Contra Costa EMS Agency
Core Indicators

Q3: 2012 Report
Quality Leadership Committee
12.11.2012
Number of Ambulance Responses by Month
All 911 Transporting Agencies
2011-Q3: 2012

No Special Cause Detected
Chart Type: Chart for Individuals
Chart for Individuals
Centerline: 6,489
Process Limits:
Lower: 5,678
Upper: 7,300
Database (Base for Limits: Average MR
Avg of Data Shown: 6488.667
Median Data Shown: 6442.5
Sigma for Limits: 270.3

A: 1 Beyond Control Limit
B: 9 On One Side of Average
C: 6 Trending Up or Down
D: 14 Alternating Up & Down
E: 2 of 3 Beyond 2 Sigma
F: 4 of 5 Beyond 1 Sigma
G: 15 Within 1 Sigma
H: 8 Outside 1 Sigma
X: Excluded or Missing Data
EMS Transports by Month
All 911 Transporting Agencies
2011-Q3 2012

No Special Cause Detected
Chart Type: Chart for Individuals
Centerline: 5,186
Process Limits: Lower: 4,580  Upper: 5,793

Avg of Data Shown: 5186.19
Median Data Shown: 5194
Sigma for Limits: 202.2
Base for Limits: Average MR

A. 1 Beyond Control Limit
B. 9 On One Side of Average
C. 6 Trending Up or Down
D. 14 Alternating Up & Down
E. 2 of 3 Beyond 2 Sigma
F. 4 of 5 Beyond 1 Sigma
G. 15 Within 1 Sigma
H. 8 Outside 1 Sigma
X. Excluded or Missing Data

Contra Costa EMS Agency
Core Indicator SU#C0002
Data Source: First Watch 2012
% Transports per Response
All 911 Transporting Agencies
By Month 2011-Q3: 2012

Month & Year

Contra Costa EMS Agency
Core Indicator SU#C0003
Data Source: First Watch 2012
HavBED % Reporting Compliance by Time/Shift
Contra Costa County – All Hospitals
Q3: 2012
Contra Costa County Hospitals – EMS Diversion
Quarterly Trending - Time in Hours
2011- Q3: 2012

No Special Cause Detected

Chart Type: Chart for Individuals
Chart for Individuals
Centerline: 161.7
Process Limits: Lower: -181.4 Upper: 504.8
Database Column 1

Avg of Data Shown 161.7143
Median Data Shown 151
Sigma for Limits 114.4
Base for Limits Average MR

1 Beyond Control Limit
9 On One Side of Average
6 Trending Up or Down
14 Alternating Up & Down
2 of 3 Beyond 2 Sigma
4 of 5 Beyond 1 Sigma
15 Within 1 Sigma
8 Outside 1 Sigma
Excluded or Missing Data
Contra Costa County Hospitals
Total Hours on Diversion
Q3 2012

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Hours On Diversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hosp A</td>
<td>27</td>
</tr>
<tr>
<td>Hosp B</td>
<td>14</td>
</tr>
<tr>
<td>Hosp C</td>
<td>7</td>
</tr>
<tr>
<td>Hosp D</td>
<td>11</td>
</tr>
<tr>
<td>Hosp E</td>
<td>7</td>
</tr>
</tbody>
</table>

(Total=66 hrs.)

Data Source: ReddiNet Q3 2012
Contra Costa County Hospitals
EMS Diversion by Reason
Q3: 2012

<table>
<thead>
<tr>
<th>Reason</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>43</td>
</tr>
<tr>
<td>STEMI</td>
<td>8.5</td>
</tr>
<tr>
<td>Trauma</td>
<td>14.5</td>
</tr>
</tbody>
</table>

(Total=66 hrs.)
Contra Costa EMS Agency
Reported Safety Events: % by Operational Type
Q3: 2012
(N=5)

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>1</td>
</tr>
<tr>
<td>Destination</td>
<td>1</td>
</tr>
<tr>
<td>Equipment</td>
<td>1</td>
</tr>
<tr>
<td>Pt Complaint</td>
<td>1</td>
</tr>
<tr>
<td>Professional Conduct</td>
<td>1</td>
</tr>
</tbody>
</table>

20% for each category.
Contra Costa EMS Agency
Core Indicators

Base Hospital

Q3: 2012 Report

Data Source: Base Hospital Registry
Base Hospital Call Volume by Month
Q3: 2012

Special Cause Detected

- Avg of Data Shown: 279.5556
- Median Data Shown: 275
- Sigma for Limits: 19.14
- Base for Limits: Average MR

Chart Type: Chart for Individuals
- Centerline: 279.6
- Process Limits: Lower: 222.1 Upper: 337.0

Database Column: 1

- A: 1 Beyond Control Limit
- B: 9 On One Side of Average
- C: 6 Trending Up or Down
- D: 14 Alternating Up & Down
- E: 2 of 3 Beyond 2 Sigma
- F: 4 of 5 Beyond 1 Sigma
- G: 15 Within 1 Sigma
- H: 8 Outside 1 Sigma
- X: Excluded or Missing Data

N=917 (includes calls from outside county providers)
Base Hospital
% Calls by Age
Q3: 2012

Adult (94.8%)

Pediatric (5.2%)

N=917
Base Hospital
% Calls by Type
Q3:2012

TRIUMA 79.5%

MEDICAL 20.5%

N=917

Data Source: Base Hospital Registry;
Contra Costa EMS Agency
Core Indicators

Cardiac Arrest

Q3: 2012 Report

Data Source: CARES Registry,
Excludes Medical Facilities (hospitals, clinics, SNF); Excludes arrest after EMS arrival
Contra Costa EMS Agency
Core Indicator # CA#0001
Data Source: CARES Registry 2012
Excludes hospitals, clinics, SNF; arrest after EMS arrival

% Cardiac Arrest Survival Overall
by Quarter 2011-2012

National Benchmark 7.2%

Q1 2011  Q2 2011  Q3 2011  Q4 2011  Q1 2012  Q2 2012  Q3 2012
8        8        8.3       8.6       10.7       10.2       10.8
% Cardiac Arrest Survival Overall
by Month 2011 - Q3: 2012

Special Cause Detected
- Avg of Data Shown: 9.4
- Median Data Shown: 9
- Sigma for Limits: 1.804
- Base for Limits: Average MR

Chart Type: Chart for Individuals
Centerline: 9.400
Process Limits: Lower: 3.987 Upper: 14.81

Database Column: 1

Contra Costa EMS Agency
Core Indicator # CA#0001
Data Source: CARES Registry June 2012
Excludes hospitals, clinics, SNF; arrest after EMS arrival
% Cardiac Arrest Survival–Utstein
By Quarter 2011-2012

Q1 2011: 26%
Q2 2011: 32%
Q3 2011: 23%
Q4 2011: 30%
Q1 2012: 25%
Q2 2012: 25%
Q3 2012: 32%

National Benchmark: 24%

Data Source: CARES Registry June 2012
Excludes hospitals, clinics, SNF; arrest after EMS arrival
% Cardiac Arrest Survival – Utstein
By Month 2011 - Q3: 2112

No Special Cause Detected

<table>
<thead>
<tr>
<th>Avg of Data Shown</th>
<th>27.88889</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Data Shown</td>
<td>27.5</td>
</tr>
<tr>
<td>Sigma for Limits</td>
<td>8.552</td>
</tr>
<tr>
<td>Base for Limits</td>
<td>Average MR</td>
</tr>
</tbody>
</table>

Chart Type: Chart for Individuals

Centerline: 27.89
Process Limits: Lower: 2.232, Upper: 53.55

Database Column

1

National Benchmark 24%

Contra Costa EMS Agency
Core Indicator # CA#0002
Data Source: CARES Registry; 2012
Excludes hospitals, clinics, SNF, arrest after EMS arrival
Bystander CPR by Quarter
Q3:2010 through Q3: 2012

Contra Costa EMS Agency
Core Indicator # CA#0001
Data Source: CARES Registry June 2012
Excludes hospitals, clinics, SNF; arrest after EMS arrival
Contra Costa EMS Agency
Core Indicators

STEMI System

Q3: 2012 Report

Data Source: STEMI 2012.
STEMI Activation
Time Interval: 911 to Intervention
By Quarter 2011-2012

National Benchmark
<90 mins

Contra Costa EMS Agency
Core Indicator STE#C0002
Data Source: STEMI data base
STEMI Centers
Activation Time Interval: Door to Intervention
Q1-Q3: 2012

Data Source: STEMI data base

Q1 2012: 51 Mins
Q2 2012: 52 Mins
Q3 2012: 46 Mins
STEMI Activation
Mean Prehospital Scene Time Interval
By Month through 2011 - Q3: 2012

No Special Cause Detected

Chart Type: Chart for Individuals
Chart for Individuals
Centerline: 15.15
Process Limits: Lower: 10.02  Upper: 20.28

Database Column 1

Avg of Data Shown 15.15333
Median Data Shown 15
Sigma for Limits 1.710
Base for Limits Average MR

A 1 Beyond Control Limit
B 9 On One Side of Average
C 6 Trending Up or Down
D 14 Alternating Up & Down
E 2 of 3 Beyond 2 Sigma
F 4 of 5 Beyond 1 Sigma
G 15 Within 1 Sigma
H 8 Outside 1 Sigma
X Excluded or Missing Data
Contra Costa EMS Agency
Core Indicators

Stroke System

Q3: 2012 Report

Data Source: MEDS 3 California Stroke registry;2012.
Number of Patients with a Primary Paramedic Impression of CVA/TIA Transported to Stroke Centers
Q3:2012

- Kaiser - Antioch: 51
- John Muir - Concord: 61
- John Muir - Walnut Creek: 37
- Doctor's Medical Center - San Pablo: 60
- Kaiser - Walnut Creek: 32
- Kaiser - Richmond: 22
- Sutter Delta Medical Center - Brentwood: 12
- Alta Bates Medical Center - Berkeley: 3
- Contra Costa Regional Medical Center - Martinez: 2
- Kaiser - Vallejo: 2
- Other: 2

Data Sources: AMR Q3: 2012
Stroke Alerts by Regions
Contra Costa County
Q3:2012

- West: 35%
- Central: 35%
- East: 30%

Data Sources: AMR Q3: 2012
Stroke System
On-Scene Time Interval
By Quarter 2013

Mean Scene Time in Mins

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Scene Time Interval</td>
<td>11.6</td>
<td>13.3</td>
<td>13.6</td>
</tr>
</tbody>
</table>

National Benchmarks 10 mins

Contra Costa EMS Agency
Core Indicator # ST#C0001
Data Source: Meds
Stroke System
On-Scene Time Interval
Q1-Q3: 2012

No Special Cause Detected

Chart Type: Chart for Individuals

Chart for Individuals

Centerline: 12.83
Process Limits: Lower: 10.21 Upper: 15.46

National Benchmarks
10 mins

Data Source: AMR

Contra Costa EMS Agency
Core Indicator # ST#C0001
Contra Costa County Stroke Centers
Door to Intervention
D2N Mean Time Interval

Q3: 2012

<table>
<thead>
<tr>
<th>Location</th>
<th>Mean Time (Mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH (EMS)</td>
<td>69</td>
</tr>
<tr>
<td>AH (NON-EMS)</td>
<td>72</td>
</tr>
<tr>
<td>SHA</td>
<td>67</td>
</tr>
<tr>
<td>SHB</td>
<td>60</td>
</tr>
<tr>
<td>SHD</td>
<td>72</td>
</tr>
</tbody>
</table>

Data Source: CSR

Benchmarks: 60 mins
Contra Costa EMS Agency
Core Indicators

Trauma System

Q3: 2012 Report

Data Source: Trauma One Registry; Apr 2012 through Jun 2012
% Field Activations with Major Trauma
Q1, Q2, Q3: 2012

Q1 2012: 22%
Q2 2012: 26%
Q3 2012: 22%

Data Source: Trauma One Registry; 2012
% Over Triage By Quarter 2011-2012
Field Activations without Major Trauma

- Q3: 2011 - 78%
- Q4: 2011 - 73%
- Q1: 2012 - 82%
- Q2: 2012 - 76%
- Q3: 2012 - 78%

Data Source: Trauma One Registry; 2012
% Over Triage
Trauma Activations Discharged Home from ED
by Month Q3 2012

No Special Cause Detected

Chart Type:  Chart for Individuals
            Centerline: 27.87
            Process Limits: Lower: 9.820  Upper: 45.91

Avg of Data Shown 27.86667
Median Data Shown 28
Sigma for Limits 6.016
Base for Limits Average MR

Data Source: Trauma One Registry 2012
% Over Triage by Month 2011-Q3: 2012
Activations without Major Trauma

No Special Cause Detected

Chart Type: Chart for Individuals
Chart for Individuals
Centerline: 77.73
Process Limits: Lower: 57.41
Upper: 98.06

Avg of Data Shown 77.73333
Median Data Shown 75
Sigma for Limits 6.776
Base for Limits Average MR

2 of 3 Beyond 2 Sigma
4 of 5 Beyond 1 Sigma
15 Within 1 Sigma
8 Outside 1 Sigma
Excluded or Missing Data

Contra Costa EMS Agency
Core Indicator # TC#C0002
Data Source: Trauma One Registry; 2012
Mean Scene Time Interval in Mins
Blunt vs. Penetrating Trauma
Q3: 2012

Data Source: Trauma One Registry 2012

Contra Costa EMS Agency
Core Indicator # TC#C0004

Mean Scene Time Interval in Mins
Blunt vs. Penetrating Trauma
Q3: 2012

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Blunt (Mins)</th>
<th>Penetrating (Mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Q2</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Q3</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Q4</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Q5</td>
<td>14</td>
<td>13</td>
</tr>
</tbody>
</table>

National Benchmarks: 10 mins
Mean Prehospital Scene Time Interval in Mins
Major Trauma - Ground Transport
By Month 2011 - Q3: 2012

Data Source: Trauma One Registry; 2012
Infrequent Skills Success Rates
Q3; 2012
Pain Scale Evaluation by Impression
Q3: 2012
END REPORT
Q3: 2012