

# California EMS Core Measures Program

Dan Smiley, Chief Deputy Director, California EMS Authority  
**INTRODUCTION**

Dan Smiley, Chief Deputy Director, California EMS Authority  
**CORE MEASURES OVERVIEW**

- Welcome
- Brief history of CHCF project
- Project overview
- 28 Core Measures
  - Training and implementation
  - Timeline for first submissions to EMSA

### Project Overview

<b>Title</b>	} California Emergency Medical Services Database Development & Implementation of Core Quality Measures
Purpose	
Grantor	
Time period	

### Project Overview

<b>Title</b>	} <ul style="list-style-type: none"> <li>▪ Increase accuracy of EMS data</li> <li>▪ Increase accessibility for public, policy, academic, and research purposes</li> <li>▪ Facilitate EMS system evaluation and improvement</li> </ul>
<b>Purpose</b>	
Grantor	
Time period	



### Project Overview

Title  
Purpose  
**Grantor**  
Time period

California HealthCare Foundation (CHCF)

### Project Overview

Title  
Purpose  
Grantor  
**Time period**

April 1, 2012 – May 31, 2013

### What are “Core” Measures?

Standardized performance measures or quality indicators

Used for examining an EMS system or treating an identified patient condition

AKA Quality Indicators or Performance Measures

Used by CMS as measures of quality for hospital inpatient and outpatient care events

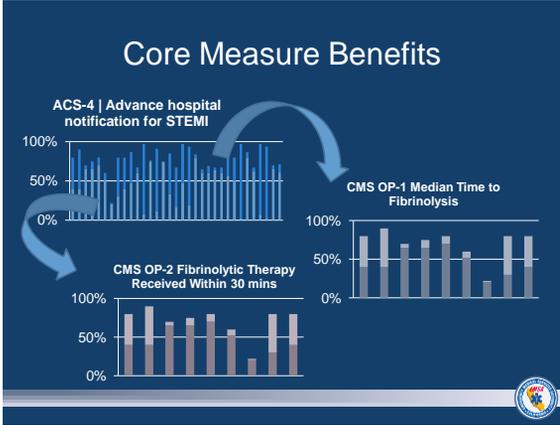
### Data Elements in CEMISIS and NEMSIS Dictionary today

For Core Measures Project, 42 elements are used

The Indicator Specification Sheet (ISS) has 2 components for Inclusion and Exclusion criteria

- Criteria (For Clinical people)
- Data Elements (for Data people)

Several Examples follow ...



Core Measures are for everyone.



Example activities and participant roles

	EMSA	Local EMS Agencies	EMS Provider Agencies
Statewide integration	✓		
Regional assessment	✓	✓	
Plan, implement, evaluate systems		✓	
Quality improvement guidelines	✓	✓	
Data collection & evaluation	✓	✓	✓
Quality improvement program	✓	✓	✓

### The 28 Core Measures

**TRAUMA CARE**

ACUTE CORONARY SYNDROME/HEART ATTACK

CARDIAC ARREST

STROKE

RESPIRATORY

PEDIATRIC

PAIN

SKILL PERFORMANCE

EMS RESPONSE & TRANSPORT

BYSTANDER CPR

**TRA-1**

Scene time for trauma

**TRA-2**

Direct transport to trauma center for patients meeting criteria

### The 28 Core Measures

**TRAUMA CARE**

ACUTE CORONARY SYNDROME/HEART ATTACK

CARDIAC ARREST

STROKE

RESPIRATORY

PEDIATRIC

PAIN

SKILL PERFORMANCE

EMS RESPONSE & TRANSPORT

BYSTANDER CPR

**ACS-1**

Aspirin administration for chest pain/discomfort

**ACS-2**

12 lead EKG performance

**ACS-3**

Scene time for STEMI

**ACS-4**

Advance hospital notification for acute MI (2014)

**ACS-5**

Direct Transport to PCI center for STEMI

### The 28 Core Measures

**TRAUMA CARE**

ACUTE CORONARY SYNDROME/HEART ATTACK

**CARDIAC ARREST**

STROKE

RESPIRATORY

PEDIATRIC

PAIN

SKILL PERFORMANCE

EMS RESPONSE & TRANSPORT

BYSTANDER CPR

**CAR-1**

AED prior to EMS arrival (2014)

**CAR-2**

EMS cardiac arrest – ROSC in field

**CAR-3**

EMS cardiac arrest – survival to emergency department discharge

**CAR-4**

EMS cardiac arrest – survival to hospital discharge

### The 28 Core Measures

**TRAUMA CARE**

ACUTE CORONARY SYNDROME/HEART ATTACK

CARDIAC ARREST

**STROKE**

RESPIRATORY

PEDIATRIC

PAIN

SKILL PERFORMANCE

EMS RESPONSE & TRANSPORT

BYSTANDER CPR

**STR-1**

Identification of stroke in field via validated pre-hosp. stroke screen (2014)

**STR-2**

Blood glucose level tested in field

**STR-3**

Scene time for stroke

**STR-4**

Advance hospital notification for suspected stroke (2014)

**STR-5**

Direct transport to stroke center for stroke patients



## The 28 Core Measures

- TRAUMA CARE
- ACUTE CORONARY SYNDROME/HEART ATTACK
- CARDIAC ARREST
- STROKE
- RESPIRATORY**
- PEDIATRIC
- PAIN
- SKILL PERFORMANCE
- EMS RESPONSE & TRANSPORT
- BYSTANDER CPR

**RES-1**  
CPAP given for patients with pulmonary edema (2014)

**RES-2**  
Beta2 agonist administration



## The 28 Core Measures

- TRAUMA CARE
- ACUTE CORONARY SYNDROME/HEART ATTACK
- CARDIAC ARREST
- STROKE
- RESPIRATORY
- PEDIATRIC**
- PAIN
- SKILL PERFORMANCE
- EMS RESPONSE & TRANSPORT
- BYSTANDER CPR

**PED-1**  
Pediatric asthma patients receiving bronchodilators

**PED-2**  
Direct transport to pediatric trauma center for patients meeting criteria (2014)



## The 28 Core Measures

- TRAUMA CARE
- ACUTE CORONARY SYNDROME/HEART ATTACK
- CARDIAC ARREST
- STROKE
- RESPIRATORY
- PEDIATRIC
- PAIN**
- SKILL PERFORMANCE
- EMS RESPONSE & TRANSPORT
- BYSTANDER CPR

**PAI-1**  
Pain intervention

**PAI-2**  
Comparison of first and last pain scale to measure pain decrease (2014)



## The 28 Core Measures

- TRAUMA CARE
- ACUTE CORONARY SYNDROME/HEART ATTACK
- CARDIAC ARREST
- STROKE
- RESPIRATORY
- PEDIATRIC
- PAIN
- SKILL PERFORMANCE**
- EMS RESPONSE & TRANSPORT
- BYSTANDER CPR

**SKL-1**  
Endotracheal intubation success rate

**SKL-2**  
End-tidal CO2 performed on endotracheal intubation



## The 28 Core Measures

- TRAUMA CARE
- ACUTE CORONARY SYNDROME/HEART ATTACK
- CARDIAC ARREST
- STROKE
- RESPIRATORY
- PEDIATRIC
- PAIN
- SKILL PERFORMANCE
- EMS RESPONSE & TRANSPORT**
- BYSTANDER CPR

**RST-1**  
Ambulance response time for emergencies at 90<sup>th</sup> percentile in ambulance response zones

**RST-2**  
Ambulance response time for non-emergencies at 90<sup>th</sup> percentile in ambulance response zones

**RST-3**  
Transport rate for requests for emergency medical care



## The 28 Core Measures

- TRAUMA CARE
- ACUTE CORONARY SYNDROME/HEART ATTACK
- CARDIAC ARREST
- STROKE
- RESPIRATORY
- PEDIATRIC
- PAIN
- SKILL PERFORMANCE
- EMS RESPONSE & TRANSPORT
- BYSTANDER CPR**

**PUB-1**  
Percent of out of hospital cardiac arrests receiving bystander CPR (2014)



## Your Core Measures Experience...

Will depend on...



who you are



your activity



your audience

"Person" by Jens Flinck, and "Group" by Amar Chadgar from The Noun Project



## Reporting Core Measures to EMSA

For CHCF project, LEMSAs will report to EMSA:

21 Core Measures

2010 and 2011; 2012 is optional

Reporting Forms Due by May 31, 2013



## References

EMSA #164: CEMSIS Data System Standards

[www.emsa.ca.gov/pubs/pdf/emsa164.pdf](http://www.emsa.ca.gov/pubs/pdf/emsa164.pdf)

EMSA #166: EMS System Quality Improvement Guidelines

[www.emsa.ca.gov/pubs/pdf/emsa166.pdf](http://www.emsa.ca.gov/pubs/pdf/emsa166.pdf)

NEMSIS 2.2.1 Data Dictionary – Updated 4/9/2012

[www.nemsis.org/v2/downloads/documents/NEMSIS\\_Data\\_Dictionary\\_v2.2.1\\_04092012.pdf](http://www.nemsis.org/v2/downloads/documents/NEMSIS_Data_Dictionary_v2.2.1_04092012.pdf)

NHTSA: Emergency Medical Services Performance Measures – Updated 12/2009

[www.ems.gov/pdf/811211.pdf](http://www.ems.gov/pdf/811211.pdf)

