



CALIFORNIA REPUBLIC

California !

State of the California Trauma System: 2014

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Trauma Advisory Committee



Trauma system

An organized set of legal, regulatory, and administrative structures coupled with human resources and medical care facilities, integrated in a way that provides optimal care to victims of major injury and informs and supports injury prevention & research.

State of the 'System'

- Progress within the system
- Priority projects
- Opportunities for 2014-2015...

Primary goals of the CA trauma system

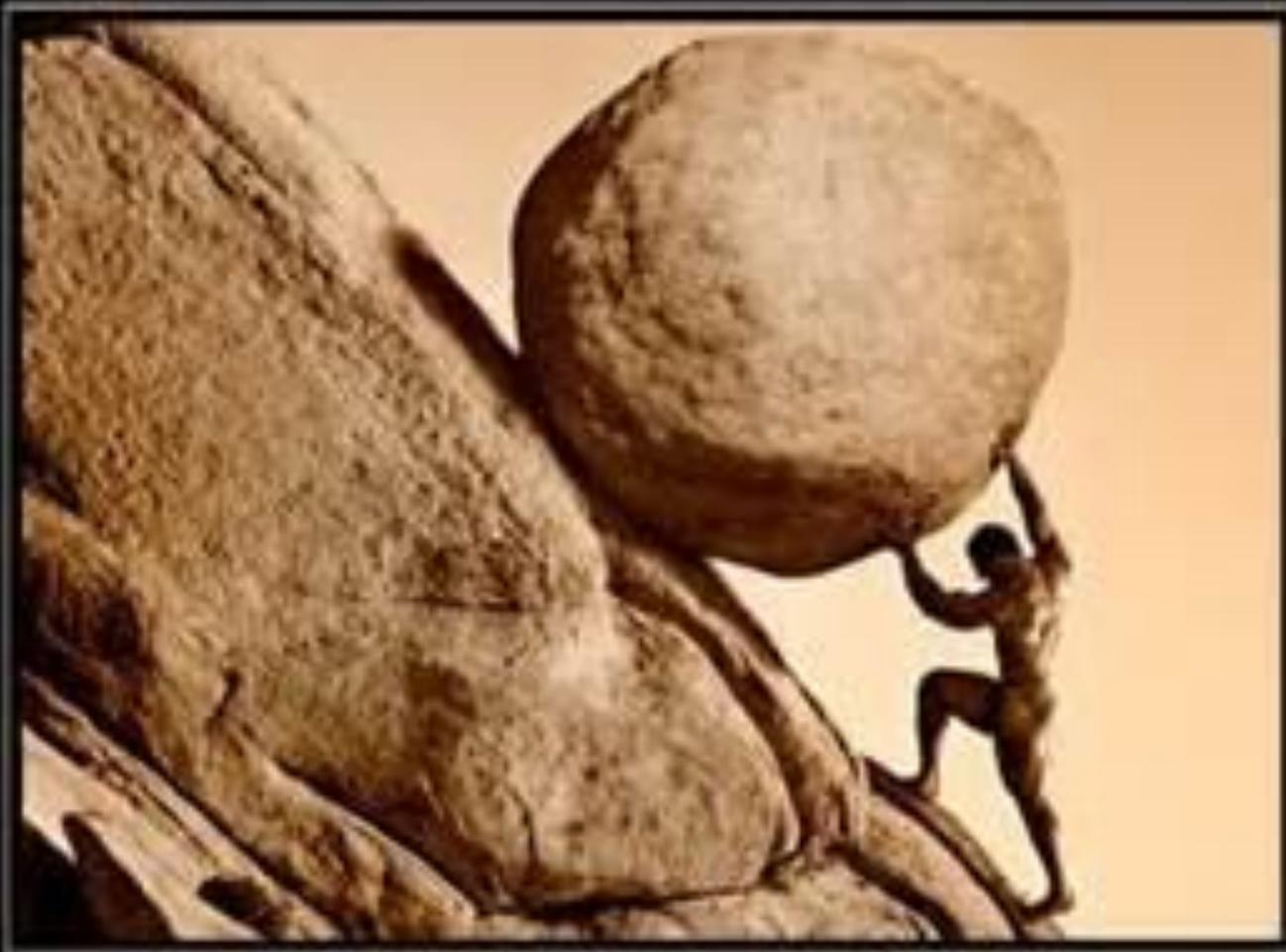
- Providing timely access to trauma care throughout the 'system'
- Promoting the delivery of optimal trauma care throughout the continuum
- Improving community health & wellness

The California Trauma System: Unique in the USA

- 58 Counties, 32 LEMSAs
- Strength of local adaptability
- Weakness of undesirable variability
- Improved economy, but...
- The system will continue to be understaffed & under-financed

The California Trauma System – run on a ‘shoestring’

- Power of an expert volunteer workforce & expertise within system
- The solidifying effect of:
 - Better data & analysis
 - Networking & good communications
- Hawthorne effect in improving trauma system development & performance



The State system: What's been happening...



California Statewide Trauma Plan 2014

**Emergency Medical Services Authority
California Health and Human Services Agency**

EMSA #13-301
Public Comment DRAFT v 1.1, March 21, 2014



- ~40 pages, 7 appendices
- Public comment phase
- EMS Commission December

Trauma system progress & events

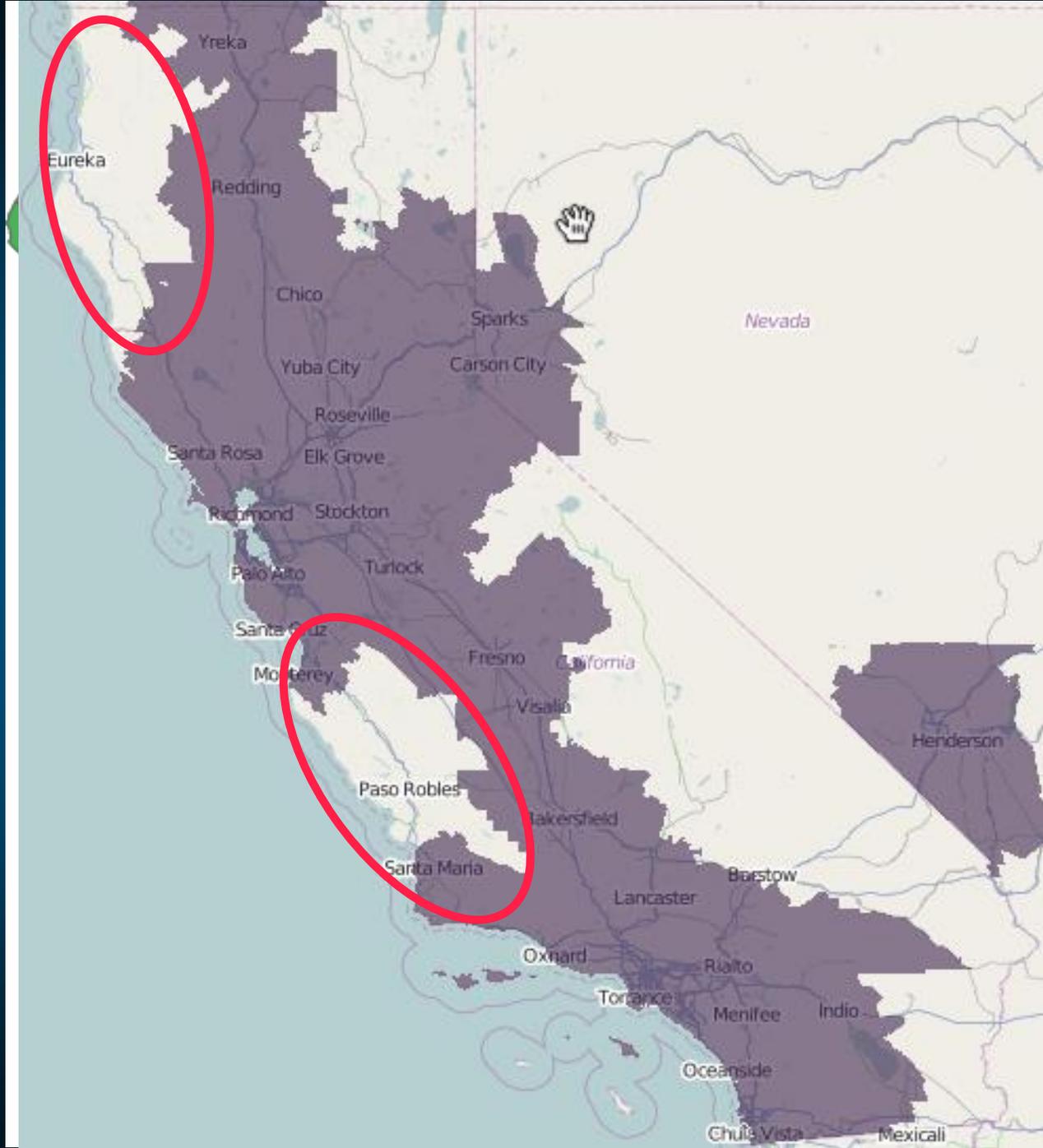
- Completion of the trauma plan
- Re-triage => Regional Network Development
 - Re-triage protocols + outreach
 - Inter-county Agreements
 - Creation of county/LEMSA-based re-triage guidelines
- PIPS
 - Investigation of TQIP for state-wide PI
 - Process for review of 'sentinel events'

Trauma system progress & events

- Trauma center assessment study & project
- Preliminary evaluation of Title 22
- DATA: ImageTrend
 - submission not perfect yet, but improving
 - epidemiologist (50%)
- Measure B Audit (LAC) => AB1975
- Research

Variability in California triage from 2005 to 2009: A population-based longitudinal study of severely injured patients

Kristan Staudenmayer, MD, MS, Feng Lin, MS, Robert Mackersie, MD, David Spain, MD,
and Renee Hsia, MD, MSc, *San Francisco, California*



Filling in the holes



- North Coast
 - No LII or LIII centers
- Central Coast
 - Marian MC – full desig. L III
 - Natividad (Monterey) pending
- South
 - Cottage SB – Pedi LII
- ? Merced County (UC)
 - > 6200 students
 - Need for TC?
- North
 - Kaiser Vacaville upgrade LII
 - San Joaquin County – L III

Level I & Level II

California has 48 Level I and Level II Trauma Centers.

The Emergency Medical Services Authority (EMS) states Level I and Level II Trauma Centers have "similar personnel, services, and resources requirements with the greatest difference being that Level I's are research and teaching facilities."

Level I & II Trauma Centers (48 total):

- Level I Trauma Center (13)
- Level II Trauma Center (35)

- 13 Level 1 Adult Centers
- 36 Level 2 Adult Centers
- 12/13 Level 1 Center are verified by ACS
 - except Loma Linda
- 31/36 Level II centers are verified by ACS
 - except Desert Regional
 - except HM Newhall
 - except Kern County
 - Kaiser Vacaville pend.



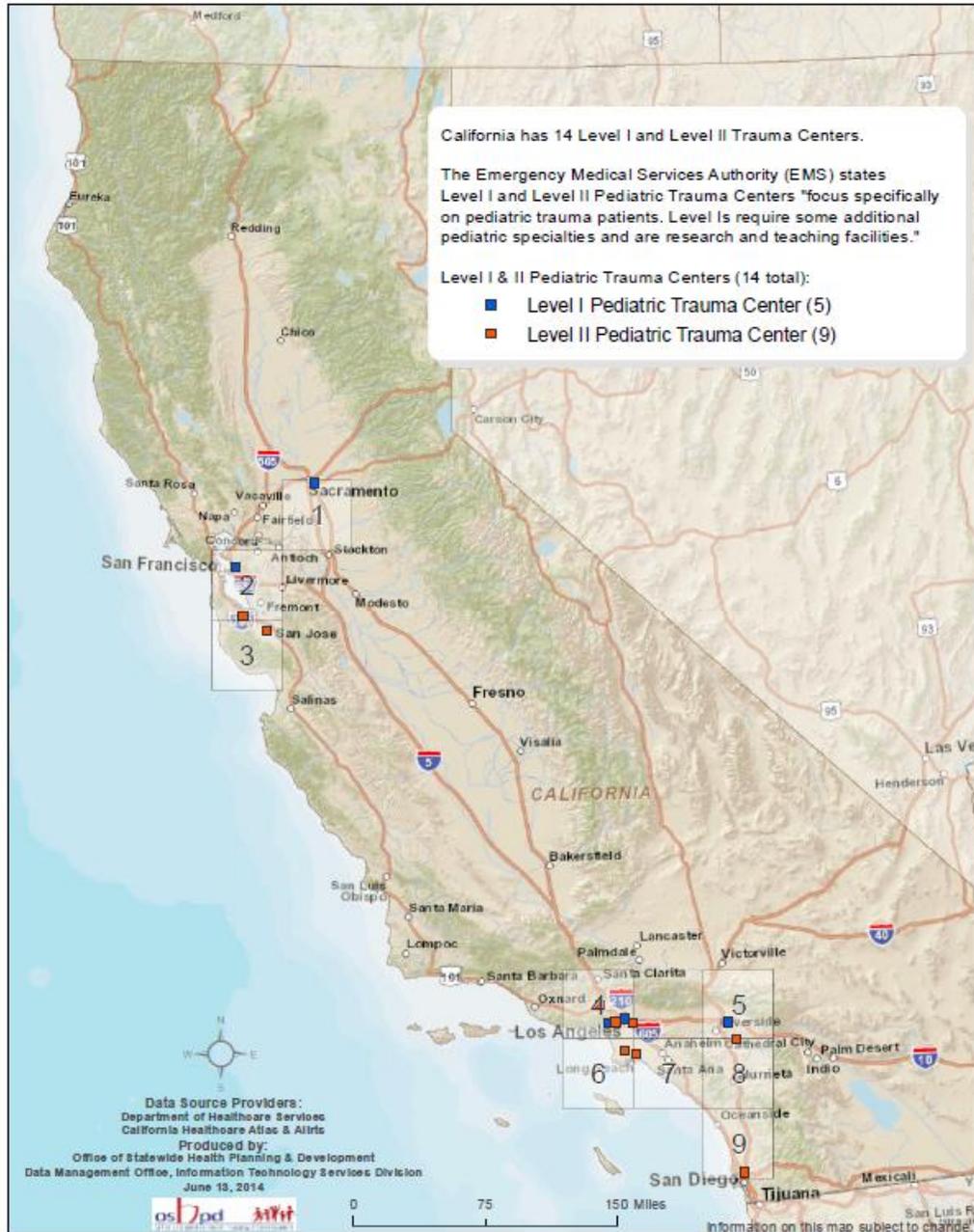
Level III and IV Trauma Centers in California Index



Level III & Level IV

- 14 Level III Centers
- 9 Level IV Centers
- 4/14 Level III centers are verified by the ACS:
 - Marin General
 - Marshall, Placerville
 - North Bay, Vallejo
 - Rideout Memorial

Level I and II Pediatric Trauma Centers in California Index



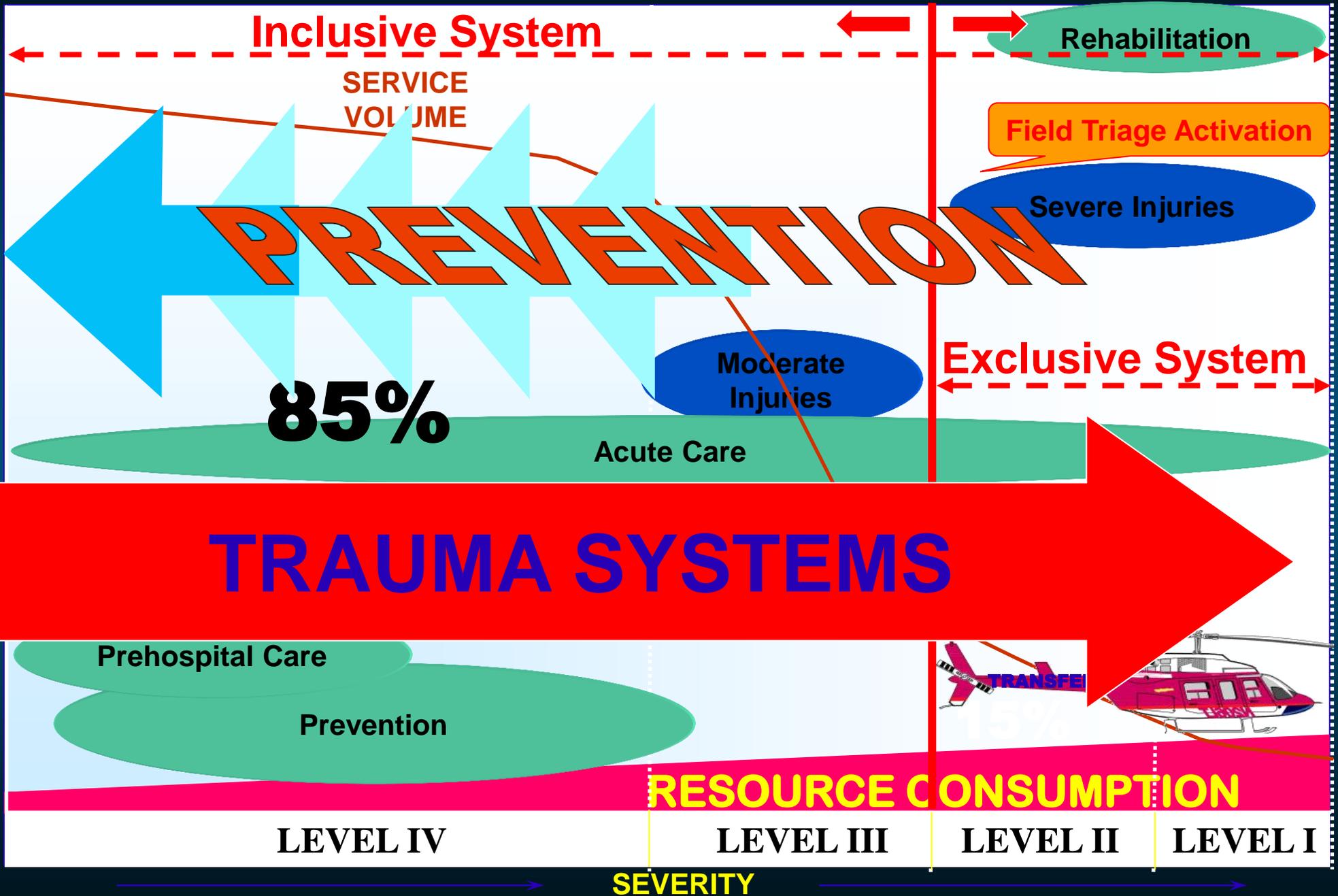
Pediatric Centers

- 6 Level I Pedi Centers
- 10 Level II Pedi Centers
- 5/6 Level I Pedi Centers verified by ACS
 - except Loma Linda
- 3/10 Level II Pedi center verified by ACS
 - Santa Clara Valley
 - UC Irvine
 - Santa Barbara Cottage



Even more to do, and even less time...

A MODEL TRAUMA SYSTEM



Summit work group focus

- Regional network development
 - The backbone for an inclusive system
 - Managed under-triage
 - Outreach
 - Enhanced inter-agency cohesiveness
- System PI
 - Data platform & accumulation
 - Database & statistical support
 - TQIP opportunities

This coming year...

- Finalization of the Trauma Plan
- Creation of comprehensive system performance improvement plan
- Creation of standardized data report for PIPS
- Explore methods for risk-adjusted outcomes analysis state-wide
 - TQIP
 - internal system development

This coming year...

- Preliminary characterization of local & regional trauma networks ('buddy systems')
- Promotion of re-triage guidance throughout the state
- Complete evaluation of spectrum of 'compliance assessment' & best practices throughout the state

This coming year...

- Improved utilization of EMSA website
- Define elements for NTC participation in trauma system
- Develop plan & funding for comprehensive ACS Systems evaluation
- Develop & commit to timeline for Title 22 revisions

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