# Contra Costa EMS Agency

Continuous Quality Improvement

Core EMS System Measures
Annual EMCC Report

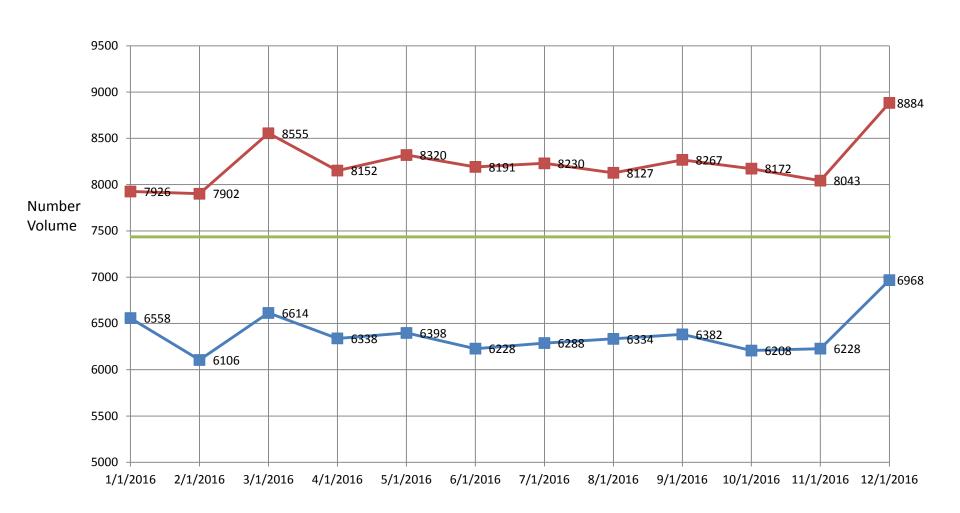
2016

# System Utilization 2016

Data Source: First Watch

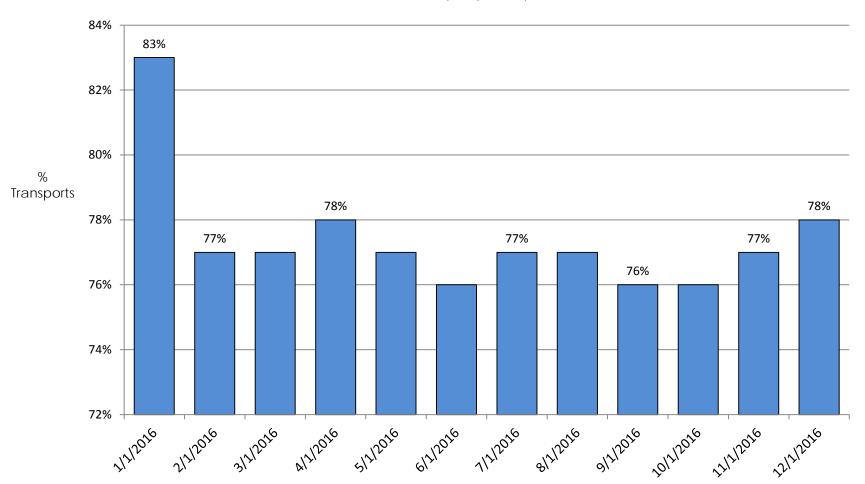
#### Contra Costa County 911 Ambulance Response and Transport CQI Annual Report 2016

N= 99,769 Responses N= 76,650 Transports

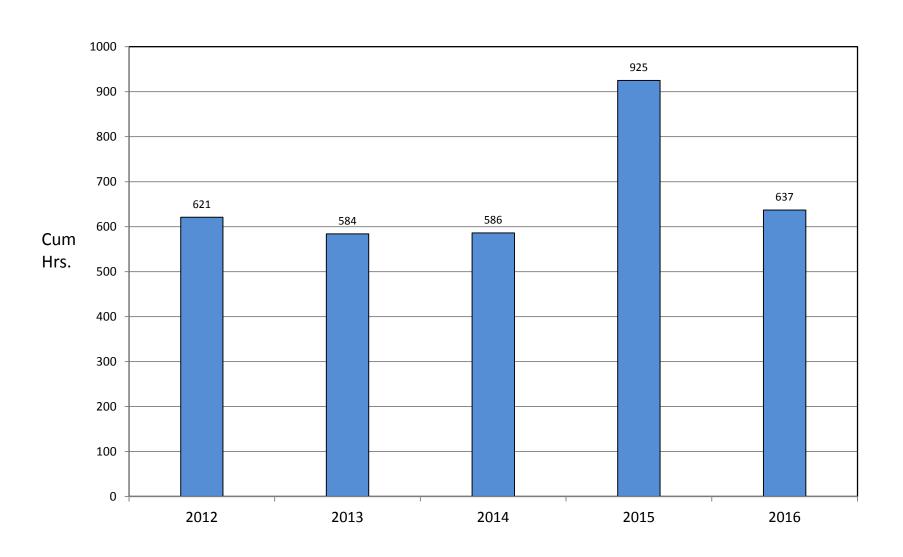


#### Contra Costa County 911 Ambulance % Transport per Response by Month CQI Annual 2016

N= 96,769 Responses N= 76,650 Transports Mean % Transport per Response = 79 %

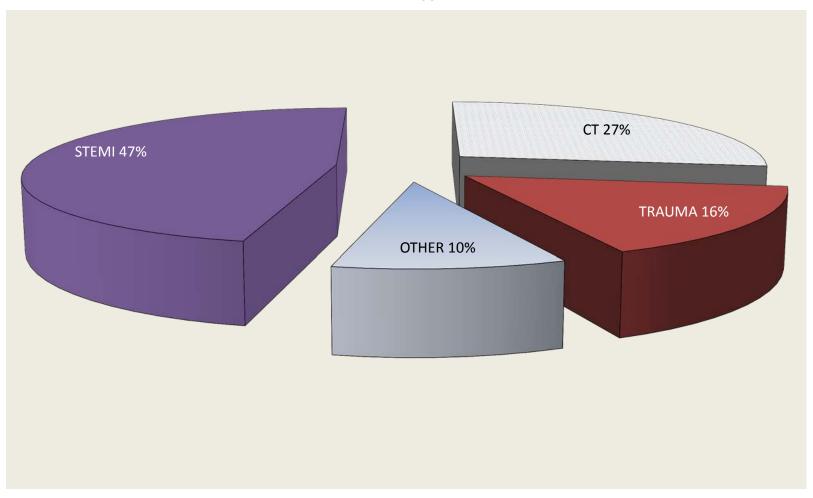


## EMS Hospital Ambulance Diversion Cumulative Hours by Year 2012 -2016



# Hospital Ambulance Diversions % by Type 2016

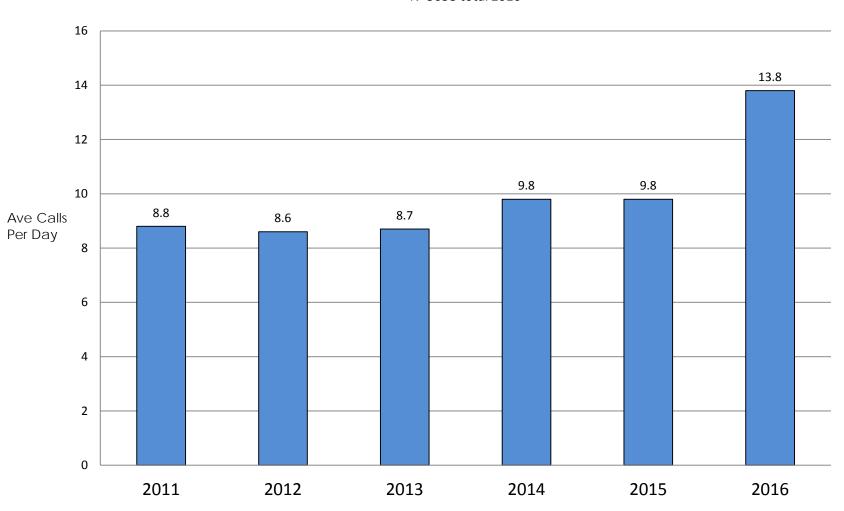
N = 637



# Base Hospital Annual 2016

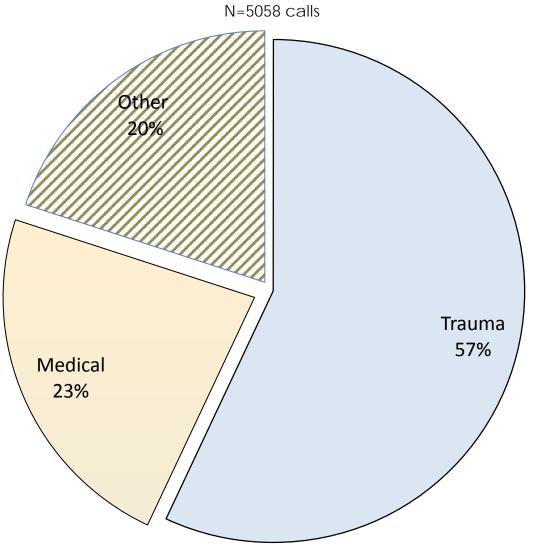
# Base Hospital Average Daily Medical Control/Advisory Calls Received By Year 2011-16

N=5058 total 2016



## % Base Hospital Medical Control/Advisory Calls Received by Type





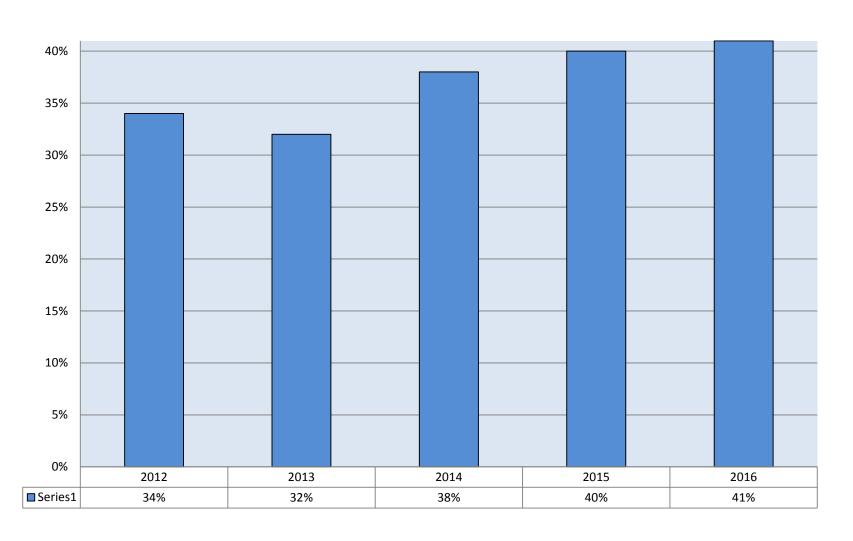
CQI Report
Annual 2016
Systems of Care
Cardiac Arrest

Data Source: CARES 2016.

# % Bystander CPR by Year5 year Comparison

N= 668

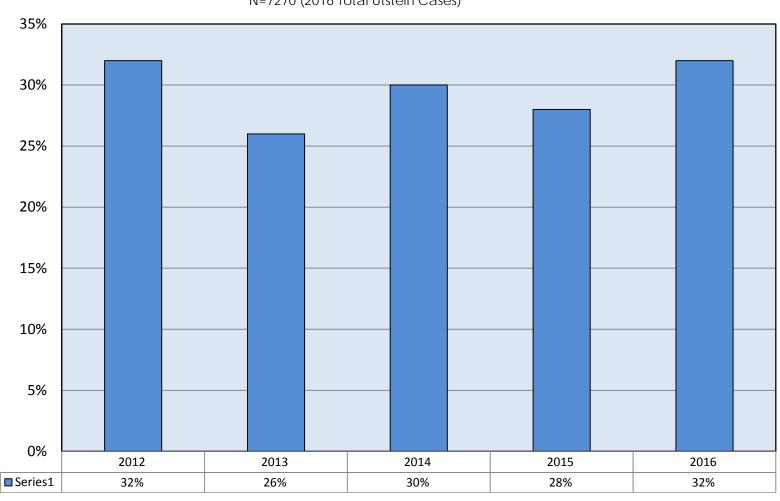
(Inclusion Criteria: all out of hospital cardiac arrest where resuscitation was attempted by 911 responder)All Cardiac Arrests for 2016)



## Cardiac Arrest Survival Utstein Survival by Year

#### 5 Year Comparison 2012-2016

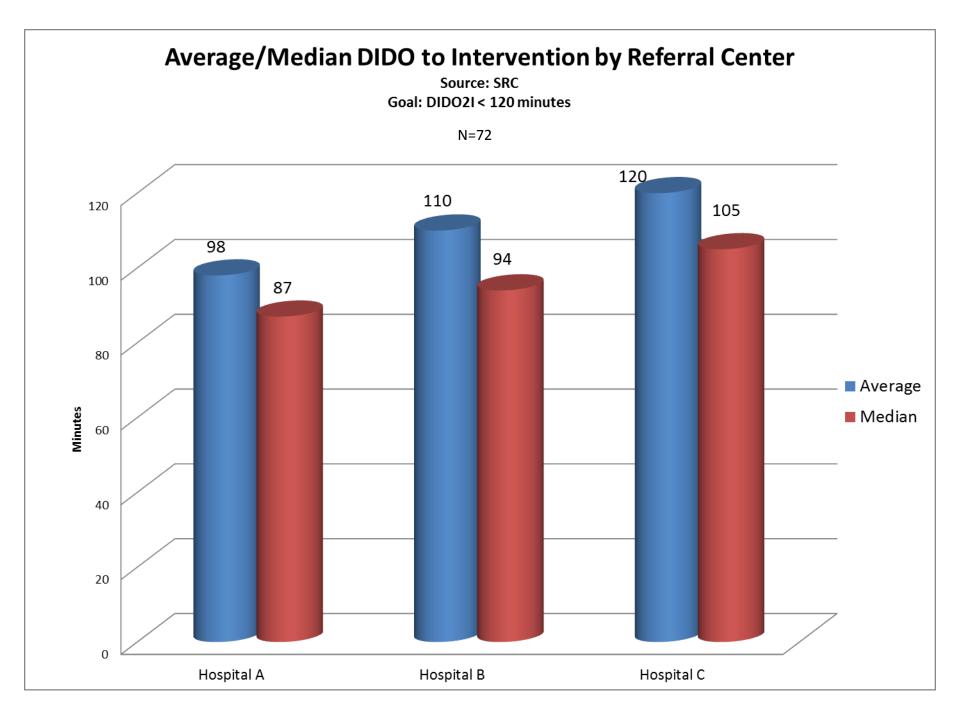
N=7270 (2016 Total Utstein Cases)



CQI Report Annual 2016

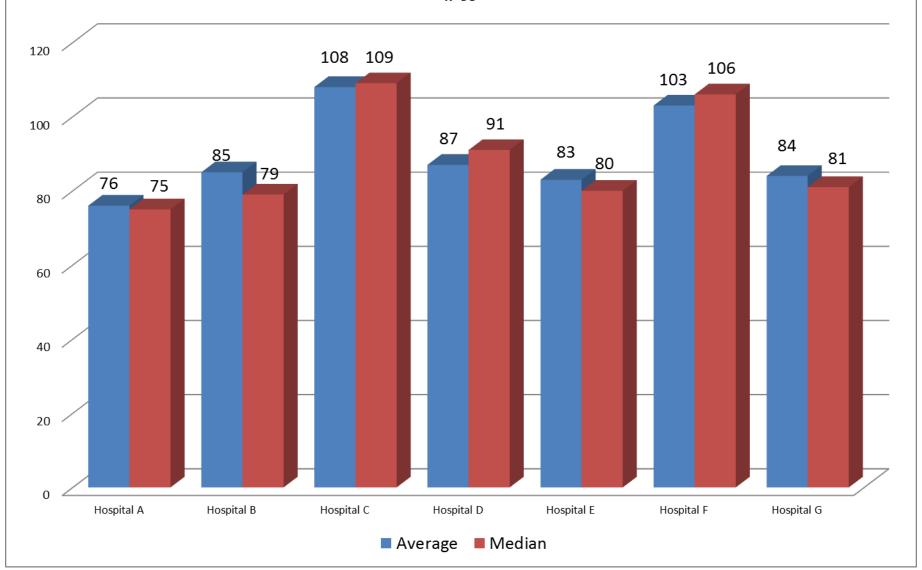
STEMI System

EMS Patient Care Performance				
	2013	2014	2015	2016
Aspirin Administration	90%	90%	94%	88%
12-Lead Acquired on STEMI Patients	98%	99%	99%	98%
Patient Identified as STEMI and Transported to SRC	100%	100%	100%	99%
Average Scene Time in Minutes	11	13	13	13



### Average/Median FMC to Intervention by STEMI Receiving Center

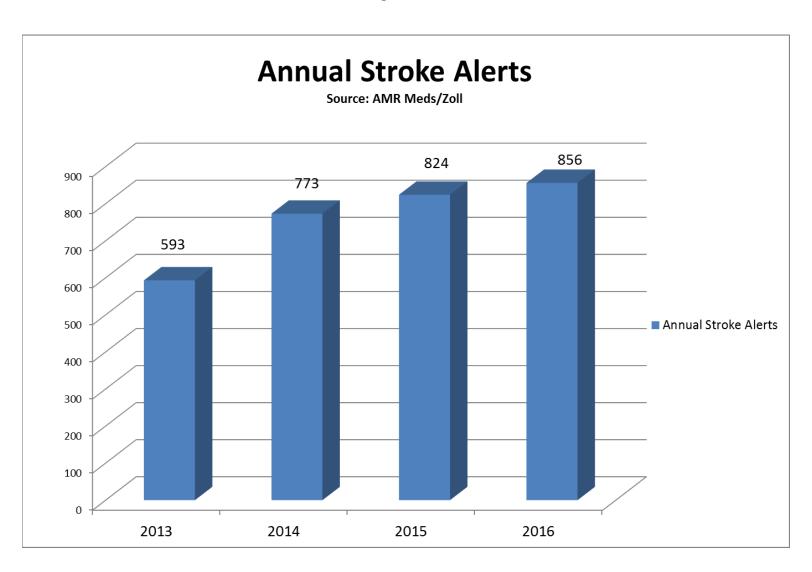
Source: SRC Goal: FMC to Intervention < 90 minutes n=95



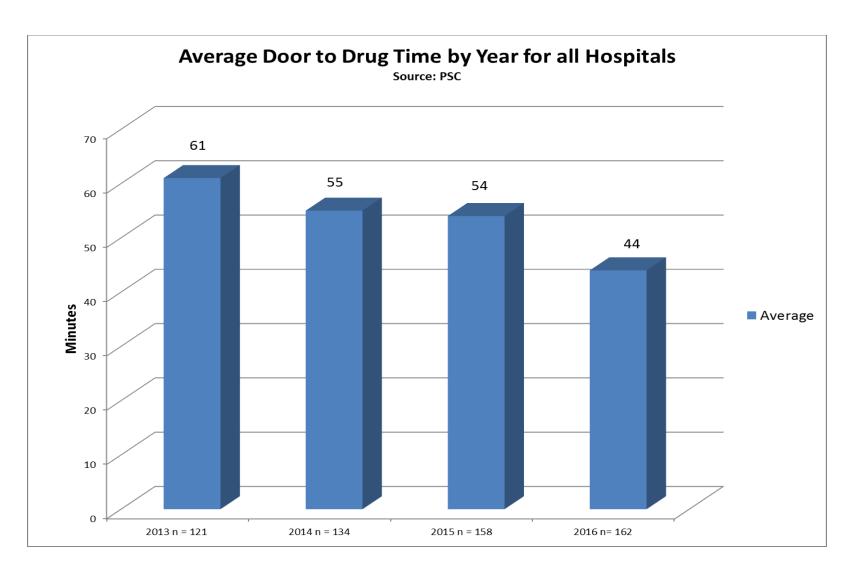
CQI Report Annual 2016

Systems of Care Stroke System

## Stroke System 2016

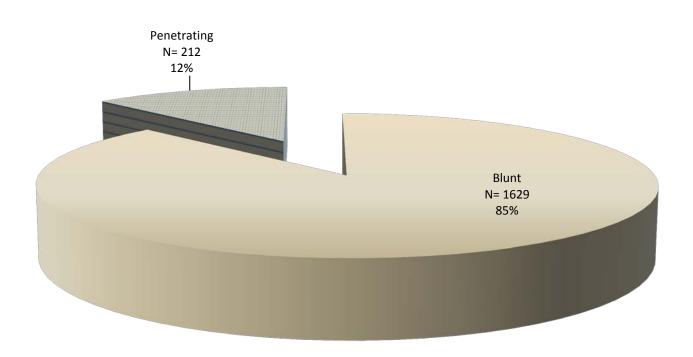


## Stroke System 2016

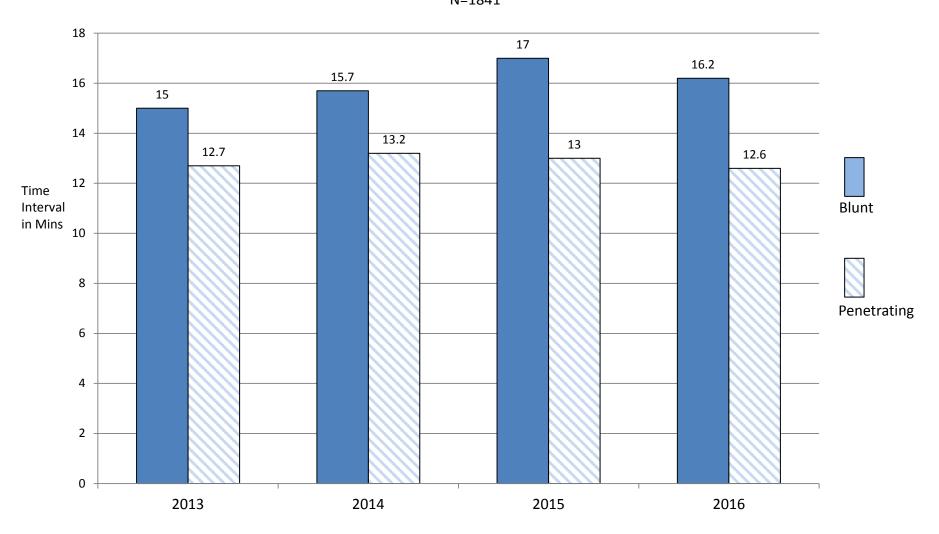


# Trauma System Annual 2016

2016 Total Trauma Patients by Type of Injury N=1841

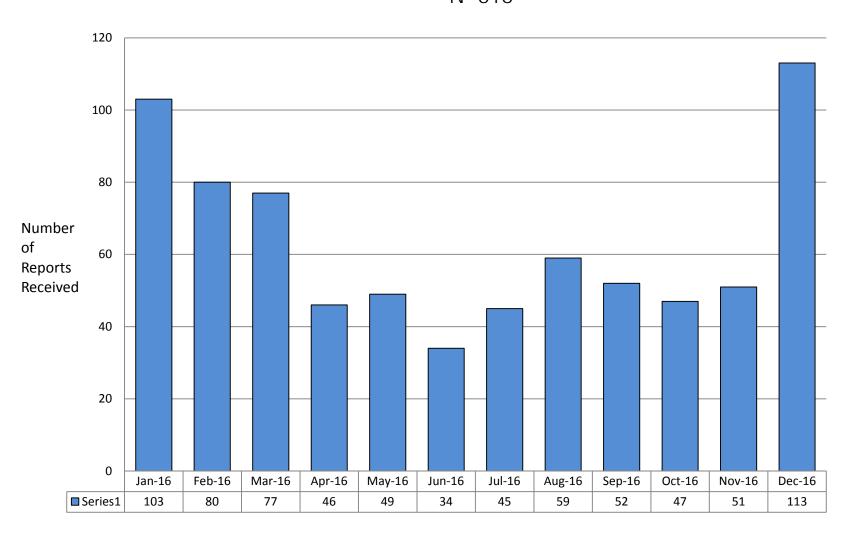


### Median Prehospital On Scene Time Interval Blunt vs. Penetrating Trauma By Year 2013-2016 N=1841

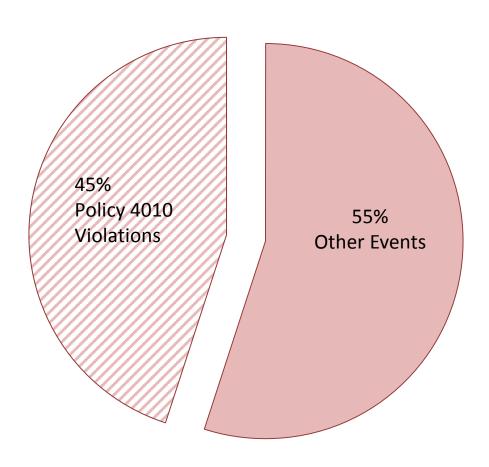


# EMS Events 2016

EMS Events
Reports Received by Month
2016
N=616



## EMS Events Reported by General Category 2016 N=616



# END REPORT Annual 2016

# 2016 Quality Improvement Initiatives

## Quality Improvement Initiatives

### Patient Off-Load Time Reduction

In 2014, an initiative to monitor and reduce the handoff times between ambulances and hospital emergency departments was implemented by the CCCEMS with the support of the CQI team. Current measures reflect that during high-volume periods, patients arriving at emergency departments by ambulance are often waiting longer than 30 minutes for offloading. Measures and other pertinent information continued to be reviewed by internal staff and the QLC. Reports were updated monthly and hospital leadership continued to be informed.

In 2016, outcomes showed some slight decreases in off-load times, however, goals for reduction continue to be a challenge for some hospitals. Most recently, a statewide initiative has been implemented in collaboration with hospital leadership to evaluate and act to improve the hospital off-load times statewide. This initiative will continue to be monitored and acted on for further improvement in the 2017 improvement cycle.

## Quality Improvement Initiatives

High Performance Cardiac Arrest Resuscitation Team

In 2014-15, indicators to measure quality of CPR for compression ratios, depth and pauses for shock were developed and implemented. In 2016, our CARES showed a 4% increase in the annual save rate performance.

In 2016-17, staff participated in targeted training programs in both Seattle and Monterey to learn the latest science and best practices to improve and enhance CCC EMS Cardiac Arrest System of Care. A newly organized Cardiac Arrest Performance Improvement Team has since been activated with the objectives of continuing to sustain our gains and to further enhance and improve outcomes.