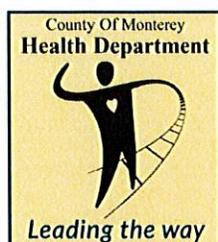


2018
2019

Monterey County Emergency Medical Services Agency Report to the Monterey County Board of Supervisors

ANNUAL REPORT

COUNTY OF MONTEREY | Health Department



Contents

- Comments from the EMS Director3
- Comments from the EMS Medical Director4
- The Monterey County EMS Agency: 2018-20195
 - Financial Management.....5
 - Community Services Area (CSA) 74.....5
 - The Maddy Fund.....5
 - Policy/Procedure and Protocol Revisions6
 - EMS App (Software Application)7
 - Website and Social Media7
- The Monterey County EMS System: 2018-20198
 - The 9-1-1 Emergency Medical Services System8
 - First Responder Response Times.....10
 - Exclusive Operating Area (EOA) Ambulance Provider: American Medical Response Monterey10
 - Dispatch Time Performance11
 - Medical Priority Dispatch System (MPDS)/Communications Policies.....12
 - Response Time Performance12
 - Computer Aided Dispatch (CAD) System and FirstWatch18
 - The Monterey County Trauma System/Natividad Trauma Center18
 - Goals for Monterey County Trauma System19
 - Monterey County Trauma System Metrics19
 - Trauma Related Committees22
 - The Monterey County Cardiac Care/ STEMI System23
 - STEMI Quality Improvement Committee23
 - Monterey County STEMI System Metrics24
 - Monterey County STEMI System Goals.....25
 - The Monterey County Stroke System25
 - Stroke Quality Improvement Committee.....26
 - Monterey County Stroke System Metrics26
 - Monterey County Stroke System Goals28
 - Monterey County EMS Data System28
 - EMS Advisory Committees29

Continuous Quality Improvement (CQI).....	29
Continuous Quality Improvement Technical Advisory Group (CQI TAG).....	30
Monterey County EMS Agency CQI TAG Goals	30
EMS Personnel Certification, Accreditation, and Discipline.....	31
EMT Certification/Recertification.....	31
Paramedic Accreditation	31
Prehospital Discipline	32
EMS Education.....	32
Law Enforcement Naloxone	32
EMS Continuing Education	32
EMT Training Programs	33
Paramedic Training Program	33
Unusual Occurrences	33
Emergency Preparedness.....	34
Summary	34

Comments from the EMS Director

Honorable Chair and Members of the Board of Supervisors:

During the July 1, 2018 through June 30, 2019 Fiscal Year, the Monterey County EMS Agency had several significant accomplishments. I would like to highlight three of these significant accomplishments, each of which will provide benefits to the citizens and visitors of Monterey County who need medical help in an emergency.

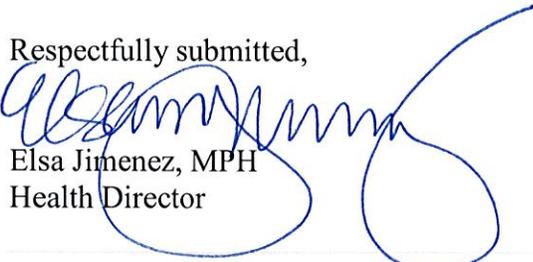
On November 1, 2018, the Monterey County EMS System launched a single county-wide electronic patient care reporting (ePCR) and data system. For the first time in the system's history, every provider, both Basic and Advanced Life Support, is contributing data on its patients to a common data system. This fills a major gap in the system's ability to accurately analyze the care being provided. Implementing the ePCR and data system was a truly collaborative effort between stakeholders, the EMS Agency, and the selected vendor ESO.

As in previous years, several EMS system policies and protocols were developed or revised. Examples include: Paramedic Accreditation and Renewal, Authorized ALS Stock, Field Trauma Triage Criteria, Emergency Department Re-Triage and Rapid Transfer, Burn Care, and Major Trauma Patient. As "science marches on" it is important for every policy and protocol to reflect the latest changes in clinical care and standards. These additions and revisions assure that the prehospital care provided within Monterey County is up to date, clinically based, safe, and effective.

During the period of this report, the EMS Agency put considerable effort into the "EMS 20/30: EMS System Redesign" process. Working with EMS system stakeholders and a consultant, the EMS Agency put together an "EMS System Strategic Plan" – a document designed to guide the development of our EMS system for years going forward. The Plan was approved first by the Emergency Medical Care Committee (July 2018) and then by the Board of Supervisors in November 2018. A Request for Proposal (RFP) for a contractor to provide ambulance service in the Monterey County Exclusive Operating Area (EOA) was released in January 2019. Based on the bid received, which was considered too expensive, it was decided to revise the RFP and distribute it again. That process is ongoing as of the writing of this report.

An EMS system is a complex one which requires the efforts of many to make it work effectively. As always, the EMS Agency wishes to thank the Honorable Members of the Monterey County Board of Supervisors, Dr. Lew Bauman and Charles McKee, community partners, first responders, emergency telecommunications professionals, EMTs and paramedics, and emergency department and specialty center personnel for their dedication, commitment, and effort in support of the Monterey County EMS System.

Respectfully submitted,


Elsa Jimenez, MPH
Health Director

Comments from the EMS Medical Director

Anyone who has worked in an EMS System recognizes that change and evolution are perpetual factors in the quest to deliver high-quality medical care. When I became an EMT in 1990, we used a LifePak 5 that was eventually replaced by a series of later models. We applied MAST trousers to hypotensive trauma patients, and procainamide was part of the V-fib algorithm. We relied on map books instead of GPS, and run sheets were documented with pen and paper instead of a keyboard. None of the rigs were equipped with CPAP, and patients in respiratory distress were sometimes intubated by sticking an endotracheal tube through their nose and into their windpipe. (A whistle on the end of the tube told us when we were getting close.) Still, I heard about the “good old days” from the medics who had trained before me in a time when only surgeons wore gloves and firefighters routinely entered burning buildings without the benefit of SCBA.

Things change, but they’re also circular in nature. In the ER, procainamide has made a comeback for the treatment of wide-complex a-fib with rapid ventricular response, and I’ve seen at least one patient with angioedema-related airway obstruction rescued using nasotracheal intubation. So not everything from the good old days is gone forever. We follow evidence-based medicine, knowing that the evidence is always in flux. Sadly, we never know as much as we *think* we know, and it’s both humbling and inspiring to recognize that most of the journey is still ahead of us.

This year I was handed the reins of EMS Medical Director by Monterey County’s previous EMS Medical Director, Dr. Jim Stubblefield. In our conversations, Jim and I discussed the changes he had witnessed and helped develop over the course of his twenty-plus years of service, and he was candid enough to tell me about some of the challenges that lie ahead. From a 30,000-foot perspective, EMS in Monterey County has matured into a complex and integrated system capable of responding to the needs of a diverse community. The people I’ve met possess the knowledge and experience to take that system to the next level, and they are passionate about the core mission of safeguarding the lives of the residents we serve.

There is no better time than the present, an opportunity forged by hard work and innovation and carried forward by individuals committed to a common goal. I’m excited to be joining this dedicated team, and I look forward to the great work we will do together in the years to come.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Beuerle".

John Beuerle, M.D.
EMS Medical Director

The Monterey County EMS Agency: 2018-2019

Financial Management

Community Services Area (CSA) 74

In 1998, Monterey County sponsored a ballot measure for the establishment of the CSA-74 benefit assessment on real property within the county to finance a countywide paramedic emergency medical services (EMS) program. On March 7, 2000, Monterey County voters approved Measure A, replacing the former CSA-74 benefit assessment with an equivalent special tax, in compliance with Proposition 218. The special tax is collected and administered by the EMS Agency and is used "for the purpose of funding the countywide paramedic EMS system, which will provide advanced life-saving support to victims in response to emergency calls."

The special tax for CSA 74 is assessed in accordance with the Monterey County Land Use Codes. CSA units are calculated as either a basic unit or all other units. The basic unit is a single-family dwelling. All other land uses are either a percentage or multiple of that basic unit. Trailer Spaces and Hotel Rooms are calculated differently as there may be many of them on a single parcel.

The break down for fiscal year 2018-19 is as follows:

<u>Type of Dwelling</u>	<u>Number of Units</u>	<u>Amount Billed</u>
CSA units	118,670	\$1,616,354
Trailer spaces and hotel rooms	<u>349</u>	<u>86,854</u>
Total	119,019	\$1,703,208

During FY18-19, the EMS Agency used CSA-74 monies to continue to pay for the costs of the single integrated electronic patient care reporting (ePCR) system county-wide to ensure compliance with Assembly Bill 1129, which revised the California Health and Safety Code, Section 1797.227 to require local emergency medical care providers to submit electronic data.

The Maddy Fund

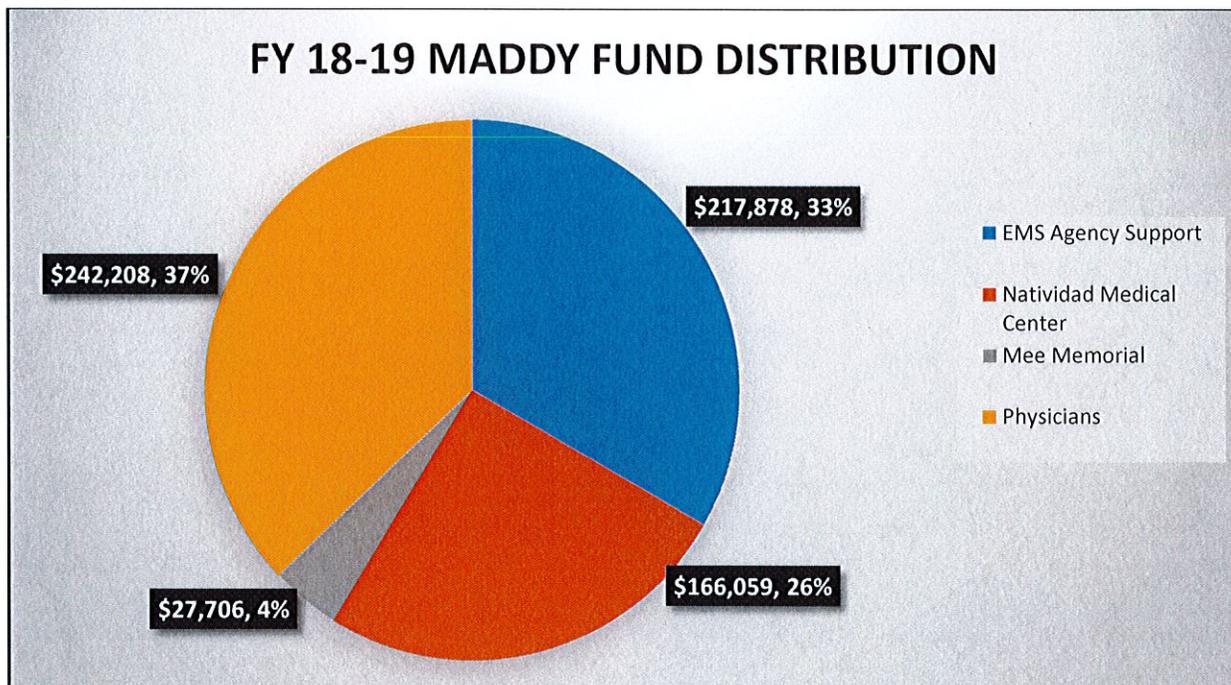
In 1989, the Monterey County Board of Supervisors established the County Emergency Medical Services Fund (EMSF) under Section 1797.98 of the Health and Safety Code (Maddy Fund) to provide for collection and distribution of fine proceeds authorized by the California State Legislature adopting of Senate Bill 612 and 1773. These laws allow counties to levy an assessment of \$4.00 per \$10.00 of fines for specified traffic violations.

Pursuant to State Law, the money in the fund is disbursed and utilized in the following manner:

Up to 10% of the proceeds are available to fund the program's administration. The remaining 90% compensates health care providers for emergency medical services provided to individuals who do not have healthcare insurance and cannot afford to pay for emergency medical care and for discretionary EMS purposes.

The distribution breakdown is as follows: 58% (or 52.2% of total collections) to reimburse physicians for a portion of unreimbursed indigent services/bad debt costs; 25% (or 22.5% of total collections) to reimburse hospitals which provide a disproportionate share of unreimbursed emergency medical care; and 17% (or 15.3% of total collections) for Health Department's Emergency Medical Services Agency discretionary activities. The distributions from the fund to hospitals and the Health Department are made during the fiscal year. Distributions of the physician reimbursement are made on a quarterly basis.

During FY18-19, the EMS Agency continued to work with providers to transition to a secure, electronic submittal of claims to increase data accuracy. A table showing the disbursement of Maddy Funds appears below:



Policy/Procedure and Protocol Revisions

Monterey County policies, procedures, and protocols continue to evolve during the current fiscal year.

July 1, 2018 brought 43 new and revised policies to govern how the EMS system is to operate. Policies were revised to reflect changes in State regulations as well as to update some policies that needed to be refreshed and clarified.

Among the policies that were created and revised were policies governing the management of behavioral health patients, policies that allowed EMT's to provide patient care during transport in specific situations, and the use of the new County-wide electronic patient care record system.

July 1, 2018 also saw 26 new treatment protocols to ensure our EMS providers are providing the most current treatments based on research and guidance from organizations such as the American Heart Association.

This fiscal year also saw the EMS Agency continue to develop policies and protocols to ensure patient care keeps pace with best practices and to base patient care and EMS system decisions on the results of quality research.

Policies and protocols which were implemented on July 1, 2019 include policies to allow EMT service providers to upgrade their skills and provide additional treatment for anaphylaxis, narcotic overdose, and breathing problems. The process for EMT certification and recertification was clarified. Policies for the oversight of EMT training programs was updated to reflect changes in California regulations. Most treatment protocols were revised to bring clarity to the directions, and many were updated in format to an algorithm style rather than plain text.

Policy changes that went into effect on July 1, 2018 have had the desired effect on patient care related to the use of backboards. The use of backboards has, as intended, decreased greatly. This change helped our system to keep pace with the latest research.

EMS App (Software Application)

The EMS Agency launched a project in April 2018 to develop and implement a mobile EMS App for use by EMS system providers. It is called the “MOCO EMS Mobile Field Manual.” The EMS App concept was designed to replace an existing antiquated phone application and to provide additional functionality for the users. The application was developed by CityGovApp and includes information and access to all Monterey County EMS System Polices and Protocols, EMS Staff contact information, hospital locations, driving directions, unusual reporting and submission capabilities, as well as other EMS System information and guidance. The EMS App is updated regularly with any system changes including policy and contact information as needed. System stakeholders recently requested a search functionality, and the EMS Agency was pleased to accomplish the upgrade in a short turn-around for the EMS System users.

Website and Social Media

Since its launch in March 2016, the EMS Agency’s Facebook page now has 1,183 followers. The Facebook page features information on forthcoming continuing education classes for EMS personnel, meeting announcements and other events, and EMS system advisories. Often, links to articles of interest to EMS providers are posted - on subjects as varied as studies on occupational injuries, the use of checklists, code 3 driving, and scene safety. Links to EMS Agency documents such as the EMS System Strategic Plan, and the Field Guide for protocols have also been provided as have links to regularly scheduled meetings. Photos of local EMS providers can also be found on the Facebook page. The Facebook page is one way the EMS Agency is leveraging new opportunities to communicate with the EMS system and public. The page can be found at: www.facebook.com/mocoems or by searching for Monterey County EMS on the Facebook site.

The EMS Agency also maintains a website which underwent a significant redesign in 2017-18. The website can be accessed at www.MoCoEMS.org. The website includes agendas and meeting packets for all EMS Advisory Committees, current policies and procedures, current treatment protocols, EMS Agency plans, and EMS provider performance data. EMS system stakeholders can report Unusual Occurrences through the website and the public can also submit concerns via the website.

The Monterey County EMS System: 2018-2019

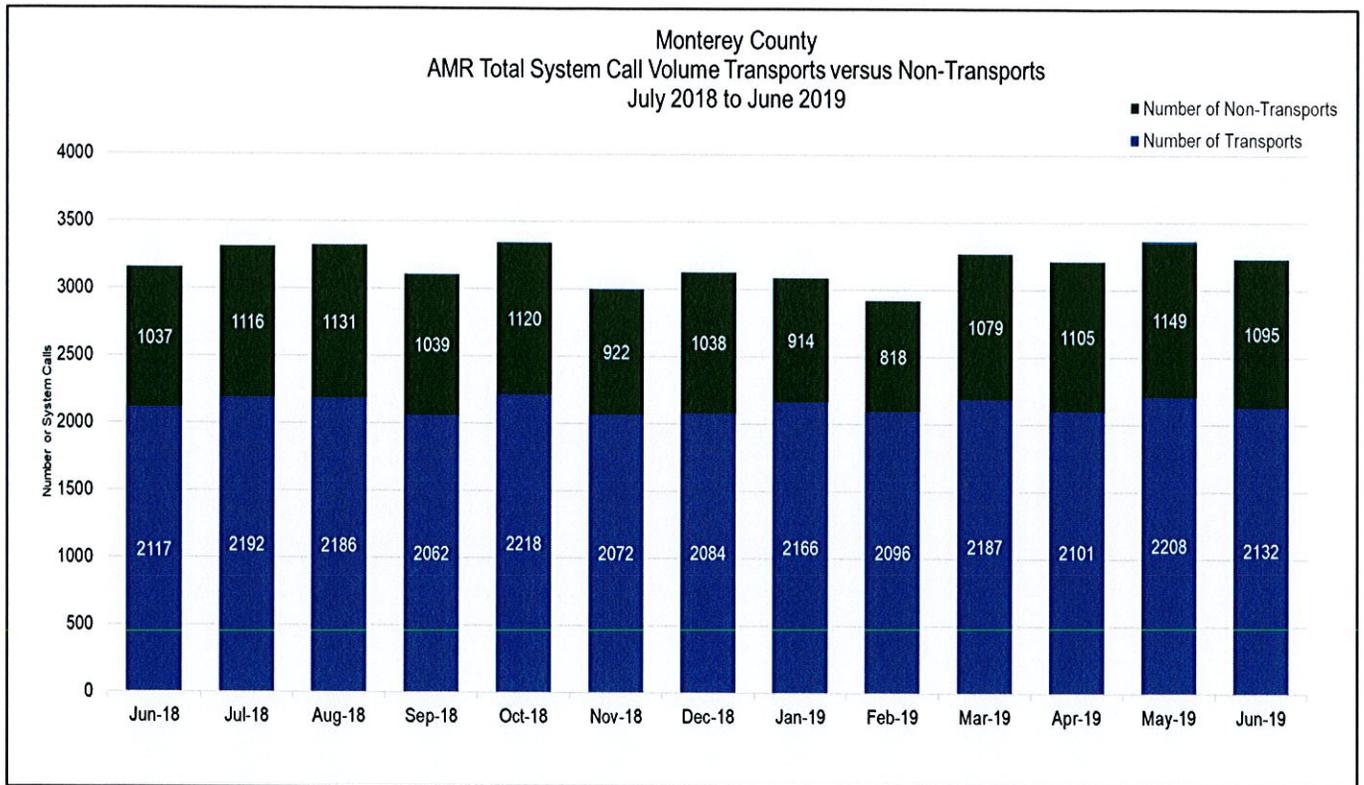
The 9-1-1 Emergency Medical Services System

Any EMS system is composed of many elements which must all work together for the benefit of the patient. Elements include communications centers, first responder agencies, ambulance providers – both ground and air, hospitals, specialty centers such as stroke, STEMI (ST-Segment Elevation Myocardial Infarction or “heart attack”) and trauma, and the EMS Agency which provides coordination for those many diverse elements. Without that team effort, the EMS system in Monterey County would not exist.

The medical response to 911 calls involves multiple EMS providers. Communications centers receive the call for help from the public, dispatch resources as appropriate, and often provide pre-arrival instructions to the caller allowing for patient care to begin before EMS system resources arrive. Public safety agencies provide first response. These responders typically arrive before the ambulance and can initiate assessment of the patient and provide care. First response providers are mostly trained to the EMT level, but some provide paramedic-level care in several areas of the county. The City of Monterey Fire Department became an ALS level first responder since the last report. In the rural areas, EMT and EMR (Emergency Medical Responder) levels of care are provided.

There are four ground ambulance providers in the county and all ambulances are staffed to provide paramedic level care. There are also two air ambulance providers with bases in Monterey County. The CHP also sometimes provides air transport at the paramedic level of care.

American Medical Response (AMR), the contractor that provides services to the Monterey County Exclusive Operating Area (EOA), continues to have a significantly high call volume. For the period of this report, they responded to 38,230 calls for service and transported 25,704 patients. The following chart shows a consistently high level of calls throughout the year with some minor monthly call volume differences. The chart reflects a thirteen-month period from June 2018 to June 2019.



The Monterey County Regional Fire District (MCRFD) provides ambulance service to the Carmel Valley area. MCRFD also saw an increase in requests for ambulance service; they responded to 2,105 calls resulting in 944 transports.

The Carmel Fire Department provides ambulance service to the City of Carmel-by-the-Sea and responded to 1,234 calls and transported 740 people.

The Fort Hunter Liggett Fire Department serves the Fort Hunter Liggett army base and had 270 ambulance calls with 120 patient transports. The Fort Hunter Liggett Fire Department also provides mutual aid first response services to the area surrounding the military base when requested.

Air ambulances (helicopters) are used for the transport of critically injured or ill patients in the more rural parts of the county. These resources can sometimes be a life-saving option in those circumstances where ground transport times would be extended.

CALSTAR has provided air ambulance services to Monterey County for nearly thirty years. In the period of this report, CALSTAR responded to 151 calls for service around the County and transported 97 patients. CALSTAR also provides critical care air ambulance services to transfer patients from one hospital to another. CALSTAR provided 163 interfacility transfers.

Mercy Air has been contracted by Fort Hunter Liggett to provide air ambulance service on base. Fort Hunter Liggett has allowed Mercy Air to provide response and transport to air ambulance requests off post when possible. Mercy Air had 46 transports out of 50 flights in FY 2017-2018.

Stanford Life Flight and the California Highway Patrol (CHP) also occasionally provide air ambulance services in the county. They are not based in the county, however.

First Responder Response Times

The EMS Agency has begun the process of calculating and collating information related to First Responder response times to EMS calls in Monterey County. This has never been done in Monterey County from an EMS systems perspective. The EMS Agency can extract response time information from Computer Aided Dispatch (CAD) sources to calculate the 90th percentile response times for all first responder districts. Fractile response time performance gives a more clear picture of response time performance than using an average of response times. These benchmarks and information will be used to measure efficiencies and to identify deployment needs within the county.

Exclusive Operating Area (EOA) Ambulance Provider: American Medical Response Monterey

American Medical Response (AMR – Monterey) is Monterey County’s contracted ambulance provider for the Monterey County Exclusive Operating Area (EOA). State law allows the EMS Agency to contract with an ambulance provider for a specific EOA by way of an agreement, which grants exclusivity to the provider for calls generated in the EOA. The current agreement between the EMS Agency/County and AMR grants exclusivity for 911 paramedic Advanced Life Support (ALS) emergency calls, critical care transports, and interfacility transports. AMR is by far the largest transport provider in the Monterey County EMS system; they provide approximately 91% of the total transports in the county.

The current contract/agreement with AMR ends on January 31, 2020. For that reason, the EMS Agency has been involved in a Request for Proposal (RFP) process for the past two years. That process will determine who the provider will be for the next five to ten-year cycle.

The agreement with AMR sets specific standards for operational, clinical, and financial performance, and includes detailed provisions for the monitoring and enforcement of the agreement. During the period of this report, the EMS Agency has continued to monitor the performance of AMR by utilizing a collaborative reporting process. Detailed reports are reviewed with AMR management in joint AMR/EMS Agency meetings every month and with the Contract Compliance Working Group (CCWG), a committee made up of citizen representatives, on a bi-monthly basis. These meetings (and the time allotted) allow for continuous monitoring of a wide range of metrics related to AMR’s performance. Many of the members of the CCWG are long-standing members, hence they have a good understanding of what they’re reviewing, and perhaps just as importantly, historical context for trends and changes.

For several years, the EMS Agency measured little more than response time compliance, and that compliance information was submitted by AMR. Over the last several years, the reports submitted by AMR have increased in depth and scope, allowing for a more well-rounded review of their performance. While AMR continues to report on response time compliance, the EMS

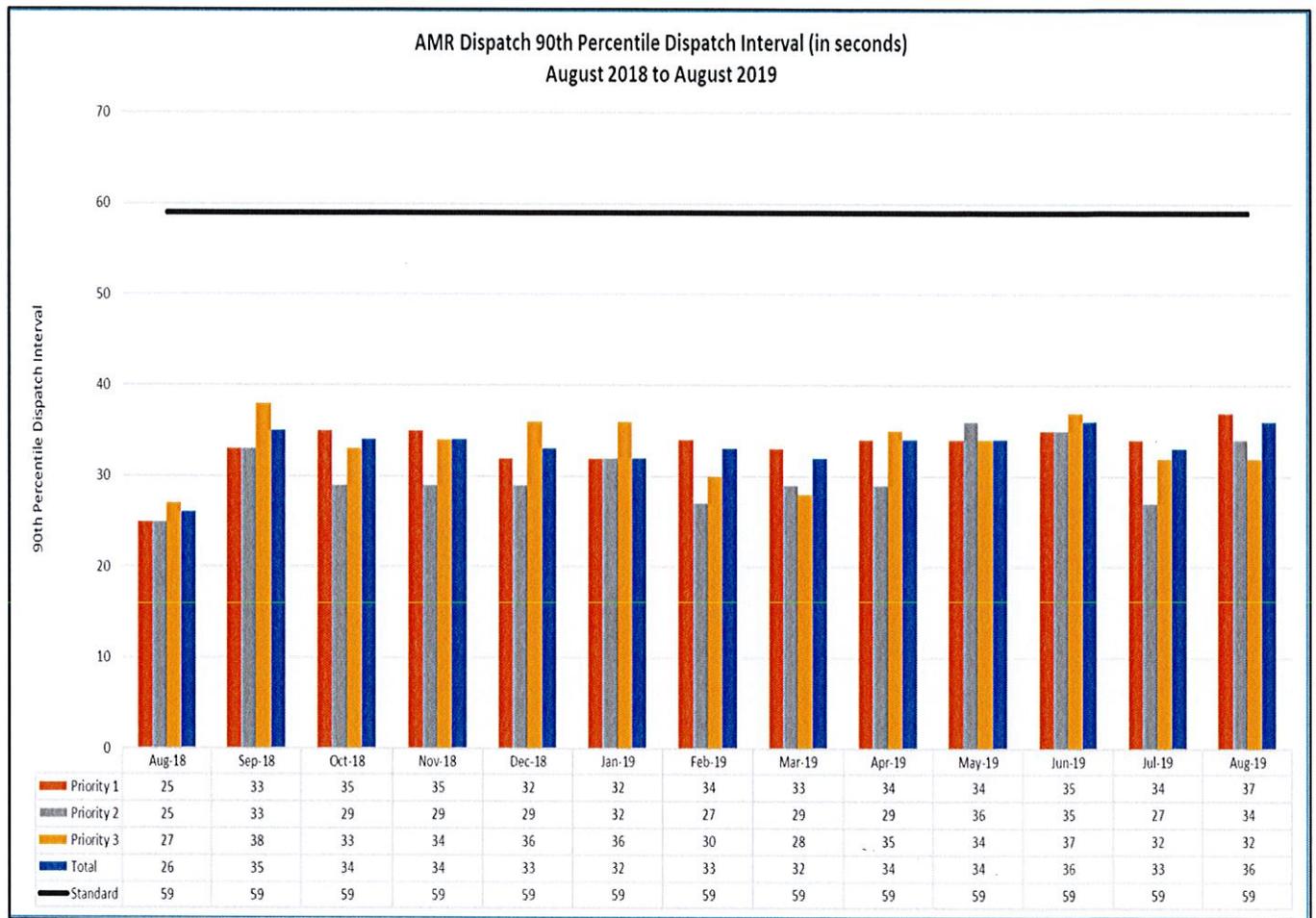
Agency can also view and verify that same compliance information in real time by way of accessing the FirstWatch system – an online data management system that was introduced into the county by AMR. FirstWatch is a nationally recognized vendor that brings a high standard of accuracy to complicated response time compliance measurements. That system was implemented in March of 2017.

In addition to the response time compliance information supplied by the FirstWatch system, AMR also reports on several metrics such as mutual aid utilized and provided, unit hours provided to the system, mechanical failures and crashes, staff turnover and tenure information, public education events, and patient offload times at hospitals. Some clinical data is also provided in these reports. Both AMR and the EMS Agency are learning how to use the robust analysis functions in the ESO ePCR/Data system discussed in the data section of this report. That system allows for a more detailed analysis of a wide range of clinical data for AMR and for other users in the system.

Dispatch Time Performance

One of the monthly metrics reported on and measured by the EMS Agency is the EMS Communications Center dispatch performance or dispatch interval performance. This is the time it takes for the EMS dispatcher to assign an ambulance resource to an emergency call. In the current agreement, the provider is required to assign a resource to the pending EMS call in under :59 seconds, 90 percent of the time. Current annual (FY 2018-2019) performance for Priority 1 calls (highest medical acuity) is 97.23% and the 90th percentile time it takes is :34 seconds. The EMS Agency continues to monitor these metrics each month to identify any improvements needed to maintain high compliance to these time critical actions.

In addition to the dispatch performance measurements, the EMS Agency has required the current Provider to submit Medical Priority Dispatch System (MPDS) protocol and performance reports. These reports outline adherence to performance standards to the various components of MPDS, including Dispatch Life Support and Pre-Arrival Instructions given by the EMD. Quality Improvement is central to the successful delivery and high quality performance of MPDS. The EMS Agency has also required the provider to staff a 1.0 FTE Quality Improvement Supervisor to manage these important programs.



Medical Priority Dispatch System (MPDS)/Communications Policies

The EMS Agency developed and implemented several important EMS Communications related policies. These policies include the EMS Agency designation and minimum requirements of an EMS Communications Center, EMS call routing and processing requirements, and response priorities to EMS calls. These policies focused on International Academy of Emergency Dispatch (IAED) researched best practices to ensure high levels of performance, and to ensure the appropriate use of scarce resources to assure the proper resources are available when needed.

Response Time Performance

The AMR agreement also stipulates response time performance standards based on the perceived acuity of the call and the population density of the area in which the call is located. For 9-1-1 calls, there are three priorities:

Priority 1 calls are life-threatening emergencies, such as cardiac arrests, choking, and major hemorrhage. Priority 1 calls receive a red light and siren response from first responders and ambulance.

Priority 2 calls are non-life-threatening emergencies that require an urgent red light and siren response.

Priority 3 calls do not require a red light and siren response, but require an immediate response due to an urgent, but not life-threatening, medical condition.

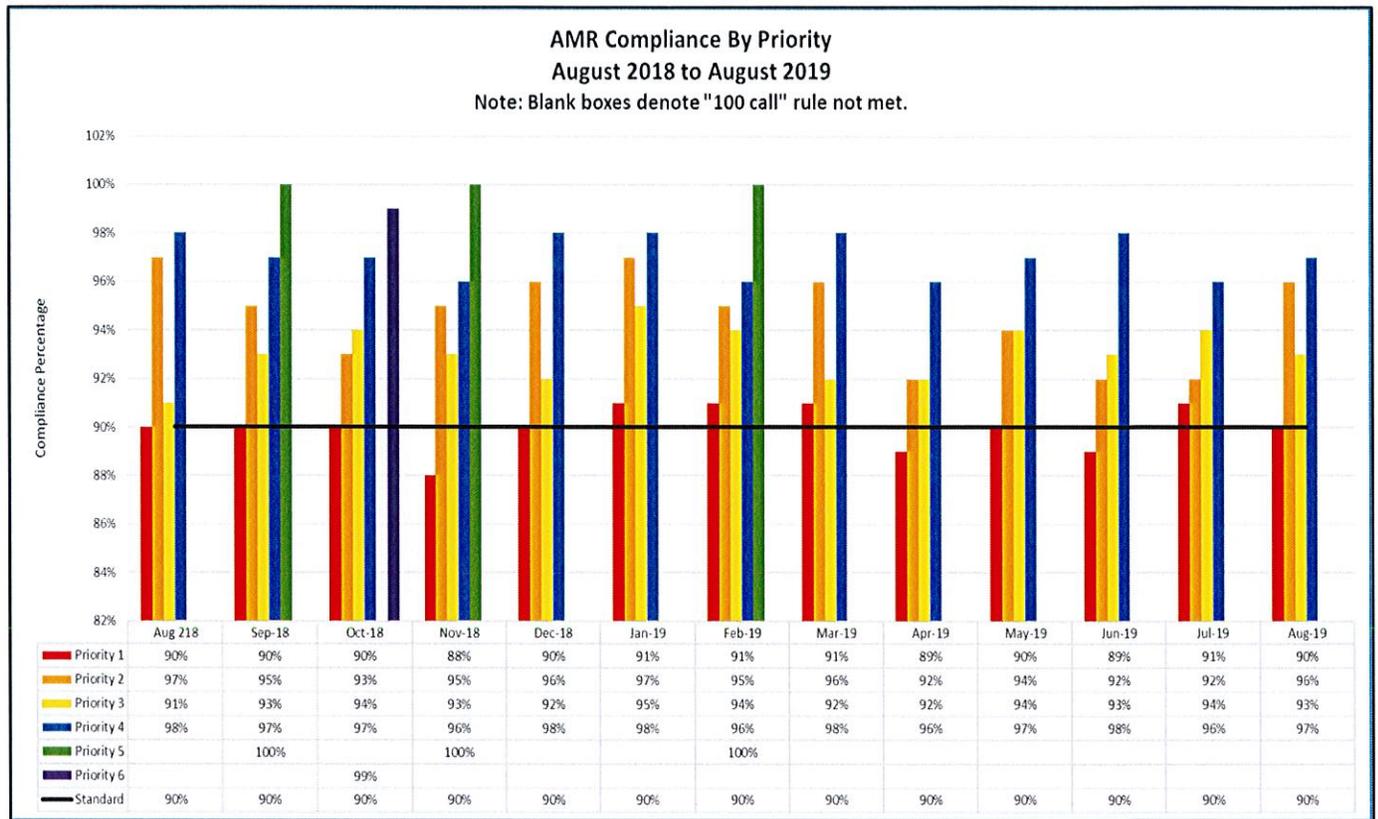
The required response times for each emergent priority and zone (based on population density) are indicated in the table below. The map in Appendix A identifies the location of each color zone, based on population density. The Green zone represents the highest population density (i.e. Salinas and the Peninsula area), Yellow is less populated (cities such as Castroville, Carmel, and Soledad), Orange (areas like the 101 corridor), and Red (wilderness areas).

Per the agreement, late calls can sometimes be exempted for reasons such as disasters, extraordinary weather, road closures, or call “spikes” in the system. When exemptions are granted, those calls are no longer considered to be non-compliant.

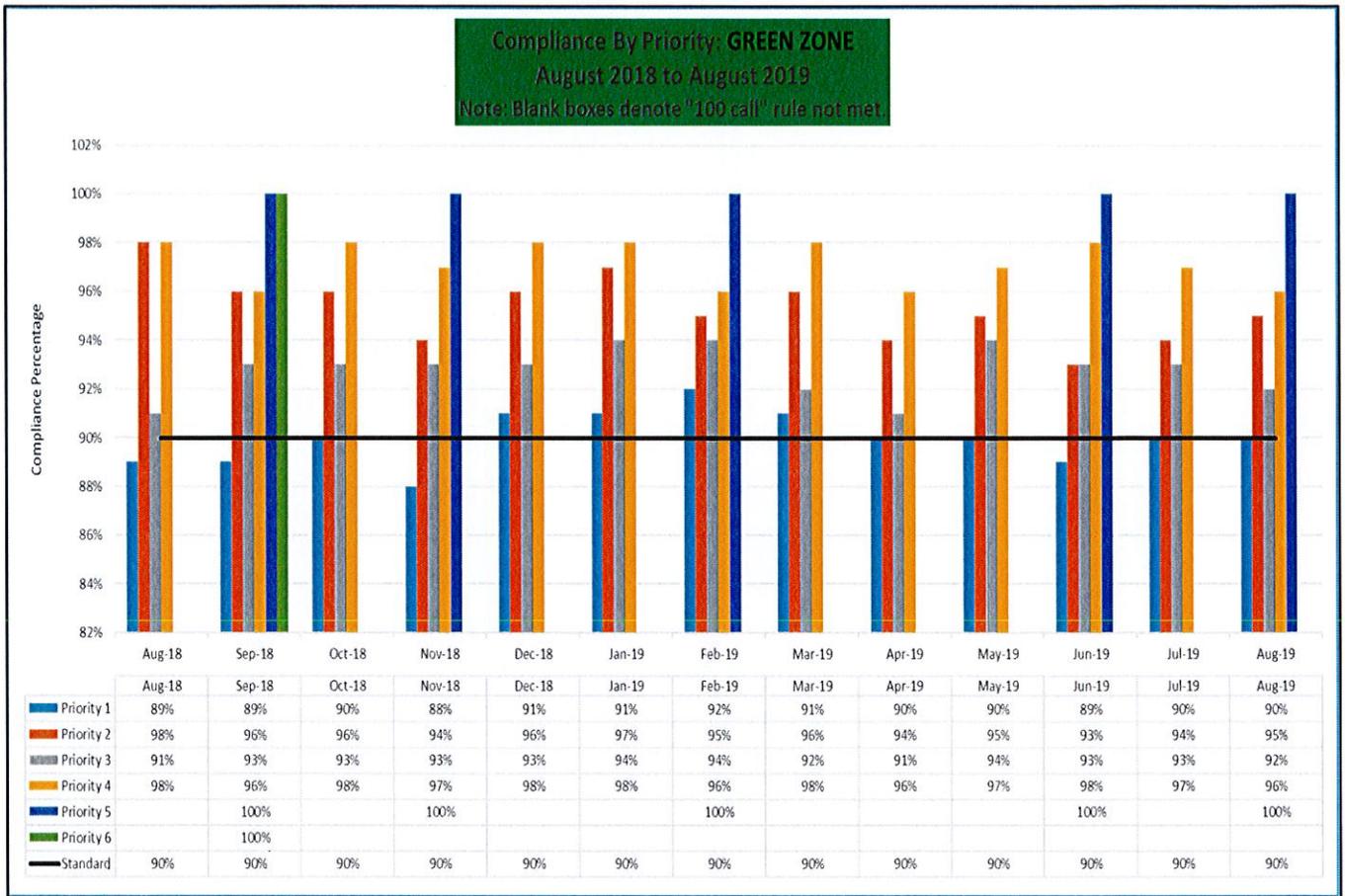
Time are calculated in minutes	Green	Yellow	Orange	Red
Priority 1	8	12	16	ASAP
Priority 2	10	16	20	ASAP
Priority 3	12	20	24	ASAP

As mentioned in the previous EOA section, the EMS Agency and AMR have both used the FirstWatch Online Compliance Utility (OCU) to measure and analyze response time compliance data for several years. Since AMR and the EMS Agency have access to the same data, in real time, there is no discrepancy between the provider’s findings and those of the EMS Agency. The EMS Agency can check compliance on any day at any time. Call volume, response time performance, triggers, and alerts from the system are monitored regularly. When certain response time requirements are not met, as per the agreement, AMR pays penalties to the EMS Agency on a quarterly basis. AMR also pays fines on “outliers” or calls that are excessively late.

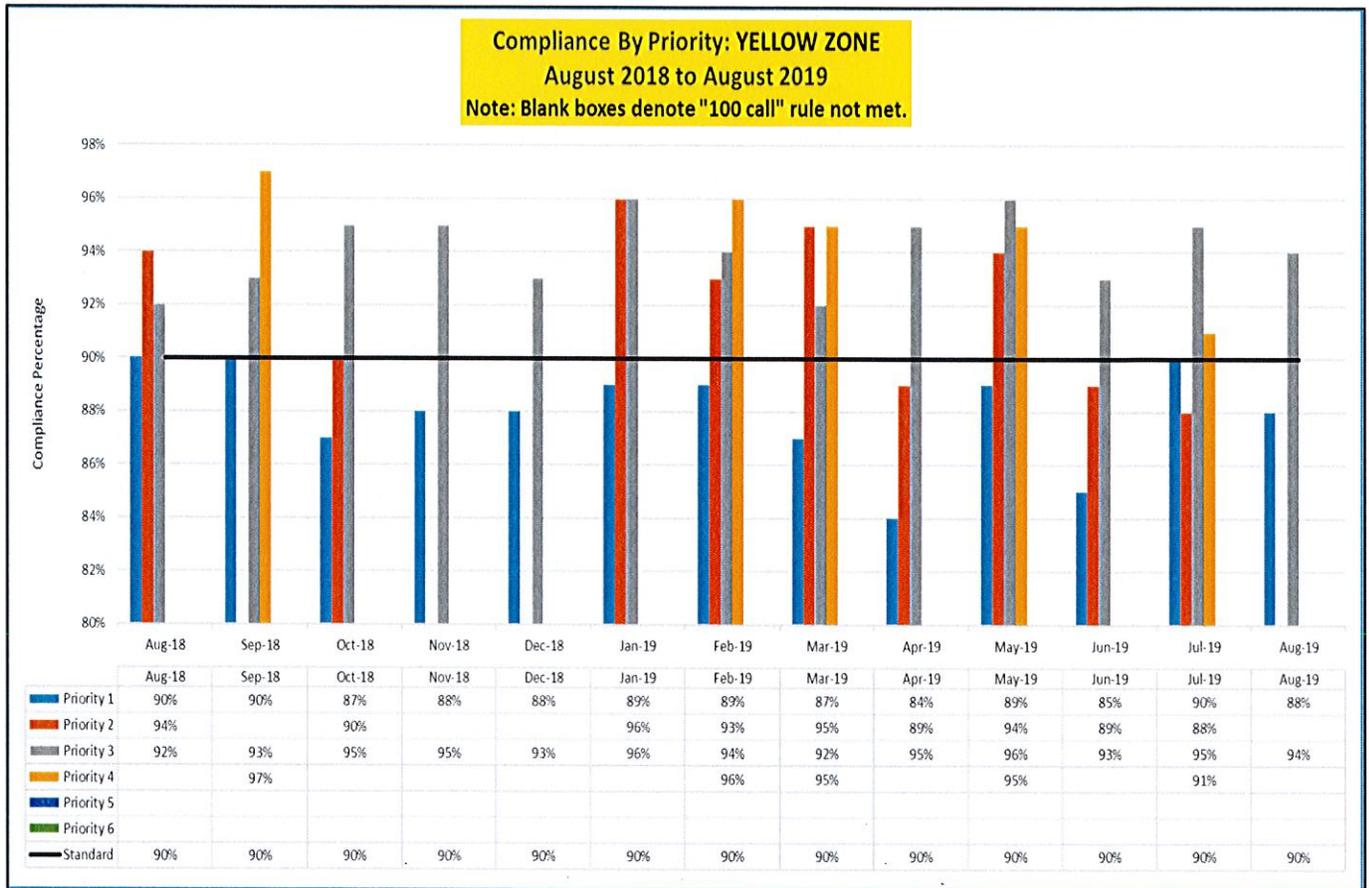
The following charts show AMR’s response time compliance data for a thirteen-month period from August 2018 through August of 2019, the latest data available for this report when it was written. Blank spaces represent months in which there were not enough calls (100) to adequately analyze compliance data. When that happens, the months are “rolled up” until the 100-call threshold is met.



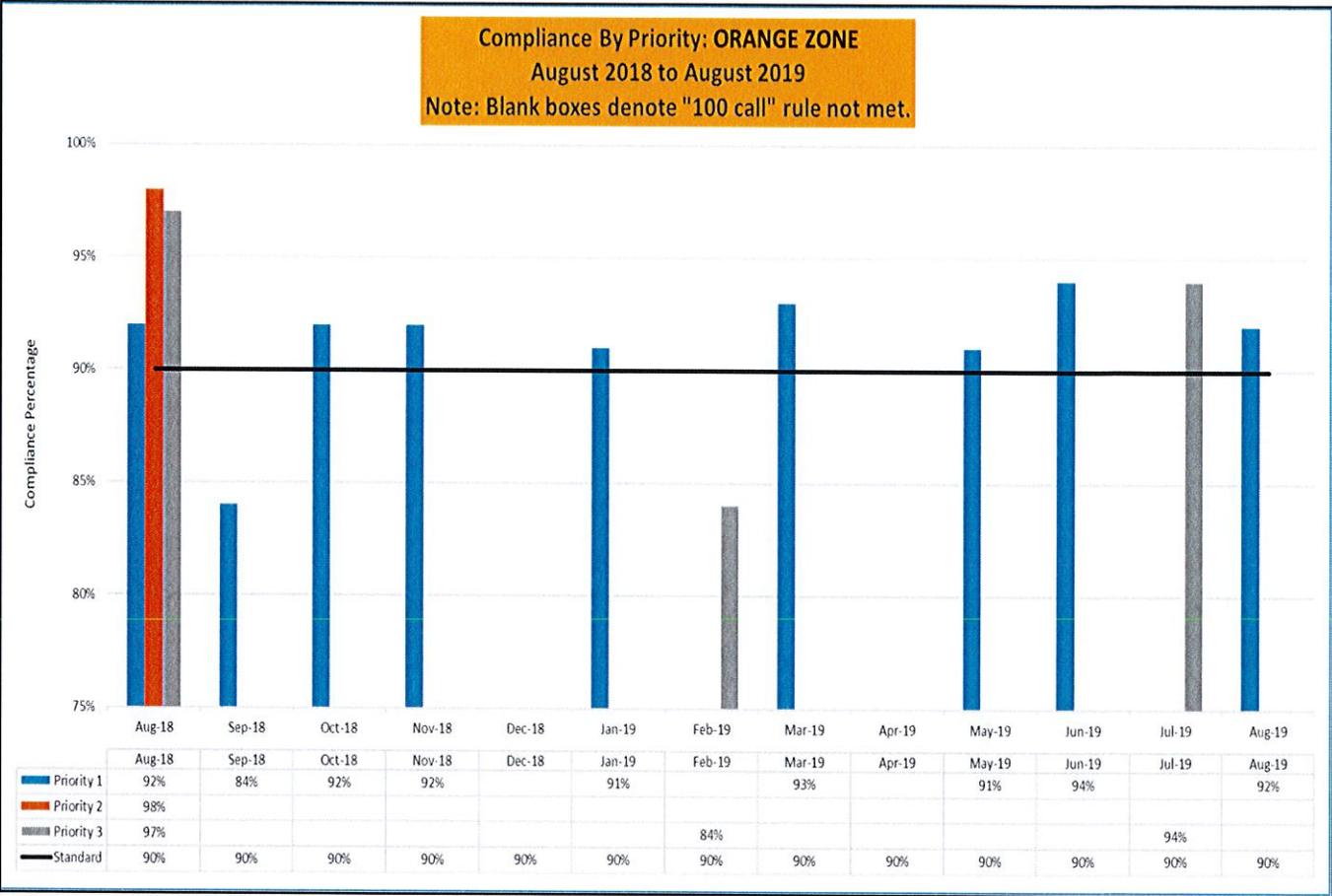
Response time compliance is measured in two ways – “overall” compliance and compliance per zone. Overall compliance is a “macro” look at how AMR is doing in the entire EOA. The above graph shows AMR’s overall compliance by priority when all the zones are averaged together. In overall compliance, AMR did well except for priority 1 calls in April and June of 2019 when they did not meet compliance.



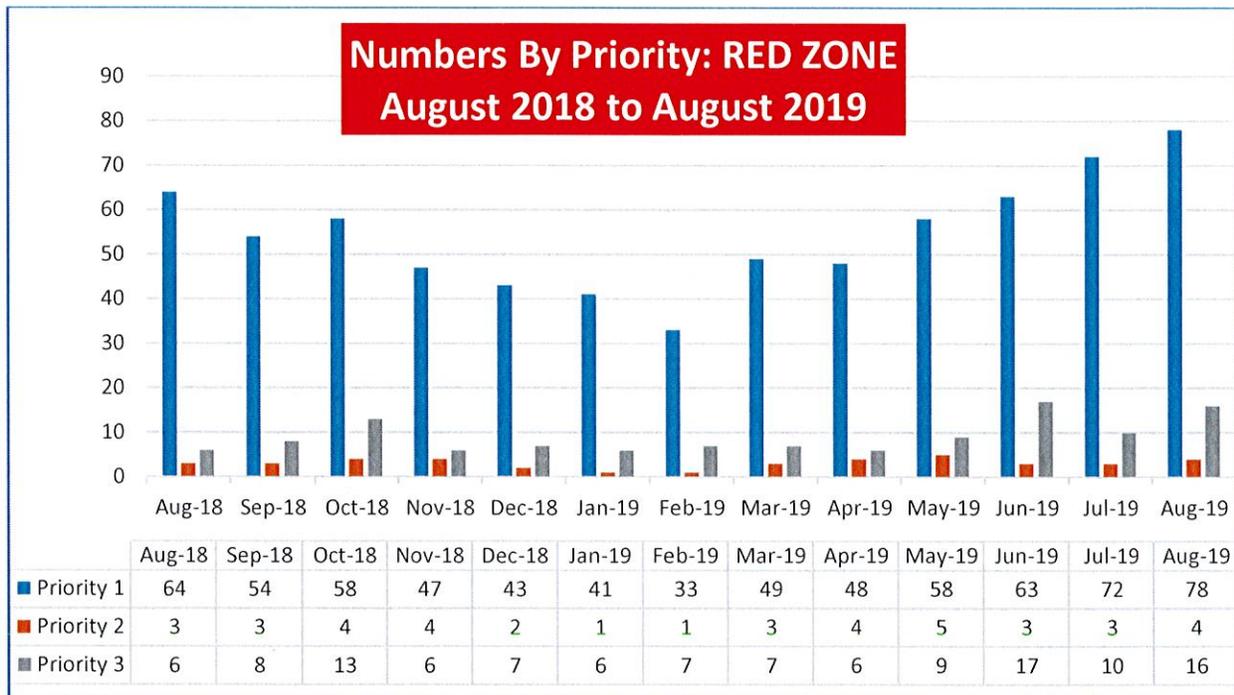
Historically, AMR has met compliance in the Green Zone as the Green Zone is the most populous area of the county and hence has more resources readily available. AMR did however have a problem with meeting compliance in priority 1 calls in this zone in four of the last five months of 2018 and in June of 2019. Changes were made to their deployment plan to improve compliance in this zone after the run of non-compliance in 2018; these changes resulted in more consistent compliance with the 90% requirement.



The Yellow Zone represents a less populous area of the county, and hence a more challenging area of the county for AMR to cover effectively. This shows in AMR’s consistent inability to meet the 90% requirement in both priority 1 and 2 calls in this zone over the reporting period. This consistent inability to meet compliance in the Yellow Zone has been discussed with AMR and with the Contract Compliance Working Group, and has been reported to the Emergency Medical Care Committee. AMR made changes to their deployment plan and added a twelve-hour unit to facilitate better compliance, but these changes had a negligible impact. They have been assessed and paid penalties for lack of compliance with the agreement.



The Orange Zone represents a very rural area, and hence has very few calls overall. That is why there are so many empty boxes in the above graph; the "100 call" rule was not met for that month and priority. When a measurement is possible, AMR has been consistently compliant.



Note: Numbers represent call totals as opposed to compliance percentage.

The Red Zone represents wilderness area. There is no response time requirement in this zone. It can sometimes take a long time to respond to a call in these areas as they are so remote. For this reason, the number of calls rather than a percentage of compliance is reported here. Much of the county is in a Red Zone. While calls are far fewer in this zone, the challenges are often unique and can demand a lot of resources. There is some seasonal variation in this zone.

Computer Aided Dispatch (CAD) System and FirstWatch

As the current contracted ambulance provider for 91 percent of the county call volume, AMR operates their EMS Communications center from the Monterey County 911 Emergency Communications Department (ECD). Monterey County ECD is a co-located, combined public safety agency dispatch center. AMR is integrated into the county’s 911 CAD, phone system, and most recently the County Next Generation (NGEN) radio infrastructure. This allows for coordinated EMS services. These services include; shared radio channels for interoperability, system status deployment of ambulances where needed, delivery of life saving MPDS (Medical Priority Dispatch System), Pre-Arrival Instructions and Dispatch Life Support to callers until responders arrive on scene. All AMR dispatch personal are certified Emergency Medical Dispatchers.

The Monterey County Trauma System/Natividad Trauma Center

Natividad Medical Center (NMC) has been the designated Adult Level II Trauma Center for Monterey County since January 5, 2015. Pediatric patients with critical or serious injuries are usually flown to a Pediatric Trauma Center in Santa Clara County. Children with less serious injuries are transported to Natividad Medical Center for treatment. Agreements exist between

Natividad Medical Center and the Pediatric Trauma Centers closest to Monterey County for the acceptance of these patients.

In November of 2018, NMC underwent a Verification Site Visit from the American College of Surgeons Committee on Trauma (ACS-COT). In December of 2018, NMC and the Monterey County EMS Agency received notification from the ACS-COT that NMC had received 3-year accreditation, and that the visit revealed no deficits - a remarkable achievement, particularly for a first-time verification visit.

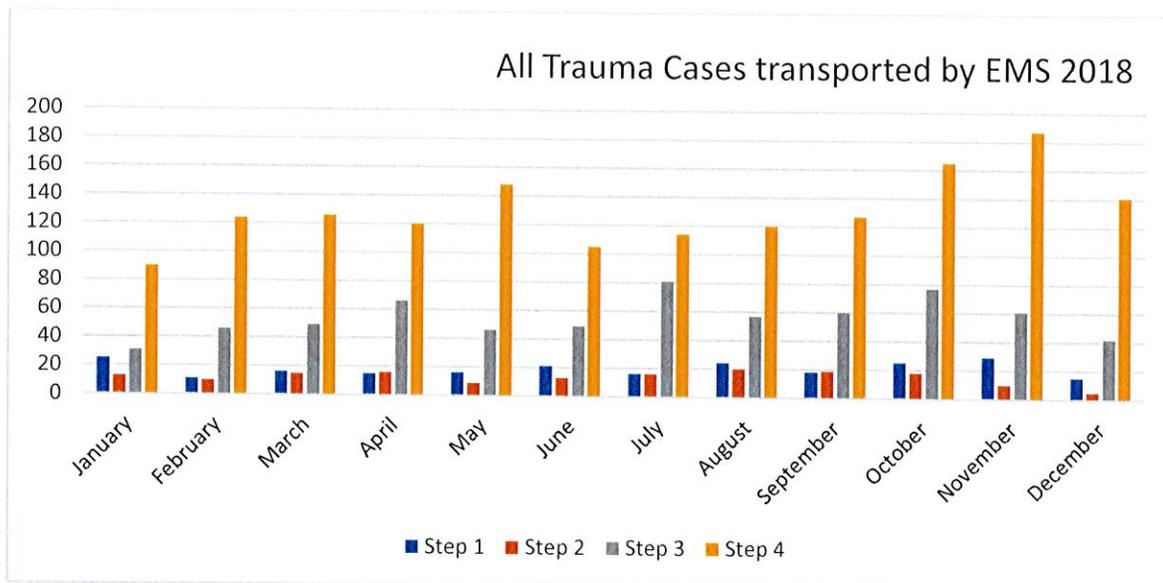
Monterey County EMS providers utilize the Centers for Disease Control Field Trauma Triage Criteria, categorizing trauma patients into four levels of severity. Step 1 patients are the most critically injured patients, and Step 4 are patients who have co-morbidities or special considerations (e.g., older adults, patients on anticoagulants, pregnancy >20 weeks). Step 1 – 3 patients are to be transported to the nearest Trauma Center. Step 4 patients can be transported to non-trauma centers since those hospitals can effectively care for these patients.

Goals for Monterey County Trauma System

2017 goal	Current Status
Assist Natividad Medical Center to obtain verification from ACS-COT as a Level II Trauma Center.	Natividad Medical Center was verified as a Level II Trauma Center by the ACS-COT for a 3-year period in November 2018.
Continued review and revision of trauma policies and protocols.	2 trauma protocols and 3 trauma policies were revised in 2018, in collaboration with Trauma Evaluation Quality Improvement Committee (TEQIC).
Identification of trauma issues and training issues in the prehospital trauma system.	Ongoing goal
Continued collaboration with Natividad Medical Center in their trauma program.	The EMS Agency meets and discusses trauma system issues regularly with the Trauma Program staff at Natividad Medical Center.
Continued collaboration with all Monterey County hospitals in obtaining outcome data on trauma patients.	Ongoing goal.

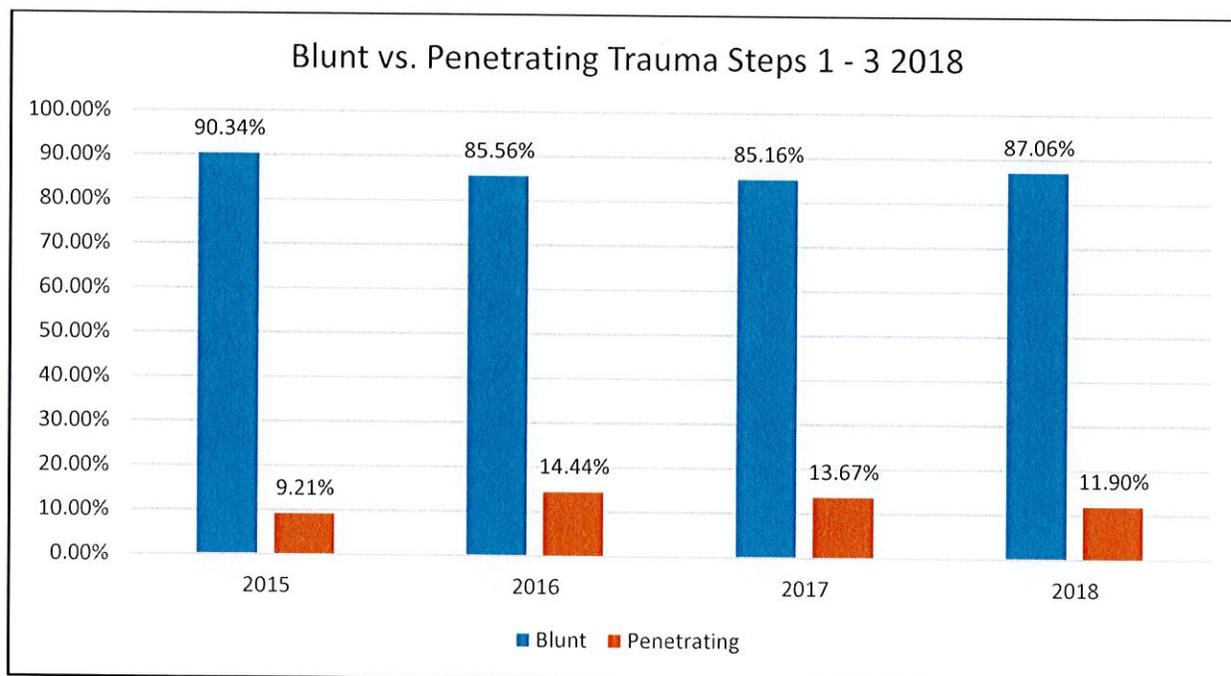
Monterey County Trauma System Metrics

The following chart identifies EMS system trauma patients by their step criteria and by month for the calendar year 2018:



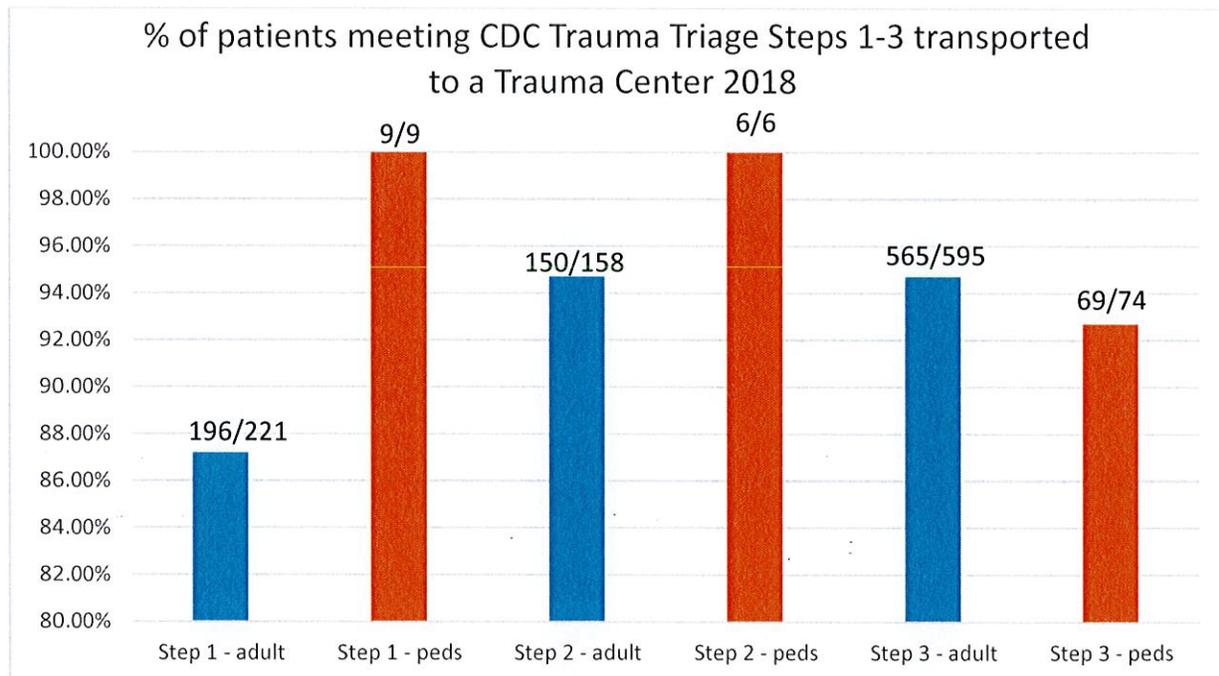
During the 2018 calendar year, the Monterey County EMS system identified and transported and/or treated 2,627 patients meeting Step 1 – 4 Trauma Triage Criteria. This is a significant increase from 2017, when data showed EMS treating and/or transporting 2,116 trauma patients.

Trauma patients are classified as “Blunt” or “Penetrating” trauma. The chart below identifies the number and percentage of blunt and penetrating trauma patients in Monterey County during calendar year 2018.

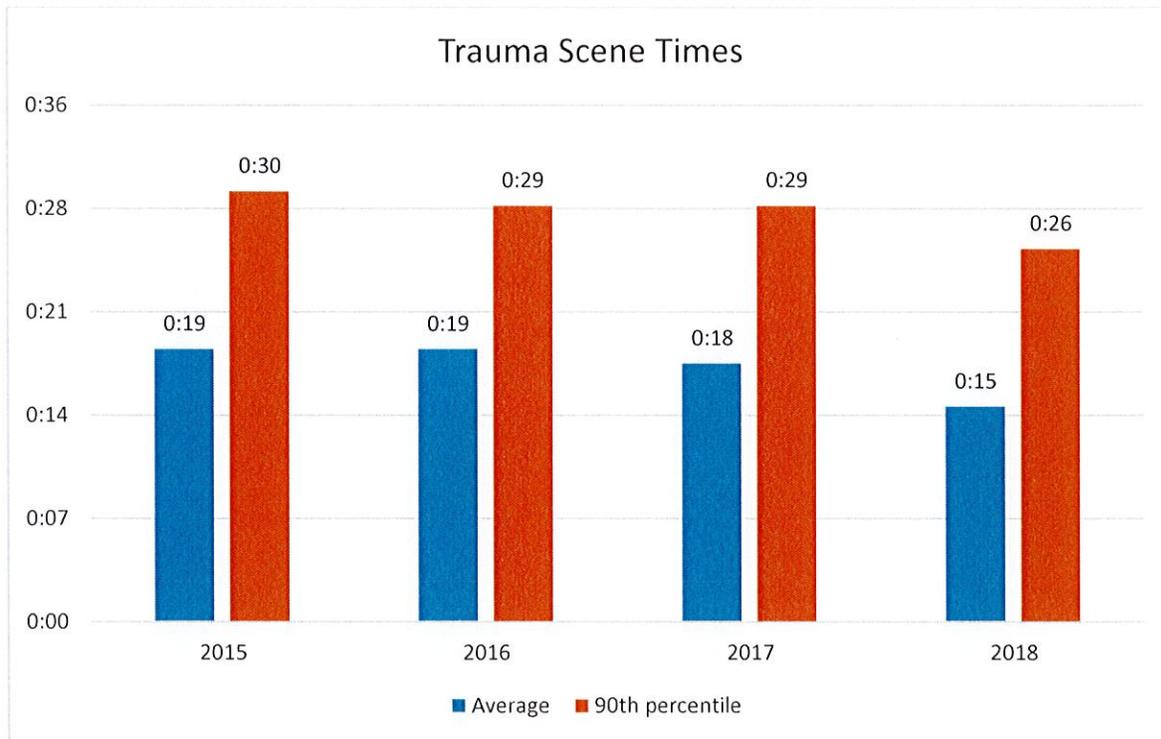


Most adult and pediatric trauma patients meeting the CDC Trauma Triage Criteria Step 1 – 3 are transported to a trauma center. Trauma patients who meet Step 4 Trauma Triage Criteria can be treated at non-trauma community hospitals. Pediatric patients with major trauma (Step 1 and 2) are generally flown to the nearest Pediatric Trauma Center. Natividad Medical Center will

accept Step 3 and 4 pediatric trauma patients and will stabilize and transfer to a pediatric trauma center if necessary. If the parents of a Step 1 or Step 2 pediatric trauma patient refuse transport via air or to an out-of-county Pediatric Trauma Center, Natividad Medical Center will accept the patient, stabilize, and transfer, if necessary, to a Pediatric Trauma Center. Santa Clara Valley Medical Center and Stanford University Hospital are the two closest Pediatric Trauma Centers. If a parent refuses helicopter transport or transport to a pediatric trauma patient, or if the paramedic believes an injured child will not survive the transport to a Pediatric Trauma Center, the patient is transported to Natividad Medical Center for stabilization prior to transporting to a Pediatric Trauma Center.



The Monterey County EMS Agency also tracks the time spent on the scene of a trauma. The goal is 10 minutes or less per Monterey County protocols. However, things such as extrication, multiple patients, patient refusals, and other things can prevent that goal from occurring. Scene times for Monterey County are trending downward, a very good thing. Overall, scene times are 4 minutes less in 2018 than they were in 2015.



Trauma Related Committees

Monterey County has several committees to review and provide oversight to the Trauma System. Monterey County EMS Agency and Natividad Medical Center participate in Santa Clara County's Trauma Executive Committee, where peer review is available through the participation of Trauma Program Managers and Trauma Surgeons from Natividad Medical Center, Santa Clara Valley Medical Center, Regional Medical Center of San Jose, and Stanford Medical Center. Cases are selected from the Trauma Executive Committee for presentation at Santa Clara County's Trauma Care System Quality Improvement Committee (TCSQIC). The TCSQIC is a larger group comprised of representatives from Santa Clara, Santa Cruz, San Mateo, San Benito and Monterey County Trauma Centers and EMS agencies. Data is presented as well as case presentations and educational presentations. The TCSQIC and the Trauma Executive Committees meet every other month.

Natividad Medical Center and the Monterey County EMS Agency also participate in the State of California's Bay Area Regional Trauma Care Committee (RTCC). The RTCC meets 3 times per year and brings together representatives from all Trauma Centers and EMS Agencies in the California Trauma Bay Area Region. This region consists of Solano, Contra Costa, San Francisco, San Mateo, Alameda, Santa Clara, Santa Cruz, San Benito, Monterey, and Marin Counties. The State of California established five RTCCs in 2008 to facilitate communication and collaboration within and between regions, to share and support best practices, to assist with the interpretation of regional data, and to provide requested technical assistance to local EMS agencies and to the State EMS Authority related to the development and operation of a system of trauma care for the State of California.

Monterey County EMS Agency also facilitates a Trauma Evaluation and Quality Improvement Committee (TEQIC). This group meets quarterly to report data related to the Monterey County Trauma System, review and make recommendations to the EMS Agency on issues such as policy and protocols, organization and training, and issues identified in the Monterey County Trauma System. This group is confidential and is not open to the public because TEQIC evaluates trauma care of individuals in the form of case reviews. TEQIC reports to the CQI TAG.

The Monterey County Cardiac Care/ STEMI System

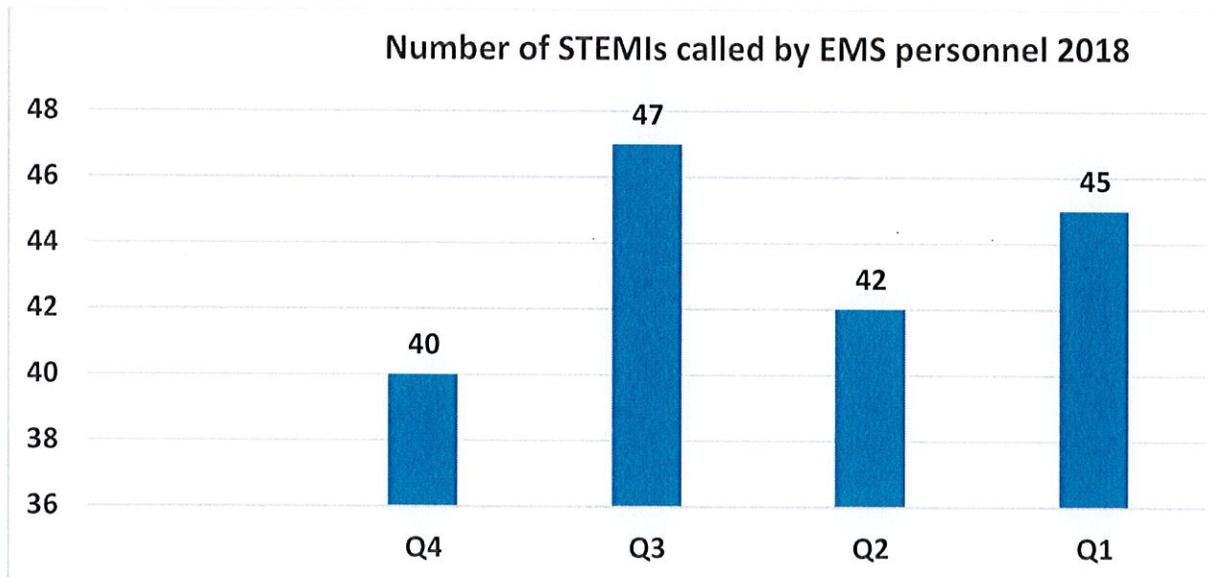
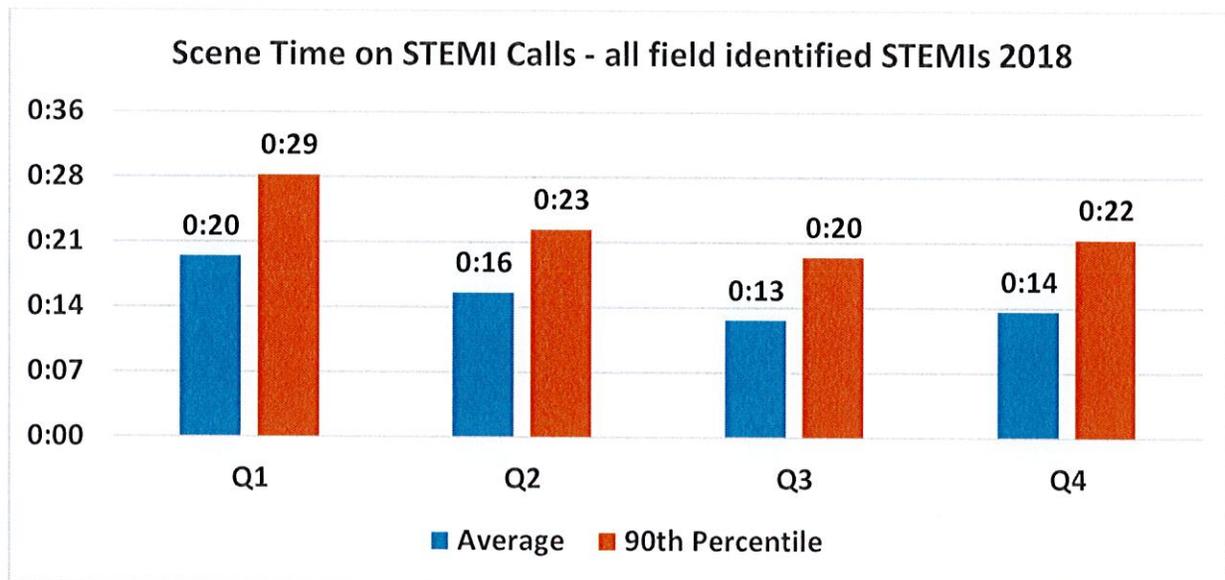
S-T Elevation Myocardial Infarction, or STEMI, is the medical term that describes those patients who are suffering from the most immediately life-threatening type of heart attack. The STEMI Quality Improvement Committee (STEMI QI) reviews the STEMI care system and advises the Monterey County EMS Agency on STEMI system policy, organization, training and equipment. EMS Agency staff report on the committee activities to the Continuous Quality Improvement Technical Advisory Group (CQI TAG), and from there to the Medical Advisory Committee. Paramedics can obtain an electrocardiogram (ECG) in the field and transmit it directly to the STEMI Receiving Center and to the interventional cardiologist's cell phone. This early notification of the critical nature of the patient results in faster activation of the cardiac catheterization lab, and a shorter time to the time-sensitive interventions taken there.

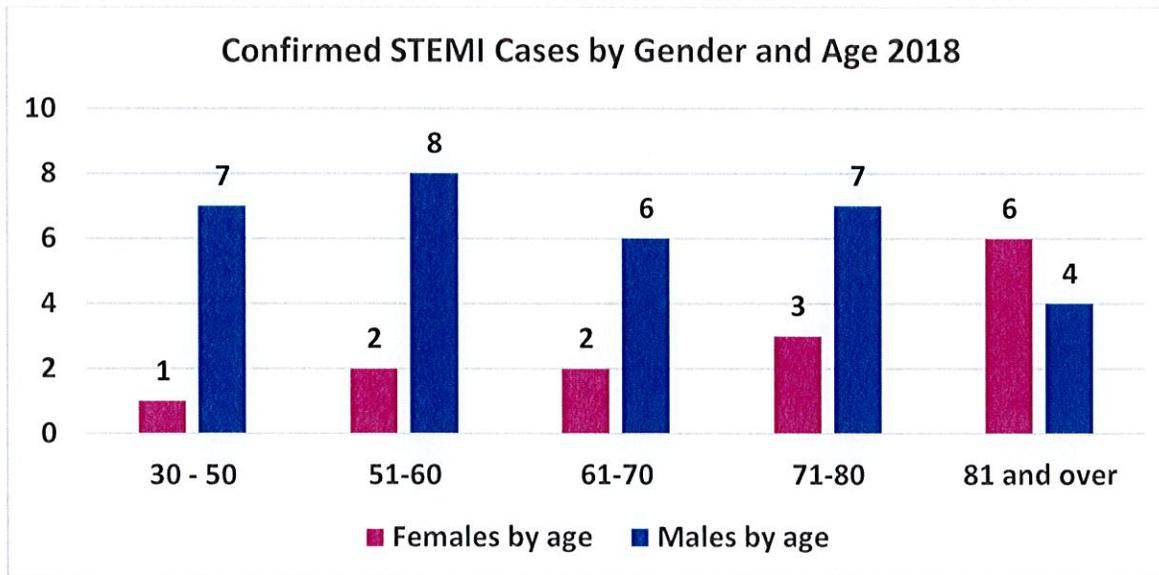
Patients identified by EMS personnel are transported to either Salinas Valley Memorial Hospital (SVMH) or to the Community Hospital of the Monterey Peninsula (CHOMP). Both hospitals have achieved accreditation either from the Joint Commission or from the American College of Cardiology as Chest Pain Centers. STEMI patients are tracked by the EMS Agency from the time the STEMI was first identified in the field, to the interventions performed by the STEMI Receiving Center, and through to discharge from the hospital.

STEMI Quality Improvement Committee

The STEMI QI Committee meets quarterly to discuss issues with the system, review data from the prehospital providers and the STEMI Receiving Centers, and to review specific cases. The committee is comprised of representatives from the STEMI Receiving Centers, the non-STEMI hospitals in Monterey and San Benito Counties, prehospital providers and EMS Agency staff. Metrics such as the number of patients seen, the number of those patients transported via EMS, and other metrics are reported to the EMS Agency and shared during these meetings. The STEMI QI Committee reviews these metrics and can advise on changes that might help to further improve STEMI care in Monterey County. Because the committee reviews and discusses specific cases, the meetings are confidential and not open to the public. The STEMI QI Committee reports to the CQI TAG.

Monterey County STEMI System Metrics





Monterey County STEMI System Goals

2017 Goal	Current Status
Participation in a STEMI data registry to simplify the submission and collection of STEMI outcome data from hospitals.	The EMS Agency is reviewing the registries available, verifying which registries are used by the STEMI Receiving Centers, and will select the best fit.
Better tracking of under-triaged STEMI patients	STEMI Receiving Centers identify under-triaged, or “missed” STEMI patients, and report to the EMS Agency.
EMS Agency will write a STEMI Plan to follow the new State STEMI Regulations	In process
Continue to refine data collection and report meaningful data at the STEMI QI Committee meetings.	Ongoing goal.

The Monterey County Stroke System

The Stroke QI Committee reviews stroke system care and advises the EMS Agency on stroke system policy, organization, training, and equipment. EMS Agency staff report on Stroke QI Committee activities to the Continuous Quality Improvement Technical Advisory Group (CQI TAG) and from there to the Medical Advisory Committee. Early recognition of stroke by EMS personnel, rapid transport to a designated Stroke Center and specialized care for these patients has been reported to vastly improve outcomes and decrease morbidity and mortality for patients suffering from a stroke. Like STEMI, stroke care is very time dependent. Stroke patients who access emergency care through the 9-1-1 system have been shown to receive faster care and have better outcomes. The two designated Stroke Centers in Monterey County are the Community Hospital of the Monterey Peninsula (CHOMP) and Salinas Valley Memorial Hospital (SVMH).

Both hospitals have achieved designation from The Joint Commission as Primary Stroke Centers, verifying that they have met or exceeded stringent criteria established by The Joint Commission for the care of stroke patients.

The Monterey County Stroke System, which began in 2011, includes training of EMS personnel in the recognition and treatment of stroke patients, immediate communication with a neurologist at the hospital, and expedited processes at the hospital for suspected stroke patients for rapid identification and treatment of stroke patients.

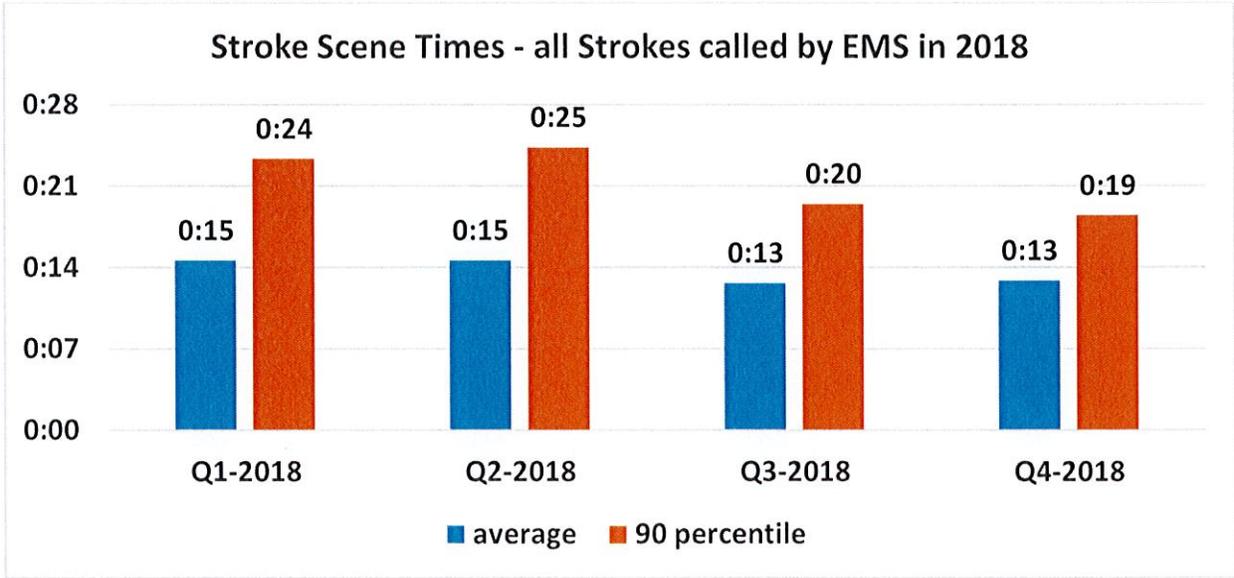
Stroke Quality Improvement Committee

The Stroke QI Committee meets quarterly to discuss system issues, do case reviews, and to review system-wide data on stroke patients. Since specific cases are reviewed in the Stroke QI Committee, this committee is confidential and not open to the public. The Stroke QI Committee reports to the CQI TAG.

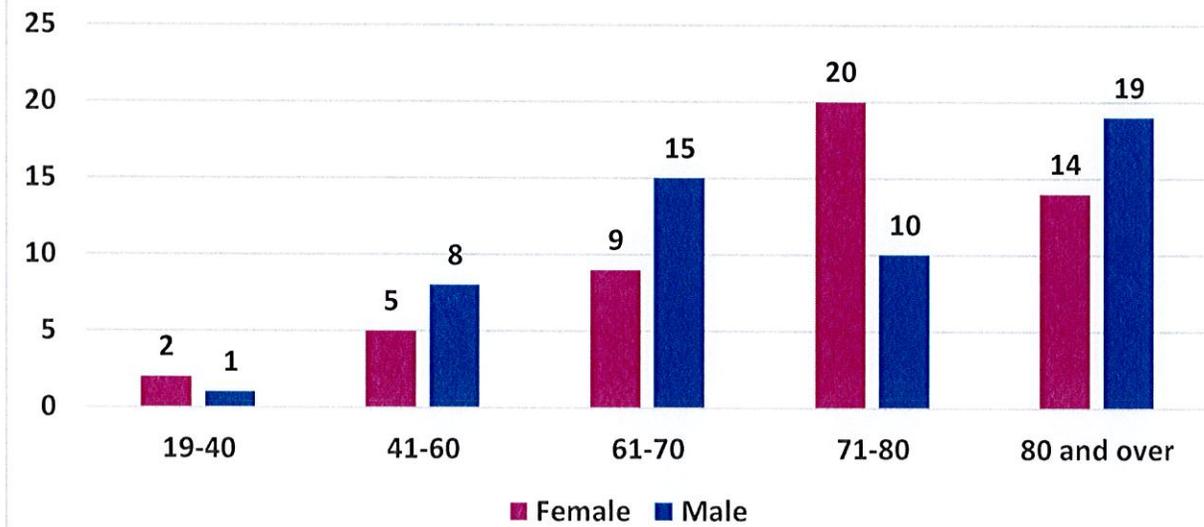
Goals for the 2018 – 2019 year included subscription to the AHA/ASA Get With The Guidelines (GWTG) Stroke Registry. Both of the Monterey County Stroke Centers submit data to this registry. Once the EMS Agency is subscribed to this registry, data collection will be simplified for the Stroke Centers and the EMS Agency. Due to many conflicting demands upon the EMS Agency, this subscription has not yet occurred. The EMS Agency is in the process of reviewing the contracts for this registry.

Stroke Centers provide education both to the community on recognition of a stroke and to the EMS personnel. Research in stroke care is evolving quickly over the past several years, and current education to EMS personnel and to the general public is crucial in decreasing morbidity and mortality from this disease.

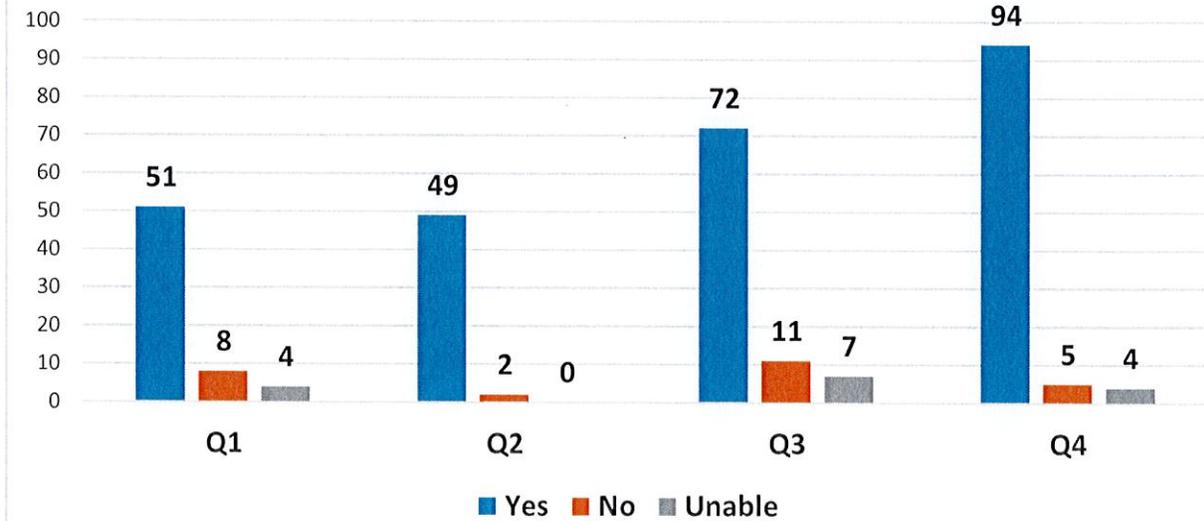
Monterey County Stroke System Metrics



Confirmed Stroke cases by Gender and Age



Prehospital Stroke Scale Evaluated - All Suspected Strokes 2018



Monterey County Stroke System Goals

2017 Goals	Current Status
EMS Agency will subscribe to the American Heart Association/American Stroke Association (AHA/ASA) Get With The Guidelines (GWTG) Stroke Registry	The EMS Agency is in the process of contracting with AHA/ASA for a subscription to GWTG.
The EMS Agency will write a Stroke System Plan which follows the new California Stroke Regulations.	In process
Continue to refine data collection and report meaningful data at the Stroke QI Committee	Ongoing goal

Monterey County EMS Data System

On November 1, 2018, the Monterey County EMS system entered a new phase in its development with the implementation of a single county-wide electronic patient care reporting (ePCR) and data system. The vendor chosen for this important project was ESO Solutions, a nationally recognized organization used in over 14,000 EMS systems across the country. The system was provided at no cost to those stakeholder departments who chose to utilize the ESO system purchased by the County.

Going “online” with this system was the culmination of over two years of work on the part of EMS Agency staff and stakeholders from the EMS system. For the first time in the EMS system’s history, patient care data is now available in a single database from every EMS provider agency in the county, including Basic Life Support (BLS) and Advanced Life Support (ALS) providers. Every fire department, ambulance provider, and helicopter service are in the system. In addition, information from the county Computer Aided Dispatch (CAD) system now integrates with that same data system.

In years past, several different electronic ePCR vendors were used by ALS providers, and those vendors did not integrate their products together. BLS providers did not use an electronic PCR at all but relied instead on hand-written records, making it impossible to “mine” data electronically. Those hand-written reports were not turned over to the EMS Agency. Now that every provider is integrated into a single electronic ePCR/Data system, analysis of the care being provided by our field personnel can take place in a more meaningful way. That kind of analysis was either very difficult or nearly impossible when no common ePCR/data system was in place. The kind of analysis now available to everyone will greatly improve the system’s ability to perform quality improvement efforts – efforts which are designed to continuously improve what we do and how we do it.

The next big step in the evolution of this program will be the integration of the EMS data system with the data systems of the four hospitals in the county. The goal is to get outcome data back from the hospitals so that EMS personnel can see what happened to their patients. This

represents another step in the quality improvement process – a knitting together of the continuum of care from the “field” component with the hospital component. As of the writing of this report, the EMS Agency is working with the administration of local hospitals to make that integration happen.

An important element of this project has been the collaboration between the EMS Agency and EMS system stakeholders. An ePCR/Data System Workgroup helped with the initial writing of a “charter” document to guide the project, helped with the drafting of the vendor RFP, helped with the selection of a vendor, and helped to facilitate the end-user training at various sites around the county. Since implementation of the system, providers familiar with the system (who were using it before) have helped providers who were new to the system. The successful implementation could not have been accomplished without that kind of collaboration.

EMS Advisory Committees

The EMS Agency seeks to continually improve the EMS system. The input of those who function within the EMS system is invaluable to the EMS Agency. The primary conduits for this feedback come from the EMS advisory committees. The EMS Agency obtains input from committee members who represent all areas of the EMS system - from 9-1-1 communications, first responder personnel, ambulance provider personnel, EMS provider leadership, hospital staff, and ED physicians. This input informs the development and implementation of EMS policies, procedures, and treatment protocols. The Medical Advisory Committee (MAC) and EMS Operations Subcommittee (EMS Ops) both provide excellent input into policies and protocols related to patient care and operations. Those two committees report to the Emergency Medical Care Committee (EMCC). The EMCC assists with administrative policy development and provides a forum for discussion of financial issues in the EMS system. It is important to get both clinical and operational perspectives on the EMS system on a regular basis to drive the ongoing development and maturation of the system. There is also a Contract Compliance Working Group (CCWG), mentioned in an earlier section, that reports to the EMS Agency and EMCC on the performance of the EOA contractor. There are several other committees that help drive quality in the system. They are discussed in more detail in the next section.

Continuous Quality Improvement (CQI)

In November 2018, the EMS system in Monterey County went live with ESO Solutions, the database used for the Patient Care Reports (PCRs) by the EMS personnel. For the first time, the Monterey County EMS Agency had data from all providers.

In 2018, the CQI Technical Advisory Group (CQI TAG) selected 11 metrics to measure to show how the system is doing in multiple areas (clinical, operational, dispatch, and hospital outcome data). The ESO Solutions system now allows the EMS Agency to begin measuring this data. The purpose of measuring system indicators is to identify opportunities for improvement and to develop corrective measures for improving the system.

The EMS Agency has adopted Just Culture as the primary method of implementing QI and performing incident investigation. Just Culture has, at its core, accountability. Organizations are accountable to their employees and to the customers they serve. Employees are accountable for their decisions to both their employers and to their customers. Just Culture looks first at systems to see if engineering controls (policies, structural controls) can help to reduce errors. It then looks at the individual’s accountability for the outcome, and determines whether the issue was a mistake, “drift” (taking shortcuts from established ways of doing things), or whether the decision was deliberate. Each of these has a predetermined action, whether that is consoling, counseling, or discipline.

The EMS Agency has improved upon the POTEE (Plan, Organize, Train, Exercise and Evaluate) form developed the previous year for tracking QI Committee activities by integrating SMART (Specific, Measurable, Attainable, Relevant, and Timely) objectives into the form. This form is used to track and ensure loop closure on action items in the QI Committees and includes due dates and people responsible for completion of each item.

Continuous Quality Improvement Technical Advisory Group (CQI TAG)

The CQI TAG is the primary group responsible for measuring system indicators, receiving reports from other QI committees, and reporting to the Medical Advisory Committee on the actions of the groups. While the STEMI and Stroke QI groups and TEQIC identify and resolve issues in those clinical areas, the CQI TAG looks at all other aspects of the EMS System in Monterey County and makes recommendations for metrics, policies, and resolution of the identified issues. The CQI TAG meets quarterly to discuss these issues and to make recommendations for system improvements, review policies, and do case reviews.

Monterey County EMS Agency CQI TAG Goals

2017 Goals	Current Status
Countywide data collection, aggregation and reporting on specific indicators	The EMS Agency has begun utilizing ESO Solutions to collect and track several of the metrics selected by the CQI TAG.
Development of a system for EMS Providers and Base Hospitals to submit data to the EMS Agency electronically	EMS providers submit their data through completion of their Patient Care Reports (PCRs) in ESO Solutions. The EMS Agency is working with each of the hospitals to submit outcome data on EMS transported patients, as well as subscribing to various registries used by the specialty centers to make data submission and collection easier and faster.
Identifying QI issues in the EMS System and implementing processes to correct areas in need of improvement	The EMS Agency has begun measurement of indicators identified by the CQI TAG previously, and several trainings of EMS

	personnel have occurred as a result of these measures.
Follow up on the areas in need of improvement to measure whether the changes implemented improved the system.	The EMS Agency will measure the same metrics at 3 and 9 months following the training to look for improvement. Policies and protocols have been changed to enable training to be more meaningful and the EMS personnel and providers more accountable.
Work with EMS providers to implement their QI plans	The EMS Agency has approved QI plans for all EMS providers in Monterey County. Several providers invite the EMS Agency to participate in their CQI TAG meetings. All EMS providers are required to submit annual updates to the EMS Agency to include metrics measured and measures taken when improvements are needed.
Collaborate with hospitals and EMS providers to develop metrics to be submitted to the EMS Agency and reported to the various QI Committees.	Ongoing goal.
Continue working with ESO Solutions to measure system indicators and resolve identified issues.	Ongoing goal. Training specific to ESO Solutions has been provided to EMS Agency staff.

EMS Personnel Certification, Accreditation, and Discipline

EMT Certification/Recertification

EMT certification and recertification continues to be a significant activity of the EMS Agency. The EMS Agency certified 73 new EMTs and recertified 271 EMTs. The EMS Agency also recertified 5 EMTs who transferred to Monterey from other EMS Agencies. The EMS Agency also denied one application for EMT certification.

Paramedic Accreditation

Paramedics are licensed through the State after completing the required coursework and testing. To work as a paramedic and utilize the paramedic scope of practice, the paramedic is required to have local accreditation to practice as a paramedic in the Monterey County Scope of Practice. To obtain initial accreditation, the paramedic is required to demonstrate, under an experienced paramedic's direct observation, that they can function as a paramedic using the Monterey County EMS Policies and Protocols correctly.

In this fiscal year, there were 32 paramedics who successfully completed the initial accreditation process and received accreditation from the EMS Agency. This number is up from the previous year and is likely due to the Monterey Fire Department beginning paramedic services.

Continued accreditation is provided to the Monterey County paramedics who meet the requirements for continued accreditation. The paramedic is required to maintain their paramedic license, have current certificates showing successful completion of several nationally recognized courses providing training in the management of trauma, pediatrics, and cardiac care. Paramedics are also required to successfully demonstrate their ability to utilize the skills that are part of their scope of practice.

In this fiscal year, 83 paramedics received continued accreditation which is up from the 73 paramedics who received continued accreditation in the previous year.

Prehospital Discipline

A necessary function of the EMS Agency is to ensure properly licensed and certified personnel are operating in the EMS system. Part of this responsibility is investigating and taking potential action on licenses and certifications as needed. Investigations of violations that are potentially a threat to public health and safety are conducted; this is needed to ensure a safe environment for both patients and participants in the EMS system. Any paramedic license investigations and actions are referred to the State EMS Authority and any EMT certification actions are investigated and addressed accordingly through the EMS Agency.

There are currently seven open and ongoing EMT-Basic investigations and enforcement actions:

6 Currently on Probation

3 Active Investigations

1 Suspension Order

1 Denial order

EMS Education

Law Enforcement Naloxone

To prevent the loss of life in the face of the growing opioid overdose epidemic, the legislature approved statutes to allow law enforcement officers to administer naloxone. In the 2018-2019 fiscal year, the Monterey County EMS Agency approved the training programs for two more law enforcement agencies to provide this lifesaving treatment. This brings the total of approved law enforcement naloxone programs to thirteen across the County. Since the implementation of the program, law enforcement officers have successfully administered Naloxone nineteen times.

EMS Continuing Education

The EMS Agency initiated a review of each EMS continuing education (CE) provider to ensure that they are compliant with State regulations and Monterey County EMS policies. This is a very detailed and comprehensive review. The EMS Agency reviewed four CE providers as well as the CE program of the three EMT training programs during the past fiscal year. The EMS Agency has scheduled reviews with another eight CE providers to be completed early in this fiscal year. The EMS Agency also approved an additional five new EMS CE providers just prior

to or during the 2018-2019 fiscal year. Including the EMS Agency CE program and the CE programs through the EMT training programs, the EMS Agency is responsible for oversight of twenty EMS CE provider programs. The completed reviews found the EMS CE providers are compliant with State regulations and Monterey County EMS policies.

EMT Training Programs

The EMS Agency has also performed an administrative review of the three EMT training programs in Monterey County. The administrative review is to ensure that the EMT training program meets the requirements in State regulations as well as Monterey County EMS policies. The EMS Agency also uses the National Highway Traffic Safety Administration's documents - EMS Agenda for the Future and National EMS Education Standards - for evaluation of the EMT training programs.

All three EMT training programs have demonstrated a commitment to meet the requirements for approval as an EMT training program. Each EMT training program passed the review with no deficiencies. The programs have implemented recently required training in epinephrine auto-injector, naloxone, glucometer, and tactical trauma care. The training programs are utilizing current textbooks and EMS equipment in their training. The equipment used in the training of EMT's is in good condition and functional. The teaching staff and skills proctors are all highly experienced EMS providers.

One EMT training program will not be seeking approval as an EMS CE provider. State regulations for EMT training programs were updated and it is no longer required for EMT training programs to also have approval as an EMS CE provider. This program has not offered EMS CE in the past so there will not be a reduction in available EMS CE due to this decision.

Enrollment in the EMT training courses seems to be holding steady after a noticeable decline in enrollment.

Paramedic Training Program

Paramedic training in Monterey County is provided as a satellite training program through NCTI which has oversight through a different EMS Agency. Oversight of a satellite paramedic training program is provided by the EMS Agency in whose jurisdiction the main office of the paramedic training program is located. The paramedic training program in Monterey County is scheduled to end in 2019. In order to provide paramedic training opportunities for EMT's looking to advance their training, AMR is working with NCTI to establish a paramedic training program in Santa Cruz County.

Unusual Occurrences

Since the Unusual Occurrence Policy was issued in 2017, the Monterey County EMS Agency has enhanced the focus on the reporting, investigation, resolution, and tracking of Unusual Occurrences (UOs) in the EMS system. Unusual occurrences range from minor to major issues that involve clinical and operational concerns.

A mechanism was created on the EMS agency website for direct reporting on Unusual Occurrences. This link accepts submittals from both the public, as well as those working within the EMS system.

There were 76 documented and reported Unusual Occurrences from July 01, 2018, through July 1, 2019. This was up 26% from last year (56), likely due to the overall awareness of the UO reporting process and engagement of the providers and stakeholders.

Emergency Preparedness

Over the past year, EMS Agency staff worked on several emergency preparedness related projects with Public Health Emergency Preparedness staff; this included substantial work on a Disaster Medical Operations Plan, a Public Health Emergency Operations Plan, and revisions to a CHEMPACK Plan – a plan designed for the rapid distribution of medication for nerve agent and organophosphate exposure. EMS staff also initiated work on revisions to the Mass Casualty Incident (MCI) Plan, an internal response to surge events document and a Medical Coordination Center (MCC) process document.

The EMS system participated in several drills and exercises including two mass casualty incident (MCI) exercises at two hospitals, a facility evacuation exercise at another hospital, and two active shooter exercises. These exercises tested a facility's ability to deal with a significant surge in patients with varying levels of acuity, or the much different scenario of having to evacuate a large percentage of their patients due to an emergency in the hospital. In all these exercises, responders at many levels, including those providing direct patient care, management staff coordinating the response in a command center, and local and state level staff who would also be involved in a real incident participated. An evacuation exercise was also held at a skilled nursing facility. Debriefings were held immediately after each exercise so that lessons learned could be identified, and better ways of handling challenging incidents could be memorialized. Monterey County also participated in the annual Statewide Medical/Health exercise held in November 2018.

EMS Agency staff participated in regularly scheduled Monterey/San Benito Healthcare Coalition meetings with Public Health staff. These meetings bring together facility representatives from hospitals, skilled nursing facilities, long term care facilities, outpatient healthcare facilities, government agencies, and others to plan together for emergency preparedness efforts. EMS Agency staff provided training on the statewide medical/health mutual aid system at several of these meetings.

EMS Agency staff and EMS providers also participated in both real and exercise activations of the county EOC, operating as staff in the Medical/Health Branch.

Summary

EMS Agency staff continue to work diligently to ensure the provision of a quality EMS system in which the residents, visitors, and those working in Monterey County can have confidence. Working with system stakeholders – from providers to facilities – the EMS Agency strives to

keep the focus on the next person who calls 9-1-1 for a medical emergency. Every program described in this report plays an important part in the continued development of our EMS system.

Appendix A

