obtain certification from the department and shall meet all of the following requirements:

(1) Demonstrate that it complies with the recommendations of the Society for Cardiovascular Angiography and Interventions (SCAI), the American College of Cardiology Foundation, and the American Heart Association, for performance of PCI without onsite cardiac surgery, as those recommendations may evolve over time.

(2) Provide evidence showing the full support from hospital administration in fulfilling the necessary institutional requirements, including, but not limited to, appropriate support services such as respiratory care and blood banking.

(3) Participate in, and provide timely submission of data to, the American College of Cardiology-National Cardiovascular Data Registry.

(4) Confer rights to transfer the data submitted pursuant to paragraph (3) to the Office of Statewide Health Planning and Development.

(5) Any additional requirements the department deems necessary to protect patient safety or ensure quality of care.

(d) An eligible hospital shall submit an application to the department pursuant to Section 1265 to obtain certification to participate in the Elective PCI Program. The application shall include sufficient information to

demonstrate compliance with the standards set forth in this section, and shall also include the effective date for initiating elective PCI service, the general service area, a description of the population to be served, a description of the services to be provided, a description of backup emergency services, the availability of comprehensive care, and the qualifications of the eligible hospital. The department may require that additional information be submitted with the application. Failure to submit any required criteria or additional information shall disqualify the applicant from the application process and from consideration for participation in the program. The department may deny an Elective PCI Program applicant pursuant to Article 2 (commencing with Section 1265).

(e) An eligible hospital that, as of December 31, 2014, was participating in the Elective Percutaneous Coronary Intervention Pilot Program established under Chapter 295 of the Statutes of 2008, as amended by Chapter 202 of the Statutes of 2013, may continue to perform elective PCI and shall be considered a certified hospital until January 1, 2016. On and after January 1, 2016, a hospital described in this subdivision shall not be considered a certified hospital unless the hospital has obtained a certification under this section.

(f) The Office of Statewide Health Planning and Development shall, using the data transferred pursuant to paragraph (4) of subdivision (c), annually develop and make available to the public a report regarding each certified hospital's performance on mortality, stroke rate, and emergency coronary artery bypass graft rate.

(g) The department may establish an advisory oversight committee composed of two interventionalists from certified hospitals, two interventionalists from general acute care hospitals that are not certified hospitals, and a representative of the department, for the purpose of analyzing the report issued under subdivision (f) and making recommendations for changing the data to be included in future reports issued under subdivision (f).

(h) If at any time a certified hospital fails to meet the criteria set forth in this section for being a certified hospital or fails to safeguard patient safety, as determined by the department, the department may suspend or revoke, pursuant to Section 70309 of Title 22 of the California Code of Regulations, the certification issued to that hospital under this section. A hospital whose certification is revoked pursuant to this subdivision may request an appeal with the department and is not precluded from reapplying for certification under this section.

(i) The department may charge certified hospitals a supplemental licensing fee, the amount of which shall not exceed the reasonable cost to the department of overseeing the program.

(j) The department may contract with a professional entity with medical program knowledge to meet the requirements of this section.

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KAREN L. SMITH, MD, MPH  
Director & State Health Officer

State of California—Health and Human Services Agency  
California Department of Public Health



EDMUND G. BROWN JR.  
Governor

May 8, 2015

AFL 15-10

**TO:** General Acute Care Hospitals

**SUBJECT:** Senate Bill (SB) 906: Elective Percutaneous Coronary Intervention (PCI) Program

**AUTHORITY:** Health and Safety Code section 1256.01

**All Facilities Letter (AFL) Summary**

- This AFL announces the implementation of the Elective Percutaneous Coronary Intervention (PCI) Program, which permits the California Department of Public Health (CDPH) to certify eligible general acute care hospitals (GACHs) that meet specified requirements to perform elective PCI and provides information about the application process.
- CDPH will host a seminar on the application process for interested providers on May 29, 2015.

Effective January 1, 2015, SB 906 (Chapter 368, Statutes of 2014) permits an eligible hospital to apply to participate in the Elective PCI Program. GACHs that do not have on-site cardiac surgery but have an approved cardiac catheterization laboratory and are in substantial compliance with all applicable state and federal licensing laws and regulations are eligible to apply.

Any GACH seeking to participate in the elective PCI Program must submit a signed application (attached) to CDPH's Centralized Applications Unit. The application must have sufficient information to demonstrate the ability to comply with all applicable standards and must include the effective initiation date for PCI services, the general service area, a description of population to be served, a description of services to be provided, a description of backup services, availability of comprehensive care, and qualifications of the eligible hospital. Failure to submit any required criteria or additionally requested information will disqualify the applicant.

The signed hard copy application (without attachments) must be submitted to:

Centralized Applications Unit  
California Department of Public Health  
Licensing & Certification Program  
1615 Capitol Avenue, MS #3401,  
P.O. Box 997377  
Sacramento, CA 95899-7377

Hospitals must submit all application materials with attachments in electronic format to [PCI@cdph.ca.gov](mailto:PCI@cdph.ca.gov).

Upon approval of the application and certification to participate in the program, a participating hospital must meet all of the following requirements:

- Demonstrate compliance with the recommendations of the Society for Cardiovascular Angiography and Interventions (SCAI), the American College of Cardiology Foundation (ACCF), and the American Heart Association (AHA) for performance of PCI without on-site cardiac surgery;
- Provide evidence showing full support from hospital administration in fulfilling the necessary institutional requirements;
- Participate in, and provide timely submission of data to the American College of Cardiology – National Cardiovascular Data Registry (ACC-NCDR);
- Confer rights to transfer the data submitted to ACC-NCDR to the Office of Statewide Health Planning and Development (OSHPD); and
- Satisfy any additional requirements the department deems necessary to protect patient safety or ensure quality of care.

An eligible GACH that was participating in the Elective PCI Pilot Program as of December 31, 2014 may continue to perform elective PCI as a certified hospital until January 1, 2016. After that date, pilot hospitals must obtain certification through the prescribed application process to continue to provide elective PCI.

CDPH will assess participating hospitals a supplemental licensing fee that will not exceed the reasonable cost of overseeing the program. CDPH will retroactively bill the fee, which will be based on the total cost to administer the program and will be divided by the total number of hospitals that are approved to participate in the program.

The most recent SCAI/ACCF/AHA recommendations for performance of PCI without on-site cardiac surgery can be accessed at the following link:

<http://www.scai.org/Assets/a7f93272-db5a-4a14-889f-427594356efd/635306605385530000/2014-03-17-pci-sos-pdf.pdf>



AFL 15-10  
May 8, 2015  
Page 3

The department will host a seminar on the application and approval process Friday, May 29, 2015, from 1:00 pm to 5:00 pm, in the auditorium located at 1500 Capitol Ave, Sacramento, CA 95814.

The information in this AFL is a brief summary of the changes that SB 906 makes to the Health and Safety Code. Facilities are responsible for following all applicable laws. CDPH's failure to expressly notify facilities of statutory or regulatory requirements does not relieve facilities of their responsibility for following all laws and regulations. Facilities should refer to the full text of all applicable sections of the Health and Safety Code.

If you have any questions about this AFL or the Elective PCI Program, please contact the Chief Medical Consultant at [PCI@cdph.ca.gov](mailto:PCI@cdph.ca.gov).

Sincerely,

**Original signed by Jean Iacino**

Jean Iacino  
Deputy Director

[Attachment](#)



June 27, 2018

**TO:** CHA EMS/Trauma Committee Members

**FROM:** BJ Bartleson, MS, RN, NEA-BC, Vice President, Nursing & Clinical Services  
Bruce Barton, Director, Riverside EMS Agency

**SUBJECT:** APOT Update

### **SUMMARY**

Fifteen LEMSAs have reported at least one quarter's worth of APOT data and eight have reported a year's worth. EMSA staff is in the process of determining the best way to display this data and working on developing a repository. Hospitals and LEMSAs have reported inconsistencies in collecting and reporting data, questioning the validity and reliability of results.

SB 2961 (O'Donnell) is a bill presently in the legislature that would require a local EMS agency to submit quarterly data to the authority that, among other things, is sufficient for the authority to calculate the average ambulance patient offload time by local EMS agency jurisdiction and by each facility in a local EMS agency jurisdiction. The bill would require the authority to calculate those averages and report them twice per year to the Commission on Emergency Medical Services. The bill would also require the authority, on or before December 1, 2020, to submit a report to the Legislature on the average ambulance patient offload time and recommendations to reduce or eliminate ambulance patient offload time.

### **DISCUSSION QUESTIONS**

- 1) How are hospitals and pre-hospital providers doing with APOT and measuring it?
- 2) Does the committee need to reassemble a collaborative to discuss additional tools with data collection, EPCR, data interpretation and or results reporting?
- 3) How does the data collection presently work with the 15 reporting LEMSAs?

### **ACTION REQUESTED**

- Information Only

**Attachments:** AB 2961 (O'Donnell)  
AB 2961 Analysis  
CHA AB 2961 Opposition Letter

BJB:br

AMENDED IN ASSEMBLY MAY 25, 2018  
AMENDED IN ASSEMBLY MARCH 20, 2018  
CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

**ASSEMBLY BILL**

**No. 2961**

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**Introduced by Assembly Member O'Donnell  
(Coauthor: Assembly Member Rodriguez)**

February 16, 2018

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An act to add Sections 1797.123 and 1797.228 to the Health and Safety Code, relating to public health.

LEGISLATIVE COUNSEL'S DIGEST

AB 2961, as amended, O'Donnell. Emergency medical services.

Existing law creates the Commission on Emergency Medical Services, within the California Health and Human Services Agency, to, among other things, advise the Emergency Medical Services Authority on the development of an emergency medical data collection system. Existing law requires the Emergency Medical Services Authority to develop a statewide standard methodology for the calculation and reporting of ambulance patient offload time, as defined, by a local emergency medical services (EMS) agency. Existing law authorizes *a county to develop an emergency medical services program, and authorizes a local EMS agency to adopt policies and procedures to calculate and report ambulance patient offload time.*

This bill would require a local EMS agency to submit quarterly data to the authority that, among other things, is sufficient for the authority to calculate the average ambulance patient offload time by local EMS agency jurisdiction and by each facility in a local EMS agency jurisdiction. The bill would require the authority to calculate those

averages and report them twice per year to the Commission on Emergency Medical Services. The bill would also require the authority, on or before December 1, 2020, to submit a report to the Legislature on the average ambulance patient offload time and recommendations to reduce or eliminate ambulance patient offload time.

~~The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.~~

~~This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.~~

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: *yes-no*.

*The people of the State of California do enact as follows:*

- 1 SECTION 1. The Legislature finds and declares the following:
- 2 (a) In 2015, the Legislature directed the Emergency Medical
- 3 Services Authority (EMSA) to develop a methodology to measure
- 4 and report ambulance patient offload time.
- 5 (b) Ambulance patient offload time is the interval between the
- 6 arrival via ambulance of a patient at an emergency department and
- 7 the time the patient is transferred to an emergency department
- 8 gurney, bed, chair, or other acceptable location and the emergency
- 9 department assumes responsibility for the care of the patient.
- 10 (c) Patients who are experiencing an emergency and are
- 11 transported to the hospital must get rapid, efficient transfer and
- 12 attention at an emergency care facility. Ensuring immediate transfer
- 13 of patient care at emergency rooms will not only benefit the patient
- 14 under direct care, but also ensure that emergency medical services
- 15 (EMS) professionals can reenter the field to help others in need.
- 16 (d) Significant delays in ambulance patient offload time
- 17 unacceptably prevent a patient from receiving appropriate and
- 18 immediate care, and pose a public safety risk by having fewer
- 19 qualified EMS personnel available to respond to other emergencies.
- 20 (e) Chapter 379 of the Statutes of 2015 required the EMSA to
- 21 create a common definition of ambulance patient offload time and
- 22 charged the EMSA with establishing a standard way of measuring
- 23 the problem across the state, while allowing for the collection of

1 data needed to measure ambulance patient offload time and address  
2 issues.

3 (f) While the EMSA has established the methodology, reporting  
4 by local EMS agencies has been intermittent. Some local EMS  
5 agencies reported ambulance patient offload time quarterly during  
6 2017, some local EMS agencies reported incomplete data, and  
7 more than a dozen local EMS agencies have not reported any data.

8 (g) Chapter 377 of the Statutes of 2015 directs EMS providers  
9 to utilize an electronic patient care record system to track patient  
10 care records and to submit that data to local EMS agencies. An  
11 electronic system allows for better data collection, better data  
12 sharing between agencies, and better coordination between the  
13 EMS system and emergency departments.

14 (h) Electronic patient care records include data tracking for each  
15 emergency response call that includes transferring a patient to an  
16 emergency department. Currently, that data is not shared with  
17 EMSA.

18 (i) It is imperative that local EMS agencies report this data to  
19 EMSA to inform EMSA and EMS system stakeholders in  
20 considering or adopting reasonable policy solutions to reduce or  
21 eliminate ambulance patient offload time.

22 SEC. 2. Section 1797.123 is added to the Health and Safety  
23 Code, immediately following Section 1797.122, to read:

24 1797.123. (a) Upon receipt of data reported by a local EMS  
25 agency to the authority pursuant to Section 1797.228, the authority  
26 shall calculate average ambulance patient offload time by local  
27 EMS agency jurisdiction and by each facility in a local EMS  
28 agency jurisdiction.

29 (b) The authority shall report twice per year to the Commission  
30 on Emergency Medical Services the average ambulance patient  
31 offload time by local EMS agency jurisdiction and by each facility  
32 in a local EMS agency jurisdiction.

33 (c) On or before December 1, 2020, the authority shall submit  
34 a report to the Legislature on the average ambulance patient offload  
35 time and recommendations to reduce or eliminate ambulance  
36 patient offload time. The report shall be submitted in compliance  
37 with Section 9795 of the Government Code.

38 SEC. 3. Section 1797.228 is added to the Health and Safety  
39 Code, immediately following Section 1797.227, to read:

1 1797.228. (a) On or before July 1, 2019, a local EMS agency  
 2 shall transmit ambulance patient offload time data to the authority,  
 3 consistent with the policies and procedures developed pursuant to  
 4 Section 1797.225 or by utilizing electronic health record system  
 5 data reported by emergency medical care providers pursuant to  
 6 Section 1797.227.

7 (b) If a local EMS agency elects to submit data from the  
 8 electronic patient care records under an electronic health record  
 9 system, reported pursuant to Section 1797.227, the data must be  
 10 sufficient for the authority to calculate average ambulance patient  
 11 offload time, as defined in subdivision (b) of Section 1797.120,  
 12 by local EMS agency jurisdiction and by each facility in a local  
 13 EMS agency jurisdiction.

14 (c) Before submitting data to the authority, the local EMS  
 15 agency shall ensure that personally identifying patient data is not  
 16 included in the submission.

17 (d) A local EMS agency shall submit quarterly data to the  
 18 authority no later than 15 days after the end of the quarter.

19 ~~SEC. 4. If the Commission on State Mandates determines that~~  
 20 ~~this act contains costs mandated by the state, reimbursement to~~  
 21 ~~local agencies and school districts for those costs shall be made~~  
 22 ~~pursuant to Part 7 (commencing with Section 17500) of Division~~  
 23 ~~4 of Title 2 of the Government Code.~~

O

ASSEMBLY THIRD READING  
 AB 2961 (O'Donnell)  
 As Amended May 25, 2018  
 Majority vote

Committee	Votes	Ayes	Noes
<b>Health</b>	14-0	Wood, Mayes, Aguiar-Curry, Bigelow, Bonta, Carrillo, Flora, Limón, McCarty, Nazarian, Rodriguez, Santiago, Thurmond, Waldron	
<b>Appropriations</b>	12-0	Gonzalez Fletcher, Bloom, Bonta, Calderon, Carrillo, Chau, Eggman, Friedman, Eduardo Garcia, Nazarian, Quirk, Reyes	

**SUMMARY:** Requires, on or before July 1, 2019, local emergency medical service agencies (LEMSAs) to transmit patient offload time data to the Emergency Medical Services Authority (EMSA), and requires EMSA, upon receipt of the data, to calculate average ambulance patient offload time (APOT) by LEMSA jurisdiction and by each facility in a LEMSA jurisdiction. Specifically, **this bill**:

- 1) Requires, if a LEMSA elects to submit data from the electronic patient care records under an electronic health record system, that the data must be sufficient for EMSA to calculate average APOT, as defined.
- 2) Requires a LEMSA, before submitting data to EMSA, to ensure that personally identifying patient data is not included in the submission.
- 3) Requires a LEMSA to submit quarterly data to the EMSA no later than 15 days after the end of the quarter.
- 4) Requires EMSA to report twice a year to the Commission on Emergency Medical Services, the average APOT by LEMSA jurisdiction and by each facility in a LEMSA.
- 5) Requires EMSA, on or before December 1, 2020, to submit a report to the Legislature on the average APOT and recommendations to reduce or eliminate APOT.
- 6) Makes findings and declarations regarding the need for LEMSAs to report APOT data to EMSA to inform EMSA and emergency medical services (EMS) stakeholders in considering or adopting reasonable policy solutions to reduce or eliminate APOT.

**FISCAL EFFECT:** According to the Assembly Appropriations Committee, costs in the range of \$150,000 General Fund to EMSA to collect, consolidate, analyze, and report data.

**COMMENTS:** According to the author, ensuring patients have access to quick, efficient and effective care during emergency situations is paramount. The author states that significant delay in APOT unacceptably prevents patients from receiving appropriate and immediate care, and

poses a public safety risk by having fewer qualified EMS personnel available to respond to other emergencies. In order to adopt reasonable policy solutions for addressing these unacceptable delays, we must first have all relevant data. The author notes that this bill works to obtain this information by requiring LEMSAs to provide APOT data to EMSA on a consistent basis so that EMSA and the Legislature can work to implement policy solutions that achieve efficient APOTs across the state. The author concludes that improving APOT will improve patient care for patients in the entire medical response system and increase the public's safety overall.

- 1) **APOT.** AB 1223 (O'Donnell), Chapter 379, Statutes of 2015, required EMSA to adopt a statewide standard methodology for the calculation and reporting by a LEMSA of APOT, and permits LEMSAs to adopt policies and procedures for calculating and reporting APOT using the statewide methodology. In collaboration with stakeholders, EMSA developed measures for APOT and adopted a statewide methodology for LEMSAs to calculate and report APOT. EMSA also developed guidance for the implementation and reporting of the measures to support LEMSAs with their efforts.

EMSA's guidance, "APOT Methodology Guidance 2016" proposed a recommended APOT of 20 minutes. Most LEMSAs chose a standard APOT of around 30 minutes. According to EMSA, it is not yet possible to provide statewide statistics for APOT delay due to the limited data. EMSA notes that the data received show that certain local jurisdictions and specific hospitals have long APOT delays and there are seasonal variances that correspond to health system impact of influenza and other respiratory viruses. EMSA states that delays in APOT are highly dependent on the specific hospital, and that the data also show that relatively small numbers of facilities with significant APOT delays can result in significant impacts to EMS systems.

As of December 2017, 14 of the 33 LEMSAs had provided at least one-quarter of APOT information that represented 231 hospitals. To date EMSA has received a least one quarter's data from 15 LEMSAs.

- 2) **Toolkit to address APOT delays.** In 2013, the California Hospital Association (CHA) and EMSA created the Ambulance Patient Offload Delay Collaborative to analyze and develop solutions for the APOT delays that were increasing pressure on both hospitals and ambulance providers. The goals of this collaborative were to: a) develop standardized language, definitions, metrics and reporting opportunities for ambulance patient throughput; b) identify ways to reduce delays and improve transfer times; and, c) assist local jurisdictions in developing processes and sustainable goals to reduce the incidence of APOT delays. In a national study involving 200 cities, including some in California, the national average wait time for handing off ambulance patients has doubled from 20 minutes in 2006 to more than 45 minutes. Through survey research, the collaborative learned that the offload delay problem in California is not uniform or consistently reported. Of the 124 hospitals that responded to the survey, 74 (or 60%) said that APOT delays were "neutral" or "not significant," which was consistent with what 19 out of 33 LEMSAs (58%) reported as well. In contrast, 45 hospitals and 13 LEMSAs reported that APOT delays were "extremely significant," "very significant," or "somewhat significant." Those 13 LEMSAs reporting a problem represent regions that include 70% of California's population.

As a result of this collaborative effort, in August of 2014 the Toolkit to Reduce Ambulance Patient Offload Delays in the Emergency Department (Toolkit) was published by CHA. The



Toolkit includes definitions, process guidelines and strategies to be considered to evaluate current practices and develop specific process improvements at the local level. The theme of the Toolkit was that local EMS systems and hospitals are unique, and that collaborative problem solving should be used to identify and solve problems locally. However, the Toolkit did identify three key factors for success, starting with improving the emergency department intake process, followed by continuous quality improvement measures, and hospital and LEMSA collaboration.

The California Professional Firefighters (CPF) is the sponsor of this bill and states that significant delays in APOT is a well-known issue in California. CPF notes these delays not only jeopardize the patient under direct care by preventing immediate attention, but also prevent critical EMS personnel from re-entering the field to respond to other emergencies. CPF notes that existing law authorizes, but does not require LEMSAs to adopt policies and procedures for reporting APOT to EMSA. CPF concludes that this bill will ensure that EMSA and the Legislature will have the information needed to implement policy changes that achieve efficient APOTs across the state, and that improving APOT will improve care for patients in the entire EMS system.

CHA opposes this bill noting that, for the past four years hospitals and health systems have worked with EMSA and LEMSAs to develop standard methodology and quality improvement collaboratives that identify issues and resolve processes within hospital or pre-hospital providers' control. CHA states that many best practices have been deployed, however, the work continues to expose the issues that neither hospitals nor pre-hospital providers have control over, such as increasing use of EDs for non-medical, non-emergent needs. CHA argues, because of this, longer than average APOT are inevitable and uncontrollable in certain situations. CHA states that not all LEMSAs or hospitals experience ambulance patient offload delays, however this bill would require providers to report on a problem that does not exist for all.

**Analysis Prepared by:** Lara Flynn / HEALTH / (916) 319-2097

FN: 0003353



**CALIFORNIA  
HOSPITAL  
ASSOCIATION**

*Providing Leadership in  
Health Policy and Advocacy*

June 20, 2018

The Honorable Richard Pan, MD  
Chair, Senate Health Committee  
State Capitol, Room 2080  
Sacramento, CA 95814

**SUBJECT: AB 2961 (O'Donnell) – OPPOSE**

Dear Senator Pan:

The California Hospital Association (CHA) — representing over 400 hospitals and health systems and 97 percent of patient beds in the state — must respectfully oppose AB 2961 (O'Donnell). The bill places undue requirements on local emergency medical services agencies (LEMSAs) and hospitals, and will not lead to accurate information on ambulance patient offload delays.

For the past four years, California's hospitals and health systems have tirelessly worked with the Emergency Medical Services Authority (EMSA) and LEMSAs to develop standard methodology and quality improvement collaboratives that identify issues and resolve processes within hospital or pre-hospital providers' control. Many best practices have been deployed, using lean process improvement approaches along with technology to enhance provider understanding. This work, however, continues to expose the issues that neither hospitals nor pre-hospital providers have control over, such as increasing use of emergency departments for non-medical, non-emergent needs. Hospital emergency departments and pre-hospital 9-1-1 providers have no control over the flow of hospital admissions under the state's current 9-1-1-system. Because of this, longer than average ambulance patient offload times are inevitable and uncontrollable in certain situations.

Not all LEMSAs or hospitals experience ambulance patient offload delays. However, this bill would require providers to report on a problem that does not exist. In addition, technology and performance improvement activities should be based on accurate data. Because reporting ambulance patient offload times and delays is still in its infancy, many processes have not been well established or shown to be statistically sound — particularly the transfer of information from the LEMSAs to EMSA. We believe this bill is unnecessary and places undue burden on both hospital and pre-hospital providers. CHA respectfully requests your "NO" vote on AB 2961.

Sincerely,

A handwritten signature in cursive script that reads "Connie Delgado".

Connie Delgado  
Chief Legislative Advocate

cc: The Honorable Patrick O'Donnell  
The Honorable Members of Senate Health Committee  
Vincent Marchand, Consultant, Senate Health Committee  
Joe Parra, Consultant, Senate Republican Caucus



June 27, 2018

**TO:** CHA EMS/Trauma Committee Members

**FROM:** BJ Bartleson, MS, RN, NEA-BC, VP Nursing & Clinical Services  
Neal Cline, RN, JD, CFRN, Sr. Flight Nurse, Enloe Hospital  
Jimmie Pierson, VP Operations, Medic Ambulance

**SUBJECT:** Community Paramedicine

**SUMMARY**

See Attached 6/20/2018 EMS Commission Report on Community Paramedicine. Also see CHA AB 1795 (Gipson) Support Letter, and CHA SB 944 (Hertzberg) Oppose letter.

**DISCUSSION QUESTIONS**

- 1) How are the projects at Enloe and Solano County proceeding?
- 2) Thoughts on how we might proceed next year with legislation?

**ACTION REQUESTED**

- Information Only

**Attachments:** 6/20/2018 EMS Commission Report on Community Paramedicine  
CHA AB 1795 Support letter  
CHA SB 944 Oppose Letter

BJB:br

**EMERGENCY MEDICAL SERVICES AUTHORITY**

10901 GOLD CENTER DR., SUITE 400  
RANCHO CORDOVA, CA 95670  
(916) 322-4336 FAX (916) 324-2875



**DATE:** June 20, 2018

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Priscilla Rivera, Manager  
Personnel Standards Unit

Lou Meyer  
Community Paramedicine Pilot Project Manager

**SUBJECT:** Community Paramedicine Update

**RECOMMENDED ACTION:**

Receive information regarding the Community Paramedicine Pilot.

**FISCAL IMPACT:**

The Community Paramedicine Project Manager and the Independent Evaluator are funded by the California HealthCare Foundation. Local pilot site providers participate with in-kind contributions and any local grants or reimbursement.

**DISCUSSION:**

Strong progress continues with the Community Paramedicine Projects. The data, as well as the independent evaluator's public report continues to show these projects have improved patient care as well as having reduced hospital re-admissions and visits to emergency departments.

**Independent Evaluation:**

The Health Workforce Pilot Project (HWPP) regulations require organizations that sponsor pilot projects to retain an independent evaluator to assess trainee performance, patient acceptance, and cost effectiveness. A team of evaluators at the Philip R. Lee Institute for Health Policy Studies and the Center for the Health Professions at the University of California, San Francisco continue to serve as the independent evaluators for the HWPP #173.

### Report to the Legislature

The "Report to the Legislature" has been submitted as required by SB 19 (Wolk).

### Pilot Site Update

The pilot site in Contra Costa County being led by the Alameda-Contra Costa Medical Association (ACCMA), has gone live with Sutter Delta and the Sutter Health System in Contra Costa County. ACCMA continues to work with their other hospital stakeholders to ensure their active participation within the POLST eRegistry.

Additionally, Vynca the technology vendor collaborated with Contra Costa County EMS, Contra Costa Fire and American Medical Response (AMR) and the POLST eRegistry has also gone live for use by EMS Field personnel on April 10, 2018.

The Contra Costa County EMS Agency's Workgroup has reported that they had a successful launch. The field personnel find the platform very intuitive to date. Systems are in place to capture real patient successes and challenges using EMS Events reporting. The main dilemma is sustaining field query activity given that queries typically do not yield results given the quantity of the POLST Forms currently available for query.

Successful strategies to sustain engagement of field personnel will be important to fully test the value of the system.

The pilot site in the City of San Diego is being led by San Diego Health Connect (SDHC). They are also continuing to work with their hospital stakeholders to ensure active participation within the POLST eRegistry.

Additionally, SDHC has collaborated with the San Diego County EMS Agency, City of San Diego Fire, and American Medical Response (AMR). The POLST eRegistry is live for use by EMS Field personnel within the SDHC HIE capture area.

Over 800 Fire and paramedics will attend refresher/update training in June that will include the new POLST eRegistry functionality, as well as a refresher about Search, Alert, File, and Reconcile and the Health Information Exchange.

Unlike Contra Costa County where the Paramedic needs to make a POLST Form query, the SDHC process currently in place will automatically advise the Paramedic if a POLST Form is on file as soon as the patients name is entered into their Field Tablet.

SDHC is continuing to manually upload POLST Forms to meet certain contractual milestone requirements, with the anticipation of having an electronic upload option in place in the near future.

Stella Technology, the technology vendor for the SDHC project, is collaborating appropriately with all parties at this time.

The UCSF's Healthforce Center issued an update Evaluation Report in February 2018, containing their findings for the first 28 months of the project, (see *link below*) which in summary states:

*"The evaluation found that community paramedics are collaborating successfully with physicians, nurses, behavioral health professionals, and social workers to fill gaps in the health and social services safety net. The evaluation has yielded consistent findings for six of the seven community paramedicine concepts tested. All of the post-discharge, frequent 911 users, tuberculosis, hospice, and alternate destination – mental health projects have been in operation for 21 or more months and have improved patients' well-being. In most cases, they have yielded savings for payers and other parts of the health care system. Preliminary findings regarding the sixth concept, alternate destination – sobering center, suggest that this project is also benefitting patients and the health care system."*

The following links contain the UCSF February 2018 Evaluation Report as well a Research Highlight Document:

<https://healthforce.ucsf.edu/publications/evaluation-california-s-community-paramedicine-pilot-program>

<https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/Community%20Paramedicine%20Research%20Highlight.pdf>

Patient Safety:

There were no patient safety issues reported to the EMSA Pilot Project Manager or discovered by the independent evaluator during this reporting period.

Additional Pilot Sites:

In accordance with the California Code of Regulations (22 CCR §92604), EMSA submitted and OSHPD approved Applications from the following healthcare agencies and/or EMS providers in collaboration with a local EMS Agency (LEMSA) to become additional Pilot Sites within the HWPP#173 Pilot Project to run thru November 13, 2018.

The following is a status update on the additional Pilot Projects

Local EMS Agency	Sponsor	Concepts	Status
Santa Clara County	Santa Clara County EMS Agency	Alt Destination Behavioral Health	CORE and Site-specific training has been completed, an IRB has been approved for this Pilot Project.

		Alt Destination Sobering Center	OSHPD implementation approval is pending.
Sierra Sacramento Valley	Dignity Health	Post Discharge	CORE and Site-specific training and an approved IRB are pending.
El Dorado County	Cal Tahoe JPA	Alt Destination Behavioral Health  Post Discharge	This project has withdrawn due to lack of JPA Board approval and funding.
Marin County EMS Agency		Frequent 911 User	CORE and Site-specific Training and an approved IRB are pending, awaiting the outcome of the Legislative process.
City & County of San Francisco	San Francisco Fire Department	Frequent 911 User Alt Destination – Behavioral Health Post Discharge	Site-specific Training and an approved updated IRB are pending.
Central California EMS Agency	Central California EMS Agency	Alt Destination - Behavioral	CORE and Site-specific Training has been completed. Currently awaiting an approved IRB

Community Paramedicine Legislation

There are currently two (2) pieces of Legislation making their way through the legislative process which would enable the ability for EMSA and the Local EMS Agencies to approve Community Paramedicine and/or Alternate Destination to Mental Health Facilities or Sobering Centers programs throughout the State of California.

**AB 1795 (Gipson)**

(Sponsored by California Hospital Association (CHA) & Los Angeles County)

Allows a local emergency medical services agency (LEMSA) to submit, as part of its emergency medical services (EMS) plan, a plan to transport specified patients who meet triage criteria to a behavioral health facility or a sobering center. This bill authorizes a city, county, or city and county to designate, and contract with, a sobering center to receive patients, and would establish sobering center standards. Specifies the

training requirements for paramedics to transport individuals to behavioral health facilities. Requires the Emergency Medical Services Authority (EMSA) to adopt guidelines for the triage criteria and assessment procedures by July 1, 2020 and requires EMSA to annually analyze administration of local plans and issue a report.

**SB 944 (Hertzberg)**

This Bill is sponsored by the California Professional Firefighters (CPF)

The Bill would enact the Community Paramedicine Act of 2018. This bill would create the statutory authority to transition community paramedicine (CP) from the Health Workforce Pilot Project #173 to a statewide program. The bill would authorize local EMS agencies to develop a community paramedicine program that is consistent with regulations that would be developed by the Emergency Medical Services Authority (EMSA), in consultation with the Community Paramedicine Medical Oversight Committee, which would be formed by this bill. Community paramedicine programs would provide services in one or more of the following five roles: (1) providing short-term post discharge follow up; (2) providing directly observed tuberculosis therapy; (3) providing case management services to frequent emergency medical services users; (4) providing hospice services in coordination with hospice nurses to treat patients in their homes; and, (5) providing patients with transport to an alternate destination, which can either be an authorized mental health facility or an authorized sobering center.



**EMERGENCY MEDICAL SERVICES AUTHORITY**

10901 GOLD CENTER DR., SUITE 400  
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 (916) 322-4336 FAX (916) 324-2875



**DATE:** June 20, 2018

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
 Director

**PREPARED BY:** Jennifer Lim, Deputy Director  
 Legislative, Regulatory, and External Affairs

**SUBJECT:** Regulations Update

**RECOMMENDED ACTION:**

For information only.

**FISCAL IMPACT:**

There is no fiscal impact.

**DISCUSSION:**

The following information is an update to the regulation rulemaking calendar approved by the Commission on EMS on December 6, 2017. In accordance with Health and Safety Code Section 1797.107, the Emergency Medical Services Authority (EMSA) is promulgating the following regulations:

	Chapter	Status
1.1	Training Standards for Child Care Providers	Under review by EMSA
4	Paramedic	Under review by the California Health and Human Services Agency
7.1	ST-Elevation Myocardial Infarction (STEMI) Systems of Care	Public comment closed May 21, 2018. Comments under review by EMSA
7.2	Stroke Systems of Care	Public comment closed May 21, 2018. Comments under review by EMSA
10	California Emergency Medical Technician Central Registry	Under review by EMSA
12	Emergency Medical Services System Quality Improvement	Under review by EMSA
14	Emergency Medical Services for Children	First public comment period completed. Comments under review by EMSA



**CALIFORNIA  
HOSPITAL  
ASSOCIATION**

*Providing Leadership in  
Health Policy and Advocacy*

June 19, 2018

The Honorable Richard Pan, M.D.  
Chair, Senate Health Committee  
State Capitol, Room 5114  
Sacramento, CA 95814

**SUBJECT: AB 2190 (Reyes) – Sponsor/Support, As Amended June 19, 2018**

Dear Senator Pan:

The California Hospital Association (CHA) — representing over 400 hospitals and health systems and 97 percent of patient beds in the state — is sponsoring AB 2190 (Reyes). AB 2190 would allow specified hospitals and medical centers to request an extension, of the hospital seismic mandate. These hospitals are demonstrating progress toward meeting this mandate, but need more time due to construction and financial delays.

Current law requires hospitals to ensure their buildings remain standing during and following a major earthquake. Many hospitals have multiple buildings on their campus, which are built to varying building codes and fall into different categories under the seismic mandate. As such, some hospitals are retrofitting buildings while others are rebuilding, replacing or removing the buildings from use for acute care services. The maximum extension allowed by AB 2190 would be January 1, 2025 for buildings that are being rebuilt to the higher standard. The completion deadline for retrofitting to replacing the buildings would be extended to July 1, 2022. Currently, if a hospital does not meet the seismic mandate, it would be required to close by January 1, 2020.

Over 90 percent of California hospitals have achieved seismic compliance. However, approximately two dozen hospitals remain classified as SPC-1 (potential collapse hazard). Some will achieve compliance by 2020, but others will need the extensions outlined in AB 2190 to allow them to remain open while they finish their construction projects. AB 2190 includes benchmarks and penalties to ensure these hospitals stay on track. If these benchmarks are not met, hospitals would be subject to fines of \$5,000 per day.

For these reasons, CHA asks you to vote “AYE” when the bill is heard in Assembly Health Committee. Should you have any questions about our position, please contact me at [chummel@calhospital.org](mailto:chummel@calhospital.org) or (916) 552-7681, or Kathryn Scott at (916) 812-7406.

Sincerely,

A handwritten signature in black ink that reads "Cheri Hummel".

Cheri Hummel  
Vice President, Emergency Management and Facilities

cc: The Honorable Eloise Gomez Reyes  
The Honorable Members of Senate Health Committee  
Vince Marchand, Consultant, Senate Health Committee  
Joe Parra Consultant, Senate Republican Caucus



June 13, 2018

The Honorable Jim Wood  
Chair, Assembly Health Committee  
State Capitol, Room 6005  
Sacramento, CA 95814

**SUBJECT: SB 944 (Hertzberg) – OPPOSE**

Dear Assemblymember Wood:

The California Hospital Association (CHA) — representing more than 400 hospitals and health systems and 97 percent of patient beds in the state — must respectfully oppose SB 944 (Hertzberg). CHA is a committed advocate of community paramedicine and its promising role in future patient care delivery. However, CHA believes that this bill seeks to take the first steps toward fundamentally restructuring California’s emergency medical services system. For this reason, we must oppose it.

Today, California’s emergency medical services system is administered by the Emergency Medical Services (EMS) Authority within the California Health and Human Services Agency. The EMS Authority provides statewide coordination and leadership for planning, developing and implementing local EMS systems throughout California, and sets standards for the training and scope of practice of various levels of EMS personnel. The EMS Authority also coordinates the state’s medical response to major disasters. Prior to 1980, California did not have a central state agency responsible for ensuring the development and coordination of EMS services and programs statewide. It was apparent that a professional, impartial, unified approach to emergency and disaster medical services was needed. Thus, as the result of several years of effort by EMS constituents to establish a state lead agency and centralized resource to oversee emergency and disaster medical services, the Emergency Medical Services System and Prehospital Emergency Care Personnel Act was enacted. This bill would undermine these accomplishments.

This bill conflicts with the current system by:

- Establishing a politically-appointed body called the “Community Paramedicine Medical Oversight Committee” to approve medical protocols, effectively giving it control over the statewide EMS Authority.
- Requiring each county that wishes to allow community paramedicine to add additional politically-appointed members to its local emergency medical care committee.
- Prohibiting local EMS agencies from considering quality of services and cost efficiency in selecting community paramedicine providers. Instead, local EMS agencies would be required to select a public agency to provide the services, regardless of its quality, efficiency or other factors. The only exception would be if the public agency did not want to provide the community paramedicine services.
- Creating unnecessary and wasteful bureaucracy, red tape and duplication of efforts.

The California emergency services system benefits from having a lead statewide authority coordinating and assisting decentralized local agencies that can successfully incorporate the unique local and regional issues to ensure that optimal patient care is provided. Local leaders should retain the authority to determine the composition of members on its local emergency medical care committee and the best providers of community paramedicine services in its geographic area. Local decision-making assures the best use of available resources and quality of service for the people being served.

Despite the bill's language stating that the Legislature intends to implement a community paramedicine program "in a fashion that is respectful of the current emergency medical system and its providers," CHA's members see just the opposite. A preponderance of provisions in the bill (e.g., Section 1841(c) - (e)) would prioritize public ambulance providers and negate the importance of the private ambulance provider industry. Presently, a combination of both public and private providers fulfill the massive emergency transportation safety net across the state. Private ambulance companies are responsible for 75 percent of ambulance transports in California and comprise 43 percent of community paramedicine pilot projects across the state. Prioritizing public agency providers over private providers may not serve the best interests of patients throughout the state.

For these reasons, CHA respectfully requests your "NO" vote on SB 944.

If you have further questions, please contact me at (916) 552-7655 or [cdelgado@calhospital.org](mailto:cdelgado@calhospital.org).

Sincerely,



Connie Delgado  
Chief Legislative Advocate

cc: The Honorable Robert Hertzberg  
The Honorable Members of the Assembly Health Committee  
Lara Flynn, Consultant, Assembly Health Committee  
Peter Anderson, Consultant, Assembly Republican Caucus

## Health Care Professionals Join CHA to Lobby on Behalf of Alternate Destination Bill



Assemblymember Mike Gipson (D-Carson) was joined by Los Angeles County Supervisor Janice Hahn, paramedics, doctors, sobering center providers and local health officials at CHA's AB 1795 Lobby Action Day press conference.

APRIL 5, 2018 [BJ BARTLESON, RN, MS, NEA-BC](#) [CONNIE DELGADO](#)

Yesterday, CHA and representatives from Los Angeles County — co-sponsors of [AB 1795](#) (Gipson, D-Carson) — led a group of more than 30 health care professionals in a full day of visits with legislators to support AB 1795. The bill would allow specially trained paramedics to transport patients with mental health and alcohol intoxication needs to sites other than emergency rooms, and give local emergency services agencies the authority to develop alternate destination programs — allowing for more direct access to appropriate care and increasing efficiency for local emergency response systems.

Professionals from sobering centers, county emergency medical services agencies and departments of behavioral health, and regional fire departments joined CHA member hospitals in the lobby action day. Participants met with all 15 members of the Assembly Health Committee and held a press conference, attended by the bill's author, Assemblymember Mike Gipson, Assemblymember Philip Ting (D- San Francisco), Assemblymember David Chiu (D-San Francisco) and Los Angeles County Supervisor Janice Hahn.

AB 1795 is scheduled to be heard in the Assembly Health Committee on April 17.



June 27, 2018

**TO:** CHA EMS/Trauma Committee Members

**FROM:** BJ Bartleson, RN, MS, and NEA-BC, Vice President, Nursing and Clinical Services  
Gabe Waters, VP Network Development, Collective Medical Technologies

**SUBJECT:** Collective Medical Technologies – EDIE Update

#### **SUMMARY**

The EDIE network continues to grow across the state. At the last committee meeting, Dr. Raven and Dr. Kanzaria discussed using EDIE and HIE Technology to advance their research endeavors. As more hospitals become involved with the technology, CHA is interested in understanding how this can maximize individual hospital emergency services quality and patient safety outcomes, along with other statewide endeavors.

#### **ACTION REQUESTED**

- Information for committee members

#### **DISCUSSION QUESTIONS**

1. How is the EDIE information used to make changes inside and outside the hospital system?
2. What insights are gleaned from using the EDIE?
3. Do nonhospital providers, such as payers, participate in using EDIE and monitoring ED admissions?
4. How else can we leverage technology and information to improve emergency services?

BJB:br

CA AB 263	<b>AUTHOR:</b> <b>TITLE:</b> <b>FISCAL COMMITTEE:</b> <b>URGENCY CLAUSE:</b> <b>INTRODUCED:</b> <b>LAST AMEND:</b> <b>DISPOSITION:</b> <b>LOCATION:</b> <b>SUMMARY:</b>	Rodriguez [D] Emergency Medical Services Workers: Working Conditions no no 01/31/2017 06/21/2017 Pending Senate Rules Committee
		Relates to the Emergency Medical Services System and the Prehospital Emergency Medical Care Personnel Act. Requires an employer that provides emergency medical services as part of an emergency medical services system or plan to authorize and permit its employees to take prescribed rest periods. Requires a specified report concerning violent incidents involving EMS providers. Specifies application of these provisions to employers that are air carriers. <b>STATUS:</b> 09/01/2017      From SENATE Committee on APPROPRIATIONS: Do pass to Committee on RULES. (5-2) <b>INDEX:</b> 35, 57 <b>ISSUES:</b> BJ, GBS* <b>LOBBYIST:</b> CD, KAS* <b>POSITION:</b> F, X
CA AB 451	<b>AUTHOR:</b> <b>TITLE:</b> <b>FISCAL COMMITTEE:</b> <b>URGENCY CLAUSE:</b> <b>INTRODUCED:</b> <b>LAST AMEND:</b> <b>DISPOSITION:</b> <b>LOCATION:</b> <b>SUMMARY:</b>	Arambula [D] Health Facilities: Emergency Services and Care yes no 02/13/2017 07/05/2017 Pending Senate Appropriations Committee
		Specifies that a psychiatric unit within a general acute care hospital, a psychiatric health facility, or an acute psychiatric hospital is required to provide emergency services to care to treat a person with a psychiatric emergency medical condition who has been accepted by the facility if the facility has appropriate facilities and qualified personnel. Makes conforming changes to related provisions. <b>STATUS:</b> 09/01/2017      In SENATE Committee on APPROPRIATIONS: Held in committee. <b>INDEX:</b> 35, 77 <b>ISSUES:</b> BJ, SL* <b>LOBBYIST:</b> AH*, CD <b>POSITION:</b> N/A, X
CA AB 735	<b>AUTHOR:</b> <b>TITLE:</b> <b>FISCAL COMMITTEE:</b> <b>URGENCY CLAUSE:</b> <b>INTRODUCED:</b> <b>LAST AMEND:</b>	Maienschein [R] Swimming Pools: Public Safety yes no 02/15/2017 05/26/2017



**DISPOSITION:** Pending  
**LOCATION:** Senate Appropriations Committee  
**SUMMARY:**

Requires public swimming pools that are required to provide lifeguard services and that charge a direct fee to provide an Automated External Defibrillator during pool operations. Requires the State Department of Education, in consultation with the State Department of Public Health, to issue best practices guidelines related to pool safety at K-12 schools.

**STATUS:**

09/01/2017 In SENATE Committee on APPROPRIATIONS: Held in committee.

**INDEX:** 35  
**ISSUES:** BJ  
**LOBBYIST:** CD  
**POSITION:** F

CA AB 1116

**AUTHOR:** Grayson [D]  
**TITLE:** Peer Support and Crisis Referral Services Pilot Program  
**FISCAL COMMITTEE:** yes  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/17/2017  
**LAST AMEND:** 05/15/2018  
**DISPOSITION:** Pending  
**FILE:** 51  
**LOCATION:** Senate Third Reading File  
**SUMMARY:**

Creates the Peer Support and Crisis Referral Services Pilot Program. Defines peer support team as a team composed of the emergency services personnel and other fields who have been appointed to the team by a Peer Support Labor-Management Committee, as defined, and who have completed a peer support training course developed and delivered by the California Firefighter Joint Apprenticeship Committee or the Commission on Correctional Peace Officer Standards and Training.

**STATUS:**

05/16/2018 In SENATE. Read second time. To third reading.

**INDEX:** 31, 35  
**ISSUES:** BJ, CLH, LR\*  
**LOBBYIST:** CD, KAS\*  
**POSITION:** F

CA AB 1795

**AUTHOR:** Gipson [D]  
**TITLE:** Emergency Medical Services: Behavioral Health Facility  
**FISCAL COMMITTEE:** yes  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 01/09/2018  
**LAST AMEND:** 04/19/2018  
**DISPOSITION:** Pending  
**LOCATION:** Assembly Appropriations Committee  
**SUMMARY:**

Authorizes a local emergency medical services agency to submit, as part of its emergency medical services plan, a plan to transport specified patients who meet triage criteria to a behavioral health facility or a sobering center. Authorizes a city or county to designate, and contract with, a sobering center to

receive patients and establishes sobering center standards.

**STATUS:**

05/25/2018 In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.

**INDEX:** 35  
**ISSUES:** BJ\*, DP  
**LOBBYIST:** CD  
**POSITION:** S, X

CA AB 2118

**AUTHOR:** Cooley [D]  
**TITLE:** MediCal: Emergency Medical Transportation Services  
**FISCAL COMMITTEE:** no  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/08/2018  
**LAST AMEND:** 06/18/2018  
**DISPOSITION:** Pending  
**LOCATION:** Senate Appropriations Committee  
**SUMMARY:**

Amends existing law relating to the MediCal Emergency Medical Transportation Reimbursement Act. Makes technical, nonsubstantive changes to the provisions, as specified.

**STATUS:**

06/18/2018 In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

**INDEX:** 35, 65  
**ISSUES:** AO\*, BJ, DP, RY  
**LOBBYIST:** BG\*, CD  
**POSITION:** F

CA AB 2262

**AUTHOR:** Wood [D]  
**TITLE:** Coast Life Support District Act: Urgent Medical Care  
**FISCAL COMMITTEE:** no  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/13/2018  
**LAST AMEND:** 04/16/2018  
**DISPOSITION:** Pending  
**COMMITTEE:** Senate Health Committee  
**HEARING:** 06/27/2018 1:30 pm  
**SUMMARY:**

Updates Coast Life Support District Act's reference to the Cortese-knox Local Government Reorganization Act of 1985 to instead reference the Cortese-knox-hertzberg Local Government Reorganization Act of 2000, and would, if the board of directors of the Coast Life Support District desires to exercise the power to provide urgent medical care services, require the board to first receive the approval of the local agency formation commission.

**STATUS:**

06/13/2018 From SENATE Committee on GOVERNANCE AND FINANCE: Do pass to Committee on HEALTH. (7-0)

**INDEX:** 33, 35  
**ISSUES:** BJ\*, DP, PW  
**LOBBYIST:** BG, CD\*  
**POSITION:** S, X

CA AB 2280

**AUTHOR:** Chen [R]  
**TITLE:** Emergency Medical Services: Patient Offload Time  
**FISCAL COMMITTEE:** no  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/13/2018  
**LAST AMEND:** 03/15/2018  
**DISPOSITION:** Pending  
**LOCATION:** Assembly Health Committee  
**SUMMARY:**

Amends existing law relating to nonstandard patient offload time. Requires the Emergency Medical Services Authority to annually report on the information received by the local EMS agencies regarding nonstandard patient offload times. Requires the report to include any local EMS associated costs attributed to the nonstandard patient offload times.

**STATUS:**

03/15/2018 To ASSEMBLY Committee on HEALTH.  
03/15/2018 From ASSEMBLY Committee on HEALTH with author's amendments.

03/15/2018 In ASSEMBLY. Read second time and amended.  
Re-referred to Committee on HEALTH.

**INDEX:** 35, 65  
**ISSUES:** AK, BJ\*, DP  
**LOBBYIST:** BG, CD\*  
**POSITION:** O, X

CA AB 2961

**AUTHOR:** O'Donnell [D]  
**TITLE:** Emergency Medical Services  
**FISCAL COMMITTEE:** no  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/16/2018  
**LAST AMEND:** 05/25/2018  
**DISPOSITION:** Pending  
**COMMITTEE:** Senate Health Committee  
**HEARING:** 06/27/2018 1:30 pm  
**SUMMARY:**

Requires a local Emergency Medical Services agency to submit quarterly data to the Emergency Medical Services Authority that is sufficient for the Authority to calculate the average ambulance patient offload time by local EMS agency jurisdiction and by each facility in a local EMS agency jurisdiction. Requires the Authority to calculate those averages and report them twice per year to the Commission on Emergency Medical Services.

**STATUS:**

06/13/2018 To SENATE Committee on HEALTH.

**INDEX:** 35  
**ISSUES:** BJ  
**LOBBYIST:** CD  
**POSITION:** O, X

CA SB 398

**AUTHOR:** Monning [D]  
**TITLE:** Acquired Brain Trauma  
**FISCAL COMMITTEE:** yes  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/15/2017

**LAST AMEND:** 03/23/2018  
**DISPOSITION:** Pending  
**LOCATION:** Assembly Appropriations Committee  
**SUMMARY:**

Relates to a program of services for persons with acquired traumatic brain injury. Makes that program operative until a specified date. Requires the Department of Rehabilitation to pursue all sources of funding and by authorizing the department to require that service providers meet specified program and operational certification standards in order to receive ongoing funding.

**STATUS:**

06/12/2018 From ASSEMBLY Committee on HUMAN SERVICES: Do pass to Committee on APPROPRIATIONS. (7-0)

**INDEX:** 35, 65  
**ISSUES:** AK\*, AO, DBR  
**LOBBYIST:** BG\*, CD  
**POSITION:** F

CA SB 792

**AUTHOR:** Wilk [R]  
**TITLE:** Homeless Coordinating and Financing Council  
**FISCAL COMMITTEE:** yes  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/17/2017  
**LAST AMEND:** 05/25/2018  
**DISPOSITION:** Pending  
**COMMITTEE:** Assembly Housing and Community Development Committee  
**HEARING:** 06/27/2018 9:00 am  
**SUMMARY:**

Requires the Homeless Coordinating and Financing Council to develop and implement a statewide strategic plan for addressing homelessness in the state. Requires the Council to implement 2 strategic plans to assist federal Housing and Urban Development Continuum of Care lead agencies in either or both better implementing Housing and Urban Development recommended activities and meeting Housing and Urban Development requirements.

**STATUS:**

06/14/2018 Re-referred to ASSEMBLY Committee on HOUSING AND COMMUNITY DEVELOPMENT.

**INDEX:** 109, 35  
**ISSUES:** AM\*, BJ  
**LOBBYIST:** BG\*, KAS  
**POSITION:** F

CA SB 944

**AUTHOR:** Hertzberg [D]  
**TITLE:** Community Paramedicine Act  
**FISCAL COMMITTEE:** no  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 01/29/2018  
**LAST AMEND:** 05/25/2018  
**DISPOSITION:** Pending  
**COMMITTEE:** Assembly Health Committee  
**HEARING:** 06/26/2018 1:30 pm  
**SUMMARY:**

Amends the Emergency Medical Services System and the Prehospital Emergency Medical Care Personnel Act. Establishes the Community

Paramedicine Act. Authorizes local EMS agencies to develop a community paramedicine program and provide specified community paramedic services. Requires local EMS agencies to integrate the proposed program into the local emergency medical services plan, enter into certain agreements, and provide specified training. Establishes an Oversight Committee.

**STATUS:**

06/07/2018 To ASSEMBLY Committee on HEALTH.  
**INDEX:** 35  
**ISSUES:** BJ\*, DP  
**LOBBYIST:** CD  
**POSITION:** O, X



CA SB 1372

**AUTHOR:** Pan [D]  
**TITLE:** Sugar-Sweetened Beverages: Study  
**FISCAL COMMITTEE:** no  
**URGENCY CLAUSE:** no  
**INTRODUCED:** 02/16/2018  
**LAST AMEND:** 03/22/2018  
**DISPOSITION:** Pending  
**LOCATION:** Senate Rules Committee  
**SUMMARY:**

Requires the California Department of Tax and Fee Administration to conduct a study and to submit a report to the Legislature, and to appropriate policy and fiscal committees, on how sugar-sweetened beverage taxes affect residents where those taxes are locally imposed within the state.

**STATUS:**

03/22/2018 From SENATE Committee on RULES with author's amendments.  
03/22/2018 In SENATE. Read second time and amended. Re-referred to Committee on RULES.  
**INDEX:** 35, 65  
**ISSUES:** AK\*, AO, BJ  
**LOBBYIST:** BG\*, CD  
**POSITION:** F



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# Modern Healthcare

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## ER spending rises with increasing prices, severity of visits

By [Shelby Livingston](#)



Even though emergency department use has stayed the same, ED spending per member nearly doubled from 2009 to 2016 as the severity of ED visits and the prices associated with those visits increased, new data from the Health Care Cost Institute shows.

The not-for-profit HCCI analyzed employer-sponsored insurance claims for the five procedure codes used to bill for ED visit facility fees over the seven-year period. Emergency department facility fees are coded on a scale of 1 to 5, with Level 1 codes reflecting low-acuity conditions, and Level 4 and 5 codes representing the most serious conditions, such as blunt trauma or severe infections.

Over the study period, the HCCI said average prices for each of the five codes increased, with the prices for codes used to designate the highest-severity visits rising faster than the lowest-severity codes. At the same time, the use of the two highest-severity codes increased.

Those two trends helped drive ED visit spending per person to an average \$247 in 2016, up 98% over \$125 in 2009, while overall ED use stayed the same. The average price of the facility fee claim was \$894 in 2016, an increase of 98% over \$452 in 2009. HCCI defines spending per person as total expenditures divided by the employer-sponsored insurance population studied. Spending is determined by prices and utilization.

Per-person spending associated with the highest-severity ED code rose even faster, more than doubling to \$77 from \$31 in 2009. Spending rose faster because the price and use of the code grew quickly over the study period. The price of that code jumped to \$1,108, a 77% increase over \$627 in 2009. The use of the code grew 38% during the period.

On the opposite end of the spectrum, the frequency of the lowest-acuity ED visits plummeted, keeping spending on those types of visits to a minimum. The use of the lowest-acuity procedure code fell 41% between 2009 and 2016, while the price of that code grew 47% to \$215 per claim. Overall spending on the lowest-acuity visits fell 5% over the seven-year period.

The HCCI also noted that ED spending increased in every state, even though ED use grew in only 11 states over the period. Spending in Mississippi grew the fastest, rising 153% to \$300 per claim in 2016 over 2009.

Some health insurers have been cracking down on rising ED spending as well as the more frequent use of the highest-severity procedure codes. For example, UnitedHealth Group in March rolled out a new nationwide payment policy under which it is **reviewing and adjusting facility claims** for the most severe and costly ED visits for patients enrolled in the company's commercial and Medicare Advantage plans.

"The goal of this revised policy is to ensure accurate coding by hospitals, and ultimately promoting accurate coding of healthcare services is an important step in achieving the triple aim of better care, better health and lower overall cost," a UnitedHealth spokesman told Modern Healthcare in March.

National insurer Anthem has taken a different route to reduce ED spending by **denying coverage for visits to the ED** that it determines were not for true emergencies. Hospitals have decried the policy and **some have sued the insurer**, claiming the policy will harm providers and patients.

For its analysis, HCCI looked at 11.8 million ER procedure code claim lines per year of the study period. The claims accounted for 4.7 million patients enrolled in employer-sponsored insurance plans.

## Article links

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## save the date

December 12, 2018  
Mission Inn Hotel & Spa  
Riverside Convention Center

California Hospital Association presents  
**The 4th Annual Emergency Services Forum**

**Here's what attendees had to say about last year's program:**

*"Hospital Emergency Panel discussing the challenges we are all experiencing and offering to make contact, sharing of information was phenomenal."*

*"Good discussions of changing the future. Things we measure will need to be more directed in overall well-being of the patient and the health system."*

*"I learned so much about improving transition of care in the E.R. and how to control overcrowding in the ER."*

CHA's Emergency Services Forum focuses on issues and solutions specific to emergency departments.

**Hotel**

The Mission Inn Hotel & Spa has discounted sleeping rooms available starting at \$185 for single or double occupancy. For reservations, call (800) 843-7755 and mention the California Hospital Association to receive the discounted rate. Discount deadline is **November 15**.

**Event Site**

Educational sessions will be held at the remodeled Riverside Convention Center, just a short walk away from the Mission Inn.

**Sponsors**

For sponsor opportunities, contact Lisa Hartzell at lhartzell@calhospital.org or (916) 552-7502.

More information will be posted on the CHA website in the coming months.

Visit the website at [www.calhospital.org/education](http://www.calhospital.org/education).





# Sponsorship Options



Emergency Services Forum  
December 12, 2018, Riverside Convention Center

**Why sponsor?** In the exhibit area, participants will be able to interact with decision makers of hospital emergency departments.

**What's the display space like?** Sponsors will have a tabletop display in the exhibit area.

**Who are our attendees?** Emergency department leaders including emergency department physicians, chief nursing officers, emergency department supervisors, hospital administrators, EMS personnel and public health officials.

**How many attend?** Approximately 200+ participants each year.



## Select Your Level of Participation

Benefits	Platinum Sponsor \$3,500	Gold Sponsor \$2,500	Silver Sponsor \$1,500
Exclusive promotion of keynote or luncheon	√		
Exhibit table with electricity in exhibit area	√	√	√
Complimentary registrations to the educational program	2	1	1
Company logo on Emergency Services Forum website	√	√	√
Color ad in rotating PowerPoint slides and signage shown in the exhibit area	1	1	1
Acknowledgement at the beginning of the program	√	√	√
Attendee list	√	√	√

### Additional Fees

\$345 (Wed. only) Registration for *each additional* representative

### Where and When

**December 12, 2018**

**Riverside Convention Center**

3637 Fifth Street

Riverside, CA 92501

### Contact

**Lisa Hartzell**

Director, Education Operations

(916) 552-7502

lhartzell@calhospital.org

[www.calhospital.org/promotional-opportunities](http://www.calhospital.org/promotional-opportunities)

*CHA reserves the right to decline exhibitor applications.*

# Exhibit Rules



Emergency Services Forum  
December 12, 2018, Riverside Convention Center

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## Space Assignments

Assignment of tables will be made by the California Hospital Association (CHA) based on the following criteria: exhibitor level, order in which reservations are received, number of tables purchased, suitability and availability of locations.

## Space and Services Included in Fee

Space charge is included in exhibitor fee. Items provided are: draped 6-foot table, 2 chairs, table-tent card with company name. Exhibitors are also listed in the conference program with a description of up to 75 words.

## Exhibit Refund Policy

Exhibit fees are NON-REFUNDABLE.

## Preliminary Exhibit Dates and Hours

(Date/Times are approximate and subject to change)

**Location:** Riverside Convention Center

### Wednesday, December 12

Set-up: 6:00 a.m. – 7:00 a.m.

Viewing: 7:00 a.m. – 4:30 p.m.

Dismantling: 4:30 p.m.

## Exhibit Set-up and Clean-up

Set-up of exhibits must be completed and ready for inspection by **7:00 a.m. on Wednesday, December 12**. No set-up work will be permitted after this time without specific permission from CHA. Exhibitors are prohibited from dismantling their exhibits until the designated tear-down time of **4:30 p.m. on Wednesday, December 12**. It is the responsibility of the exhibitor to remove all materials from the exhibit area on Tuesday.

## Admittance to the Forum

Exhibit hall admittance is limited to symposium attendees and company representatives who have contracted and paid for exhibit space.

## Eligible Exhibits

CHA reserves the right to refuse rental of display space, exhibit, or any part of an exhibit to any company.

## Exhibitor Raffle

Exhibitors will have an opportunity to give prizes to the attendees. Each exhibitor is limited to two raffle prizes minimum value of \$100 is recommended.

### How the Prize Drawing Works!

An exhibit tour card with a list of each participating vendor will be made available within the exhibit area. To enter and win a prize, the attendee must receive a sticker (CHA will provide stickers) from all vendors. Once they have visited each vendor they can enter the completed card in the raffle prize basket. The raffle will take place at the last break. A CHA representative will ask you to come up and draw the winner of your prize. The attendee must be present to win and CHA will provide the winner's contact information to the donating exhibitor.

## Fire and Safety

All flammable materials must be flame proofed before being placed in the exhibit area. All materials and installations are subject to the fire and safety regulations in force by state and/or city fire authorities. Exhibitors must provide certification of flame proofing if requested by show management or the fire department. Volatile or flammable fluids, substances or materials of any nature are prohibited in any booth.

## Social Functions

Social functions sponsored by exhibitors must not be scheduled during exhibit hours or during the CHA education program. Any function not approved by CHA that would compete for attendees' time, either during the hours of the exhibition or hours of educational sessions, general sessions or programs is prohibited.

## Security

Exhibitors are responsible for any valuables at their booth. Security guards will be present at all times.

# Exhibitor Checklist



Emergency Services Forum  
December 12, 2018, Riverside Convention Center

## Please provide the following by November 15, 2018

- Exhibit fees—make checks payable to CHA/CAHHS or provide Visa, MasterCard or American Express number with expiration date.
- Company logo in high resolution .jpeg file format.
- Artwork for a full color advertisement rotating in exhibit area.  
*Dimension of ad: 13”w x 10”h. Ad submitted as a .jpeg file.*
- A short description of your organization (75 words or less).
- A description of your tabletop, dimensions, and product(s) being displayed.
- A description of items you may wish to contribute for the Exhibit show raffle prize drawing.  
*\*minimum value of \$100 is recommended*

All materials can be submitted via email: lhartzell@calhospital.org • Fax: 916-552-7506  
Mail: CHA, Education Department, 1215 K Street, Suite 800, Sacramento, CA 95814

## Hotel & Exhibit Information

- The Mission Inn Hotel & Spa has discounted sleeping rooms available starting at \$185 for single or double occupancy. For reservations, call (800) 843-7755 and mention the California Hospital Association to receive the discounted rate. Discount deadline is **November 15**.
- Additional sleeping rooms are available nearby at the Marriott Riverside at the Convention Center for \$145, single or double occupancy. For reservations, call (800) 228-9290 and mention the California Hospital Association to receive the discounted rate. Discount deadline is **November 15**.
- Exhibit area includes one draped, 6 ft table, (2) chairs and a name tent listing your company’s name. Please contact Lisa Hartzell at (916) 552-7502 or lhartzell@calhospital.org if you would like electricity at your tabletop and have not already signed up for it.  
**NOTE:** This is a table top exhibit. Each exhibitor will have roughly 8ft of space to display (this includes the 6ft table), so please plan accordingly.
- Shipping information: Packages must arrive **no sooner than Thursday, December 6, 2018**.  
**Ship to: Riverside Convention Center**  
Event Name/Date: Emergency Services Forum; Dec. 12, 2018  
ATTN: Pamela Sturrock  
3637 Fifth Street,  
Riverside, CA 92501

\*Please include your company name on the shipping label so the Convention Center knows to look out for your package.

## Exhibit Schedule on Wednesday, December 12

- **Set-up:** 6:00 a.m. – 7:00 a.m.
- **Viewing:** 7:00 a.m. – 4:30 p.m.
- **Dismantling:** 4:30 p.m.

# Application



Emergency Services Forum  
December 12, 2018, Mission Inn Hotel & Spa and Riverside Convention Center

## Submit Completed Application

Fax: (916) 552-7506  
E-mail: lhartzell@calhospital.org  
Mail: California Hospital Association  
Education Department  
1215 K Street, Suite 800, Sacramento, CA 95814  
Questions: Lisa Hartzell, (916) 552-7502

## Select Your Level

- Platinum Sponsor (\$3,500)       Silver Sponsor (\$1,500)  
 Gold Sponsor (\$2,500)       Additional Registration (\$345)(Wed. only)

Amount to be Billed: \$ \_\_\_\_\_

## Billing Information

VISA     MC     AMEX

Name on Card: \_\_\_\_\_

Card Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ Security Code: \_\_\_\_\_

Billing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Authorizing Signature: \_\_\_\_\_

*\*Make checks payable to "CAHHS/CHA"*

## Attending Representatives

Please list exactly as you wish it to appear in conference program.

Representative #1: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail (required): \_\_\_\_\_

Representative #2: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail (required): \_\_\_\_\_

## Company Information

Please list your company name as you wish it to appear in marketing materials.

Company: \_\_\_\_\_

Contact Name/Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Company web address: \_\_\_\_\_

Please provide a brief description about your company. This description will be used in marketing materials. Please adhere to 75 words. CHA reserves the right to alter your description for marketing purposes.

Please list special request consideration in table assignments (e.g., companies you do not wish to be located next to). List specific company names, not products or services. CHA cannot guarantee requests will be met but will make every effort to accommodate them.

Representative #3 (Gold/Platinum Exhibitors Only): \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail (required): \_\_\_\_\_

Representative #4 (Platinum Exhibitors Only): \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail (required): \_\_\_\_\_

## Authorization

Exhibitor assumes responsibility and agrees to indemnify and defend the California Hospital Association and the Riverside Convention Center and their respective employees and agents against any claims or expenses arising out of the use of the exhibition premises. The Exhibitor understands that neither the California Hospital Association nor the Riverside Convention Center maintains insurance covering the Exhibitor's property, and it is the sole responsibility of the exhibitor to obtain such insurance. Our company shall be bound by the terms and conditions in the Exhibitor Rules information material.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_