Monterey County Emergency Medical Services Agency: Annual Report FY 13/14

Prepared by Monterey County

Emergency Medical Services Agency

September 2014

Executive Summary

Thank you to all Monterey County residents, community partners and first responders for your dedication, commitment and effort. Whether it was advancing the Natividad Medical Center level II trauma designation, starting new data collection solutions, releasing new policies and procedures via our new phone app or just ensuring that ambulances arrive on time, the 2013/14 fiscal year was a busy one for the EMS agency. The 2014/15 fiscal year will see more progress in these and other areas with the designation of Natividad Medical Center as a level II trauma center, the expansion of our data collection efforts, ongoing QI efforts with Stroke and STEMI and more. The coming year will be a busy one and we thank everyone for their efforts and continued support.

Kirk Schmitt, Director
Emergency Medical Services Agency

Monterey County Board of Supervisors

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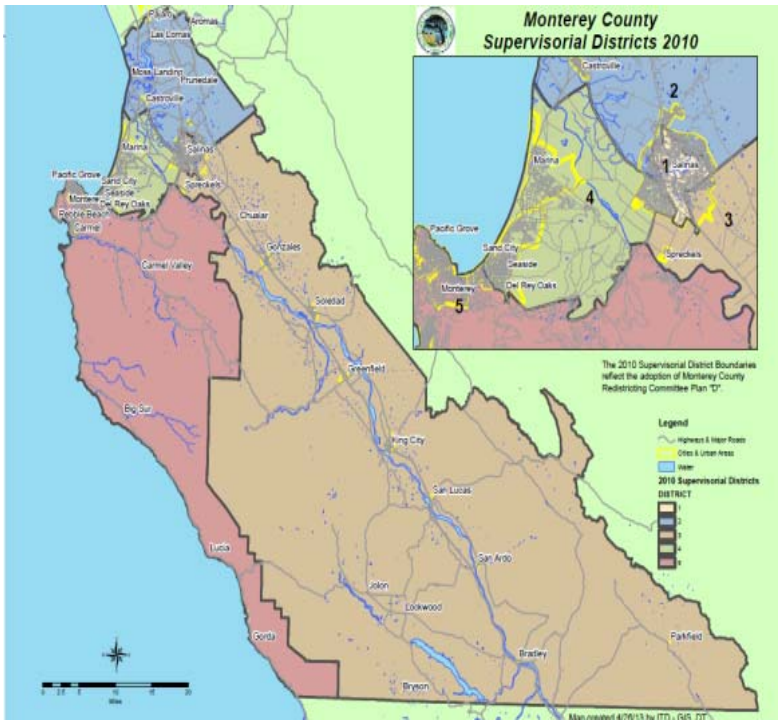


Monterey County Administration Officer

Lew Bauman, Ph. D.

Monterey County Health Department

Ray Bullick, Director

EMS Agency Staff

Kirk Schmitt – Director
James Stubblefield – EMS Medical Director
Marissa Mclean – Trauma Coordinator
John Sherwin – Management Analyst
Steve Brooks – EMS Analyst
Erik Haselhofer – Business Technology Analyst
Deanna Gunn – Finance Manager
Mary Brownrigg – Office Assistant

Natividad Medical Center Trauma Designation

In 2011, the Board of Supervisors approved a plan for a level II adult trauma center within Monterey County leading to the selection of Natividad Medical Center as the level II trauma center by an expert consulting team. In September 2014 a different set of expert consultants will survey Natividad Medical Center to ensure its readiness. The Monterey County EMS agency anticipates that Natividad Medical Center will be designated as Monterey County's first trauma center in January 2015.

Almost 70% of injuries transported by air were either blunt or penetrating trauma. The designation of a local Level II Trauma Center will significantly reduce the need for air transport.

Training for the hospital staff at Natividad is currently underway and an extensive quality improvement (QI) process is being developed. Upon NMC's designation a comprehensive trauma evaluation system will be established to include numerous stakeholders throughout the county. This process will help better assess the ongoing needs of our community. Finally, a plan is being developed for continued coordination with outside counties in the event of a need for higher or specialized level of care.

Pre-hospital providers are currently using the MAP (Mechanical, Anatomical, and Physiological) triage system. In October 2014 pre-hospital providers will begin using the nationally accepted Centers for Disease Control (CDC) four-step triage system. This system better allows pre-hospital providers to identify trauma patients rapidly.

Trauma Center Timeline

2011

- Updated trauma plan submitted and approved by EMS authority.

2012

- Issued RFQ.

2013

- Proposal Submittal Deadline.
- Independent Review Panel Facility Review.

2014

- September - Outside trauma experts to review NMC's trauma treatment capabilities.
- December - Outside trauma experts to do final review of NMC.

2015

- January - Trauma Center designation and start up.

Transport Providers

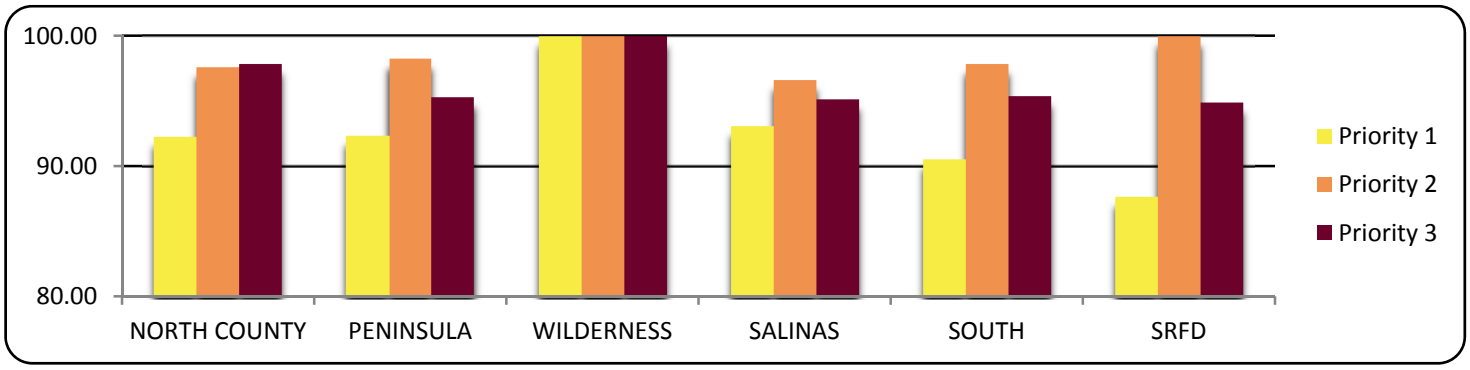
AMR is Monterey County's primary ambulance transport provider responding to nearly 30,000 calls annually and transporting just under 20,000 patients. In addition to monitoring AMR's performance the EMS Agency has several notable accomplishments in its partnership with AMR including:

62%

Percentage of emergency transports to emergency calls in the second quarter of 2014.

- Established an online "Concern Form" which allows AMR customers to submit concerns to the EMS Agency.
- Worked with AMR to review their Fee-Forgiveness Program and present the program to the community. The current amount is up to $1,000,000 on an annual basis or a maximum of $250,000/quarter for qualified residents of Monterey County.
- Improved the process and documentation of billing complaints and medical concerns. A summary of complaints and concerns are web posted; and annually audited and reported to the Board of Supervisors. The primary reason for billing complaints is due to the insurance provider's practices of handling claims; not with AMR invoicing or their billing process.
- Negotiated two extensions of the AMR contract.
- There has not been a rate increase since January 2013.
- Expanded the AMR First Responder Equipment Exchange, Supply Restock and Pharmaceutical Rotation Program.
- Established a MOU for mutual aid, including installing AVL in non AMR ambulances, with the City of Carmel and MCRFD.
- Salinas Fire and AMR will develop a trial study plan to identify the need for automatic ambulance deployment to non-emergency vehicle accidents.

In addition to AMR, Monterey County Regional Fire Protection District, Fort Hunter Liggett and Carmel Fire also provide ground transportation services.



AMR Response performance (2013 Fiscal Year), 90% on-time target.

Air Transport

Currently all air transports of trauma patients are provided by CALSTAR. Of the 371 air transports 33% of the transports were interfacility or neonatal transfers to the Bay Area. Regional Medical Center of San Jose received 76% of incident (scene) and 33% of interfacility transports. UC San Francisco Medical Center received 27% of interfacility and 100% of neonatal transports.

Improvements to Patient Care

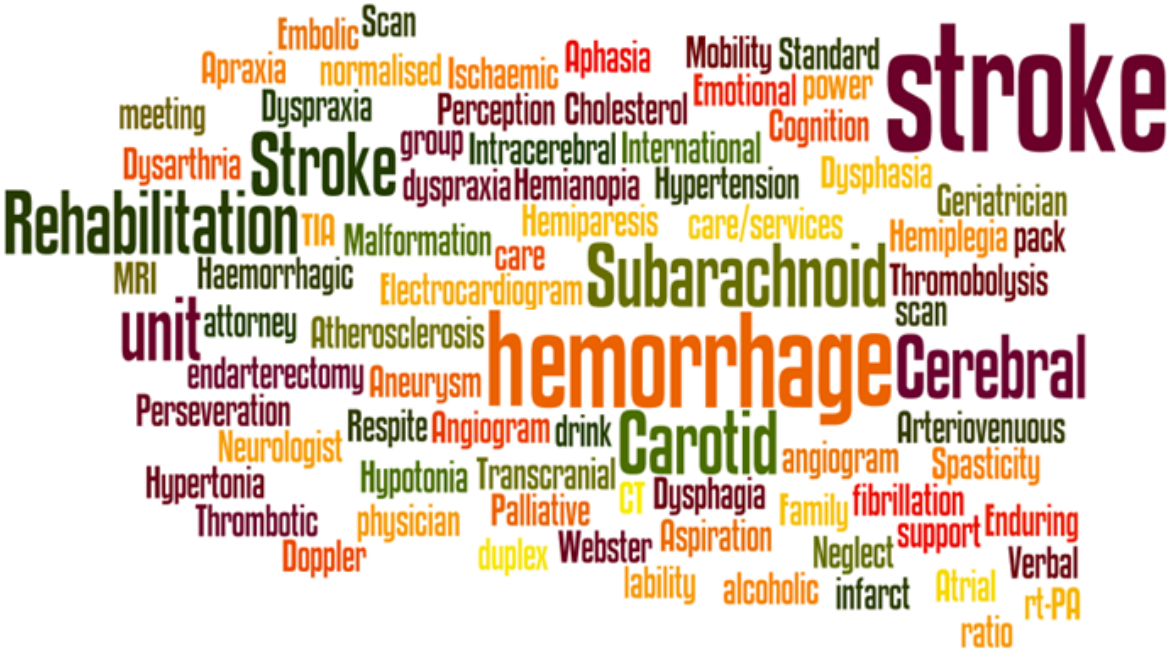
EMS is always changing and 2014 is no exception. This year saw significant beneficial changes to two long-standing practices. The first is a change to the requirement to strap patients to a backboard when there is any possibility of a spinal injury. Research showed that this was not necessary except in limited circumstances. EMT's and paramedics are now directed to only immobilize patients on a backboard under specified situations. This will result in greater patient comfort during transport to the hospital. The second change is to allow paramedics to have greater latitude to treat pain in all circumstances.

94%

Of the time help arrives on scene within a prescribed timeframe.

The STEMI system of care for those patients who have the most life-threatening type of heart attack continues to improve patient access to the necessary life and heart muscle saving treatment over patient self-transport. Paramedics on the ambulance are able to send a copy of the patient's EKG to the STEMI Center ED and to the interventional cardiologist's cell phone. This EKG along with the paramedic's description of the patient's condition speeds activation of the cardiac cath lab team resulting in a short time to treatment upon arrival at the hospital. The Community Hospital of the Monterey Peninsula (CHOMP) and Salinas Valley Memorial Hospital provide STEMI care.

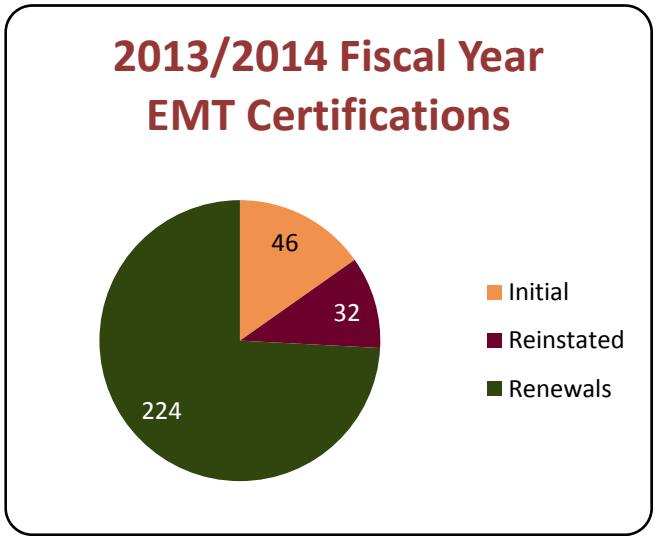
Monterey County has implemented a Stroke system of care. EMS patients with stroke symptoms are transported directly to designated hospitals. The hospitals have received designation as Primary Stroke Centers. The early recognition of stroke by EMS personnel, rapid transport to the Stroke Center hospital, and specialized care pathways in the hospital has resulted in faster times for the patient to receive treatment. As optimal treatment for stroke is time dependent, patients with stroke who access emergency care through 911 have the best chance of successful treatment. In reviewing data for stroke patients, we are finding a remarkable decrease in time to treatment for stroke patients due to the implementation of our Stroke system of care. The Community Hospital of the Monterey Peninsula (CHOMP) and Salinas Valley Memorial Hospital provide Stroke care.



EMT Certification and Paramedic Accreditation

Monterey County is a certifying entity for EMT's where there are currently 636 active EMT certifications.

There is no local certification fee; certification services are funded through CSA74. The Agency does collect and forward the EMS Authority's (state) certification fee in exchange for the Authority printing and mailing certification cards to applicants.



Paramedic Accreditation

Local paramedic accreditation requires being employed by an approved ALS provider and holding a license issued by the California EMS Authority. There is no local accreditation fee.

There are 185 accredited paramedics in Monterey County. In the 2013/14 fiscal year there were 31 initial accreditations and 66 renewals processed.

Investigation/ Disciplinary Actions

The EMS Agency conducts various investigatory and disciplinary actions including formal investigations, suspensions, probations and revocations. In 2013/2014 16 investigations were initiated by the EMS Agency resulting in the following:

- Two probations.
- One suspension.
- One revocation.
- One action pending.

And in eleven cases no action was taken.

Data and Technology

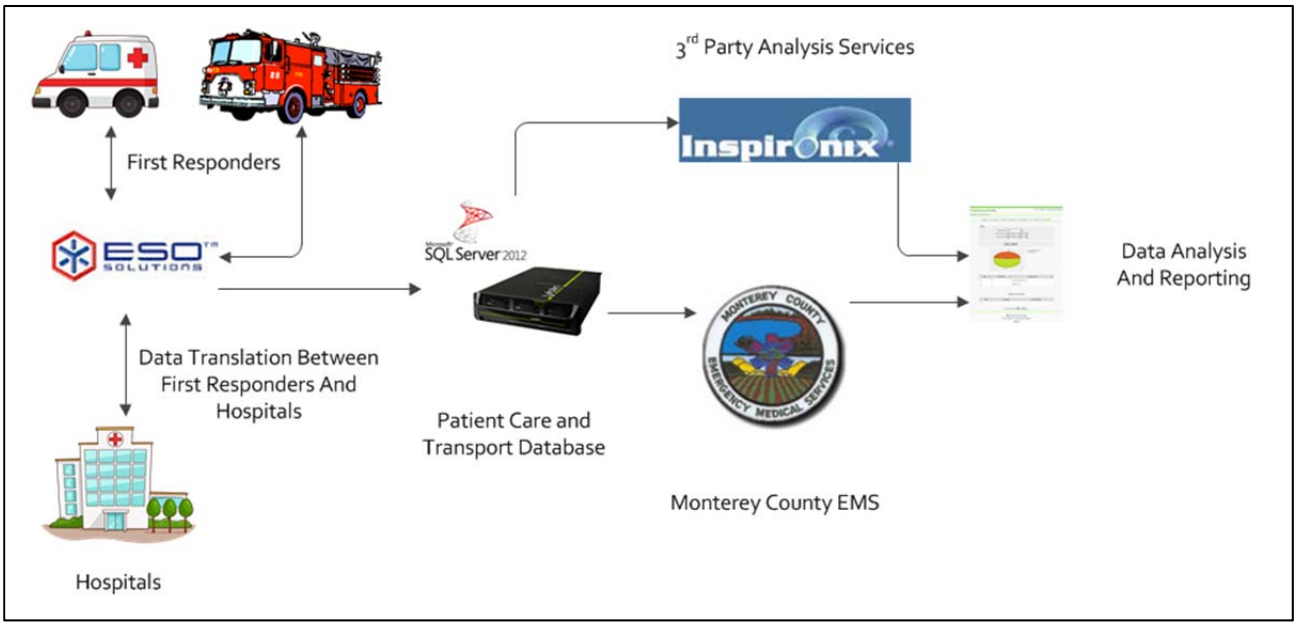
We've initiated a number of EMS data initiatives:

250

Number of downloads of the EMS app in the first two weeks.

- In 2013, the EMS Agency entered into an agreement with ESO Solutions to provide a Health Data Exchange to allow the seamless exchange of data between prehospital providers and hospitals. This exchange of data will enhance our ability to review health outcomes and improve the performance of prehospital care. This will go live in the second half of 2014.
- In 2014, the EMS Agency entered into an agreement with Inspironix to provide independent third-party validation of AMR prehospital data. In addition, they will provide us with mapping resources to better review prehospital health care performance.
- Also, in 2014, the EMS Agency purchased a database server. The server will provide both ad-hoc query support and allow us to host the data generated from the ESO health data exchange.
- We are also evaluating Stroke, STEMI and trauma software to support both the coming designation of Natividad as a trauma center but ongoing quality improvement efforts in these areas as well.
- AMR billing concerns can be filed online.
- The EMS Agencies website has been redesigned to provide a much cleaner and friendlier user experience.

2014 saw the rollout of the Monterey County EMS app for smart phones. The app was praised by the paramedics and EMT's for its ease of use and readability. A feature that automatically calculates drug dosages for children when the patient's weight is entered into the app helped make the app a "must have" by Monterey County paramedics.



Monterey County Emergency Medical Services Data Flow

Financial Management

CSA74

The (now) special tax for CSA 74 is assessed in accordance with the Monterey County Land Use Codes. The basic unit is a single-family dwelling. All other land uses are either a percentage or multiple of that basic unit. The present rate for one unit is $12.00. The rate is set annually, by the Board of Supervisors through a public hearing process.

"It is the intent of the Board of Supervisors of the County of Monterey to provide for the continued funding of the Monterey County Emergency Medical Services System, including paramedic, ambulance, and related services…"

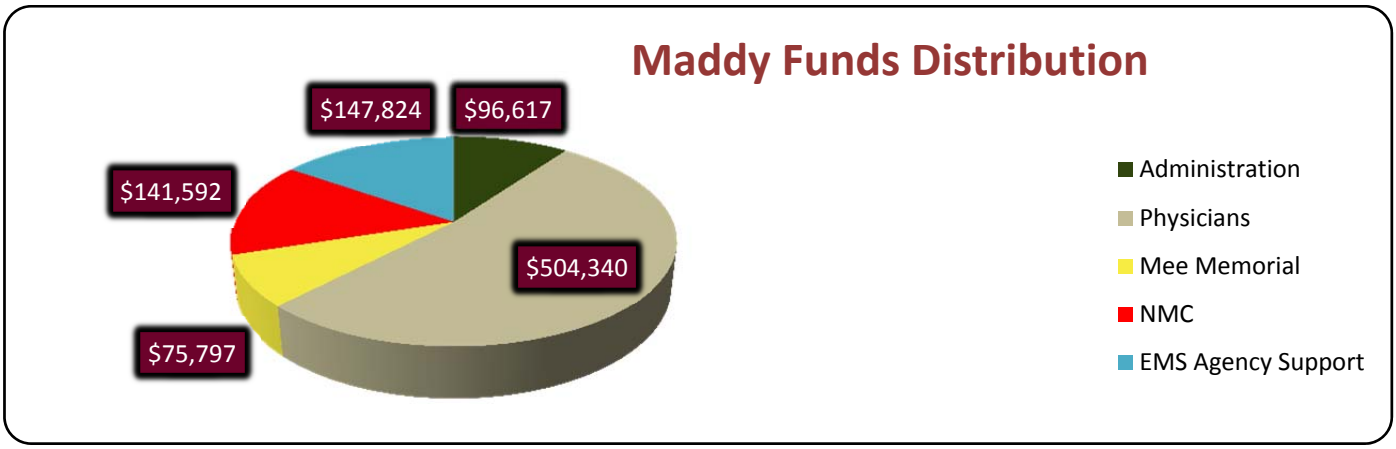
The total number of units collected by CSA 74 for Fiscal Year 2013-14 was 116,938 units, 3,925 Trailer Spaces and 11,301 Hotel Rooms. Trailer Spaces and Hotel Rooms are calculated differently as there may be many of them on a single parcel.

The break down for fiscal year 2013-14 is as follows:

CSA units	116,938	$1,589,660
Trailer spaces	3,925	$46,169
Hotel rooms	11,301	$27,122
		$1,662,951

Maddy

In 1987, the Legislature enacted SB 12 allowing each county to establish, finance, and administer an Emergency Medical Services (EMS) Fund, called the Maddy EMS Fund. It was subsequently amended in 1988 (SB 612, Maddy) to create a penalty assessment of $2 per $10 is levied on applicable fines, penalties, and forfeitures (Penal Code 76000). It was again amended in 2006 (SB 1773, Alarcon) to add another penalty assessment of $2 per $10 and modified the purpose and distribution including adding the Richie's Fund for pediatric trauma (Penal Code 76000.5). This EMS fund compensates health care providers for emergency services for people who do not have health insurance and cannot afford to pay for emergency care and for discretionary EMS purposes.



Participating hospitals are Mee Memorial and Natividad Medical Center

Committees and Meetings

The EMS Agency provides oversight to all providers of emergency medical services, including fire departments, transport providers, trauma centers and paramedic/EMT training programs. To facilitate these functions several committees and groups have been established.

17

Number of policies changed in the 2013/14 fiscal year.

Contract Compliance Work Group

The AMR ambulance contract has over four-hundred major and minor requirements. Some of these requirements are static and others are on-going; but all of these requirements require monitoring to ensure all parties are meeting their obligations. The CCWG is composed of representatives of the community, EMS stakeholders, ambulance provider (AMR), and the EMS Agency; they meet every other month. Activities include reviewing of AMR contract extension and rate increase requests, contract changes, billing complaints and medical care concerns, and performance response.

Medical Advisory Committee (MAC)

MAC is made up of representatives from the various EMS system providers. The purpose of MAC is to advise the EMS Medical Director regarding EMS issues as well as policy and protocol development. MAC has remained active and engaged in their roll. In addition to the strong work on revising the Spinal Immobilization and Pain Management policies, MAC input was helpful in identifying a need for early submission of the EMS patient care report to assist the ED physician in their understanding of the patient's condition.

EMS Operations Committee (EMS Ops)

EMS Ops is the forum to discuss EMS operational issues and for field providers to make recommendations to the EMS Director about operational issues. EMS Ops was the primary forum for the 2014 revision to the MCI Plan.

Emergency Medical Care Committee (EMCC)

The EMCC acts as the clearing house for EMS provider and first responder agency recommendations and requests. Membership composition of CCWG and EMCC was reviewed; EMCC bylaws revision and governing county code amendment will be provided to the Board of Supervisors for their consideration in January 2015. In addition, the EMCC will meet annually in December to review the previous year's activity, develop a projected plan of action and milestones for the next year in the support of the Board of Supervisors directives.

STEMI QI

The STEMI QI meeting happens quarterly. Key stakeholders from the STEMI centers, (Salinas Valley Memorial Hospital, and Community Hospital of the Monterey Peninsula), and pre-hospital providers attend. Process and policy updates and adjustments are addressed and made.

10

Number of minutes saved during a stroke by calling 911.

Stroke QI

The Stroke QI meeting happens quarterly. Key stakeholders from the Stroke centers, (Salinas Valley Memorial Hospital, and Community Hospital of the Monterey Peninsula), and per-hospital providers attend. Process and policy updates and adjustments are addressed and made.

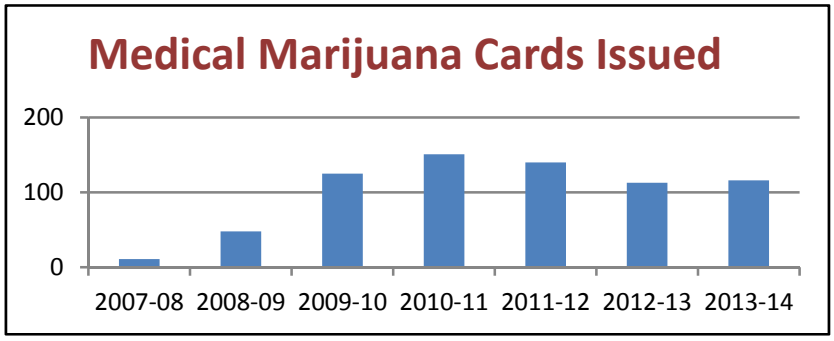
Other Activities

Ambulance System Issues Review and Analysis of Options

The Citygate report on the Monterey County's EMS System was provided to the Board of Supervisors in November 2013. A plan of action and milestones on items identified in the Citygate report included the Board of Supervisors and Monterey County Fire Chiefs' Association concerns. The process was developed to facilitate communication by representatives from fire agencies, law enforcement, healthcare, ambulance provider, and EMS management. The EMS Summit initially met in January 2014; with follow-up meetings in April and July.

Medical Marijuana Identification Card

The EMS Agency administrates the Medical Marijuana Identification Card program for Monterey County. The Compassionate Use Act of 1996 (prop. 215) provides protections to seriously ill persons who have a doctor's recommendation to use marijuana for medical purposes. It also provides protections to the physicians and primary caregivers who assist these seriously ill persons.



In Fiscal Year 2013-14 the EMS Agency issued 116 cards and collected $8,687 in fees.

Communication

Citygate has been contracted to revise the EMS Communication Plan; includes NGEN and voiceover Internet initiatives. We anticipate that the plan should be implemented in January 2015. There are also other communication, documentation, and operational issues being addressed with Emergency Communications; current CAD has inherent limitations and system requires a costly upgrade. EMS stakeholder needs have been identified and will be included in the CAD upgrade scope of work and discussion. EMS communications and priority dispatch issues remain a high priority and will hopefully be resolved with CAD upgrade and integration.

EMS Week

The EMS Agency hosted EMS Week in May. Attendance exceeded expectations with the number of visitors to the event estimated to be as high as 450 people. Fifteen EMS providers from around the County assembled in the parking lot of the Health Department to showcase the people and organizations that make up the EMS system. Visitors were able to learn about EMS from the people who provide EMS: 911 communications, first responders, ambulance providers, law enforcement, hospital, and EMT training program providers. The highlights of the event were: watching the CALSTAR helicopter land, receiving compression only CPR instruction from AMR (400 individuals), and interacting with EMS providers.

EMS Week – May 2014

The Emergency Medical Services (EMS) Operating Unit plans, coordinates and evaluates the Countywide EMS System. This includes maintaining Countywide advanced life support services, contracting for ambulance and pre-hospital care services, monitoring training, planning for disaster medical response, and coordinating public information and education. In addition, staff administers funds received through the CSA 74 Fund and the Uncompensated Care Fund 016.

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