San Joaquin County
Emergency Medical Services Agency

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

Thursday, May 9, 2024
0900 – 1100
Robert Cabral Agriculture Center
2101 E. Earhart Ave, Stockton CA 95206
Assembly Room 1

SJC EMS ADVISORY COMMITTEE

AGENDA

I. CALL TO ORDER/INTRODUCTIONS

II. APPROVAL OF PAST EMS ADVISORY COMMITTEE MEETING MINUTES:

a. Review and approval of February 8, 2024, EMS Advisory Committee meeting minutes

III. OLD BUSINESS:

a. Paramedic Training Program — Update
b. Healthcare Strategist - EMS System Assessment — Presentation-Discussion

IV. NEW BUSINESS:

a. EMS Advisory Membership Designations 2024:

i. (1) One Emergency Department Registered Nurse Liaison member representing the Base hospital, designated by the San Joaquin County Base Hospital;
ii. (2) Two Emergency Department Registered Nurse Liaison members representing all of San Joaquin County receiving hospitals;
iii. (1) One member representing the San Joaquin County exclusive operating area (EOA) emergency ambulance provider, designated by the EOA provider;
iv. (1) One member representing Fire-based emergency ambulance provider(s), designated by the San Joaquin County Fire Chiefs Association;
v. (1) One member representing Advanced Life Support (ALS) fire departments or districts, designated by the San Joaquin County Fire Chiefs Association.

b. San Joaquin County APOD Sub-Committee Formation:

i. Subcommittee objectives
1. Identify and review current transfer of care practices and identify ways to improve education and accuracy;

2. Identify and review barriers and efficiencies to hospital throughput;
3. Identify local solutions to reduce ambulance patient offload delays greater than 20 minutes.

ii. Identify subcommittee membership
1. (2) receiving hospital
2. (2) ambulance providers
3. (2) hospital executives
4. (1) ALS fire non transport
5. (1) EMS Agency

iii. Identify subcommittee frequency and schedule
iv. Identify subcommittee chair

c. EMS Annual Report

V. EMS SYSTEM PROGRAMS/REPORTS:

a. Specialty Care Reports
i. STEMI Program Update
ii. Stroke Program Update
iii. Trauma Program Update
iv. CQI Update

VI. ANNOUNCEMENTS/GOOD OF THE ORDER:

a. EMS Week 2024 recognition

VII. NEXT MEETING:

a. The next regularly scheduled EMS Advisory Committee meeting is scheduled for August 8, 2024.

VIII. ADJOURNMENT

Attachments:

EMS Advisory Committee meeting minutes - February 8, 2024 - Draft
San Joaquin County EMS System Assessment Presentation
EMS Policy No. 1400, EMS Advisory Committee
EMS Specialty System of Care Update
EMS CQI Update

San Joaquin County
Emergency Medical Services Agency

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

EMS Advisory Committee

Thursday, February 8th, 2024, at 0900

MINUTES

Members	Membership Representing	Present	Absent
Jared Bagwell (Co-Chair)	SJCEMSA	X	
Dr. Katherine Shafer (Co-Chair)	SJCEMSA	X	
Nasir Khan	ED RN – Base Hospital - SJGH	X	
Cheryl Heaney-Ordez	ED RN – Receiving Hospital – St. Joseph's Medical Center		X
Brian Hajik	EOA emergency ambulance provider – American Medical Response	X	
Erica Lowry	ED Director – Receiving Hospital – Sutter Tracy Community Hospital	X	
John Andrews	EOA emergency ambulance provider – Manteca District Ambulance	X	
Bryan Carr	Representative of an ALS fire dept./district – Stockton Fire Department	X	
Ken Johnson	BLS fire departments or districts – Lodi Fire Department	X	
Vince Stroup	Paramedic Non fire-based ALS emergency ambulance providers – Manteca District Ambulance		X
Lucas Mejia	EMT Non Fire-based ALS emergency ambulance		X

	providers – Manteca District Ambulance		
Vanessa Herrero	SJC accredited paramedic member representing a non fire-based ALS provider		**X**
Pat Burns	EOA emergency ambulance provider – Ripon Fire	**X**	
Dennis Bitters	Fire-based emergency ambulance provider – Ripon Fire	**X**	
Anna Josephson	Emergency Medical Dispatcher – SFD ECD	**X**	
Nicholas Taiariol	Law Enforcement – San Joaquin County Sheriff	**X**	
Alternate members			
Mary Barnes	San Joaquin General Hospital		**X**
James Trinchera	American Medical Response		**X**
George McKelvie	Manteca District Ambulance		**X**
Jeremy Abundiz	Ripon Fire Department		**X**
Jeremy Bishop	Stockton Fire Department		**X**
Jennifer Fowler	Sutter Tracy Community Hosp.		**X**
EMS Agency Staff	**Title**	**Present**	**Absent**
Christine Tualla	EMS Analyst	**X**	
Matthew Esposito	EMS Coordinator	**X**	
Amanda Petroske	EMS Trauma Coordinator	**X**	
Jeffrey Costa	EMS STEMI/Stroke Coordinator	**X**	
Anita Canarios	EMS Office Technician Coordinator	**X**	

Sophany Bodine	EMS Specialist		**X**
Guests			
Michelle Garibaldi	Chief Mental Health Clinician, Behavioral Health Services	**X**	
Greg Diederich	Director, SJC HCSA	**X**	
Courtney Chinn	Resident, St. Joseph Medical Center	**X**	

Meeting called to order at 0904 by Co-Chair EMS Director Jared Bagwell.

I. INTRODUCTIONS:

Committee member introductions.

II. APPROVAL OF PAST EMS ADVISORY COMMITTEE MEETING MINUTES:

a. M/S Chief Bitters/Brian Hajik - Committee moved to approve meeting minutes.

III. OLD BUSINESS:

a. 2023 APOT/APOD**:** Committee members presented with the ambulance patient offload delays (APOD) aggregate and by hospital for the last four (4) years, including 2023. APOD times will be reported locally though SJCEMSA bi-monthly on the SJCEMSA website. Discussion on rising APOD times countywide and record volume at Sutter Tracy Community Hospital (STCH) and AMR volume for December. ED holds, volume, staffing, space, and discharge processes remain the main challenges.
b. Paramedic Training: Committee members updated on progress to the NCTI/SJCEMSA paramedic class scheduled for March of 2024 and the partnership with Delta college.
c. EMS System Assessment and Emergency Ambulance RFP: Committee members updated on the EMS Assessment which is expected to be completed sometime in March. SJCEMSA will then begin to work with Healthcare Strategist on the upcoming emergency ambulance RFP based on the findings through the assessment.
d. BHS Mobile Crisis Response: M. Garibaldi updated Committee members on the expansion of BHS Mobile Crisis Response. With the very short timeline she was given they were not able to move forward with a staffing contract with AMR. Funding and staffing are currently not available for the county staffing of a 24-

hour crisis response. BHS to work on a plan B. As of now they are operating Monday through Friday 8am to 5pm.

IV. NEW BUSINESS:

a. Project Advisory Group: Committee members were informed of the impending establishment of an EMS Assessment Project Advisory Group. The Project Advisory Group is to be made up of EMS stakeholders, local hospital executives, public safety, or public health representatives that will not have a conflict of interest. The Project Advisory Group first action will be to review draft of EMS Assessment which will creates the framework for the emergency ambulance RFP. J. Bagwell is going to draft up the Project Advisory Group and asked the committee to send him possible candidates for the group.
b. Policy Review: Committee members presented with EMS policies that were up for stakeholder comment in the past several months and asked to discuss or comment with suggestions or concerns for the following polices.
    i. 2610 MICN Authorization: the minimally interrupted cardiac resuscitation video and pretest.
    ii. 3415 Trauma Center Notification and Transfer of Care Process: Transfer of care process was added. A. Petroske explained the transfer of care process and the importance of getting the patient into the OR.
    iii. 4101 EMS Vehicle Medication and Equipment: Changes to minimum medication and stock on hand were made. TXA and dosage were added.
    iv. 4448 EMS Aircraft Utilization: Updates to language in this policy were made. Dr. Shafer discussed with the committee the advantages and disadvantages of air transport.
    v. 4981 Receiving Hospital Status: The mandatory 8:00 update for hospital status was removed.
    vi. 5201 Medical Patient Destination: Language of policy was update. Doctors Hospital of Manteca no longer has labor and delivery.
    vii. 6640 STEMI Quality Improvement Committee:
    viii. 6650 Stroke Quality Improvement Committee:
    ix. 5700 Trauma Protocol ATRA 1 and ATRA 2:

    Discussion and comments on several policies including MICN Authorization, EMS Aircraft Utilization, Receiving Hospital Status.
c. EMS Week: Committee members encouraged to submit nominations for the 2024 EMS Award of Excellence.
    i. Efforts and dedication to improving the EMS system:
    ii. Providing mentorship support of other EMS system participants
    iii. Providing valuable education and feedback to the EMS system
    iv. Commitment to helping others in our community.

V. EMS SYSTEM REPORTS:

a. Specialty Care Reports:
    i. STEMI Program: Discussed STEMI transfer process
    ii. Stroke Program: No significant update
    iii. Trauma Program: A. Petroske is leaving SJCEMSA and J. Costa will be taking over the trauma program.
    iv. CQI: M. Esposito gave an update on CQI program including current planning for BLS KPI to include:
        1. Total volume of BLS calls.
        2. BLS Lights and sirens transport.
        3. Accuracy of adherence to policy 3202.
        4. Medication administration.

VI. ANNOUNCEMENTS/GOOD OF THE ORDER:

a. New EMS Agency Staff: J. Bagwell introduced D. Valenzuela, EMS Analyst.
b. Ripon Fire District: D. Bitters will be retiring in April.
c. Stockton Fire Department: B. Carr shared patient success stories
d. San Joaquin County Sheriff Department: J. Bagwell asked N. Taiariol is there is any meeting he could attend within the sheriffs department to get feedback from the law side of EMS. N. Taiariol stated they have a monthly chiefs meeting he can give information on.
e. AMR: B. Hajik stated that he sees improvements in recruiting EMTs and Paramedic in San Joaquin County.
f. SJCEMSA: C. Tualla reminded the committee the EMR course will be held in June.

VII. NEXT MEETING:

a. The next regularly scheduled meeting is scheduled for May 9, 2024.

VIII. ADJOURNMENT:

Meeting adjourned 1048.

SAN JOAQUIN COUNTY
EMERGENCY MEDICAL SERVICES
ASSESSMENT

Presented by
Healthcare Strategists
May 2024

HEALTHCARE STRATEGISTS

Introduction

- Goal: A comprehensive EMS system assessment of the County EMS system.
- Healthcare Strategists: Consultants represent emergency medical services (EMS), fire, and clinical experts, each with at least 35 years of industry experience.

Assessment Process

- Interviews: Met with EMS, fire, hospital, and county leadership.
- Ride-Alongs: Spent considerable time in the field observing the system.
- Data Analysis: Historical call volume, performance, agreements, and other materials reviewed.
- Support: The San Joaquin County EMS Agency (SJCEMSA) and all stakeholders were open and engaging in sharing their agencies' demographics, strengths, and opportunities for improvement.

EMS System Highlights

- The San Joaquin County EMS System comprises highly trained individuals working in all aspects of EMS who have a shared mission and vital role of providing a collective continuum of care for people in need.
- SJCEMSA plays a critical role in coordinating the EMS system.
- The countywide use of EMD and MPDS provides excellent 911 caller support and resource management opportunities.
- Patient care standards are high and well documented through a standardized ePCR platform for ambulance providers.

DISCUSSIONS, FINDINGS, AND RECOMMENDATIONS

HEALTHCARE STRATEGISTS

Preface

- Findings and recommendations are based on best practices, industry trends, and service innovation.
- Recommendations may need to be part of an EOA bid, a new provider contract, or other process.
- Recommendations do not consider external factors such as financial resources, provider interest, or political support to implement.
- Key Findings/Recommendations are indicated in red.

1.

Use of Medical Priority Dispatch System (MPDS®)

Finding: Dispatch centers are using MPDS and emergency medical dispatch (EMD) effectively with appropriate quality improvement processes. Both centers are ACE-accredited.

Recommendation: Continue high-level dispatch services. Consider an ongoing review of lights and siren use by MPDS classification to reduce the driving risk to EMS crews and the public.

2.

Use of Communications System, including Practices and Configuration

Finding: Multiple dispatch centers is the predominant model.

Recommendation: Consolidating to one dispatch center would streamline dispatching, reduce costs, and improve resource tracking.

Finding: Each dispatch center utilizes a different method for resource tracking that is not visible to the other center.

Recommendation: All EMS resources should be visible to each other and dispatchers.

3.

Clinical Oversight and Performance

Finding: The existing clinical metrics are working well. Future performance incentives should be tied to quality patient care. Current provider agreements may not require enough clinical leadership to ensure excellent patient care and outcomes.

Recommendation: Future agreements should require sufficient clinical staff to meet patient care standards through monitoring, training, and education.

Finding: The EMS Medical Director supports an Advanced EMT program to serve the community better.

Recommendation: Support the Advanced EMT program to improve the tiered-response program.

Finding: The Cardiac Arrest Registry to Enhance Survival (CARES) Report identified that the County had superior survival outcomes.

Recommendation: Continue participation in the CARES program and compare data elements to identify and implement clinical improvement opportunities.

4.

Integration and Use of First Responders

Finding: There appears to be a lack of joint training and education between ambulance and first responder staff.

Recommendation: Future agreements should require integrating ALS and BLS first responders. Collaborating training with ambulance personnel will support greater on-scene patient care coordination.

5.

Deployment of Ambulance Resources

Deployment and System Status Management Plans

Finding: Not all ambulance provider plans were on file with the EMS Agency, and many were outdated.

Recommendation: Providers should update their plans regularly. SJCEMSA should review plans for accuracy and completeness.

Response Zone Structure

Finding: A lack of AMR deployment centers (stations) in certain areas decreases unit availability. The Zone X-26 population has grown considerably.

Recommendation: AMR should consider adding stations in harder-to-serve areas to improve response times.

Recommendation: Consider an EOA to cover Zone X-26.

5.

Deployment of Ambulance Resources
(continued)

Exemptions

Finding: The number of exemptions granted is significant and disproportional to other EMS agencies in California.

Recommendation: SJCEMSA should continue to review the current exemption policy and consider adjustments to address only truly unpredictable situations

Ambulance Response Times

Finding: The clock starts when the call is ready for dispatch, not when the unit receives the call.

Recommendation: The provider response time standard should start when the unit receives the call. Dispatch performance should be measured separately.

5.

Deployment of Ambulance Resources (continued)

Ambulance Response Times (continued)

Finding: The County has some of the quickest standards in California.

Recommendation: Response times drive system costs more than any other factor. Consider applying where they provide value and redirect funding to tiered-response options, community paramedicine, lower ambulance rates, public CPR classes, public AED distribution, etc.

Tiered Response

Finding: BLS units are being sent to Zone X-26 with extended response times when ALS units are available within the zone.

Recommendation: Response times should be met using an ALS or BLS unit.

5.

Deployment of Ambulance Resources (continued)

Tiered Response (continued)

Finding: The stakeholders interviewed stated a need for firefighters/paramedics to accompany 30% of BLS transports. However, no data was available for a more in-depth analysis.

Recommendation: These instances should be reported, quantified, and corrected where inappropriate through the existing CQI process. Changes could include adjusting which MPDS determinants receive a BLS response.

Finding: SCJEMSA policy requires a 100% audit of all 911 calls dispatched to a BLS unit. While the Agency is conducting audits, interviews with AMR leadership indicated that it is not occurring at 100% due to a lack of CQI staff.

Recommendation: Ideally, all BLS 911 calls should be audited. At a minimum, any BLS call requiring an ALS unit or firefighter/ paramedic should be included. This program should be added to the existing CQI Council meeting agendas.

5.

Deployment of Ambulance Resources
(continued)

Field Management & Supervision

Finding: AMR indicated it has challenges filling supervisor shifts and is not consistently compliant. A recent MCI requiring a supervisor went unfulfilled, as both supervisors were in the office instead of the field.

Recommendation: AMR management should meet its contractual agreement and EMS policies for field response. Future agreements should specify a minimum amount of supervisor field time.

Field Supervisor Certification/Licensure

Finding: Sometimes, AMR uses an EMT shift lead as a supervisor. The contract does not require the supervisor to be a paramedic.

Recommendation: SJCEMSA should consider requiring the supervisor to be a paramedic in future agreements.

6.

EMS Data and Performance Reporting Requirements

Clinical Data

Finding: There have been temporary delays with ambulance data reporting due to transition to a single patient care reporting platform.

Recommendation: Once consolidated, SJCEMSA should capitalize on the ImageTrend tools to track ambulance patient care metrics and implement systemwide education to improve patient outcomes.

Compliance Software

Finding: The online compliance utility (OCU) software currently in use simplifies the oversight process for SJCEMSA.

Recommendation: Continue to mandate OCU software to support provider compliance tracking.

7.

Ambulance and Dispatch Staffing and Schedules

Finding: Stockton Fire uses 24-hour shifts for dispatchers. Longer shifts are associated with lower performance, employee mistakes, and increased injuries.

Recommendation: Consider matching dispatcher schedules to dispatch workload for additional resources during peak demand.

8.

Integration of Bi-directional Health Exchange

Finding: Current patient diagnosis and condition feedback can be obtained through the SJCEMSA website.

Recommendation: Consider a robust solution that automates this process between pre-hospital providers and receiving EDs.

9.

Feasibility for Community Paramedic and Alternative Destination Programs

On-Scene Treatment and Release

Finding: EMS systems across California have benefited from not transporting patients with minor issues.

Recommendation: Research opportunities for providers to have other options than just transporting patients. This will reduce ED saturation.

911 Triage and Referral

Finding: Most EMS systems have opportunities to redirect 911 callers to more appropriate resources.

Recommendation: Research partnerships to connect 911 callers with the right resources for their medical needs.

9.

Feasibility for Community Paramedic and Alternative Destination Programs
(continued)

Post-discharge Follow-up

Finding: Patients returning to the hospital after discharge financially impact the hospital.

Recommendation: Discuss with hospitals the current impact and interest in paramedics supporting follow-up care to avoid readmissions.

Behavioral Health Alternate Destinations

Finding: Behavioral health patients have prolonged ED stays awaiting transfer to a facility. Direct transport to a behavioral health facility can save hundreds of ED hours. Currently, there is no such facility within the County.

Recommendation: As resources become available in the County, explore ways to avoid EDs and transfer directly to that facility.

10.

EMS System Financial Analysis

Cost Containment Strategies

Dispatch: A single dispatch center is more cost-efficient. When Stockton Fire established its dispatch center, AMR noted no appreciable savings. SB438 limits dispatch options

Hospital Off-Load Time: Delays in turning patient care over to the ED and returning to service represent a significant loss of unit hours in the system. For AMR, those delays equate to 12 lost units hours daily or a financial loss of $950,000.

Financial Statements

Finding: Most providers appear to be financially stable. However, because Ripon Fire tracks overall expenses, evaluating the ambulance program is impossible. Escalon has the highest revenue and cost per transport. Ripon Fire receives the least revenue per transport.

Recommendation: Ripon Fire may consider a billing audit to ensure it is maximizing transport collections. SJCEMSA should review financial statements annually and look for trends in revenue, cost per transport, and net income that could indicate a future financial challenge.

11.

Medical Helicopter Utilization

Finding: Stockton Airport has a base to support 911 and IFT helicopter transports. The cancellation rate is significant.

Recommendation: Review the current helicopter dispatch protocols to determine why there is a high rate of canceled flights.

Finding: The current EMS policy for aircraft utilization is available for public comment currently.

Recommendation: Review and incorporate stakeholder feedback to balance the need and availability of air resources to serve the community.

12.

Other Areas of Interest

Patient Off-Load Delays

Finding: Most EDs cannot consistently off-load patients within the 20-minute SJCEMSA goal.

Recommendation: To reduce delays, capitalize on best practices provided in the CHA/EMSA toolkit and solutions implemented in other counties.

Finding: During field observations, some ambulance crews appeared less motivated to return to service until a supervisor arrived.

Recommendation: Provider leadership needs to closely track the time from patient turnover to unit availability for opportunities to capture lost unit hours.

12.

Other Areas of Interest
(continued)

Patient Off-Load Delays (continued)

Finding: The current EMS transfer of care policy allows paramedics to take patients to another ED or leave them in a bed, chair, or waiting area without turnover to hospital staff.

Recommendation: Continue to consult with County Counsel to analyze this policy related to EMTALA. Work with ED and hospital leadership to mitigate turnover challenges.

Use of Non-911 ALS IFT and CCT Providers

Finding: AMR's zone includes ALS IFT and CCT; the other zones do not.

Recommendation: Consider allowing ALS IFT and CCT by all permitted providers to enhance hospital resources for transfers.

12.

Other Areas of Interest
(continued)

Use of Non-911 ALS IFT and CCT Providers (continued)

Finding: CCT-RN is a limited resource in the County. Other EMS agencies have successfully reduced the strain on CCT-RN by training critical care paramedics (CCP) to handle some of these calls.

Recommendation: Explore CCP training as allowed by the California Code of Regulations to increase resources and decrease the demand for CCT-RN.

Public/Private ALS Field Provider Patient Care Coordination

Finding: On-scene patient coordination was excellent, as observed during field observations. Interviews with ALS fire stakeholders indicated a concern about on-scene control for patient care.

Recommendation: The EMS agency may want to review this policy to clarify the difference between scene management and medical care management and establish better expectations for all field providers.

12.

Other Areas of Interest
(continued)

Public/Private ALS Field Provider Patient Care Coordination
(continued)

Finding: First responders and transport providers use different patient care report software.

Recommendation: Consider adopting the same reporting software for all EMS stakeholders. This would allow first responders to immediately transfer patient information to the ambulance crews' reports, improve documentation, and streamline CQI through a single report system.

Finding: Historically, the AMR agreement included restocking first responder crews, but it is not in the current one. This has led to inconsistency by ambulance crew with restocking fire units.

Recommendation: Add "one-for-one" restocking for first responders into all ambulance provider agreements.

12.

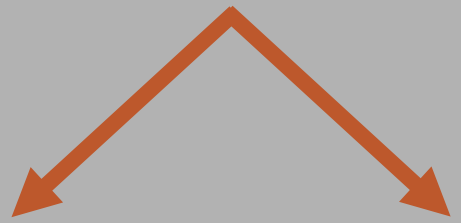
Other Areas of Interest
(continued)

EMS Agency Overview

Finding: The current licensing and certification fees are typically higher than those of other EMS agencies in California. This can create entry barriers for EMTs and paramedics, especially for part-time employees.

Recommendation: Consider revising the fees to lessen the burden on applicants, who will be hired by the local ambulance providers and increase 911 and IFT system capacity.

Next Steps



Ambulance RFP

EMS Agency to work with Healthcare Strategists team to draft and release a competitive RFP process to secure emergency ambulance service through County Purchasing.

EMS System

The EMS Agency, with input from the EMS Advisory Committee, will review and prioritize the identified system recommendations.

SAN JOAQUIN COUNTY
EMERGENCY MEDICAL SERVICES
ASSESSMENT

Questions & Answers

HEALTHCARE STRATEGISTS

TITLE: **EMERGENCY MEDICAL SERVICES ADVISORY COMMITTEE** EMS Policy No. **1400**

PURPOSE:

The purpose of this policy is to establish membership, roles, responsibilities, process, and structure of the San Joaquin County Emergency Medical Services Advisory Committee (EMS Advisory Committee).

AUTHORITY:

Health and Safety Code, Division 2.5, Section 1797.220

POLICY:

The EMS Advisory Committee is a multi-disciplinary, stakeholder represented committee established to discuss, review, provide input, and make recommendations to the EMS Medical Director and the San Joaquin County Emergency Medical Services Agency (SJCEMSA) on matters related to policy and procedures with the purpose to enhance the delivery and effectiveness of prehospital emergency medical services.

PROCEDURE:

I. EMS Advisory Committee Responsibilities:

A. Reviewing draft SJCEMSA policies and reviewing comments on draft policies submitted during any policy review period.

B. Serve as a forum for pre-hospital stakeholder engagement related to the SJCEMSA EMS System.

II. EMS Advisory Committee Membership:

A. Only properly affiliated San Joaquin County EMS system stakeholders shall hold membership in the EMS Advisory Committee.

B. The EMS Advisory Committee membership shall be comprised of thirteen (13) designated members representing each of the following:

1. EMS Administrator – permanent member.
2. EMS Medical Director – permanent member.
3. (1) One Emergency Department Registered Nurse Liaison member representing the Base hospital, designated by the San Joaquin

County Base Hospital.

4. (2) Two Emergency Department Registered Nurse Liaison members representing all of San Joaquin County receiving hospitals.
5. (1) One member representing the San Joaquin County exclusive operating area (EOA) emergency ambulance provider, designated by the EOA provider.
6. (1) One member representing Fire-based emergency ambulance provider(s), designated by the San Joaquin County Fire Chiefs Association.
7. (1) One member representing Advanced Life Support (ALS) fire departments or districts, designated by the San Joaquin County Fire Chiefs Association.
8. (1) One member representing Basic Life Support (BLS) fire departments or districts, designated by the San Joaquin County Fire Chiefs Association.
9. (1) One San Joaquin County accredited paramedic member representing Non Fire-based ALS emergency ambulance providers, designated by the Non Fire-based ALS emergency ambulance providers.
10. (1) One EMT member representing Non Fire-based ALS emergency ambulance providers, designated by the Non Fire-based ALS emergency ambulance providers.
11. (1) One Emergency Medical Dispatcher (EMD) member representing authorized Medical Priority Dispatch System (MPDS) dispatch centers, designated by the authorized MPDS dispatch centers.
12. (1) One member representing law enforcement agencies within San Joaquin County, designated by the San Joaquin County Law Chiefs Council.

C. EMS Advisory Committee members shall serve a term of two (2) years and not limited to term limits.

D. Membership for representatives 3 through 7 shall expire on July 1 of even years and membership for representatives 8 through 13 shall expire on July 1 of odd years.

III. EMS Advisory Committee Membership Designation:

A. All EMS Advisory Committee member designations must be submitted in writing to the EMS Administrator.

B. Member designation requires a consensus of different organizations for member representatives #9, #10, and #11. If consensus is not achieved, or if more designations are received than allotted for a particular membership, the EMS Administrator shall designate a properly affiliated member.

C. Re-designation of membership representation is required at the end of a member's two (2) year term, or in the event of a member no longer meets the requirements for membership or resigns.

IV. EMS Advisory Committee Membership Seating and Vacancy:

A. EMS Advisory Committee members may be removed by the EMS Administrator who are disruptive to committee business or who do not attend at least 75% of scheduled EMS Advisory Committee meetings annually. A member removed based on either of these reasons shall be deemed ineligible for future membership and the membership position shall be deemed vacant.

B. EMS Advisory Committee members may be ineligible for a membership position and their membership position deemed vacant due to change of employment status, change in license or certification status, or other reasons.

C. An EMS Advisory Committee member may request a regular alternate member to attend a meeting. Such requests must be made in advance and in writing to the EMS Administrator for approval.

V. EMS Advisory Committee Proceedings:

A. The EMS Administrator or the EMS Medical Director will serve as the chairperson for each meeting.

B. EMS Advisory Committee members shall notify the SJCEMSA in advance of any meeting they will be unable to attend.

C. The EMS Advisory Committee shall meet no less than quarterly on a schedule to be determined by the EMS Administrator in coordination with

EMS Advisory Committee members.

D. The SJCEMSA will provide administrative and clerical support to maintain records of each meeting including agendas, minutes, and attendance records.

E. All meetings of the EMS Advisory Committee, including all documents pertaining to the proceedings, are public documents and are subject to public review pursuant to the California Public Records Act, California Government Code, Section 6240 et. seq.

San Joaquin County
Emergency Medical Services Agency

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

DATE: May 9, 2024

TO: EMS Advisory Committee

PREPARED BY: Jeff Costa, MBA, RN
Specialty Care Coordinator

SUBJECT: Specialty Systems of Care Update

Medical treatment of San Joaquin County citizens and visitors for traumatic injuries, STEMI and stroke related illnesses continue to be lifesaving and administered at a high level of expertise.

SJCEMSA engages regularly with specialty system of care hospitals regarding opportunities for improvement through multidisciplinary focused committees. A primary focus for the remainder of this year (2024) is system evaluation through data.

Currently, SJCEMSA is collaborating with San Joaquin General Hospital's Level II Trauma Center Department to standardize a transfer process for trauma patients originating at non-trauma centers. Expediting the interfacility transfer process for these patients will considerably improve patient survivability of injuries.

Additionally, a combined standardized approach to data collection and reporting will improve system evaluation for specialty systems of care in SJC.

SAN JOAQUIN COUNTY

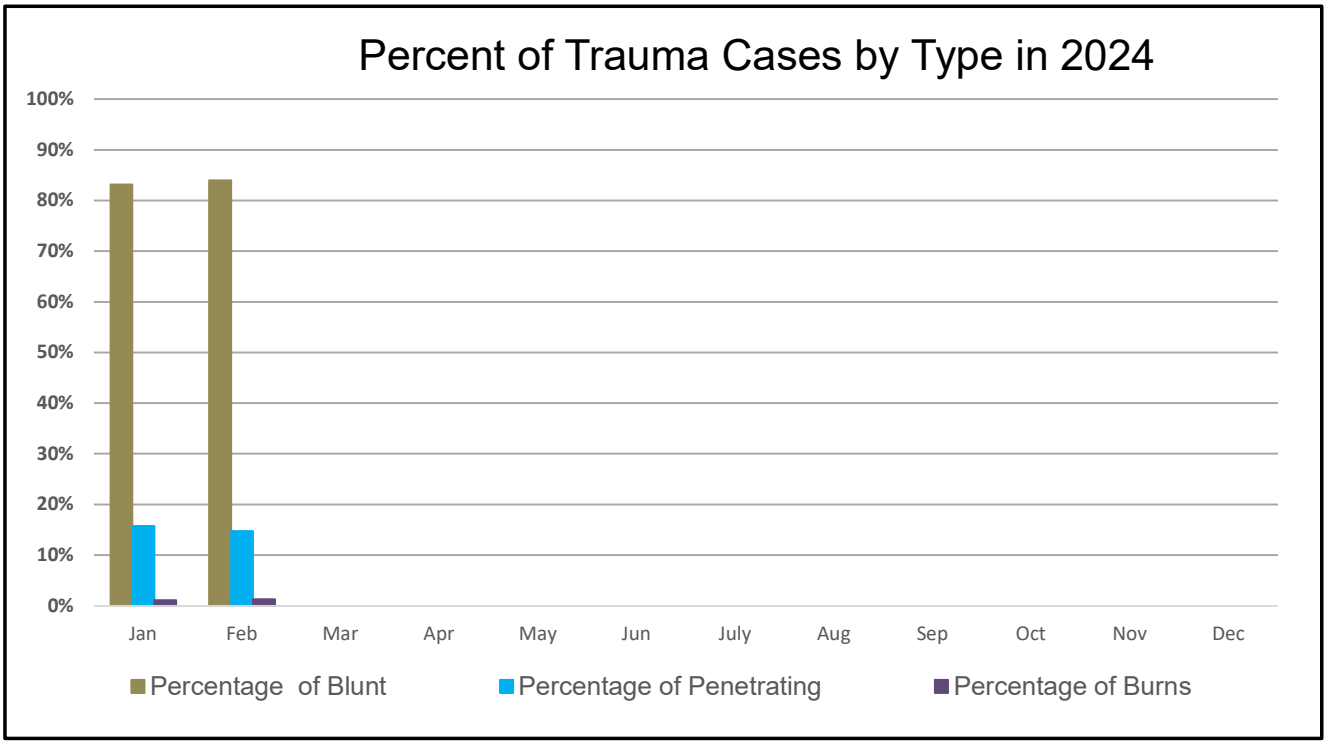
Emergency Medical Services Agency

Specialty Care System Report

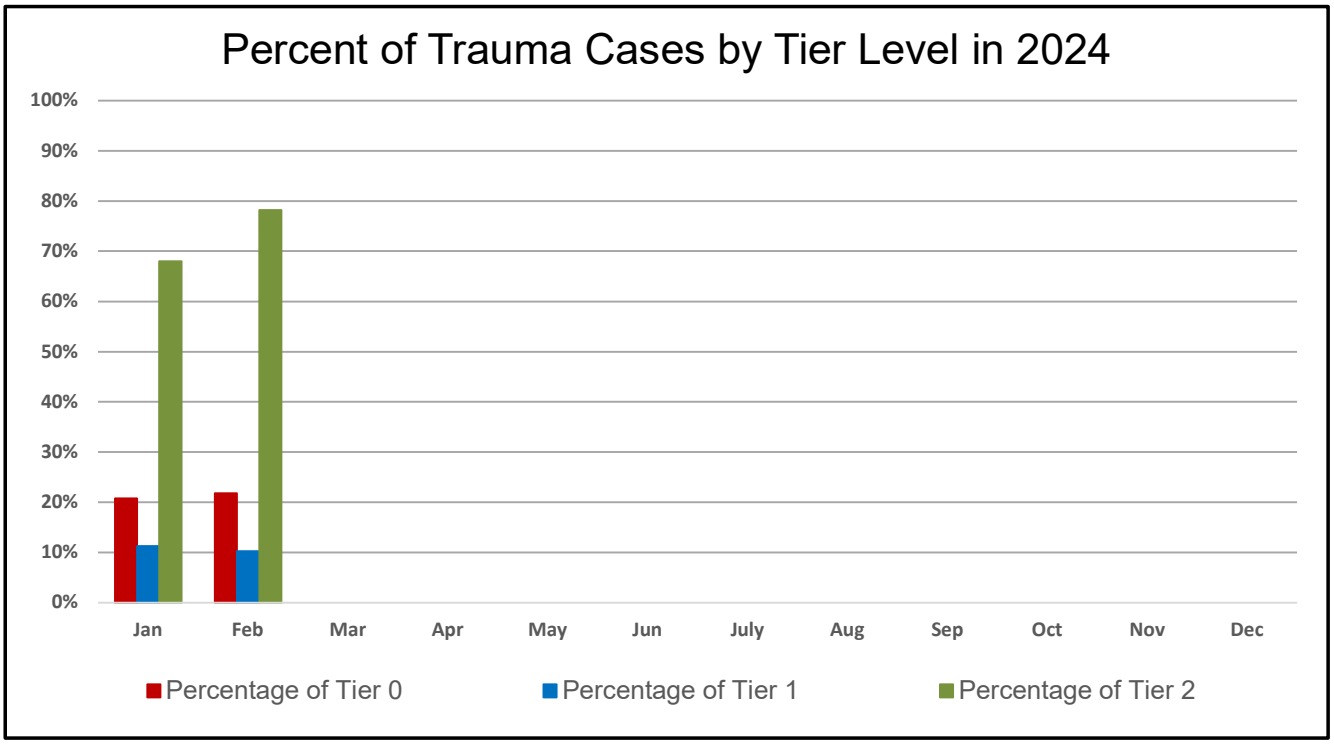
EMS Advisory Committee May of 2024

Created by: Jeff Costa, RN, Specialty Care Coordinator

Percent of Trauma Cases by Type in 2024							
Month	Trauma Cases Total	Blunt Trauma Cases	Percentage of Blunt	Penetrating Trauma Cases	Percentage of Penetrating	Burn Trauma Cases	Percentage of Burns
Jan	178	148	83.1%	28	15.7%	2	1.1%
Feb	156	131	83.97%	23	14.74%	2	1.3%
Mar							
Apr							
May							
Jun							
July							
Aug							
Sep							
Oct							
Nov							
Dec							



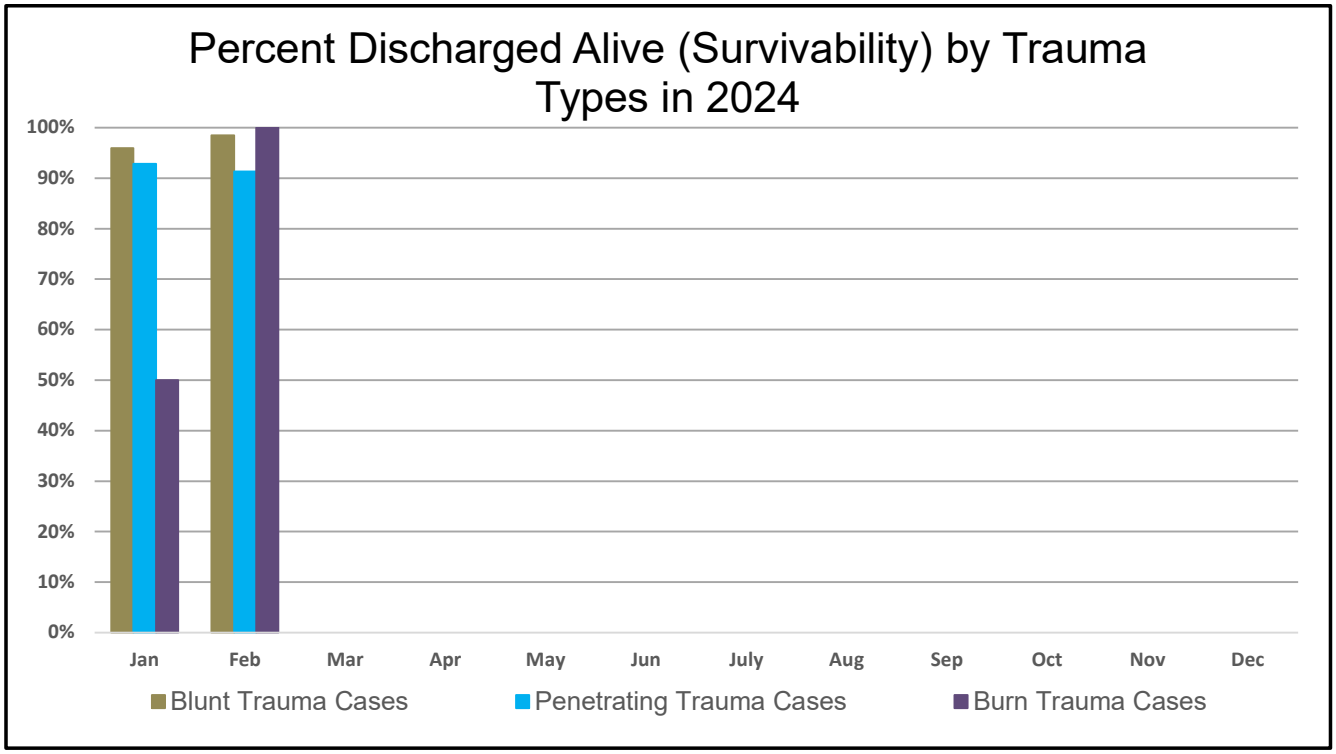
Percent of Trauma Cases by Tier Level in 2024							
Month	Trauma Cases Total	Tier 0 Cases	Percentage of Tier 0	Tier 1 Cases	Percentage of Tier 1	Tier 2 Cases	Percentage of Tier 2
Jan	178	37	20.8%	20	11.2%	121	68.0%
Feb	156	34	21.8%	16	10.3%	122	78.2%
Mar							
Apr							
May							
Jun							
July							
Aug							
Sep							
Oct							
Nov							
Dec							



Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

Percent Discharged Alive (Survivability) by Trauma Types in 2024				
Month	Total Percent of Trauma Cases Discharged Alive	Blunt Trauma Cases	Penetrating Trauma Cases	Burn Trauma Cases
Jan	94.94%	95.9%	92.9%	50.0%
Feb	97.44%	98.5%	91.3%	100.0%
Mar				
Apr				
May				
Jun				
July				
Aug				
Sep				
Oct				
Nov				
Dec				

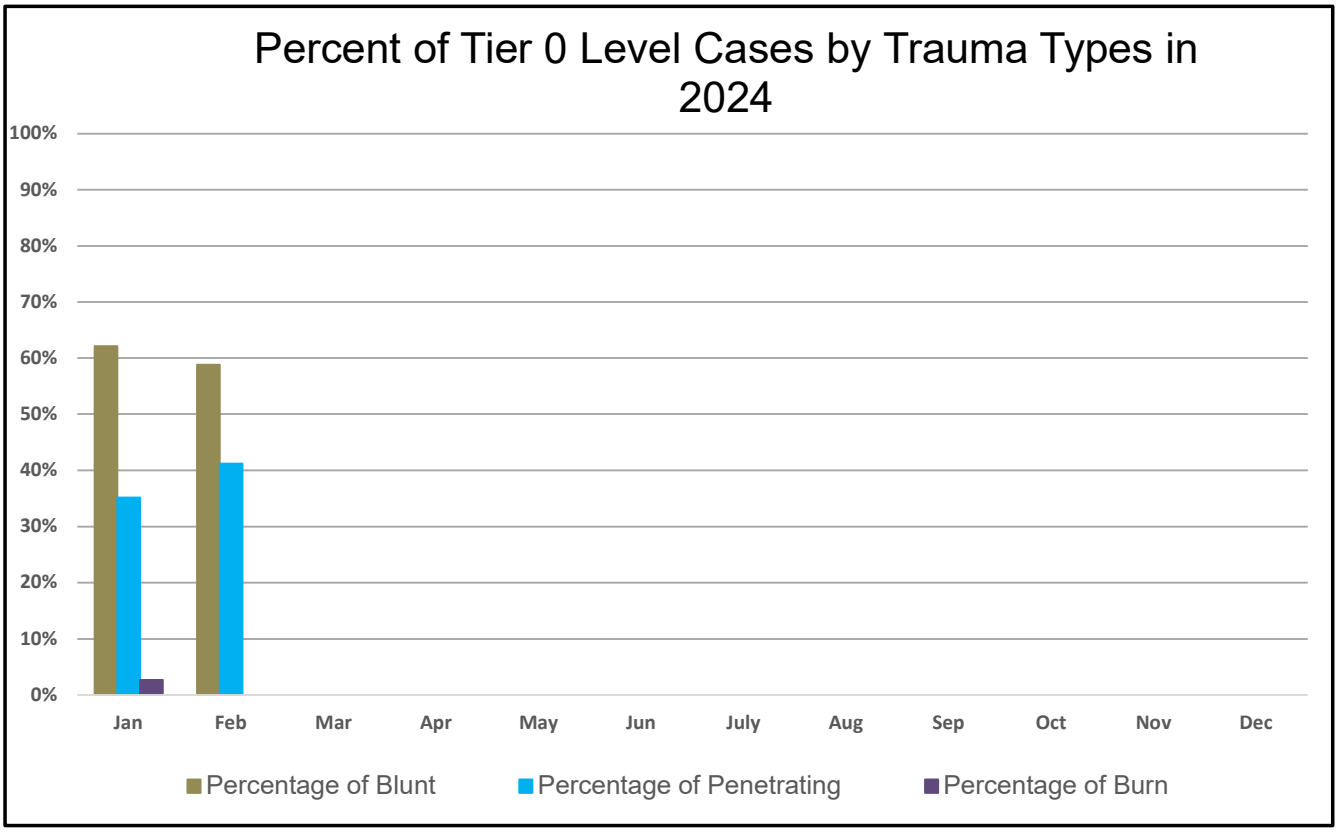


Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

Percent of Tier 0 Level Cases by Trauma Types in 2024

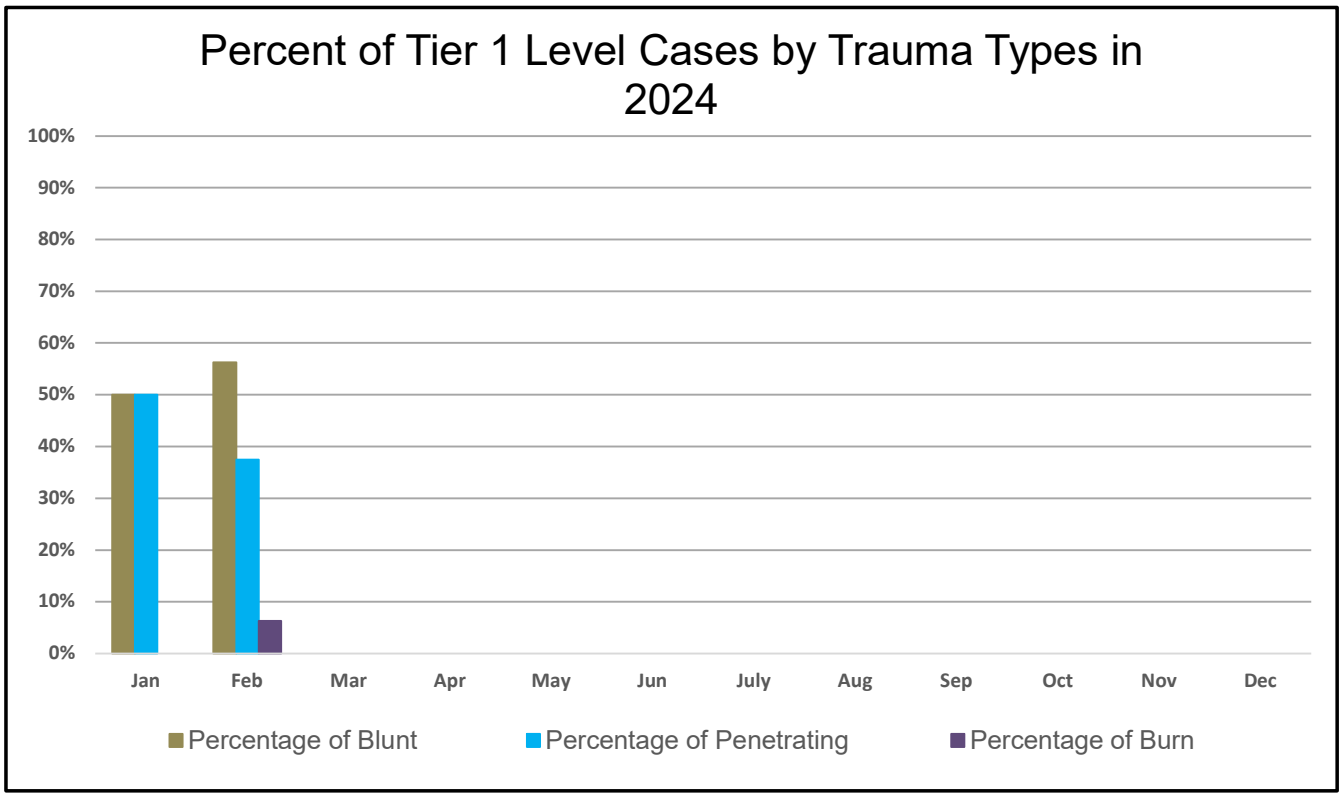
Month	Tier 0 Trauma Cases	Blunt Tier 0	Percentage of Blunt	Penetrating Tier 0	Percentage of Penetrating	Burn Tier 0	Percentage of Burn
Jan	37	23	62.2%	13	35.1%	1	2.7%
Feb	34	20	58.8%	14	41.2%	0	0.0%
Mar							
Apr							
May							
Jun							
July							
Aug							
Sep							
Oct							
Nov							
Dec							



Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

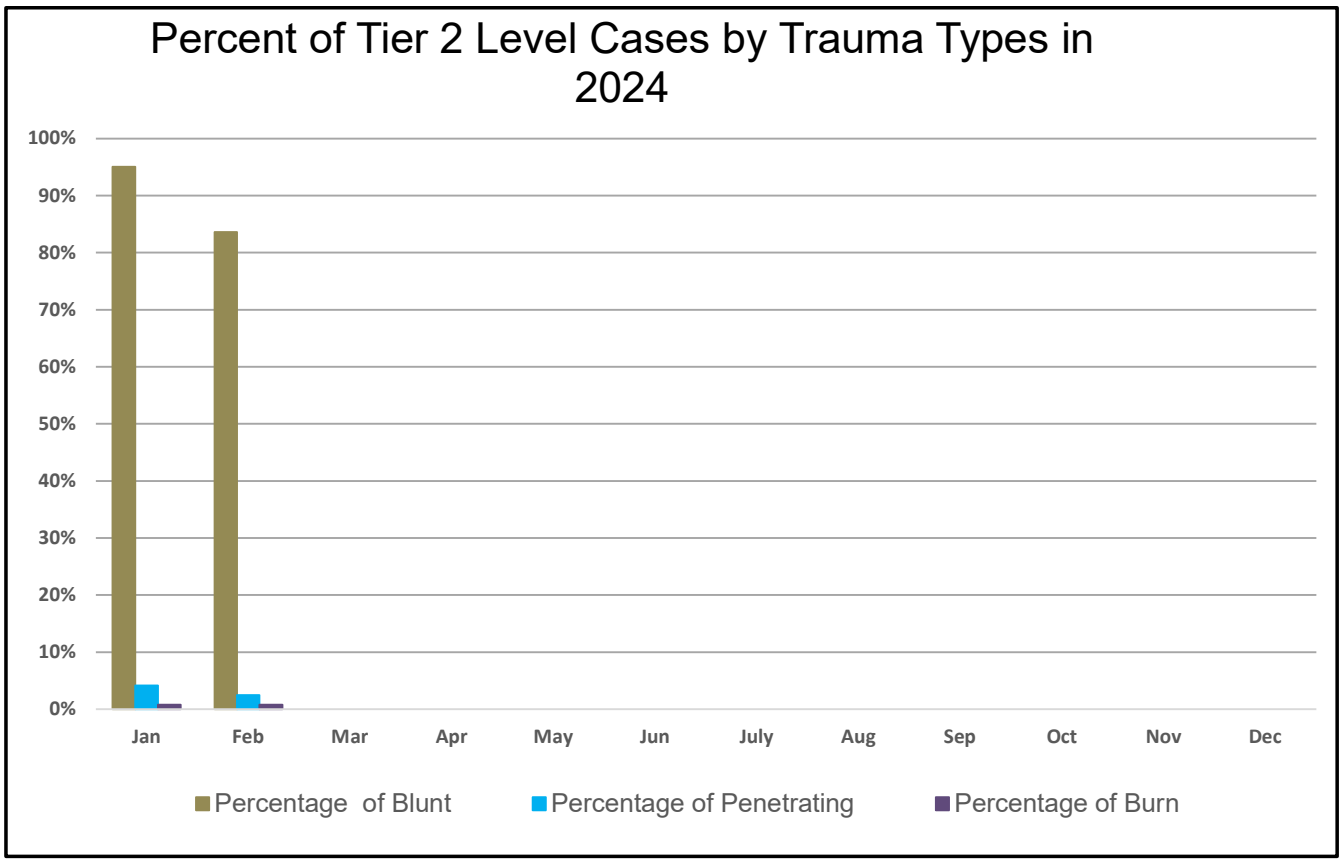
Percent of Tier 1 Level Cases by Trauma Types in 2024							
Month	Tier 1 Trauma Cases	Blunt Tier 1	Percentage of Blunt	Penetrating Tier 1	Percentage of Penetrating	Burn Tier 1	Percentage of Burn
Jan	20	10	50.0%	10	50.0%	0	0.0%
Feb	16	9	56.3%	6	37.5%	1	6.3%
Mar							
Apr							
May							
Jun							
July							
Aug							
Sep							
Oct							
Nov							
Dec							



Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

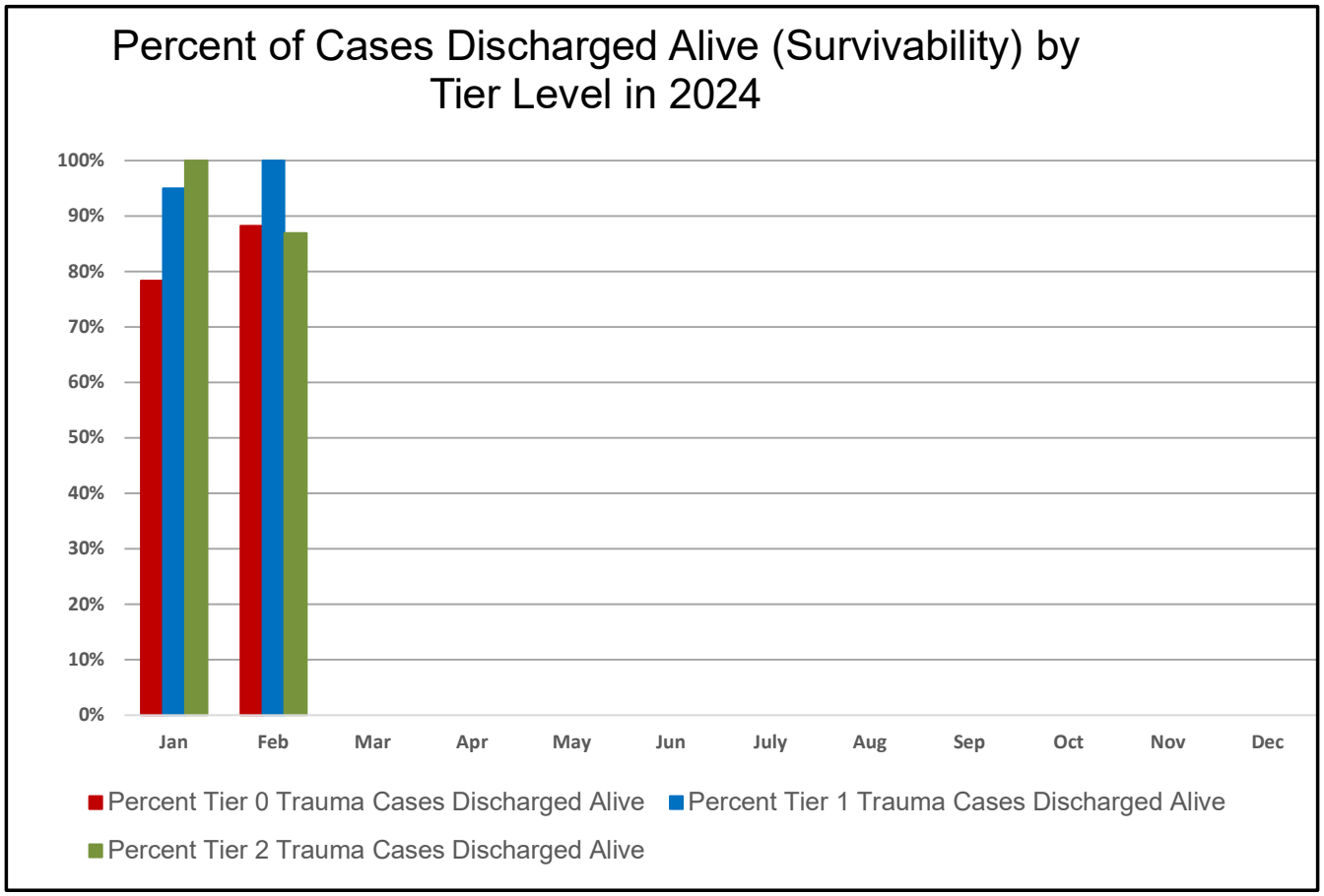
Percent of Tier 2 Level Cases by Trauma Types in 2024							
Month	Tier 2 Trauma Cases	Blunt Tier 2	Percentage of Blunt	Penetrating Tier 2	Percentage of Penetrating	Burn Tier 2	Percentage of Burn
Jan	121	115	95.0%	5	4.1%	1	0.8%
Feb	122	102	83.6%	3	2.5%	1	0.8%
Mar							
Apr							
May							
Jun							
July							
Aug							
Sep							
Oct							
Nov							
Dec							



Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

Percent of Cases Discharged Alive (Survivability) by Tier Level in 2024				
Month	Total Percent of Trauma Cases Discharged Alive	Percent Tier 0 Trauma Cases Discharged Alive	Percent Tier 1 Trauma Cases Discharged Alive	Percent Tier 2 Trauma Cases Discharged Alive
Jan	94.94%	78.38%	95.00%	100.00%
Feb	97.44%	88.24%	100.00%	86.89%
Mar				
Apr				
May				
Jun				
July				
Aug				
Sep				
Oct				
Nov				
Dec				



Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

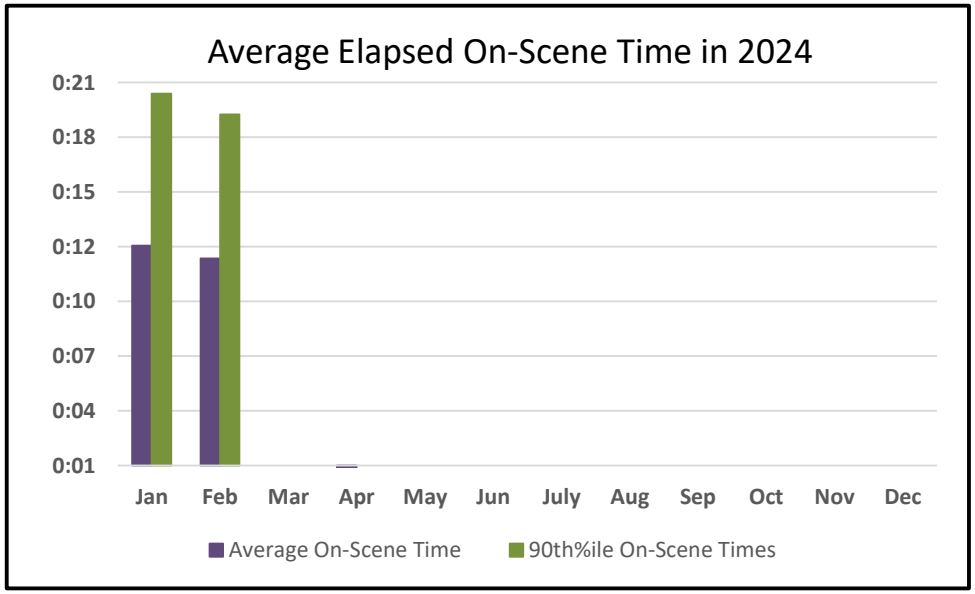
San Joaquin County Emergency Medical Services Agency 2024 Monthly Trauma Report Time Metrics

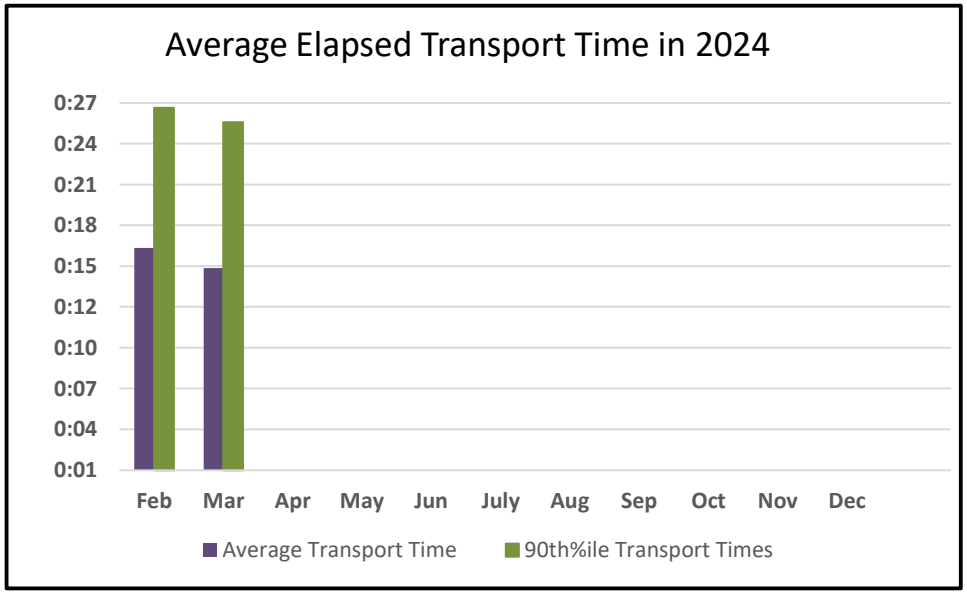
Total Elapsed On-Scene Time in 2024

Month	Trauma Cases Total	Average On-Scene Time	Median On-Scene Time	90th%ile On-Scene Times
Jan	157	0:13:00	0:11:00	0:21:00
Feb	142	0:12:20	0:12:00	0:19:54
Mar				
Apr				
May				
Jun				
July				
Aug				
Sep				
Oct				
Nov				
Dec				

Total Elapsed Transport Time in 2024

Month	Trauma Cases Total	Average Transport Time	Median Transport Time	90th%ile Transport Times
Jan	157	0:17:08	0:17:00	0:27:00
Feb	142	0:15:41	0:14:00	0:26:00
Mar				
Apr				
May				
Jun				
July				
Aug				
Sep				
Oct				
Nov				
Dec				





Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

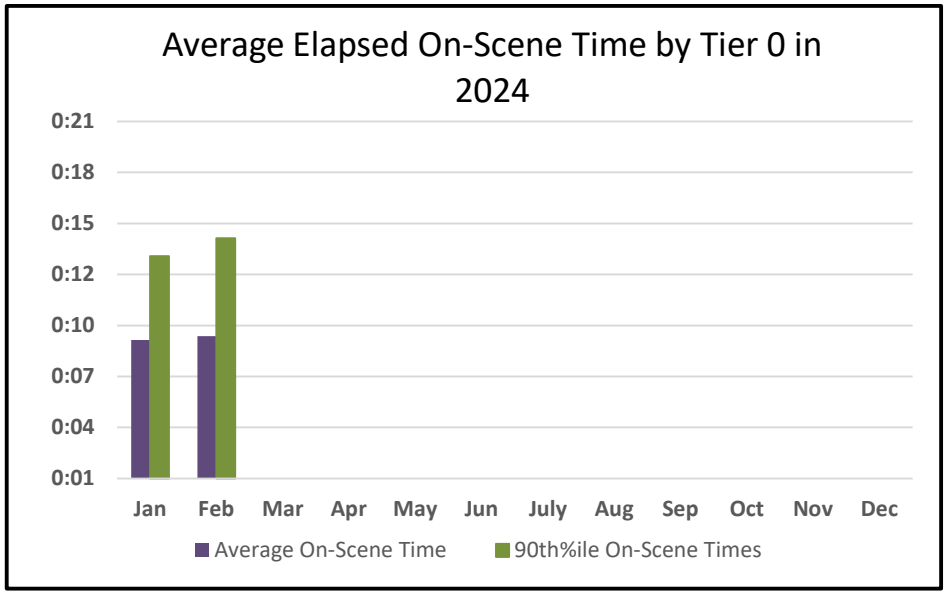
San Joaquin County Emergency Medical Services Agency 2024 Monthly Trauma Report Time Metrics

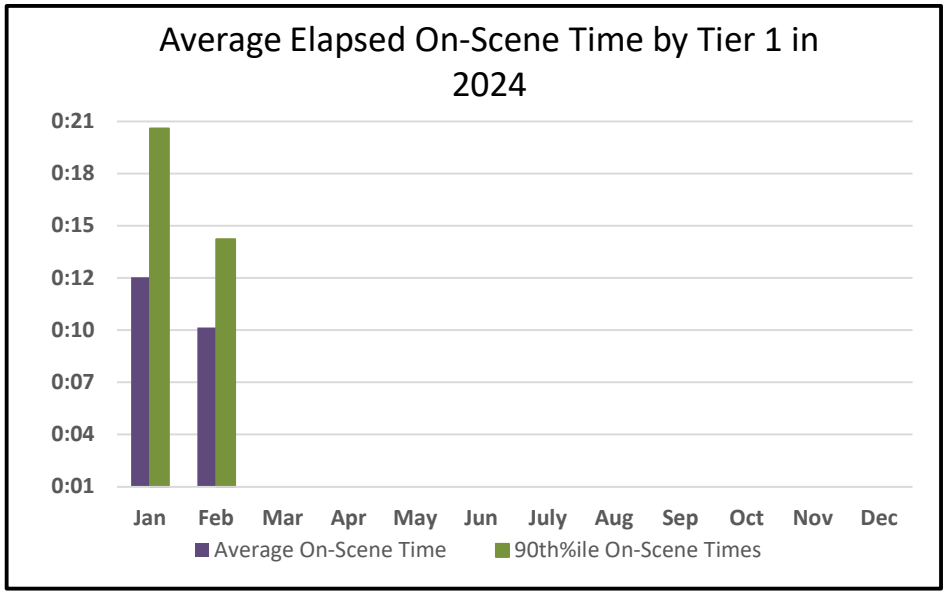
Total Elapsed On-Scene Time by Tier 0 in 2024

Month	Trauma Cases Total	Average On-Scene Time	Median On-Scene Time	90th%ile On-Scene Times
Jan	26	0:09:16	0:09:00	0:14:00
Feb	29	0:09:29	0:08:00	0:15:00
Mar				
Apr				
May				
Jun				
July				
Aug				
Sep				
Oct				
Nov				
Dec				

Total Elapsed On-Scene Time by Tier 1 in 2024

Month	Trauma Cases Total	Average On-Scene Time	Median On-Scene Time	90th%ile On-Scene Times
Jan	18	0:13:00	0:11:30	0:21:12
Feb	14	0:10:13	0:08:30	0:15:06
Mar				
Apr				
May				
Jun				
July				
Aug				
Sep				
Oct				
Nov				
Dec				

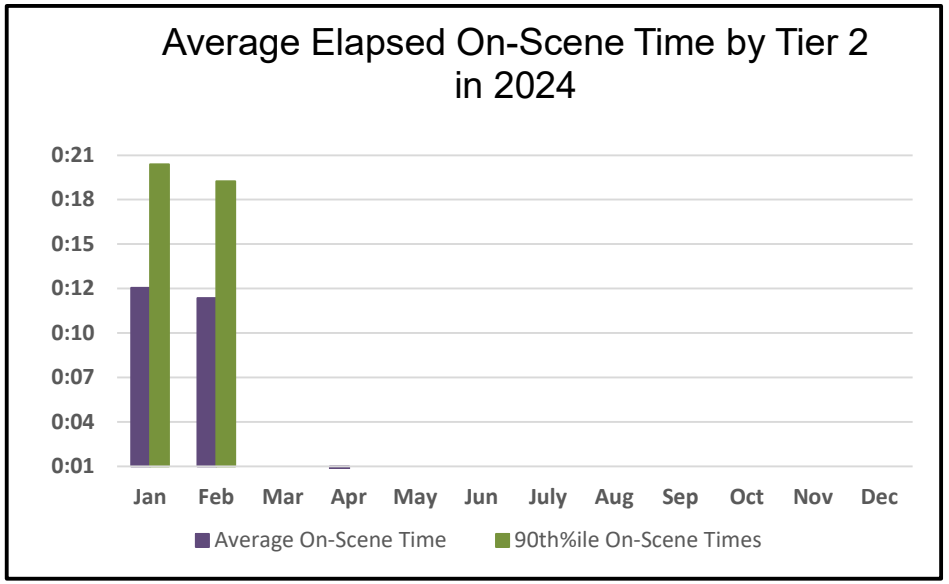




Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

Data Source:
Trauma Base/Clinical Data Management

Total Elapsed On-Scene Time by Tier 2 in 2024				
Month	Trauma Cases Total	Average On-Scene Time	Median On-Scene Time	90th%ile On-Scene Times
Jan	113	0:13:55	0:12:00	0:21:48
Feb	99	0:13:28	0:13:00	0:22:24
Mar				
Apr				
May				
Jun				
July				
Aug				
Sep				
Oct				
Nov				
Dec				

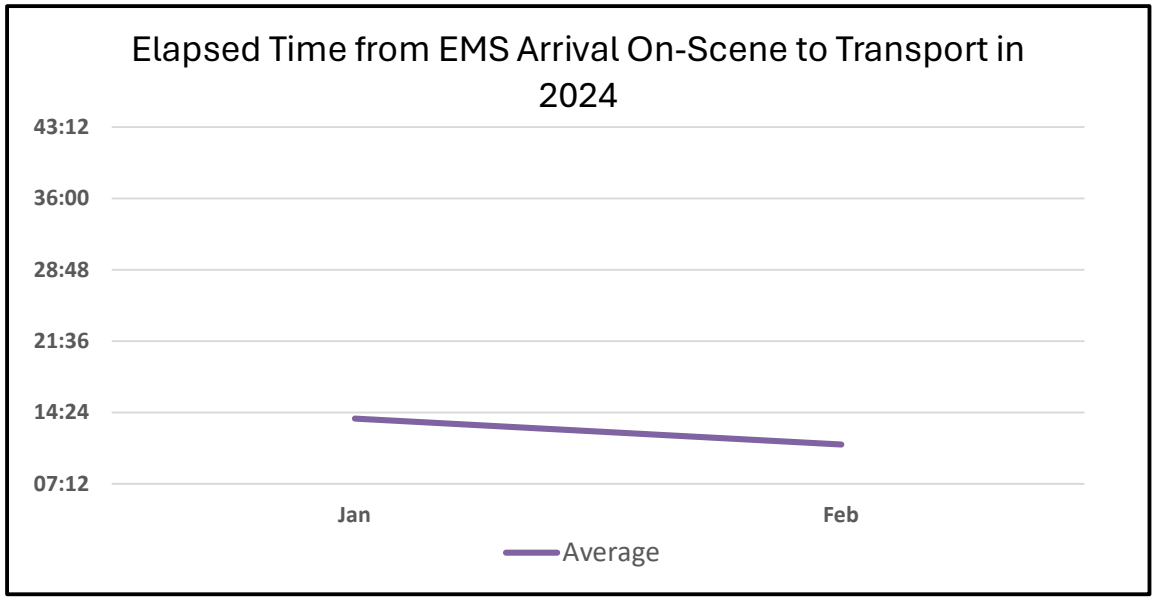


Created by:
Jeff Costa, MBA, RN, EMS Specialty Care Coordinator on 4/9/2024

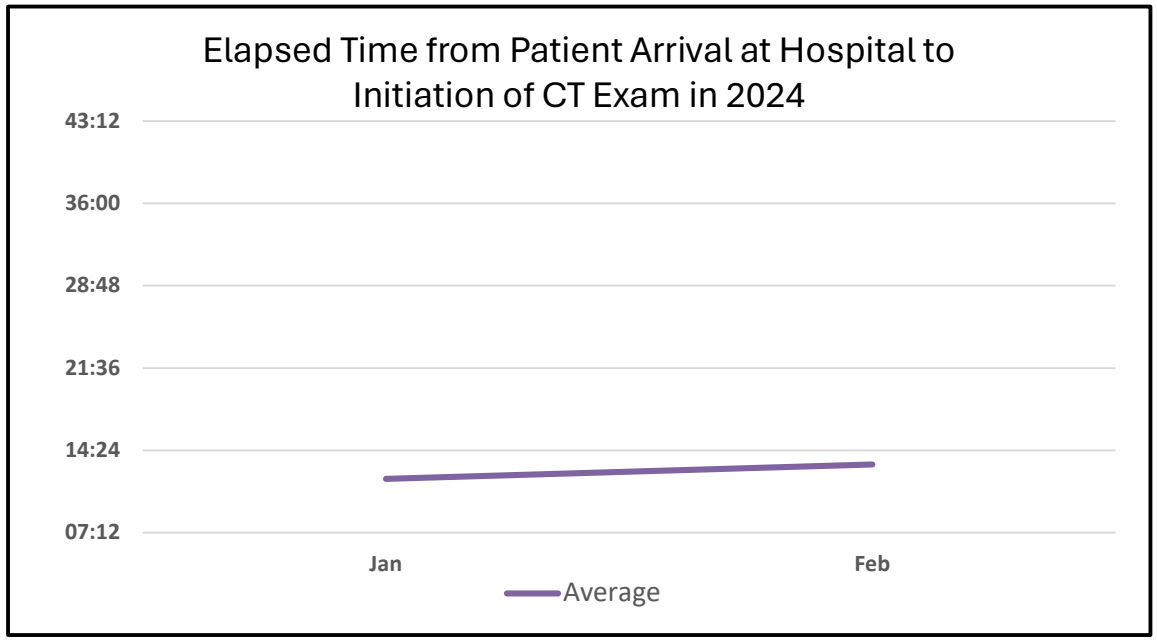
Data Source:
Trauma Base/Clinical Data Management

San Joaquin County Emergency Medical Services Agency 2024 Monthly Stroke Report

Elapsed Time From EMS Arrival On-Scene to Transport		
Month	Average	Stroke patients
Jan	0:13:47	24
Feb	0:11:11	17
Mar	0:00:00	0
Apr	0:00:00	0
May	0:00:00	0
Jun	0:00:00	0
July	0:00:00	0
Aug	0:00:00	0
Sep	0:00:00	0
Oct	0:00:00	0
Nov	0:00:00	0
Dec	0:00:00	0
Standard per AHA is less than (>) fifteen (15) minutes (Average)		



Elapsed Time From Patient Arrival at Hospital to Initiation of CT Exam		
Month	Average	Stroke patients
Jan	0:11:55	22
Feb	0:13:11	16
Mar	0:00:00	0
Apr	0:00:00	0
May	0:00:00	0
Jun	0:00:00	0
July	0:00:00	0
Aug	0:00:00	0
Sep	0:00:00	0
Oct	0:00:00	0
Nov	0:00:00	0
Dec	0:00:00	0
Standard per SJCEMSA Policy No. 4811 Primary Stroke Center Designation is "within twenty-five (25) minutes"		

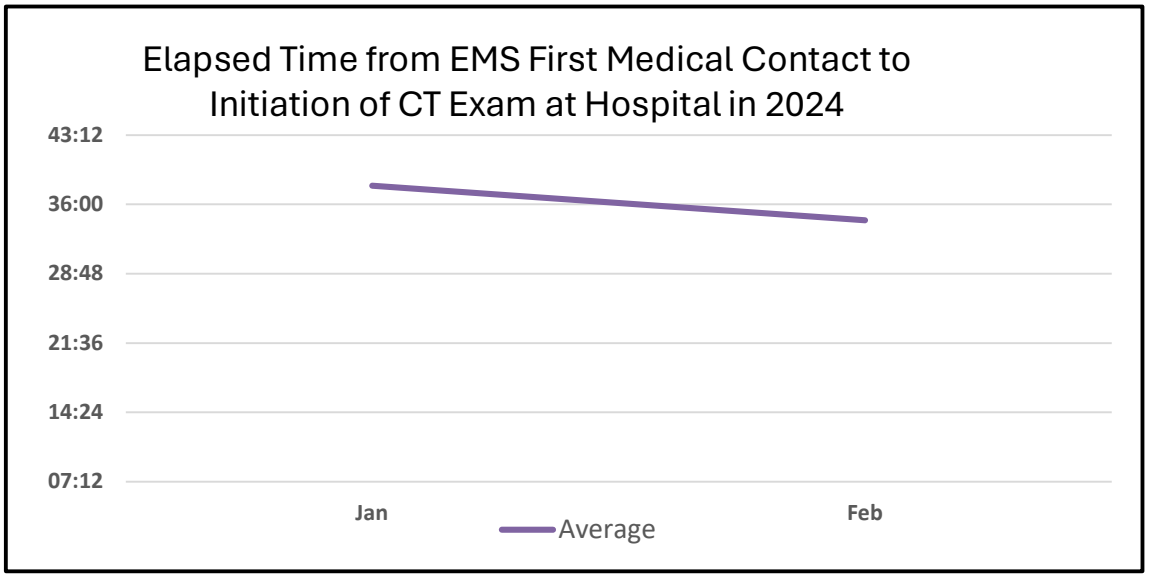


Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/23/2024

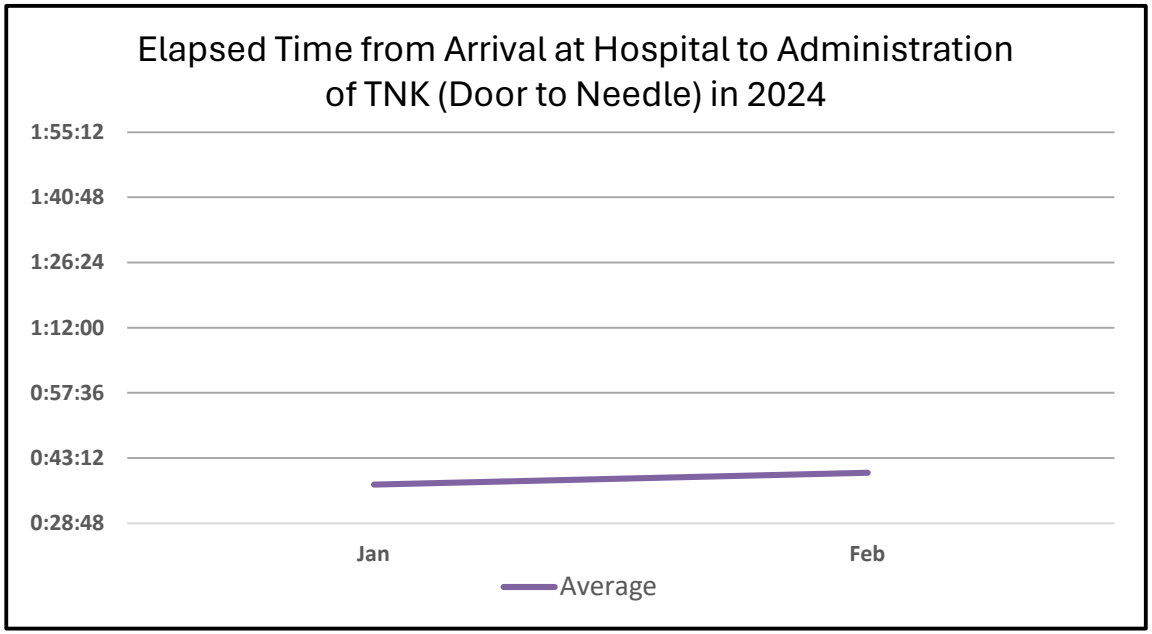
Data Source: American Heart Association GWTG-Stroke data registry
All Primary Stroke Center Hospitals reporting data

San Joaquin County Emergency Medical Services Agency 2024 Monthly Stroke Report

Elapsed Time From EMS First Medical Contact to Initiation of CT Exam at Hospital		
Month	Average	Stroke patients
Jan	0:37:57	22
Feb	0:34:22	16
Mar	0:00:00	0
Apr	0:00:00	0
May	0:00:00	0
Jun	0:00:00	0
July	0:00:00	0
Aug	0:00:00	0
Sep	0:00:00	0
Oct	0:00:00	0
Nov	0:00:00	0
Dec	0:00:00	0



Elapsed Time From Arrival at Hospital to Administration of TNK (Door to Needle)		
Month	Average	Stroke patients
Jan	0:37:24	5
Feb	0:40:00	2
Mar	0:00:00	0
Apr	0:00:00	0
May	0:00:00	0
Jun	0:00:00	0
July	0:00:00	0
Aug	0:00:00	0
Sep	0:00:00	0
Oct	0:00:00	0
Nov	0:00:00	0
Dec	0:00:00	0
Standard per AHA Target: Stroke Phase III is "within sixty (60) minutes"		

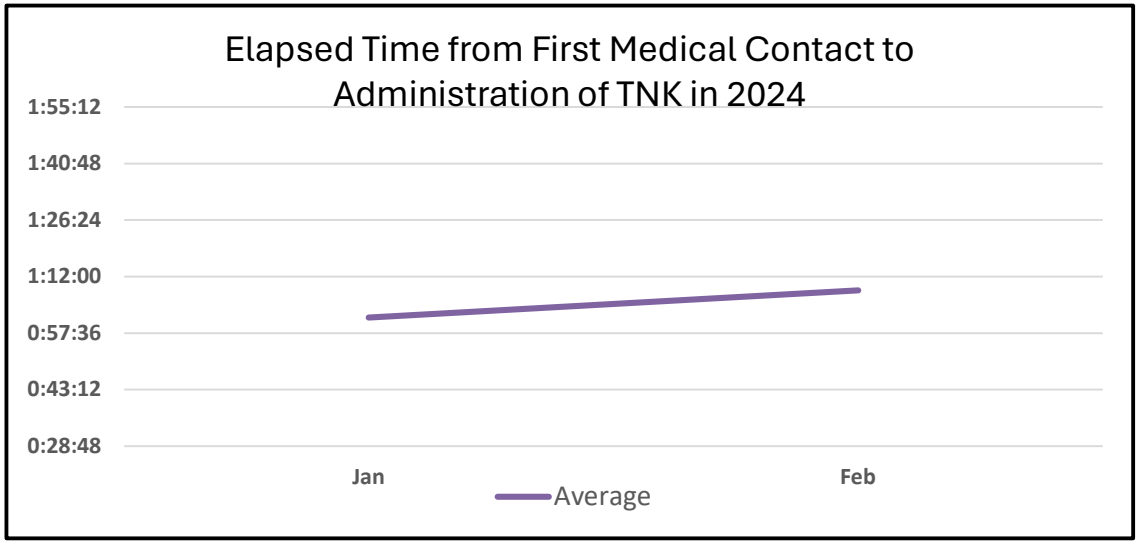


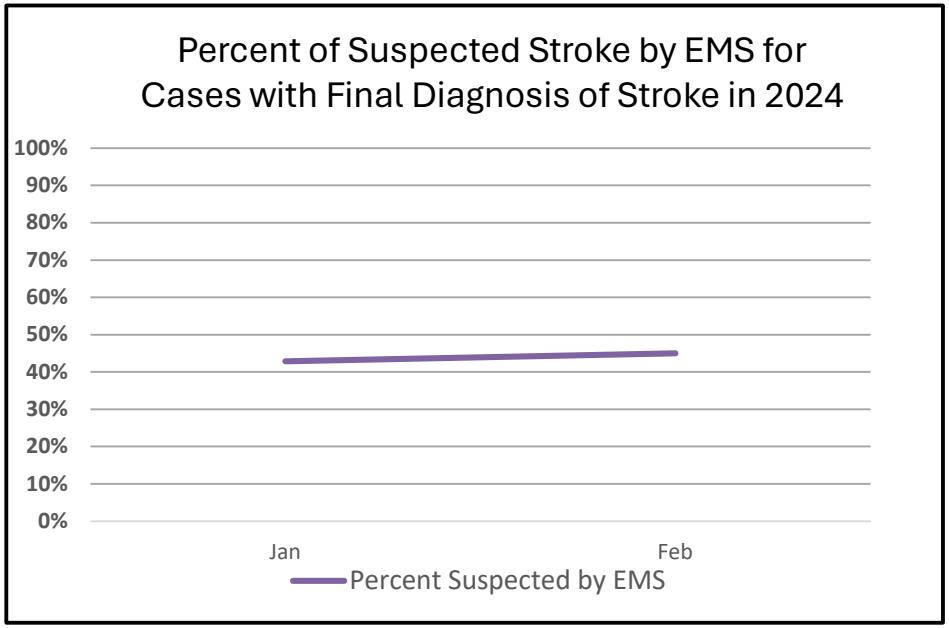
Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/23/2024

Data Source: American Heart Association GWTG-Stroke data registry
All Primary Stroke Center Hospitals reporting data

San Joaquin County Emergency Medical Services Agency 2024 Monthly Stroke Report

Elapsed Time From First Medical Contact to Administration of TNK		
Month	Average	Stroke patients
Jan	1:01:36	5
Feb	1:08:30	2
Mar	0:00:00	0
Apr	0:00:00	0
May	0:00:00	0
Jun	0:00:00	0
July	0:00:00	0
Aug	0:00:00	0
Sep	0:00:00	0
Oct	0:00:00	0
Nov	0:00:00	0
Dec	0:00:00	0



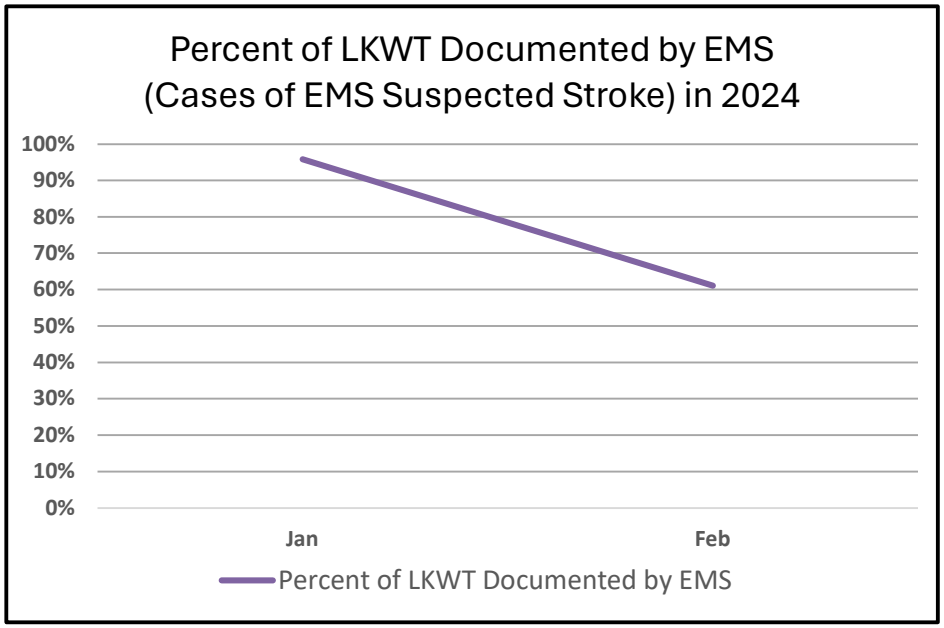


Percent of EMS Suspected Stroke Cases with Final Diagnosis of Stroke in 2024			
Month	# with End Diagnosis of Stroke	# of EMS suspected stroke patients	Percent Suspected by EMS
Jan	56	24	42.9%
Feb	40	18	45.0%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!

Data Source: American Heart Association GWTG-Stroke data registry
All Primary Stroke Center Hospitals reporting data

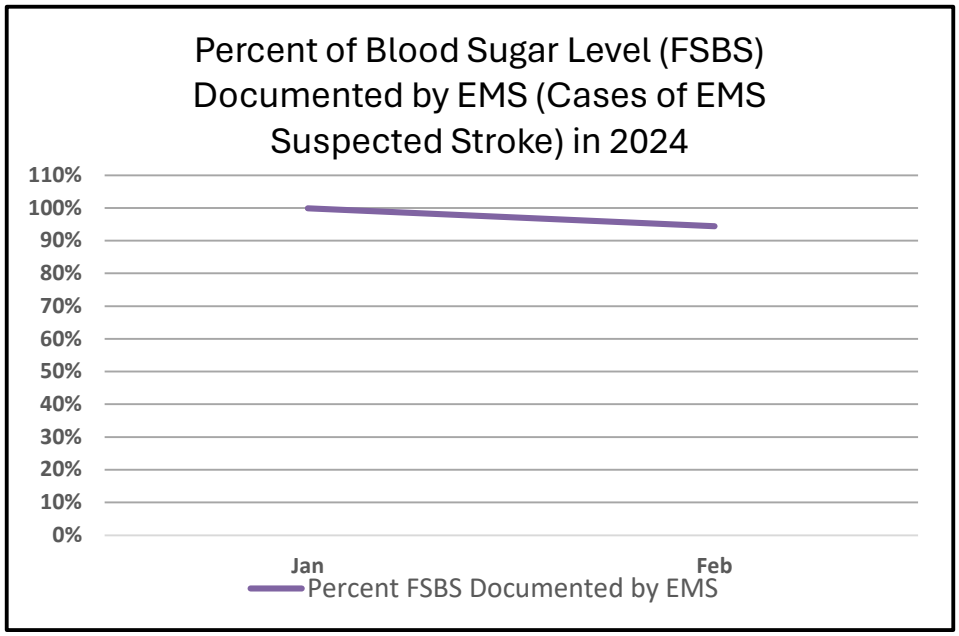
Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/23/2024

San Joaquin County Emergency Medical Services Agency 2024 Monthly Stroke Report



Percent of EMS Suspected Stroke Cases with LKWT Documented in 2024

Month	# of EMS suspected stroke pts	Number of Cases with LKWT Documented by EMS	Percent of LKWT Documented by EMS
Jan	24	23	95.8%
Feb	18	11	61.1%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!



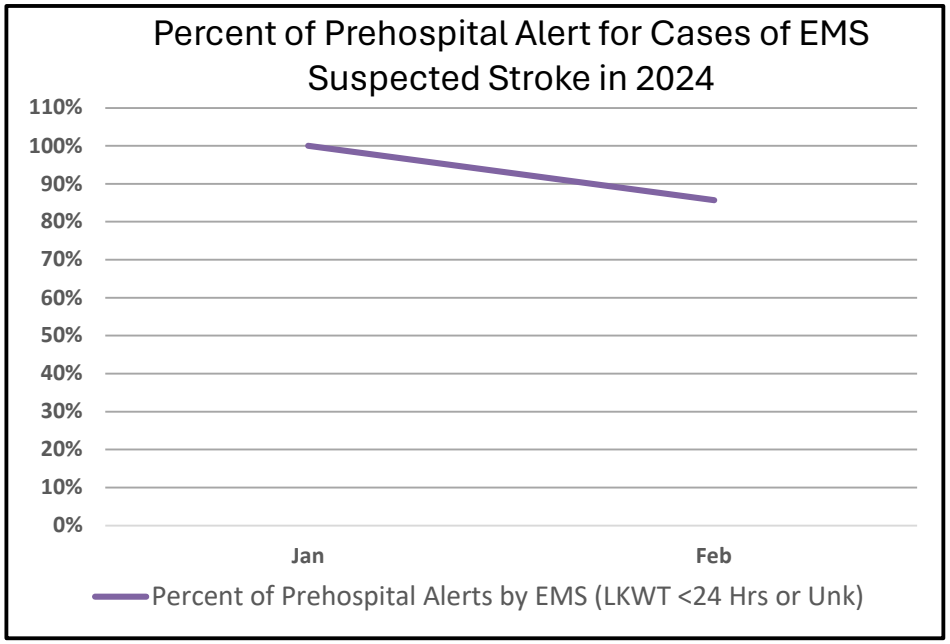
Percent of EMS Suspected Stroke Cases with Finger Stick Blood Sugar Level (FSBS) Documented by EMS in 2024

Month	# of EMS suspected stroke pts	Number of Cases with FSBS Documented by EMS	Percent FSBS Documented by EMS
Jan	24	24	100.0%
Feb	18	17	94.4%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!

Data Source: American Heart Association GWTG-Stroke data registry
All Primary Stroke Center Hospitals reporting data

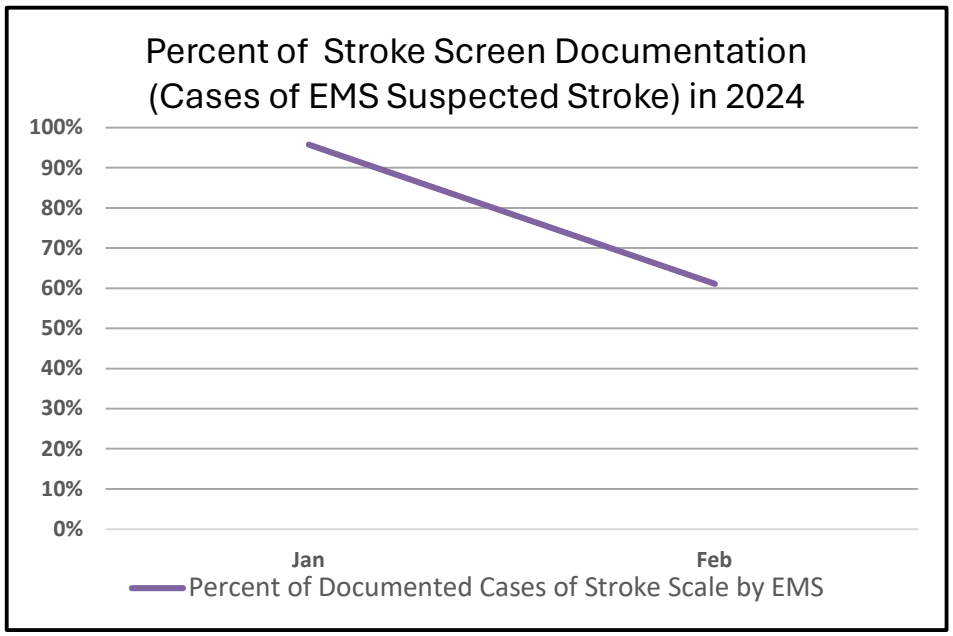
Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/23/2024

San Joaquin County Emergency Medical Services Agency 2024 Monthly Stroke Report



Percent of EMS Suspected Stroke Cases with Prehospital Alert in 2024 (LKWT < 24 hours or Unk)

Month	# Cases of Prehospital Alerts by EMS <24 hrs or Unk	# of cases with LKWT < 24 Hours or Unk	Percent of Prehospital Alerts by EMS (LKWT <24 Hrs or Unk)
Jan	22	22	100.0%
Feb	12	14	85.7%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!



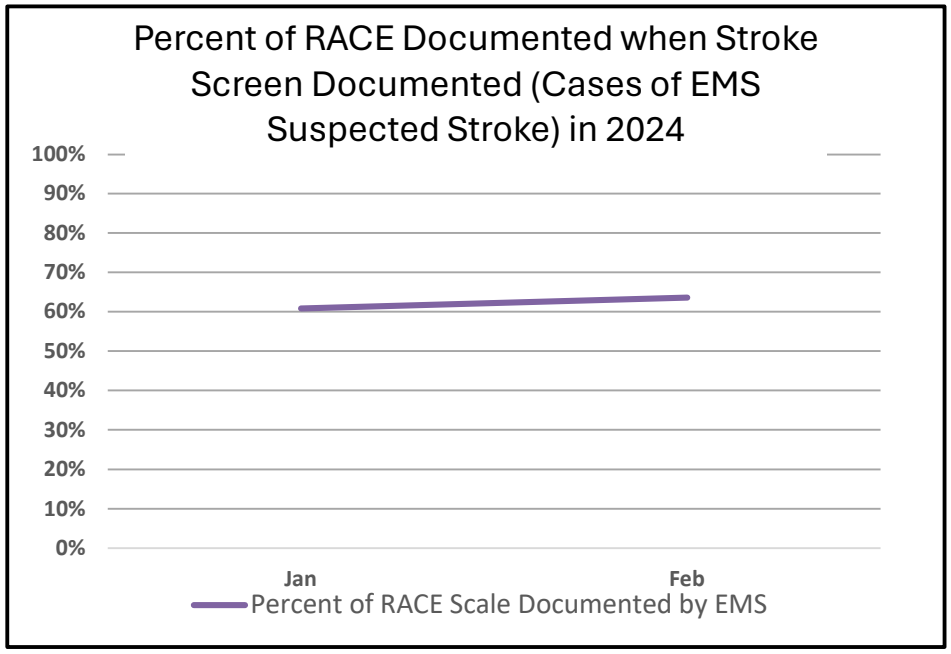
Percent of EMS Suspected Stroke Cases with Stroke Screen Documentation in 2024

Month	# of EMS suspected stroke pts	Number of Cases with Stroke Screen Documented by EMS	Percent of Documented Cases of Stroke Scale by EMS
Jan	24	23	95.8%
Feb	18	11	61.1%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!

Data Source: American Heart Association GWTG-Stroke data registry
All Primary Stroke Center Hospitals reporting data

Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/23/2024

San Joaquin County Emergency Medical Services Agency 2024 Monthly Stroke Report



Percent of EMS Suspected Stroke Cases with Completed RACE Exam when Stroke Screen Documented in 2024

Month	# of Cases when CPSS Used	Number of Cases when RACE Documented by EMS	Percent of RACE Scale Documented by EMS
Jan	23	14	60.9%
Feb	11	7	63.6%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!

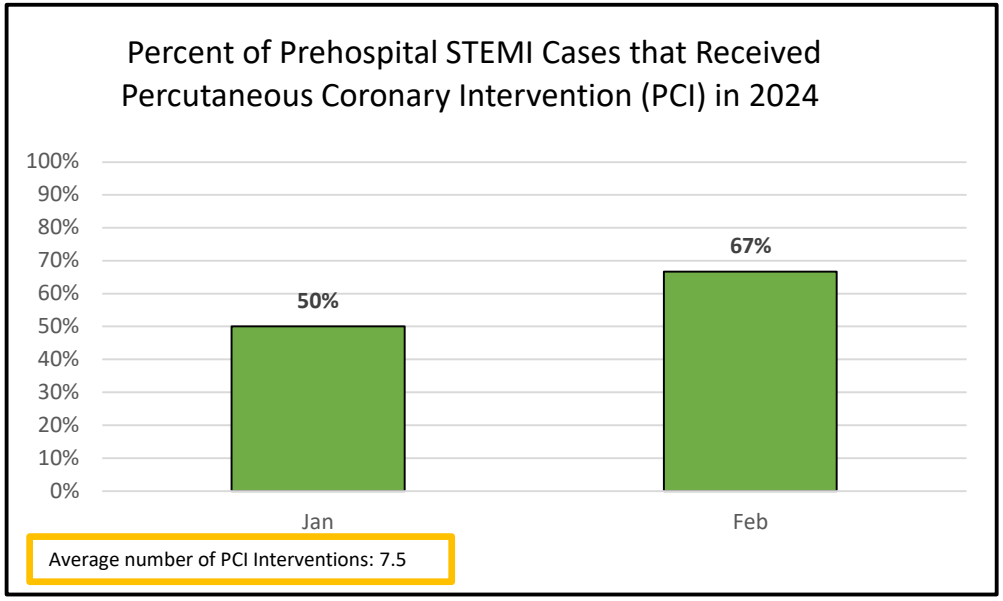
Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/23/2024

Data Source: American Heart Association GWTG-Stroke data registry
All Primary Stroke Center Hospitals reporting data

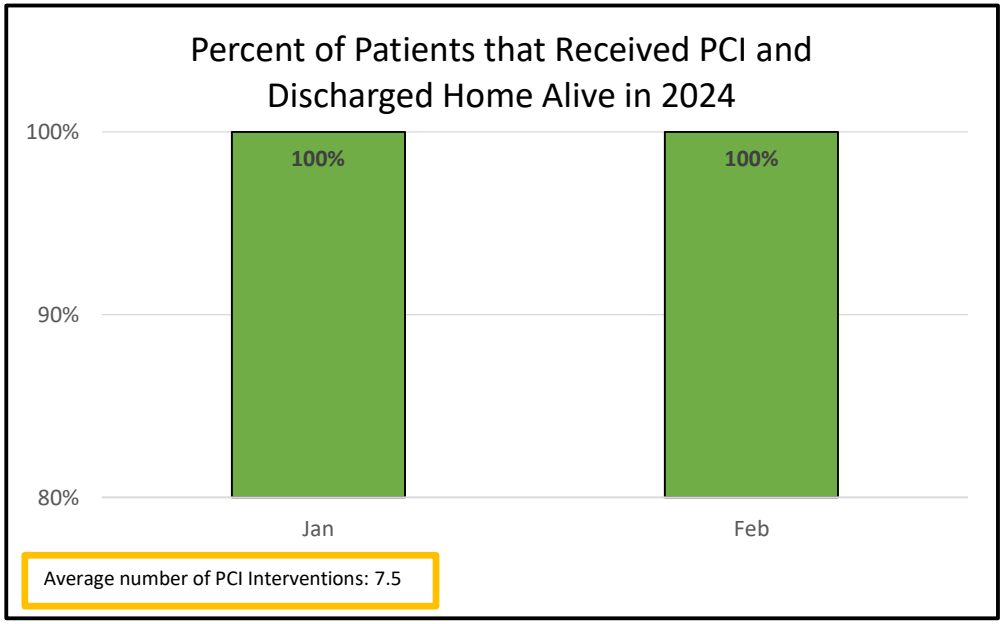
San Joaquin County Emergency Medical Services Agency's Monthly STEMI Report

Exclusionary criteria met

Difference between Number of Prehospital STEMI Patients and the Number of Patients that Received PCI in 2024			
Month	Number of Prehosp STEMI Cases	Number of Pts with PCI Interventions	Percent of Cases that Received PCI
Jan	10	5	50%
Feb	9	6	67%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!



Percent of Patients That Received PCI and Discharged Home Alive in 2024			
Month	Number of Pts with PCI Interventions	Patients Discharged Alive	Percent
Jan	5	5	100%
Feb	6	6	100%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!



Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/17/2024

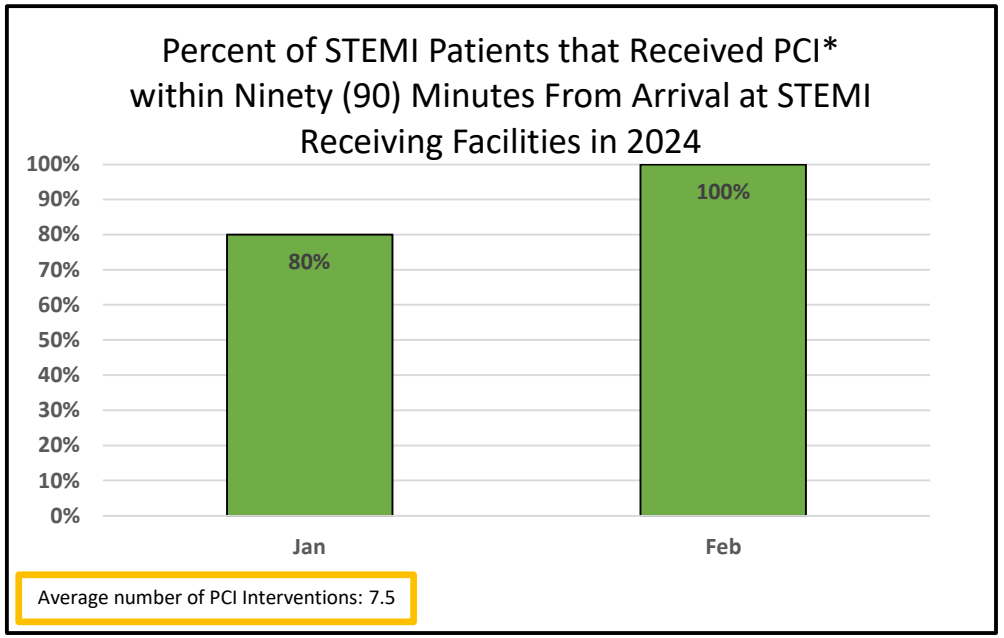
Data Source: SJCEMSA STEMI Data Collection Registry
Submission of data from each SJCEMSA designated SRC

San Joaquin County Emergency Medical Services Agency's Monthly STEMI Report

Exclusionary criteria met

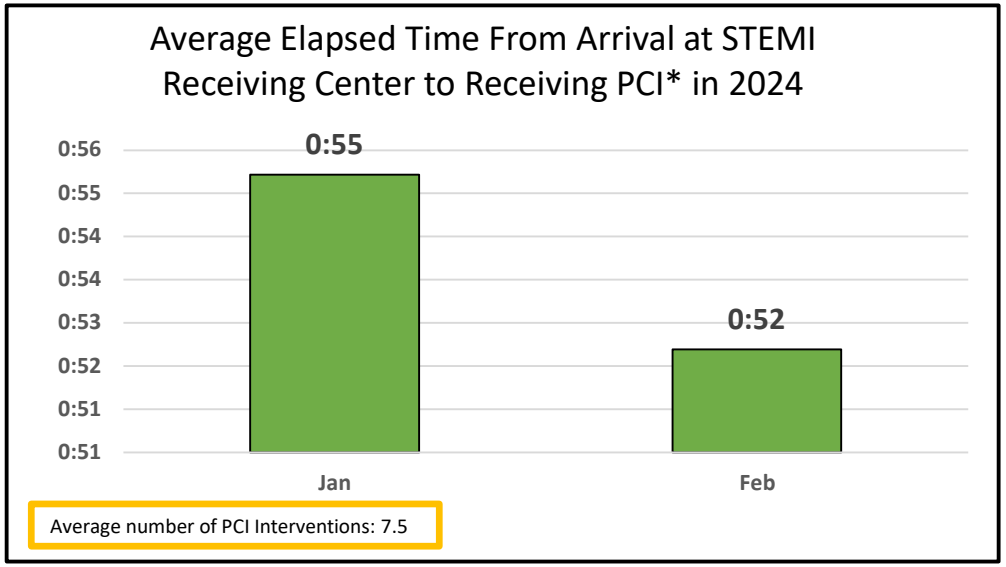
Pecent of STEMI Patients that Received PCI Within Ninety (90) Minutes From Arrival at STEMI Receiving Facilities in 2024

Month	Number of Pts with PCI Interventions*	PCI Cases Within 90 Minutes	Percent
Jan	5	4	80%
Feb	6	6	100%
Mar	0	0	0%
Apr	0	0	NA
May	0	0	0%
Jun	0	0	0%
July	0	0	0%
Aug	0	0	0%
Sep	0	0	0%
Oct	4	0	0%
Nov	5	0	0%
Dec	0	0	0%



Elapsed Time From Arrival at STEMI Receiving Center to Receiving PCI in 2024

Month	Average	90th%ile	Number of Pts with PCI Interventions*
Jan	0:55	1:07	5
Feb	0:52	1:13	6
Mar	0:00	0:00	0
Apr	0:00	0:00	0
May	0:00	0:00	0
Jun	0:00	0:00	0
July	0:00	0:00	0
Aug	0:00	0:00	0
Sep	0:00	0:00	0
Oct	0:00	0:00	0
Nov	0:00	0:00	5
Dec	0:00	0:00	0



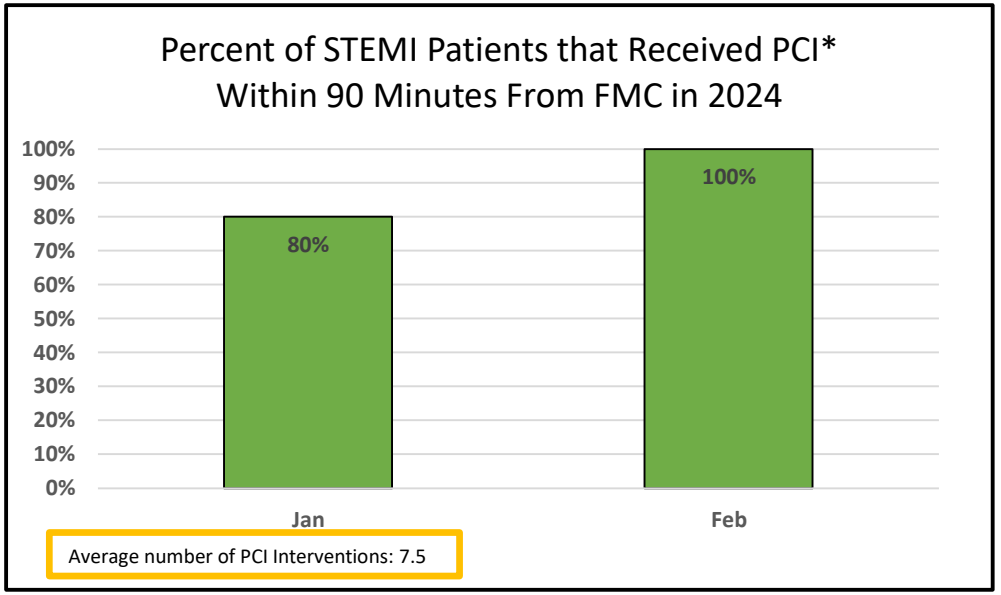
Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/17/2024

Data Source: SJCEMSA STEMI Data Collection Registry
Submission of data from each SJCEMSA designated SRC

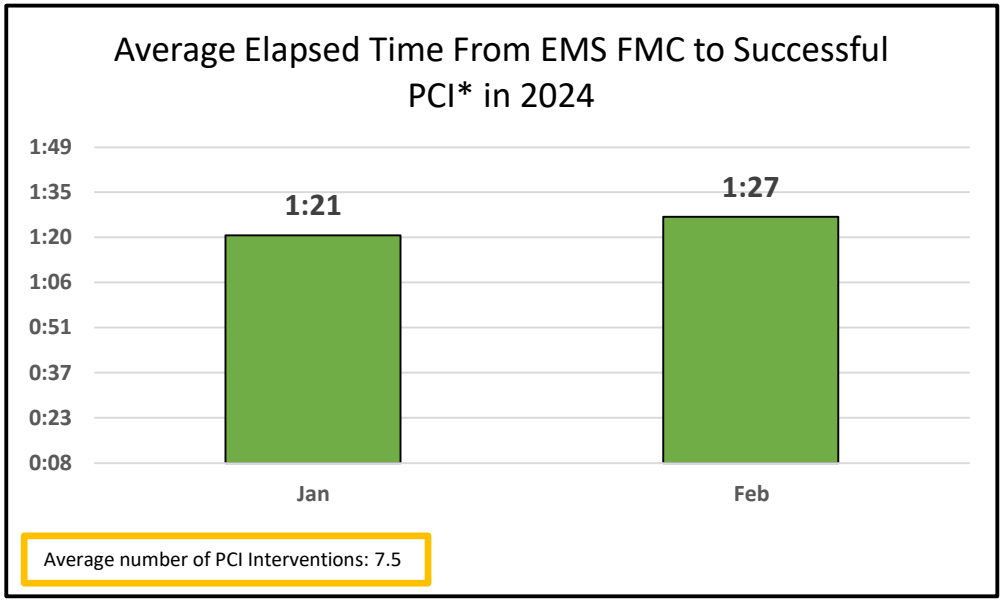
San Joaquin County Emergency Medical Services Agency's Monthly STEMI Report

Exclusionary criteria met

Percent of STEMI Patients that Received PCI Within Ninety (90) Minutes From FMC in 2024			
Month	Number of Pts with PCI Interventions*	< 90 Minutes	Percent < 90 Minutes
Jan	5	4	80%
Feb	6	6	100%
Mar	0	0	0%
Apr	0	0	0%
May	0	0	0%
Jun	0	0	0%
July	0	0	0%
Aug	0	0	0%
Sep	0	0	0%
Oct	0	0	0%
Nov	0	0	0%
Dec	0	0	0%



Elapsed Time From EMS FMC to Successful PCI in 2024			
Month	Average	90th%ile	Number of Pts with PCI Interventions*
Jan	1:21	1:35	5
Feb	1:27	1:44	6
Mar	0:00	0:00	0
Apr	0:00	0:00	0
May	0:00	0:00	0
Jun	0:00	0:00	0
July	0:00	0:00	0
Aug	0:00	0:00	0
Sep	0:00	0:00	0
Oct	0:00	0:00	0
Nov	0:00	0:00	0
Dec	0:00	0:00	0



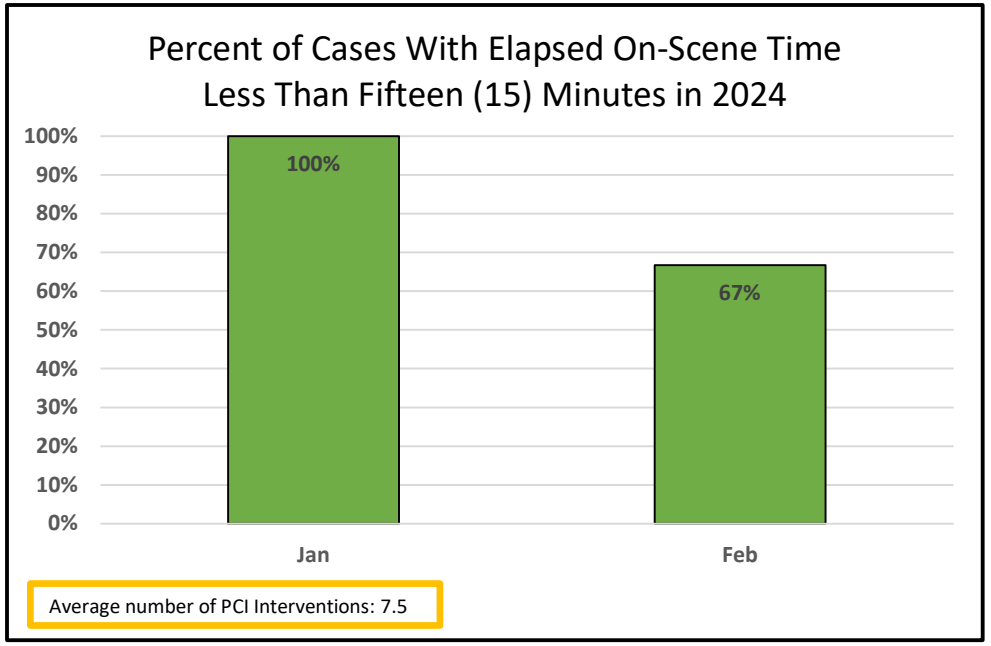
Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/17/2024

Data Source: SJCEMSA STEMI Data Collection Registry
Submission of data from each SJCEMSA designated SRC

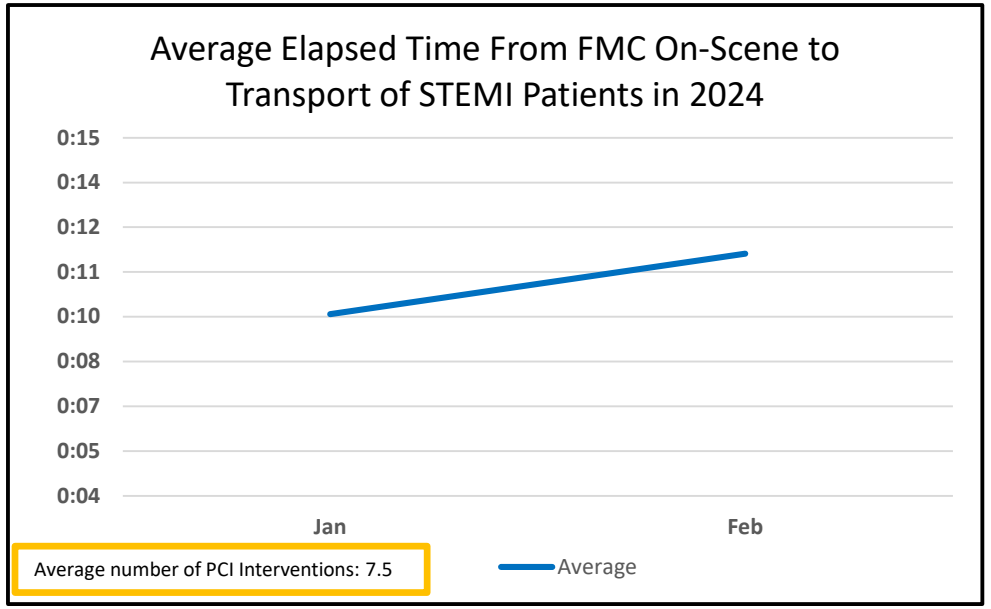
San Joaquin County Emergency Medical Services Agency's Monthly STEMI Report

Exclusionary criteria met

Percent of Cases With Elapsed On-Scene Time Less Than Fifteen (15) Minutes in 2024			
Month	Number of Pts with Confirmed STEMI	On-Scene Time < 15 min	Percent
Jan	6	6	100%
Feb	9	6	67%
Mar	0	0	0%
Apr	0	0	0%
May	0	0	0%
Jun	0	0	0%
July	0	0	0%
Aug	0	0	0%
Sep	0	0	0%
Oct	0	0	0%
Nov	0	0	0%
Dec	0	0	0.0%
Total	15	12	80.0%



Elapsed Time From FMC On-Scene to Transport of STEMI Patients in 2024			
Month	Average	90th%ile	Number of Pts with Confirmed STEMI
Jan	0:10	0:13	6
Feb	0:12	0:18	9
Mar	0:00	0:00	0
Apr	0:00	0:00	0
May	0:00	0:00	0
Jun	0:00	0:00	0
July	0:00	0:00	0
Aug	0:00	0:00	0
Sep	0:00	0:00	0
Oct	0:00	0:00	0
Nov	0:00	0:00	0
Dec	0:00	0:00	0



Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/17/2024

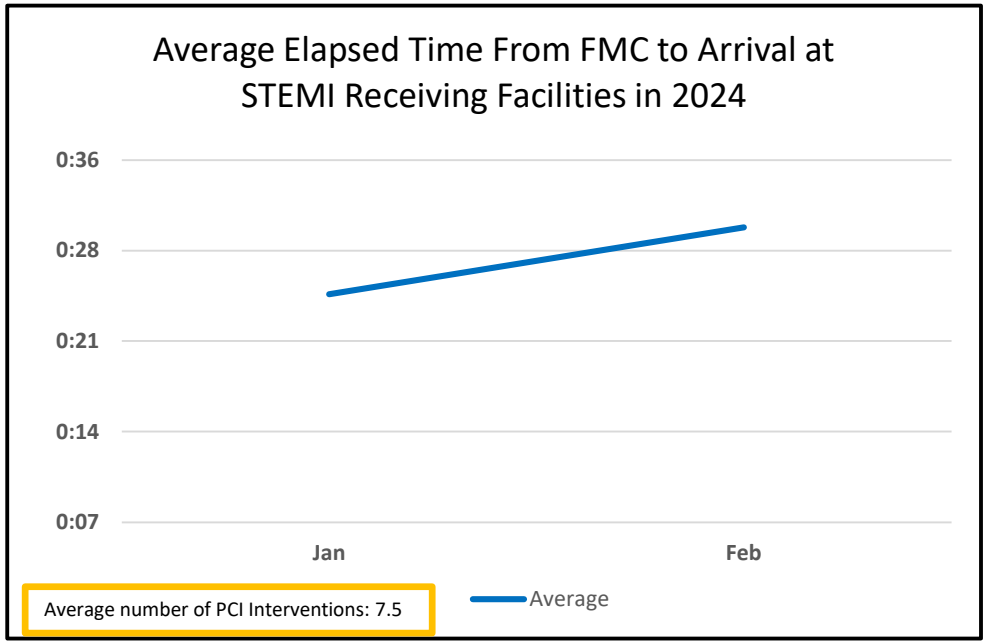
Data Source: SJCEMSA STEMI Data Collection Registry
Submission of data from each SJCEMSA designated SRC

San Joaquin County Emergency Medical Services Agency's Monthly STEMI Report

Exclusionary criteria met

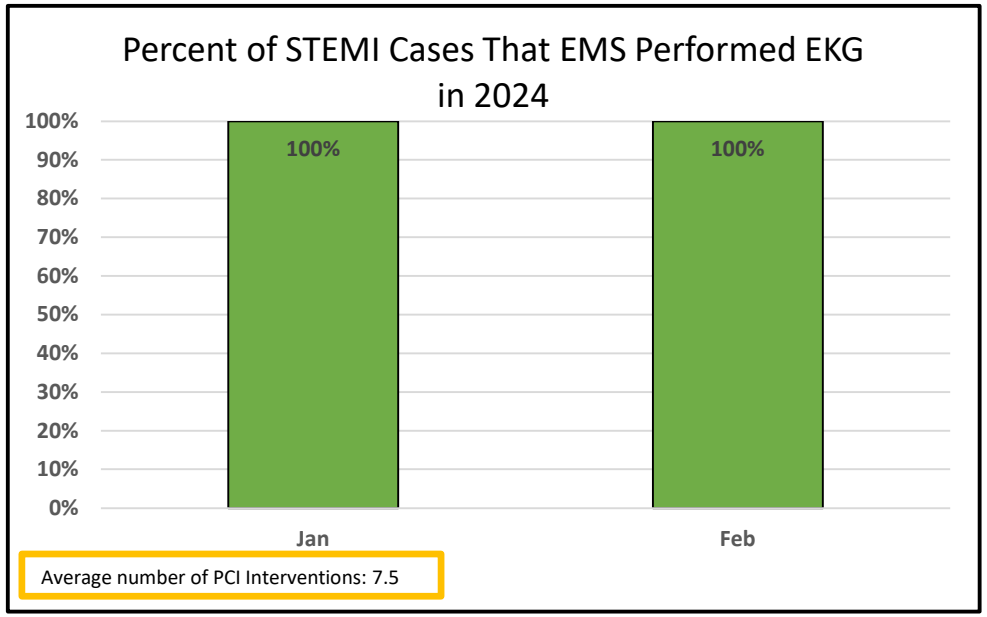
Elapsed Time From FMC to Arrival at STEMI Receiving Facilities

Month	Average	90th%ile	Number of Pts with Confirmed STEMI
Jan	0:25	0:31	6
Feb	0:30	0:44	9
Mar	0:00	0:00	0
Apr	0:00	0:00	0
May	0:00	0:00	0
Jun	0:00	0:00	0
July	0:00	0:00	0
Aug	0:00	0:00	0
Sep	0:00	0:00	0
Oct	0:00	0:00	0
Nov	0:00	0:00	0
Dec	0:00	0:00	0



Percent of STEMI Cases That EMS Performed EKG in 2024

Month	Number of Pts with Confirmed STEMI	EKGs Performed	Percent
Jan	6	5	100%
Feb	9	6	100%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!



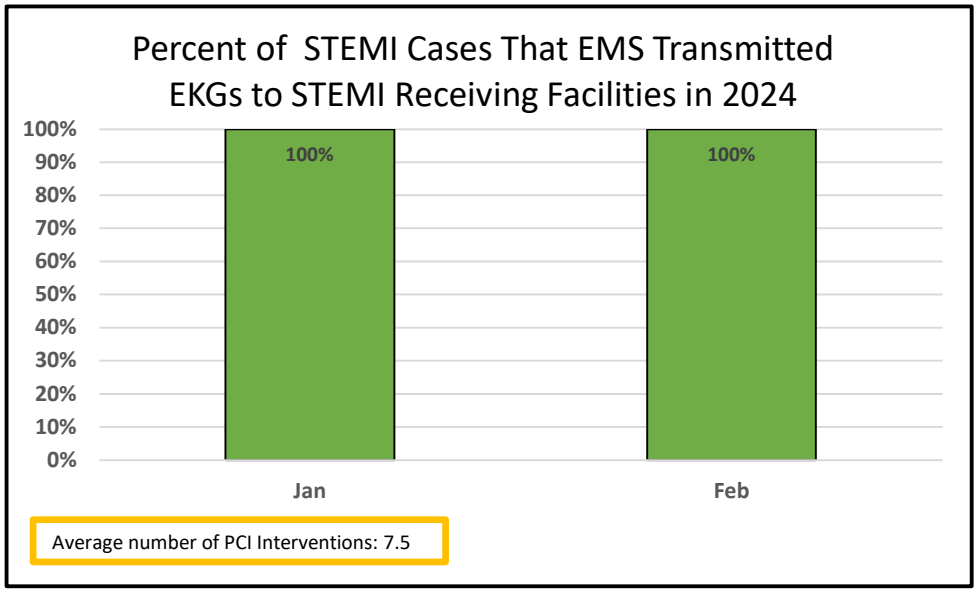
Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/17/2024

Data Source: SJCEMSA STEMI Data Collection Registry
Submission of data from each SJCEMSA designated SRC

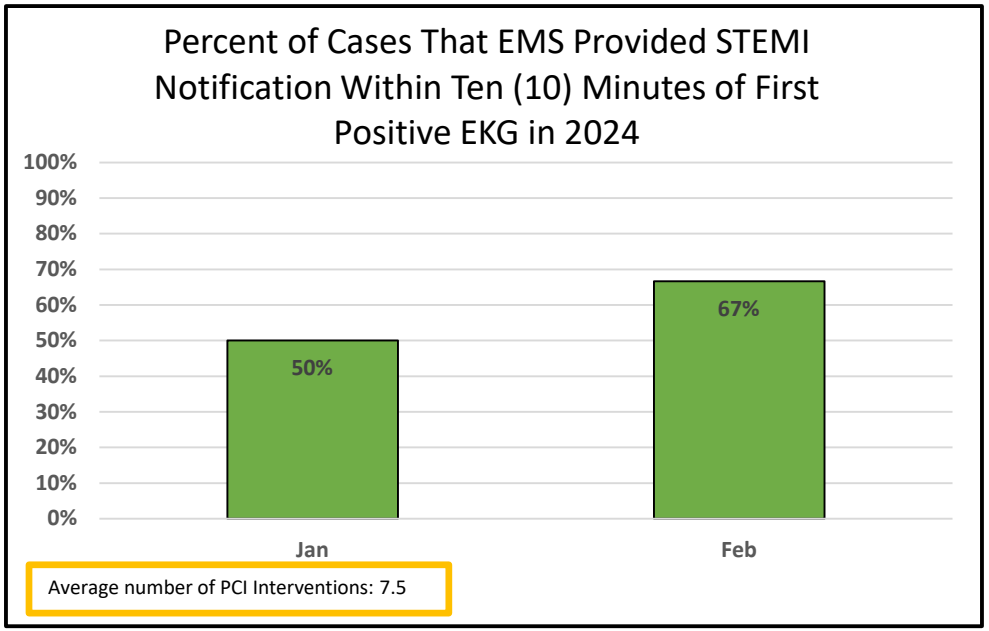
San Joaquin County Emergency Medical Services Agency's Monthly STEMI Report

Exclusionary criteria met

Percent of STEMI Cases That EMS Transmitted EKGs to STEMI Receiving Facilities in 2024			
Month	Number of Pts with Confirmed STEMI	EKGs Transmitted	Percent
Jan	6	5	100%
Feb	9	6	100%
Mar	0	0	#DIV/0!
Apr	0	0	#DIV/0!
May	0	0	#DIV/0!
Jun	0	0	#DIV/0!
July	0	0	#DIV/0!
Aug	0	0	#DIV/0!
Sep	0	0	#DIV/0!
Oct	0	0	#DIV/0!
Nov	0	0	#DIV/0!
Dec	0	0	#DIV/0!
Total	15	11	73%



Percent of Cases That EMS Provided STEMI Notification Within Ten (10) Minutes of First Positive EKG in 2024			
Month	Number of Pts with Confirmed STEMI	Notification Given Within 10 Minutes	Percent
Jan	6	3	50%
Feb	9	6	67%
Mar	0	0	0%
Apr	0	0	0%
May	0	0	0%
Jun	0	0	0%
July	0	0	0%
Aug	0	0	0%
Sep	0	0	0%
Oct	0	0	0%
Nov	0	0	0%
Dec	0	0	0%
Total	15	9	60%



Created by: Jeff Costa, MBA, RN, Specialty Care Coordinator on 4/17/2024

Data Source: SJCEMSA STEMI Data Collection Registry
Submission of data from each SJCEMSA designated SRC

San Joaquin County
Emergency Medical Services Agency

A DIVISION OF
HEALTH CARE SERVICES
AGENCY

DATE: May 9, 2024

TO: EMS Advisory Committee

PREPARED BY: Matthew R. Esposito, MS, M.I.C.P.
EMS Coordinator

SUBJECT: Basic Life Support (BLS) Quality Assurance / Quality Improvement.

Since July of 2023, San Joaquin County EMS Agency (SJCEMSA) has evaluated and assessed tiered response. As a continued effort of quality assurance and quality improvement (QA/QI), the SJCEMSA CQI Council has adopted multiple BLS key performance indicators (KPI) to monitor. SJCEMSA's CQI Council will continue to monitor tiered response through ongoing KPIs.

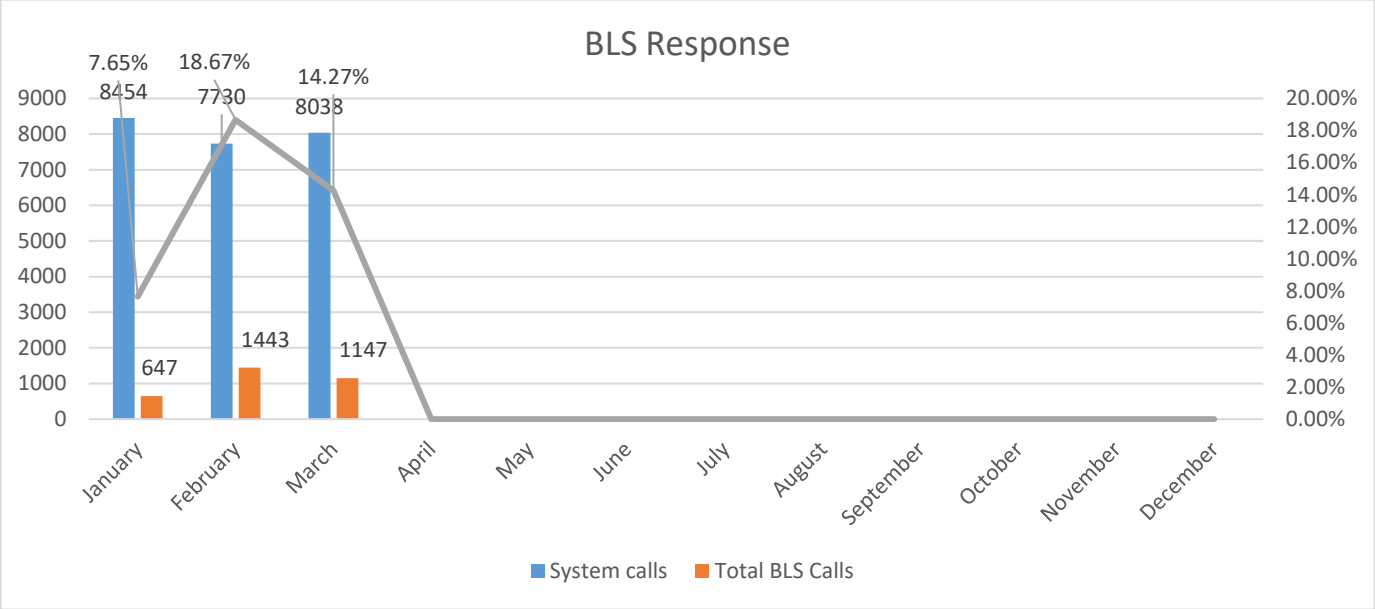
BLS KPIs:

1. Overall BLS call volume,
2. Incidents of transport to hospital with red lights and sirens,
3. M.P.D.S. determinant compliance with EMS Policy No. 3202, Medical Priority Dispatch System use and Assignments,
4. Medications and procedures:
    a. Nitroglycerin (NTG),
    b. Aspirin (ASA),
    c. Naloxone,
    d. Blood Glucose Level Determination,
    e. Epinephrine via auto injector,
5. Non transport ALS provider continues care to hospital.

Current findings:

1. Overall BLS system volume.

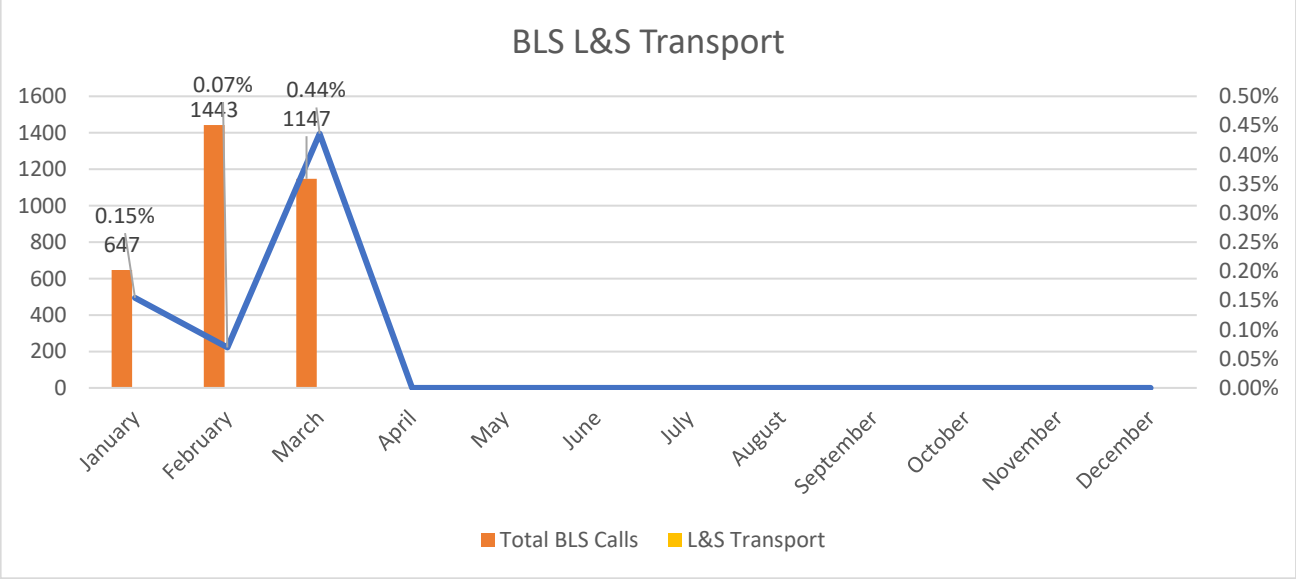
Since tiered response was expanded in July 2023, BLS usage in the 911 system has ranged between 8-12% of all 911 responses. We have seen an increase in BLS response in the last



three months from 7.6% in January, to 18.6% in February, and 14.2% in March. SJCEMSA CQI Council will continue to analyze this data to identify trends.

2. Lights and sirens transport:

In the first quarter of 2024, although an increase in overall BLS response was seen, the percentage of lights and sirens transports (7) is down when compared to the percentage of lights and sirens transport (10) for the last quarter of 2023.

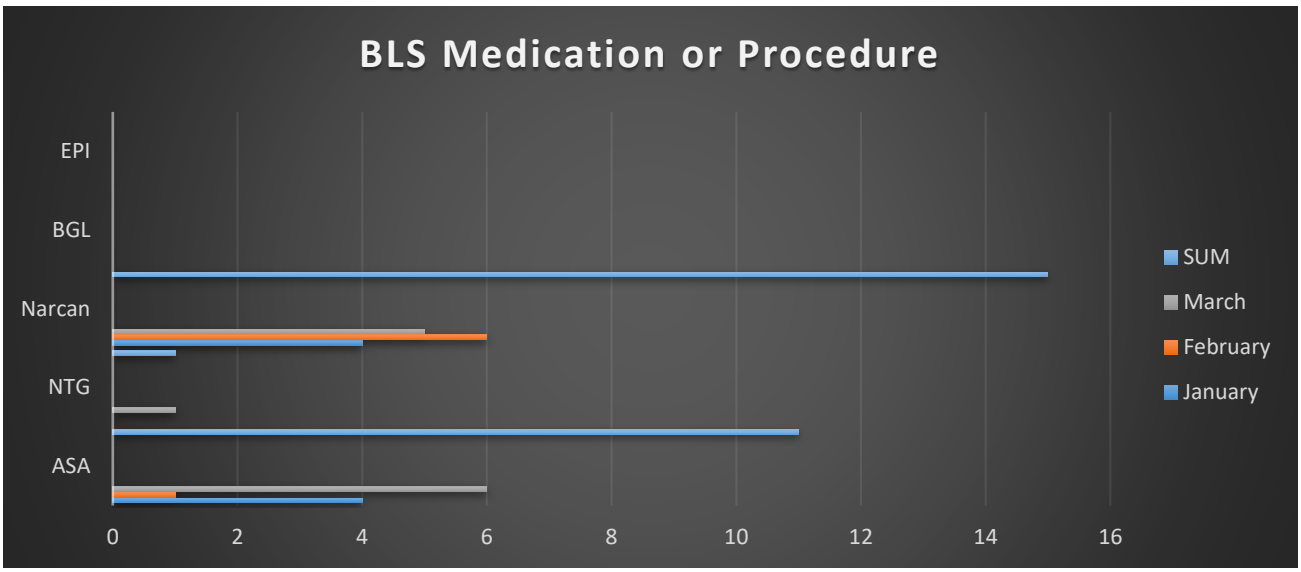


3. M.P.D.S. determinant compliance with EMS Policy No. 3202.

Each lights and sirens transport receives an individual QA/QI assessment that not only looks at the appropriateness of the use of lights and sirens transport as well as if the call followed EMS Policy No. 3202, Medical Priority Dispatch System use and Assignments. In the last quarter of 2023 BLS used lights and sirens to transport a patient 10 times. On individual incident QA/QI, all calls followed policy No. 3202 appropriately. Transport with lights and sirens was most often due to a seizure patient that was no longer seizing during MPDS questioning but then had seizure like activity enroute to the hospital. Thus far in 2024 BLS units have transported lights and sirens 7 times, with the most common reason being ALOC at a doctor's office or clinic. In one case it was faster to transport the patient, via BLS, to the ED than to wait for an ALS unit. MPDS determinants for all the doctor's office and clinics coded out as card 33, Transfer/ Interfacility / Palliative care, and appropriately received a BLS response.

4. Medications and procedures:

All medication administration are evaluated to determine correct usage. In Q4 of 2023 there was a total of 57 medication administrations with 21 of them being ASA, 35 being Naloxone and 1 NTG. In Q1 2024 we have seen a reduction of medication administration with a total of 26. 11 being ASA, 1 NTG and the majority being naloxone at 15.



5. Non transport ALS provider continues care to hospital.

In 2024, one of our main focuses will be on Non transport ALS paramedics riding in on BLS units. These QA/QI processes will focus initially on appropriate use of EMS policy No. 3202 as well as appropriateness of non-transport ALS personnel maintaining patient care and riding into the hospital.