

EMS Delivery System Redesign

September 2025



EVALUATION BACKGROUND

HOW DID WE GET HERE?



Workgroups



Project Charter

The EMS System Redesign is focused on modernizing coordination, improving patient outcomes, and building a more efficient, equitable system across San Diego County.

Base Station Hospital & Trauma Catchment Review



The San Diego region offers a robust Emergency Medical Services (EMS) System of emergency, specialty, and trauma medical care through its cooperating hospitals. The County of San Diego, in its role as the Local Emergency Medical Services Agency (LEMSA) oversees and upholds the standards of the EMS system, which includes designation of base station hospitals, trauma centers, and trauma center catchment areas.

The purpose of this project is to conduct a comprehensive review and evaluation of:

1. Base Station Hospital System (BSHS)
2. Trauma Center Catchment Area Designations (TCCAD)

Public and stakeholder input is critical to ensure a comprehensive evaluation. Opportunities to learn and provide feedback on the project will be available through this site and other activities.

We look forward to hearing from you!

Background

County EMS monitors and evaluates the local emergency medical system on an ongoing basis by conducting surveillance and reporting

Visit us at [SanDiegoCounty.gov](https://www.sandiegocounty.gov)

Access the County's EMS Office Project page for additional information. Click the link below.

[San Diego County EMS Office Project Page](#)

County EMS Documents & Memos

[EMS Delivery System Redesign - Project Charter - posted May 1 2025 \(147 KB\) \(pdf\)](#)

[EMS System Redesign Constituent Group Request Letter - posted January 28 2025 \(3.98 MB\) \(pdf\)](#)

[San Diego County Board of Supervisors Presentation Memo - posted August 27, 2024 \(222 KB\) \(pdf\)](#)

EMS Delivery System Redesign Project Charter

Optimize EMS - Hospital Communication

Streamline EMS notifications to Emergency Departments

Improve real-time visibility into hospital availability and status

Pilot new communication tools across diverse EMS and hospital settings

Streamline Online Medical Direction

Evaluate new models for physician consultation

Ensure timely, consistent guidance for EMS crews

Modernize Quality Management

Replace fragmented QA processes with a unified, systemwide model

Implement shared performance metrics and dashboards

Foster a data-driven just culture across agencies

Evaluate Northwest Trauma Catchment

Reassess trauma boundaries in the Northwest area to improve access

Pilot flexible transport options based on traffic and capacity

Build for the Future

Establish secure, bidirectional data sharing between EMS and Hospitals

Plan for a unified EMS Command and Control Center (EMCCC)

Next Steps

- Pilot development
 - Digital prehospital pre-arrival notifications
 - Agency-based, LEMSA-coordinated Quality Management
 - Bidirectional data exchange between EMS and Hospitals
 - Streamlined Online Medical Direction
 - Northwest trauma catchment area
- Early Planning
 - Emergency Medical Command and Control Center



Prehospital Notification

Pilot Design

- Vendors
 - Pulsara
 - ImageTrend
 - TigerConnect
- Pilot Setup
 - 3 months per pilot, with extensions possible for successful implementations
 - Geographic and operational separation
 - Mixture of BSHs & BEFs
 - LEMSIS & WATER

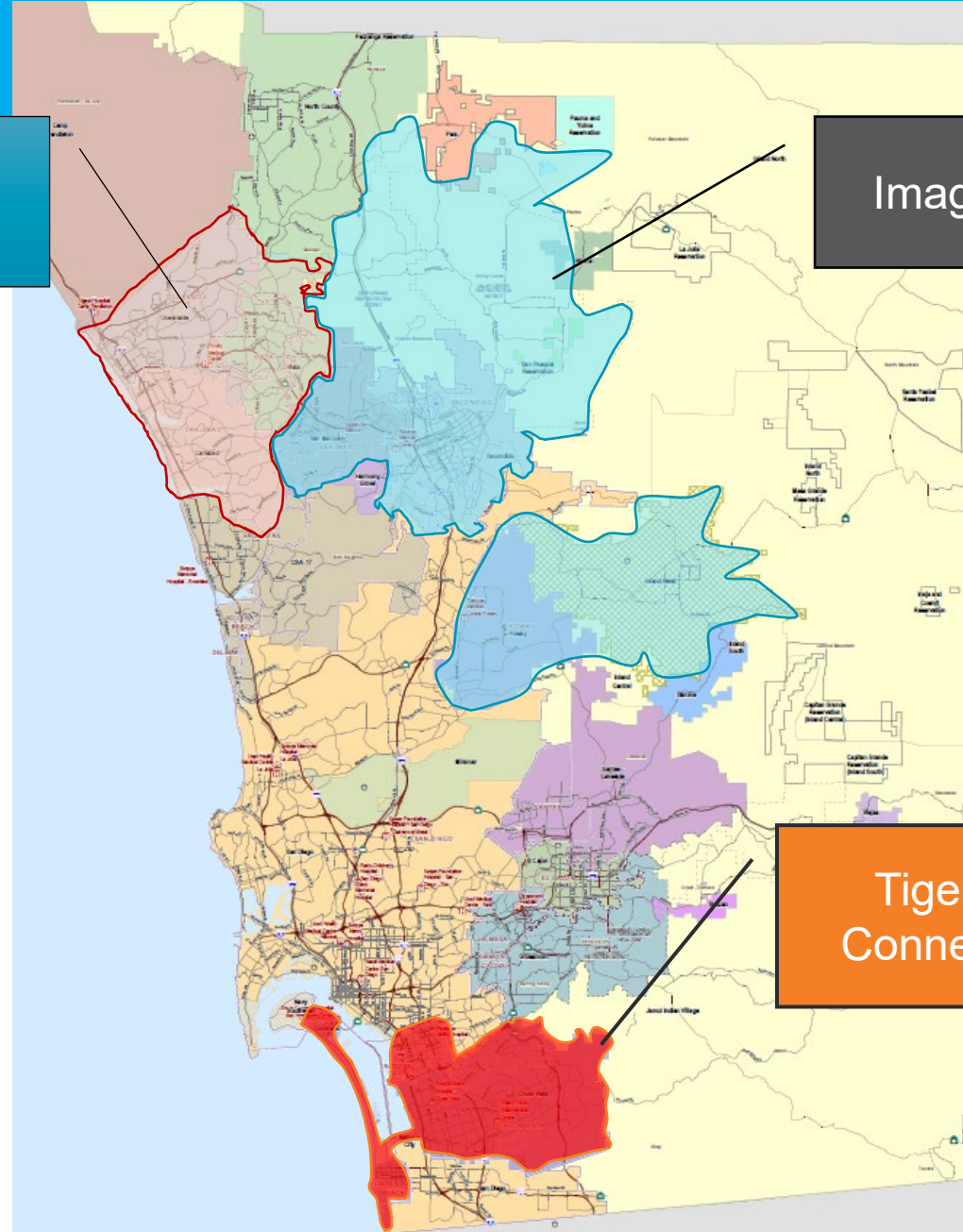


Pilot Map

Pulsara

ImageTrend

Tiger
Connect



Pilot Design



All eligible transports should use the designated pilot platform for hospital notifications.



If Online Medical Direction (OLMD) is needed, the hospital notification should still be sent through the platform, while OLMD communication follows base hospital radio procedures. OLMD Process may be adapted to utilize the pilot platform, if equipped



Traditional radio report via a base hospital should occur when the destination hospital or EMS agency is not participating in the pilot.



Bedside verbal report remains standard for all transports.

Evaluation Metrics

- Usage Rate
- Notification Lead Time
- Acknowledgement Time
- Confirmation Time
- Fallback Rate
- No-Notice Arrival Rate
- Satisfaction survey

Timeline

- Summer/Fall 2025
 - Reach out to participants
 - Vendor setup
 - Tech setup & evaluations
- Winter 2025
 - Training
- Spring 2025-6 (March 1)
 - Pilots
- Spring/Summer 2026
 - Second round pilots (if needed)
- Summer/Fall 2026
 - Progressive system-wide implementation





Quality Management

Quality Management Plan Update

- Revised plan incorporates Task Force and stakeholder feedback.
- Non-punitive, collaborative framework focused on improvement.
- Target: Countywide implementation by January 1, 2026.



COUNTY OF SAN DIEGO
EMERGENCY MEDICAL SERVICES

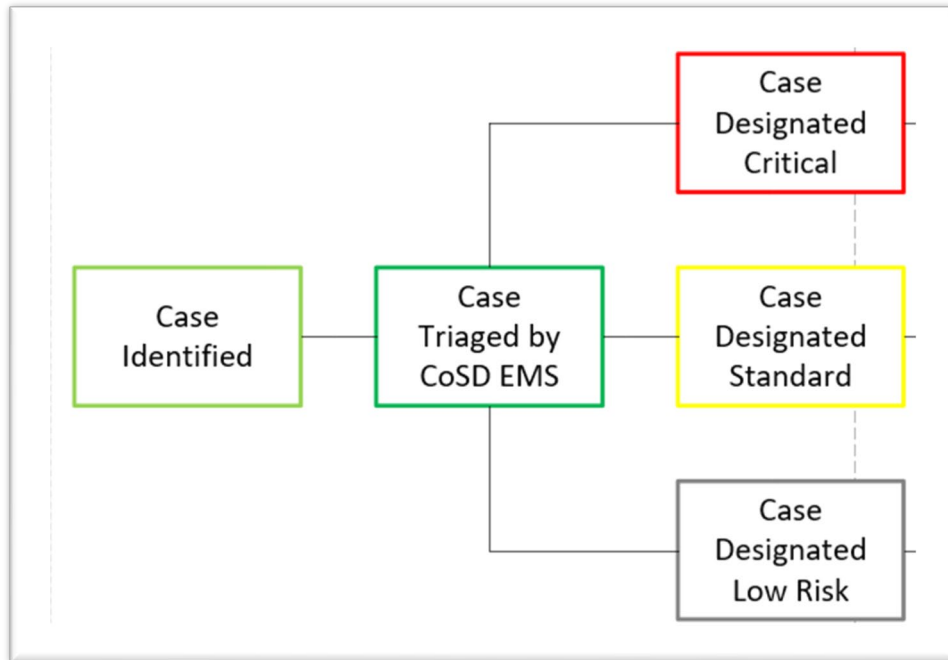
Emergency Medical Services
Quality Management Plan

County of San Diego
Public Safety Group
San Diego County Fire

Quality Management

- Quality Assurance (QA):
 - Individual case review, classification, and follow-up
- Quality Improvement (QI):
 - Metric-based monitoring for system trends
- Oversight and guidance by the Quality Care Consortium (QCC)
 - Advisory to CoSD EMS; Promotes standardization and Just Culture.
 - Representatives from EMS agencies, hospitals, dispatch, CoSD EMS.
 - Review case trends, QI initiative guidance, system changes
 - Can form subcommittees/task forces for focused initiatives

QA Review Process

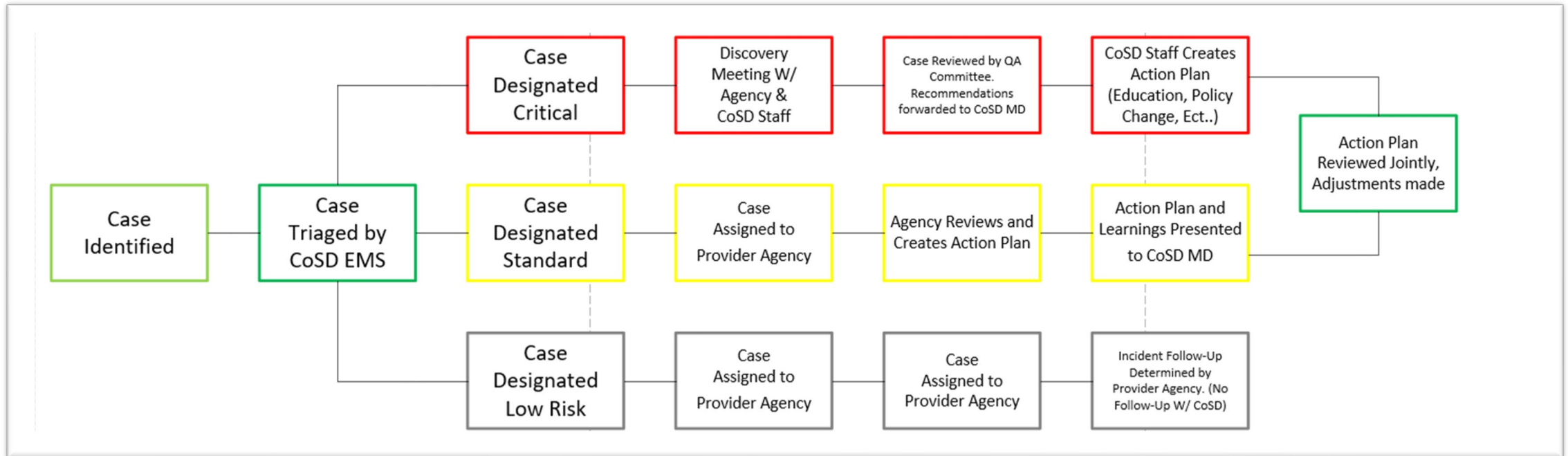


QA Case Severity Levels

<u>Severity</u>	<u>Definition</u>	<u>Examples</u>
Critical	High-risk lapse in care; likely harm	Failed airway, unrecognized dysrhythmia
Moderate	Deviation with potential for harm	Medication error, under-treatment
Low	Minor issues, no clinical risk	Documentation gaps, general complaints

Cases can be recategorized during review

QA Review Process



Post-Review Outcomes

<u>Outcome</u>	<u>Definition</u>	<u>Implication</u>
Clinically Appropriate	Care was consistent with protocol, policy, and accepted clinical standards.	No further action needed; case may highlight best practices
Opportunity for Improvement	Care was acceptable but opportunities exist to improve documentation, efficiency, or clinical judgment.	May result in informal feedback, education, or coaching
Clinically Inappropriate	Deviation from protocol or expected standards occurred and warrants further action.	Formal remediation or retraining may be initiated
System-Level Concern	The issue reflects broader systemic gaps (e.g., unclear protocol, equipment failure, inter-agency issues).	Escalated to QCC for cross-agency resolution or protocol revision
Non-Clinical	No clinical issue identified; concern may be unrelated to care (e.g., interpersonal complaint).	Documented and closed; may still inform agency trends

QI Metrics & Data Strategy

- FAIR (Feasible, Actionable, Impactful, Relevant)
- Sources:
 - LEMSYS ePCR
 - Manual data
 - Hospital outcome feeds (bidirectional data exchange).
- Dashboards with stakeholder-specific subsets
- QI initiatives may develop for specific improvement

Example Quality Improvement Metrics

California Core Measures:

- STR-1: Stroke assessment for suspected stroke patients
- TRA-2: Trauma patients transported to trauma centers

County-Selected Measures:

- % of OHCA cases with public AED defibrillation
- T-CPR time to first chest compression
- % of STEMI patients receiving 12-lead ECG within 10 minutes

NEMSQA Measures:

- Safety-04: Pediatric restraint use during transport
- Syncope-01: ECG for patients with syncope

Agency-Level Options are Encouraged



Questions?