

PREHOSPITAL ECPR PILOT PROGRAM



ECPR Pilot Program 2-Year Overview

July 1, 2023 – June 30, 2025

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BACKGROUND AND HISTORY

- San Diego Resuscitation Consortium (SDRC) Workgroup was formed on April 29, 2022 ([Memo](#))
 - Subgroup of Base Station Physicians' Committee (BSPC)
 - Tasked with exploring the feasibility of a prehospital ECPR program
- Treatment protocols updated to include ECPR in early 2023
- Hospitals applied for program participation and were selected beginning June 2023
 - Sharp Grossmont Hospital
 - Scripps Memorial Hospital La Jolla
 - Sharp Memorial Hospital
- Prehospital ECPR Pilot Program went live on July 1, 2023
 - USCD Medical Center Hillcrest (*started in November 2024*)
 - Sharp Chula Vista Medical Center (*started in November 2025*)
- SDRC became a subcommittee of the Cardiac Advisory Committee (CAC) on July 28, 2023 ([Memo](#))
 - SDRC Workgroup was dissolved
 - Provides progress reports at BSPC and CAC



PROGRAM GOALS

Scene time
< 15 minutes

"Get off scene in 15"

Cardiac arrest to ECPR
Receiving Center
< 45 minutes

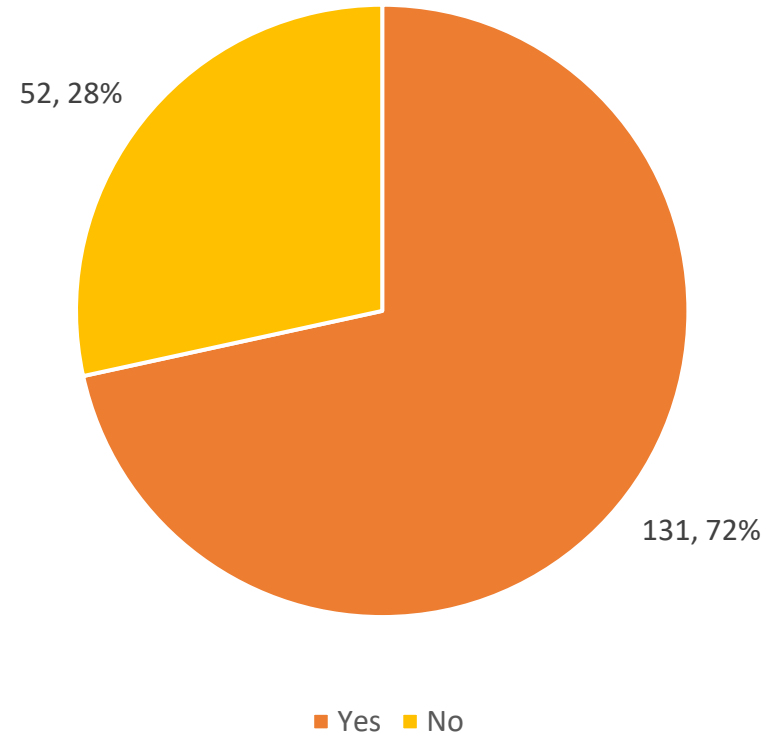
Cardiac arrest to
ECMO
< 60 minutes



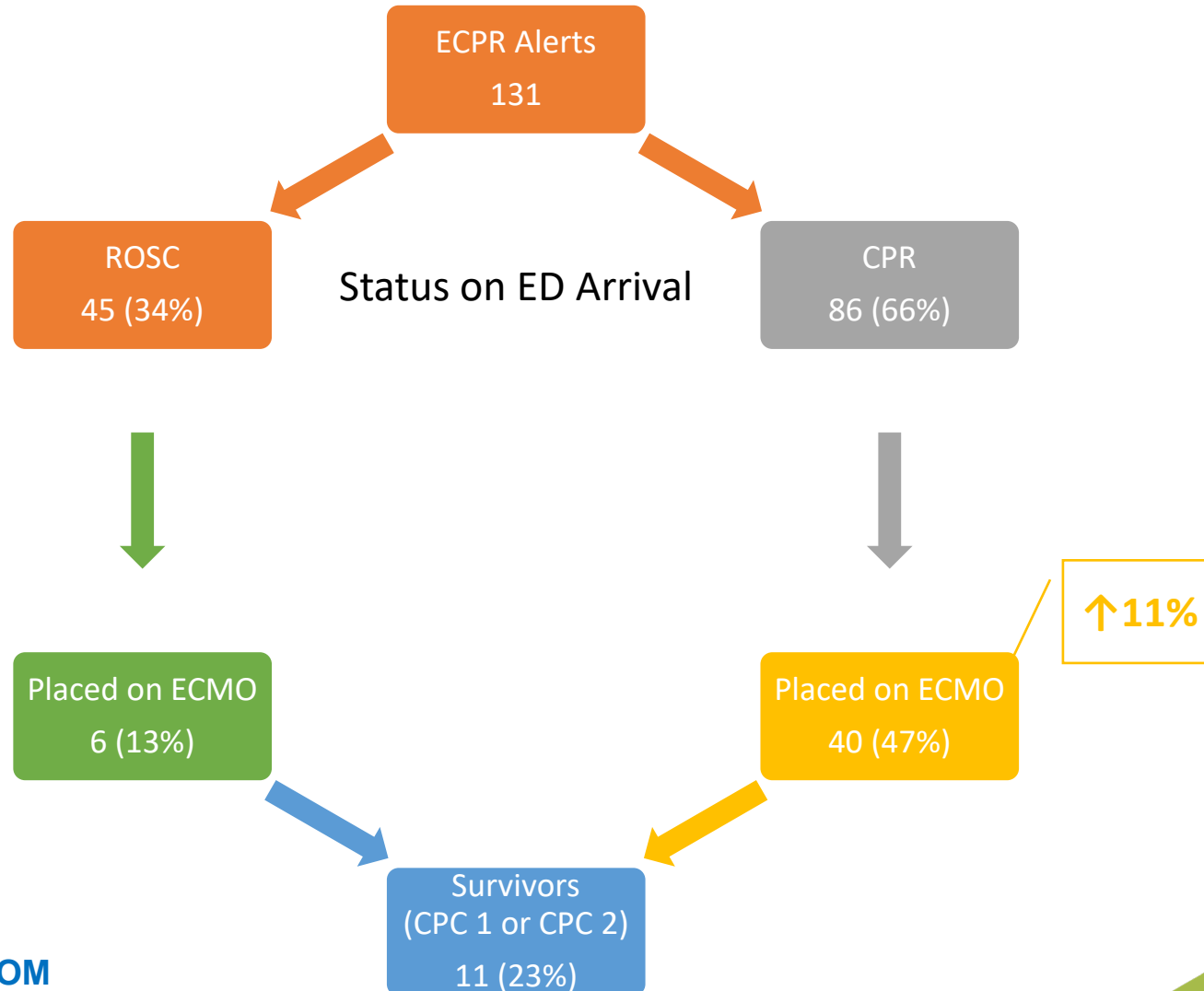
PREHOSPITAL ECPR ALERTS

In 2 years of implementation
(July 1, 2023 – June 30, 2025)
there were a total of
183 prehospital ECPR alerts

Alerts Meeting ECPR Criteria (S-127A)



PREHOSPITAL ECPR ALERTS





PREHOSPITAL ECPR TIMES

Cardiac Arrest to
ECPR Receiving Center

Median

Year 1: **36.3**

Year 2: **35.5**

Cardiac Arrest to
ECMO

Median

Year 1: **60.4**

Year 2: **56.3**

Disp. to Scene
Median

Year 1: **6.7**

Year 2: **5.8**

Scene to Patient
Median

Year 1: **1.2**

Year 2: **1.0**

Scene Time
Median

Year 1: **15.9**

Year 2: **15.6**

Transport Time
Median

Year 1: **12.5**

Year 2: **11.9**

Cannulation Time
Median

Year 1: **21.5**

Year 2: **24.0**



PREHOSPITAL ECPR TIMES & MILEAGE

Mileage Difference between Closest Facility
and ECPR Receiving Center

Average

7.1

(n = 76)

ECPR Receiving Center
=
Closest Facility

Transport Time

Average

10.0

(n = 54)

Placed on
ECMO

22

ECPR Receiving Center
≠
Closest Facility

Transport Time

Average

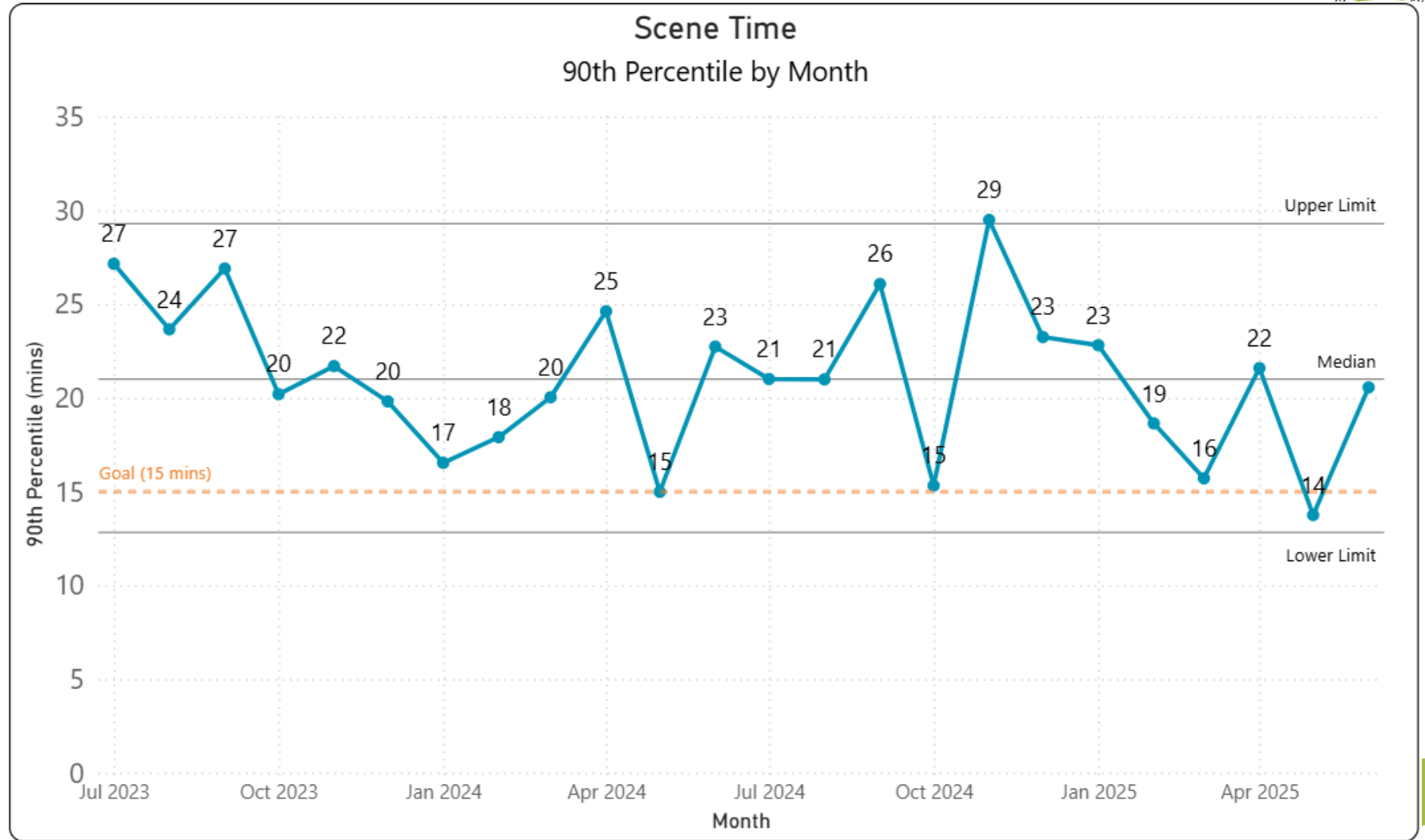
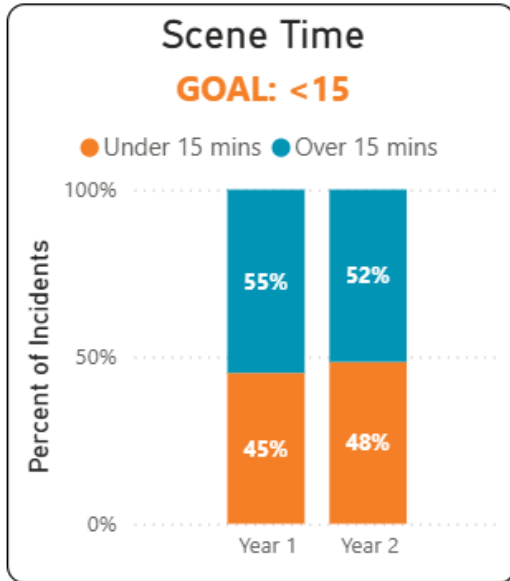
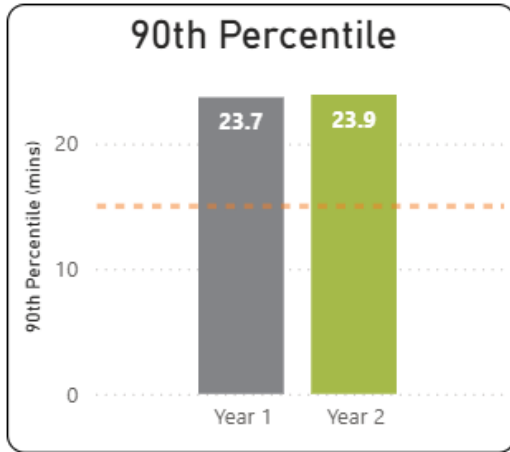
15.6

(n = 76)

Placed on
ECMO

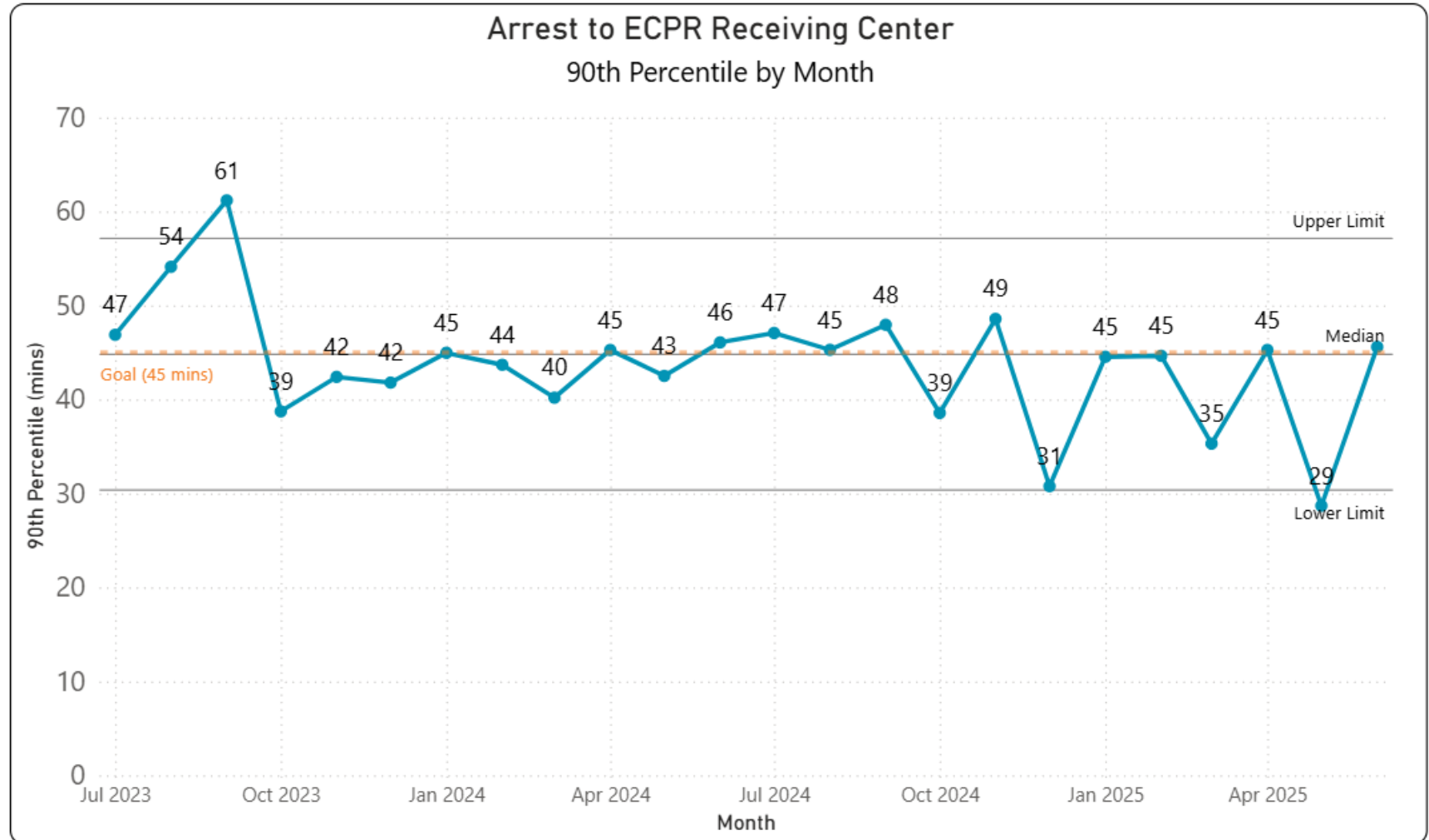
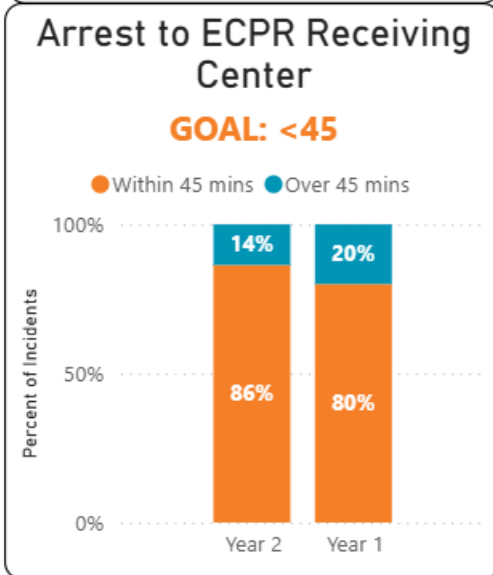
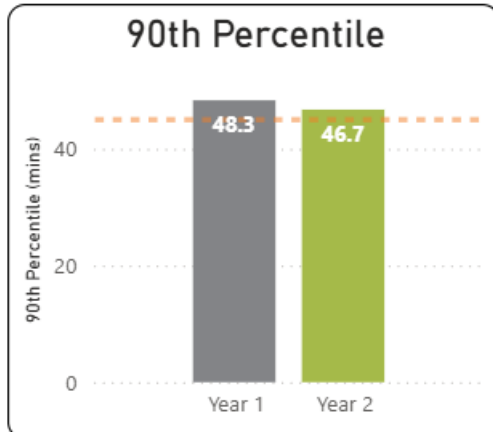
23

GOAL 1: SCENE TIME < 15 MINUTES

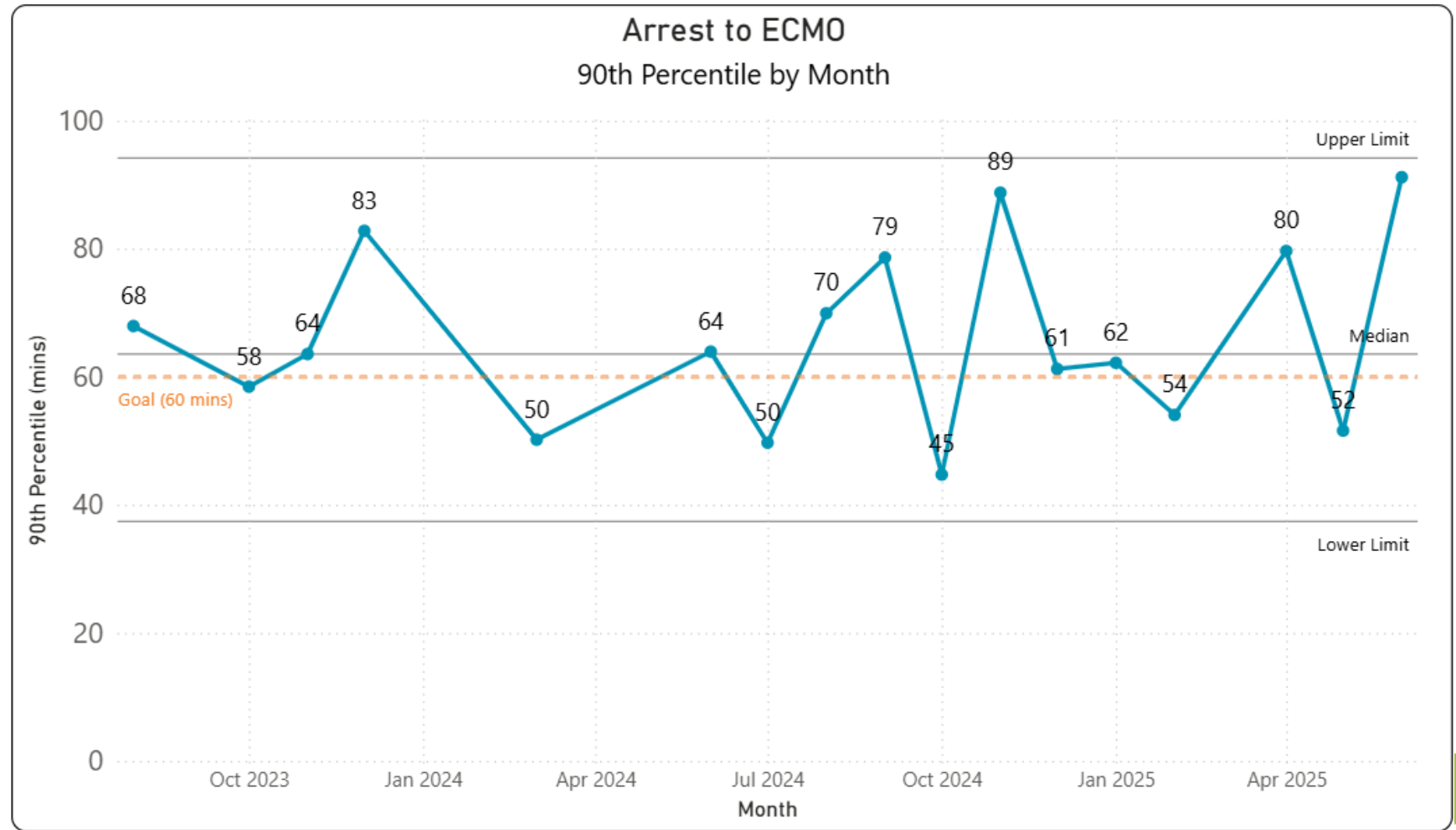
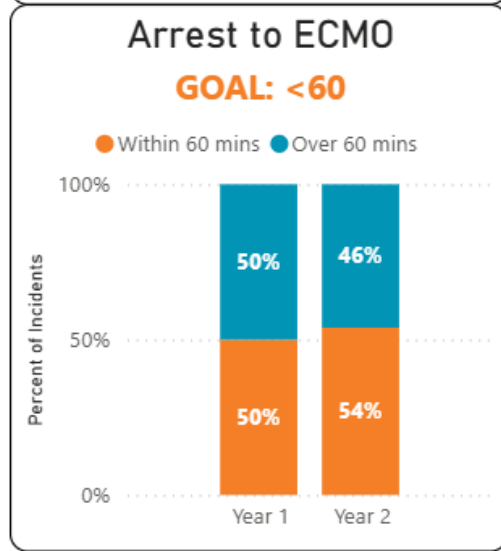
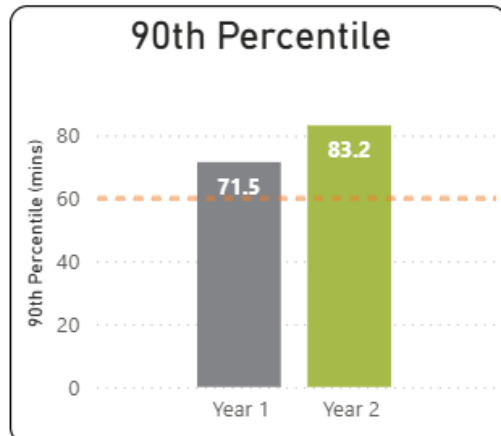




GOAL 2: CARDIAC ARREST TO ECPR RECEIVING CENTER < 45 MINUTES



GOAL 3: CARDIAC ARREST TO ECMO < 60 MINUTES



**Excludes patients in cardiogenic shock*



PROGRAM FUTURE

- Approaching program's third year (June 30, 2026)
- Expansion should focus on North County region
- Evaluation of inclusion criteria
 - Potential alignment with other programs
 - Adding other clinical indications (e.g., suspected pulmonary embolism)

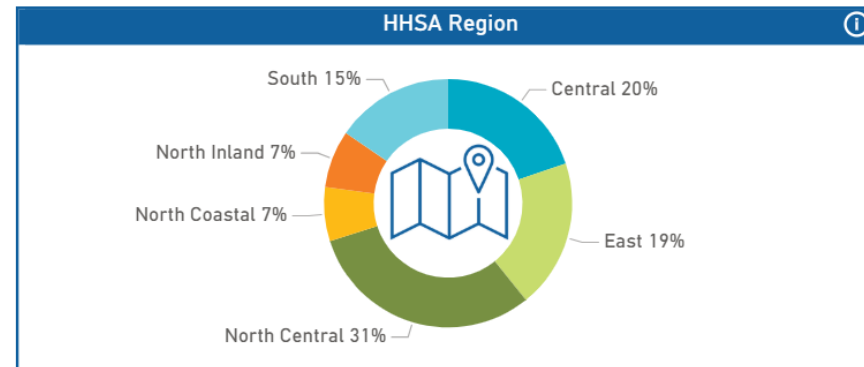
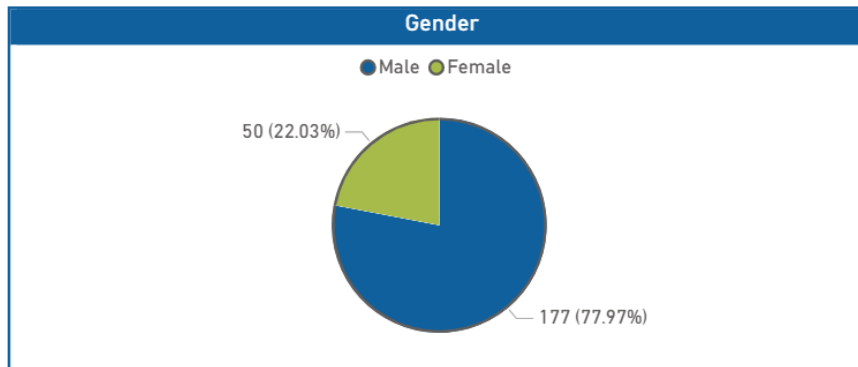
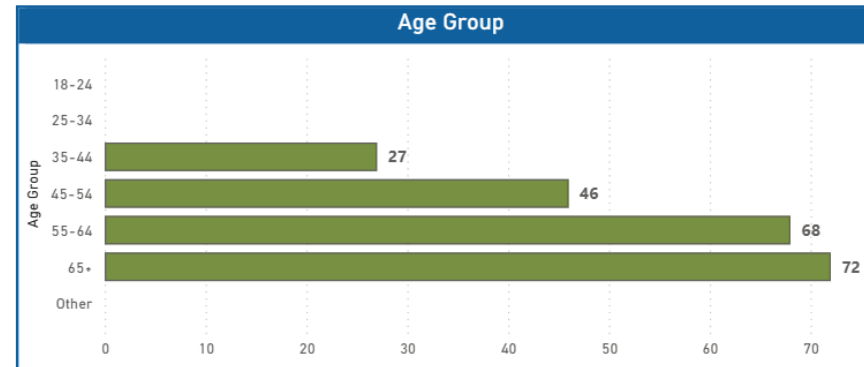
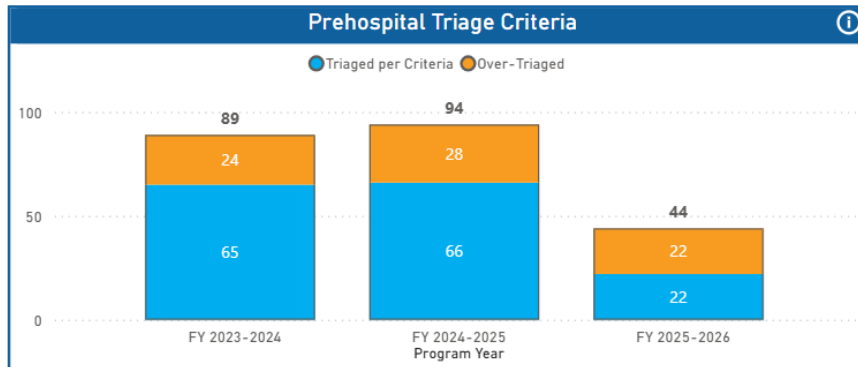


ECPR DASHBOARD



Prehospital ECPR Pilot Program

Program Year ⁱ
 Met Prehospital Criteria? ⁱ
 Initial EMS Rhythm
 Status on ED Arrival ⁱ
 Placed on ECMO?
 CPC Score at Discharge ⁱ



Sources: County of San Diego Public Safety Group, San Diego County Fire, Emergency Medical Services, LEMSIS Elite; Direct reporting from participating hospitals

Note: For blank values, data are automatically suppressed if n<11 or data are not available.



QUESTIONS?

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