



EMERGENCY MEDICAL CARE COMMITTEE

CONTRA COSTA COUNTY

Wednesday, September 9, 2015

4:00 – 5:30 p.m.

Contra Costa County Schools Insurance Group Conference Room
550 Ellinwood Way, Pleasant Hill, CA

Agenda

- 4:00 p.m. 1. Introduction of Members and Guests
- 4:03 2. Approval of June 10, 2015 Minutes
- 4:04 3. Comments from the Public
Members of the public may speak up to 3 minutes each on matters either on or not on this agenda.
- 4:07 4. Chair's Report
- 4:09 5. Fire Chiefs' Report
- Chief Carman, Contra Costa Fire Protection District
- 4:15 6. Members' Reports:
- Presentation of updated By-Laws Andy Swartzell, EMCC Executive Committee Officer
- Presentation of new slate of officers EMCC Executive Committee
- 4:28 7. Overview of EMS' Medical Health Disaster Program
Steve Huck, Contra Costa EMS Emergency Manager
- 4:40 8. Medical Health Operational Area Coordination (MHOAC) Program
Jesse Allured, Contra Costa EMS Program Coordinator
- 4:52 9. 9-1-1 Communications Update
Gerard Heidkamp, 911 Coordinator, Contra Costa County Office of the Sheriff
- 5:05 10. EMS Director's Report
Pat Frost, EMS Director
- 5:16 11. EMS Medical Director's Report
Joseph Barger, MD, EMS Medical Director
- 5:27 12. Agenda Items for next EMCC – December 9, 2015
- 5:30 13. Adjournment

Reasonable accommodations can be made for persons with disabilities planning to attend the EMCC Meeting by contacting EMS Staff at least 24 hours in advance at (925) 646-4690.

Any disclosable public records related to an item on a regular meeting agenda and distributed by the County to a majority of members of the Emergency Medical Care Committee less than 96 hours prior to that meeting are available for public inspection at 1340 Arnold Drive, Suite 126, Martinez during normal business hours.

Emergency Medical Care Committee **BY-LAWS**

MISSION STATEMENT

The goal of the Emergency Medical Care Committee (EMCC) is to assure the availability of an effective and efficient emergency medical services system that provides consistent, high quality emergency medical services to all people in Contra Costa County. The EMCC advocates Emergency Medical Services (EMS) system fiscal stability, provides a means for community involvement in defining levels of EMS, and promotes a system that can withstand future challenges and thrive. The EMCC provides the Board of Supervisors, under which it serves, and the Health Services Director with advice and recommendations on EMS system planning and oversight.

I. AUTHORITY.

The Contra Costa County Board of Supervisors, established the Contra Costa County EMCC (Resolutions 68/404, 77/637, 79/460 and by Board Order on February 24, 1998), in accordance with the California Health and Safety Code Division 2.5, Chapter 4, Article 3, to act in an advisory capacity to the Board and the County Health Services Director on matters relating to emergency medical services.

II. DUTIES.

- A. The duties of the EMCC as specified in the California Health and Safety Code Section 1797.274 and 1797.276 are to review the operations of each of the following at least annually:
 - 1. Ambulance services operating within the county.
 - 2. Emergency medical care offered within the county, including programs for training large numbers of people in cardiopulmonary resuscitation and lifesaving first aid techniques.
 - 3. First aid practices in the county.
- B. The EMCC shall, at least annually, report to the Authority, and the local EMS Agency its observations and recommendations relative to its review of the ambulance services' emergency medical care, and first aid practices, and programs for training people in cardiopulmonary resuscitation and lifesaving first aid techniques, and public participation in such programs in the county. The EMCC shall submit its observations and recommendations to the County Board of Supervisors which it serves and shall act in an advisory capacity to the County Board of Supervisors, and to the County EMS Agency, on all matters relating to emergency medical services as directed by the Board.

III. MEMBERSHIP.

- A. Membership of the EMCC shall consist of the following:
 - 1. Consumer representatives - One representative and one alternate representative from each supervisorial district approved by the Board of Supervisors.
 - 2. One representative and one alternate representative from each of the following organizations or groups approved by the Board of Supervisors:
 - a. Alameda-Contra Costa Medical Association
 - b. American Heart Association
 - c. American Red Cross
 - d. California Highway Patrol
 - e. Communications Center Managers' Association
 - f. Contra Costa Fire Chiefs' Association
 - g. Contra Costa Police Chiefs' Association
 - h. Emergency Nurses Association
 - i. Hospital Council, Bay Area Division

- j. Public Managers' Association
 - k. Trauma Center (Contra Costa Contract)
 - l. Contra Costa Sheriff-Coroner
 - m. Contra Costa Health Services
 - n. Community Awareness and Emergency Response – CAER
3. One representative and one alternate representative of each of the following groups nominated by the Health Services Director and approved by the Board of Supervisors:
 - a. Ambulance Providers (Contra Costa Contract)
 - b. Air Medical Transportation Provider (Contra Costa Authorized)
 - c. Base Hospital
 - d. Emergency Department Physicians
 - e. EMS Training Institution
 - f. Private Provider Field Paramedic
 - g. Public Provider Field Paramedic
 4. Existing membership-elected EMCC Officers for the remainder of their terms.
- B. The EMS Director shall serve as an ex officio member.

IV. APPOINTMENT PROCESS

- A. The EMS Agency will contact each of the agencies, organizations and groups listed in Section A, above, to solicit nominations for one representative and one alternate representative prior to the expiration of its representative's and its alternate representative's term.
- B. The nominations received from Sections 3.A.1-2 will be submitted to the Clerk of the Board for the Board of Supervisors' consideration and approval.
- C. The Health Services Director will consider suggested names received from Section 3.A.3. and will provide nominations for these groups for the Board of Supervisors' consideration and approval.

V. TERMS.

- A. EMCC members shall serve for terms not to exceed two years, and elected officers shall remain members of the EMCC for the balance of their terms in office. All terms will expire on September 30th on even-numbered years. There shall be no limit on the number of consecutive terms that an EMCC member may serve.
- B. Any Board-appointed member or alternate member choosing to resign from the EMCC must submit a written letter of resignation to the Clerk of the Board of Supervisors with copy to the EMCC Chair.
- C. The EMS Agency will follow the initial appointment procedure to fill a position for the remainder of a term when there is a resignation or lack of participation.

VI. OFFICERS.

- A. The officers of the EMCC shall be a Chair, First Vice-Chair, and Second Vice-Chair.
- B. Officers shall be elected by the EMCC membership to serve for two years or until their successors are elected. The term will begin on December 1st and terminate on November 30th of odd-numbered years.
- C. Officers may not be elected for more than two consecutive terms in the same office.
- D. In the event of an officer vacancy, the next Vice Chair moves up to the vacant position. In the event of a vacancy of the Second Vice Chair position, the Chair may appoint a member of the EMCC to serve as Second Vice Chair for the remainder of the officer term, subject to an affirmative vote of the EMCC.

VII. DUTIES OF OFFICERS.

- A. The Chair shall preside over all meetings of the EMCC in addition to serving as the Chair of the Executive Committee. The Chair will be a spokesperson for the EMCC and assure that the EMCC is informed about County emergency medical services issues and needs.
- B. The First Vice-Chair shall assume the duties of Chair in the absence of the Chair and shall render assistance as requested by the Chair. The First Vice-Chair shall also serve as a member of the Executive Committee.
- C. The Second Vice-Chair shall assume the duties of Chair in the absence of the First Vice-Chair and shall render assistance as requested by the Chair or First Vice-Chair. The Second Vice-Chair shall serve as a member of the Executive Committee.
- D. In the absence of the Chair and Vice-Chairs, one of the two non-officer Executive Committee Members shall preside.

VIII. EXECUTIVE COMMITTEE

- A. The Executive Committee is established to conduct the business of the EMCC between regular meetings and shall be composed of the:
 - 1. EMCC Chair
 - 2. EMCC First Vice-Chair
 - 3. EMCC Second Vice-Chair
 - 4. Two non-officer EMCC members
- B. EMCC members elected to the Executive Committee will serve for two years or until their successors are elected. The term will begin December 1st, and terminate on November 30th of odd-numbered years. Executive Committee members may be elected to consecutive terms.
- C. At least one member of the Executive Committee shall be a Citizen/Consumer.
- D. The Executive Committee shall be subject to the orders of the EMCC and none of its acts shall conflict with action or directions of the EMCC.
- E. The Executive Committee shall meet at the call of the Chair, or at the request of a majority of the members of the Executive Committee.
- F. Whenever issues arise requiring the attention of the EMCC before its next regularly scheduled meeting, the Executive Committee shall be empowered to meet and take whatever action is considered appropriate. It will be the responsibility of the Chair to assure that all Executive Board members are notified of such meetings.
- G. Whenever issues must be voted on at Executive Committee meetings in which other EMCC members are in attendance, the voting shall be limited to Executive Committee members.

IX. OFFICER AND EXECUTIVE COMMITTEE SELECTION

- A. The EMCC Chair shall appoint a three-member nominating committee from the membership prior to the June EMCC meeting of odd-numbered years. This committee shall solicit one or more names for each office. The ballot shall be presented at the June meeting, at which time nominations from the floor may be added to the slate. If there are no additions to the slate from the floor and there is a single nomination for each of the Officers, the Chair may call for a vote at the June meeting.
- B. The election of Officers and the two non-officer members of the Executive Committee will be carried out by mail ballot of members if there is more than one nomination for any of the positions. Results of any mail ballot elections will be announced at the September EMCC meeting.
- C. Nominations and election of the two non-officer Executive Committee members will be handled in the same manner as the nomination of EMCC officers.

- D. Whenever a vacancy occurs on the Executive Committee, the Chair shall appoint an EMCC member to fill the vacant position to complete the remainder of the existing term subject to an affirmative vote of the EMCC.

X. MEETINGS.

- A. Regular meetings of the EMCC shall be held at least four times per year or more often as deemed necessary. Meetings will convene at 4:00 pm on the second Wednesday of March, June, September, and December unless otherwise directed by the EMCC or its Executive Committee.
- B. The EMCC Chair may call special meetings as deemed necessary upon ten days prior written notification.
- C. A quorum for the EMCC shall consist of all members (or their alternates) who are present.
- D. Staff support for the EMCC will be provided by the County Emergency Medical Services Agency.

XI. ATTENDANCE.

- A. EMCC members or their alternate members shall attend EMCC meetings.
- B. Whenever a member, or his or her alternate, does not attend three consecutive, regularly scheduled meetings, the Chair of the EMCC may notify the appointing agency/organization of the absences.

XII. VOTING.

- A. All motions placed before the EMCC shall be approved or disproved by the majority of members present and voting.
- B. An alternate for a member shall have full voting rights in the absence of the appointed member.
- C. The EMCC member, or in his or her absence, the alternate member, for each of the groups and agencies identified in Section III, above shall have the right to vote on any motion.

XIII. AD HOC COMMITTEES.

- A. The EMCC membership may appoint ad hoc committees to address EMS related matters.
- B. The EMCC Chair shall appoint chairs and members of any ad hoc committees.
- C. Ad hoc committee members must be members or alternate members of the EMCC.
- D. The EMCC Chair shall be ex officio, a member of all ad hoc committees.
- E. Ad hoc committees shall meet at the call of the ad hoc committee Chair.
- F. Members present shall constitute a quorum.
- G. EMS Agency shall provide a staff member to attend each ad hoc committee meeting.

IVX. BROWN ACT AND BETTER GOVERNMENT ORDINANCE.

County advisory bodies are subject to both the Ralph M. Brown Act (Government Code, sections 54950 et. seq.) and the County's expanded open meeting law, the Better Government Ordinance (Contra Costa County Code, Chapter 25-2.)

VX. PARLIAMENTARY AUTHORITY.

All proceedings of the EMCC and its ad hoc committees shall be conducted in a free and open manner. Upon the request of any three members of the EMCC or at the discretion of the Chair, parliamentary procedure as specified in Robert's Rules of Order will be followed provided they do not otherwise conflict with these by-laws.

VXI. AMENDMENT.

These by-laws may be amended by a two-thirds vote at any regularly scheduled meeting of the EMCC provided that the amendment has been submitted in writing to all members ten (10) working days prior to the meeting.

Emergency Medical Care Committee
Contra Costa County, California
BY-LAWS

Approved by Contra Costa County Counsel 6/19/2015

The Emergency Medical Care Committee (EMCC) acts as an advisory body to the County Board of Supervisors, the Local EMS Agency and the County Health Services Director on all matters relating to Emergency Medical Services.

I. AUTHORITY

The Contra Costa County Board of Supervisors (Authority), established the Contra Costa County EMCC (Resolutions 68/404, 77/637, 79/460 and by Board Order on February 24, 1998), in accordance with the California Health and Safety Code Division 2.5, Chapter 4, Article 3, to act in an advisory capacity to the Board and the County Health Services Director on matters relating to emergency medical services.

II. DUTIES

- A. The duties of the EMCC as specified in the California Health and Safety Code Section 1797.274 and 1797.276 are to review the operations of each of the following at least annually:
 - 1. Ambulance services operating within the county.
 - 2. Emergency medical care offered within the county, including programs for training large numbers of people in cardiopulmonary resuscitation and lifesaving first aid techniques.
 - 3. First aid practices in the county.
- B. The EMCC shall, at least annually, report to the Authority, and the local EMS Agency its observations and recommendations relative to its review of the ambulance services' emergency medical care, and first aid practices, and programs for training people in cardiopulmonary resuscitation and lifesaving first aid techniques, and public participation in such programs in the county. The EMCC shall submit its observations and recommendations to the County Board of Supervisors which it serves and shall act in an advisory capacity to the County Board of Supervisors, and to the County EMS Agency, on all matters relating to emergency medical services as directed by the Board.

III. MEMBERSHIP

Membership of the EMCC consists of 21 members and two ex officio, non-voting members comprised of the following:

- A. Consumer representatives - One representative from each of the five supervisorial district appointed by the Board of Supervisors.
- B. One representative nominated from each of the following organizations or groups and appointed by the Board of Supervisors:
 - a. Alameda-Contra Costa Medical Association – Emergency Room physician serving in Contra Costa County
 - b. American Heart Association
 - c. American Red Cross
 - d. California Highway Patrol
 - e. Communications Center Managers' Association
 - f. Contra Costa Fire Chiefs' Association

- g. Contra Costa Police Chiefs' Association
 - h. Emergency Nurses Association – from a Contra Costa County Receiving Hospital
 - i. Hospital Council, Bay Area Division – from a Contra Costa County Receiving Hospital
 - j. Public Managers' Association
 - k. Trauma Center (Contra Costa Contract)
 - l. Contra Costa Office of Emergency Services
 - m. Contra Costa Health Services – Behavioral Health
- C. Three representatives selected from among the following groups, nominated by the Health Services Director and appointed by the Board of Supervisors:
- a. Ambulance Providers (Contra Costa Contract)
 - b. Air Medical Transportation Provider (Contra Costa Authorized)
 - c. EMS Training Institution
 - d. Private Provider Field Paramedic
 - e. Public Provider Field Paramedic
- D. The EMS Director and the EMS Medical Director shall serve as ex officio non-voting members.

IV. APPOINTMENT PROCESS

The EMS Agency will contact each of the agencies, organizations and groups listed in Section A, above, to solicit nominations for one representative prior to the expiration of its representative's term.

- A. The nominations received from Section III B will be submitted to the Clerk of the Board for the Board of Supervisors' consideration and appointment.
- B. The Health Services Director will consider suggested names received from Section III C and will provide nominations for these groups for the Board of Supervisors' consideration and appointment.
- C. Membership will terminate automatically if an appointed member no longer meets the criteria for the seat held.

V. TERMS

- A. EMCC members shall serve for terms not to exceed two years.
- B. All terms will expire on September 30th on even-numbered years. There shall be no limit on the number of consecutive terms that an EMCC member may serve.
- C. Any Board-appointed member choosing to resign from the EMCC must notify the EMCC Chair and the EMS Director.
- D. The EMS Agency will follow the initial appointment procedure to fill a position for the remainder of a term when there is a resignation or lack of participation.

VI. OFFICERS

- A. The officers of the EMCC shall be a Chair and a Vice-Chair.
- B. Officers shall be elected by the EMCC membership to serve for two years or until their successors are elected. The term will begin on December 1st and terminate on November 30th of odd-numbered years.
- C. Officers may not be elected for more than two consecutive terms in the same office. In the event of a vacancy in the Chair position, the Vice Chair automatically assumes the Chair position. In the event of a vacancy in the Vice Chair position, the EMCC will elect a new Vice Chair from among its current membership at its next regular public meeting subsequent to the officer's resignation.

VII. DUTIES OF OFFICERS

- A. The Chair shall preside over all meetings of the EMCC in addition to serving as the Chair of the Executive Committee. The Chair will be a spokesperson for the EMCC and assure that the EMCC is informed about County emergency medical services issues and needs.
- B. The Vice-Chair shall assume the duties of Chair in the absence of the Chair and shall render assistance as requested by the Chair.
- D. In the absence of the Chair and Vice-Chair, one of the two non-officer Executive Committee Members present at the meeting shall preside.

VIII. EXECUTIVE COMMITTEE

- A. The Executive Committee is established to conduct the business of the EMCC between regular meetings and shall be comprised of the:
 - 1. EMCC Chair
 - 2. EMCC Vice Chair
 - 3. Two non-officer EMCC members
- B. EMCC members elected to the Executive Committee will serve for two years or until their successors are elected. The term will begin December 1st, and terminate on November 30th of odd-numbered years. Executive Committee members may be elected to consecutive terms.
- C. The Executive Committee shall be subject to the direction of the EMCC and none of its acts shall conflict with action or directions of the EMCC.
- D. The Executive Committee shall meet at the request of the Chair, or at the request of a majority of the members of the Executive Committee.
- E. Whenever issues must be voted on at Executive Committee meetings in which other EMCC members are in attendance, the voting shall be limited to Executive Committee members.

IX. NOMINATING COMMITTEE

- A. The EMCC Chair shall appoint a three-member nominating committee from the membership prior to the June EMCC meeting of odd-numbered years.
- B. Current officers may not be members of the Nominating Committee.
- C. This committee shall solicit one or more names for each office. The nominated ballot shall be presented at the September meeting, at which time nominations from the floor may be added to the slate. The slate of nominees shall be voted on and elected at this September meeting.
- D. Nominations and election of the two non-officer Executive Committee members will be handled in the same manner as the nomination of EMCC officers.
- E. Whenever a vacancy occurs on the Executive Committee, the EMCC shall elect an EMCC member to fill the vacant position to complete the remainder of the existing term of office.

X. MEETINGS

- A. Regular meetings of the EMCC shall be held at least four times per year or more often as deemed necessary. Meetings will convene at 4:00 pm on the second Wednesday of March, June, September, and December unless otherwise directed by the EMCC or its Executive Committee.
- B. The EMCC Chair may call special meetings as deemed necessary upon proper public notice.
- C. A quorum for the EMCC shall consist of a majority of the filled seats.
- D. Staff support for the EMCC will be provided by the County Emergency Medical Services Agency.

XI. ATTENDANCE

- A. EMCC members shall attend EMCC meetings.
- B. A member who cannot attend a meeting must notify the Chair and may have one excused absence in a twelve month period.
- C. Whenever a member does not attend two consecutive, regularly scheduled meetings, or two absences in a twelve month period, the EMS Agency notify the nominating agency/organization of the absences and request appropriate action.
- D. Members must complete the required Ethics and Brown Act training provided by the County prior to participating at any meeting.

XII. VOTING

All motions placed before the EMCC shall be approved or rejected by the majority of membership.

XIII. AD HOC COMMITTEES

- A. The EMCC membership may create ad hoc committees to address EMS related matters.
- B. The EMCC Chair shall appoint chairs and members of any ad hoc committees.
- C. Ad hoc committee members must be members of the EMCC.
- D. Ad hoc committees shall meet at the request of the ad hoc committee Chair upon proper public notice.
- F. A quorum shall be more than 50% of the appointed members.
- G. EMS Agency shall provide a staff member to attend each ad hoc committee meeting.

VX. PARLIAMENTARY AUTHORITY

Meetings of the EMCC will be conducted by the Chair following generally accepted parliamentary procedures.

VXI. AMENDMENT

These by-laws may be amended by a two-thirds affirmative vote at any regularly scheduled meeting of the EMCC provided the amendment has been submitted in writing to all members ten (10) working days prior to the meeting.

Revised: (ENTER DATE)
Approved by EMCC: (ENTER DATE)
Approved by BOS: (ENTER DATE)

County of Contra Costa
OFFICE OF THE COUNTY ADMINISTRATOR
MEMORANDUM

DATE: August 28, 2015

TO: Internal Operations Committee

FROM: Dorothy Sansoe
County Administrator's Office

SUBJECT: Response to Direction from IOC on the Emergency Medical Care Committee

On April 13, 2015 the Internal Operations Committee, during the Triennial Advisory Body Review, provided the following direction:

The Committee expressed concerns that the Emergency Medical Care Committee (EMCC) was working beyond its charge and authority and directed the CAO to examine this with the EMCC.

Health and Safety Code Section 1797.270 allows each county to establish an emergency medical care committee. The Contra Costa County Board of Supervisors first established the EMCC in 1968 (Resolution 68/404). The Board subsequently abolished the EMCC in 1994 (Resolution 94/343) but reinstated the EMCC as a Board advisory committee at its February 24, 1998 meeting.

The duties of the EMCC, as specified in the California Health and Safety Code Section 1797.274 are to review the operations of each of the following at least annually:

1. Ambulance services operating within the county.
2. Emergency medical care offered within the county, including programs for training large numbers of people in cardiopulmonary resuscitation and lifesaving first aid techniques.
3. First aid practices in the county.

Health and Safety Code Section 1797.276 further directs the EMCC to report annually to the State and the Local EMS Authorities on its observations and recommendations relative to its review of the ambulance services emergency medical care, and first aid practices, and programs for training people in cardiopulmonary resuscitation and lifesaving first aid techniques, and public participation in such programs in the county. The EMCC submits its observations and recommendations to the County Board of Supervisors which it serves and shall act in an advisory capacity to the County Board of Supervisors, and to the County EMS Agency, on all matters relating to emergency medical services as directed by the Board.

During conversations with the Emergency Medical Services Director, it became clear that the EMCC bylaws were woefully out of date. The EMCC created a sub-committee to work on these and I participated in the discussions. The bylaws have been re-written, reviewed and approved by County Counsel, and approved by the EMCC sub-committee. One significant change to the proposed bylaws is a reduction in the number of seats and number of officers. These changes will bring the EMCC more in-line with other advisory bodies to the Board of Supervisors.

The full EMCC will review the bylaws at their September meeting. At this meeting, the EMCC will also discuss their purpose as an advisory body to the Board of Supervisors to ensure that all members understand their role.

The Emergency Medical Services Director clearly understands the role of the EMCC as advisory. The authority for EMS System policy making and oversight rests with the Local EMS Agency. The Director will ensure that matters brought before the EMCC fall within the charge given them by the Board of Supervisors. Members of the EMCC Executive Committee have offered and are available to meet with the Internal Operations Committee about any concern should they decide to do so.



Countywide Emergency Department 9-1-1 Ambulance Patient Transfer of Care Report Performance Report

Prepared by:

**Contra Costa Emergency
Medical Services**

Visit us at www.cccems.org

7/15/2015

Contra Costa Emergency Medical Services (EMS) System Performance Expectation

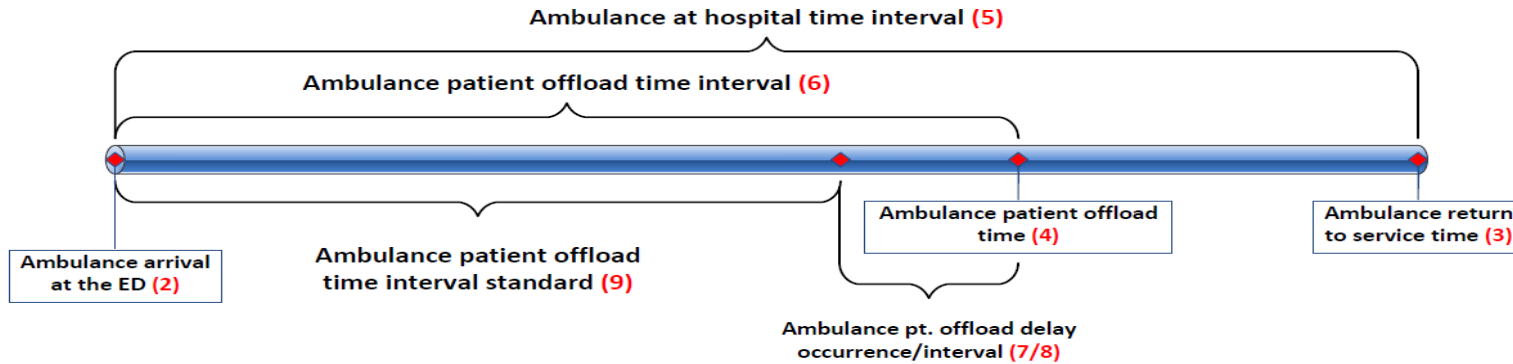
EMS Policy #40: Hospitals designated as an EMS receiving facility in Contra Costa County shall be prepared to receive patients transported by 9-1-1 county ambulance providers and accept these patients upon arrival. The patient transfer of care performance expectation for the EMS System is 20 minute or less; 90% of the time.

Countywide Hospital Performance (June 2014 to May 2015)

90 th Percentile of All Facilities ¹
Patient Transfer of Care occurs between 18 to 26 minutes 9 out of 10 times

Description of Patient Transfer of Care (TOC)

EMS patient transfer of care is known to improve the availability of 9-1-1 ambulances and patient safety. The California Hospital Association and the EMS Administrators of California have proposed the following graphic to describe the intervals associated with patient transfer of care. In Contra Costa County our metric of patient transfer of care or handoff time is equivalent to the ambulance patient offload time interval.



¹ San Ramon Regional Medical Center is not included in the all facilities reporting. San Ramon Regional Medical Center is served primarily by San Ramon Fire Protection District who does not collect this information.

Hospital Capacity and EMS Transfer of Care (TOC)

Emergency departments (ED's) have different capacities and utilization. During 2014 Contra Costa County Community Hospitals received 11-19 percent of their patients via EMS with vast majority of all emergency department patients transporting themselves to a local emergency department for primarily urgent and sometimes routine medical care. In 2014 there were 2,379 **less** EMS transports to Contra Costa Hospitals. Typically 10 % of ALL emergency department patients require admission while patients brought in by EMS admission rates can be as high as 40% due to their medical condition. During 2014 overall emergency department admission rates (walk in and EMS combined) averaged between 13 to 14% in Contra Costa. Although ED crowding is a statewide and national problem patients transported by EMS are not the cause.

County Wide Emergency Department Capacity and Utilization	ED BEDS	OSHPD TOTAL REPORTED ED VISITS 2014	OSHPD ED VOLUME PER ED BED 2014 ²	TOTAL EMS TRANSPORTS 2014 (All Contra Costa County Transports) ³	PERCENT OF EMS TRANSPORTS BY TOTAL ED VISITS 2014	DAILY AVERAGE 2014 (All Contra Costa EMS Transports)
Contra Costa Regional Medical Center ⁴	20	56,920	2846	10,538	19%	29
Doctors Medical Center ⁵	25	35,717	1429	4,224	12%	12
John Muir-CONCORD	32	52,747	1648	9,345	18%	26
John Muir-WALNUT CREEK	47	45,406	966	8,008	18%	22
KAISER ANTIOCH	34	45,922	1351	5,259	11%	14
KAISER RICHMOND	15	50,303	3354	6,289	13%	17
KAISER WALNUT CREEK	52	55,128	1060	6,907	13%	19
SAN RAMON REGIONAL	12	17,230	1436	2,021	12%	6
SUTTER DELTA	32	48,630	1520	8,433	17%	23
TOTAL ⁶	269	408,003	1517	61,024	15%	167

² The American College of Emergency Physicians (ACEP) recommended standard is one emergency department treatment station (bed) for 2000 visits

³ This data includes all Contra Costa emergency ambulance transport data for San Ramon Fire and Moraga Orinda Fire Departments and AMR.

⁴ Includes Contra Costa Regional Psychiatric Emergency Patient Volume

⁵ Doctors Medical Center Closed to EMS Traffic on August 7, 2014 and the Hospital Closed on April 21, 2015.

⁶ EMS Transport totals do not include transports to out of county hospitals. 28% of West County EMS transports go to Hospitals outside Contra Costa County.

The Contra Costa EMS System TOC Safety Initiative: Data Sharing for Improvement

Contra Costa Emergency Medical Services (EMS) recognizes the challenges that many hospital emergency departments face managing the increase in patient volume associated with many citizens using the Emergency Department (ED) for primary and urgent care. However, delays in the timely transfer of care of patients⁷, brought by 9-1-1 emergency ambulance, are known to increase risk to the patient and adversely impact the availability of providing emergency ambulance services throughout the county. It is important that all hospitals receiving emergency ambulances recognize the following:

- Approximately 10% of all 9-1-1 patients in Contra Costa experience some level of transfer of care delays when they arrive at the hospital.
- Delays of greater than one hour are considered **“Never Events”** within the Contra Costa EMS system because they are **“preventable”**.
- In 2014 **“Never Events”** affected some 401 patients of all ages at a rate of 5.24 times for every 100 patients.
- When delays of more than 30 minutes occur, efforts by ED staff closest to the patient need to occur to prevent further delays in patient care.
- When two or more emergency ambulances experience delays greater than 30 minutes (known as stacking) a community’s 9-1-1 ambulance response may be adversely affected.
- Emergency ambulance providers have strict response time performance requirements resulting in stiff financial penalties when delays in response occur.
- **Hospitals with inpatient workflow practices that support emergency department throughput consistently demonstrate shorter patient transfer of care times and experience significantly fewer excessive delays (never events) regardless of spikes in normal day to day emergency department volume.**

To effectively collaborate and manage the patient safety issues associated with patient handoff delays, transfer of care standards and performance metrics were established for the Contra Costa EMS System. The EMS policy # 40 *“EMS Prehospital-Emergency Department Transfer of Care Standards”* is available at <http://cchealth.org/ems/pdf/policy40.pdf>. Contra Costa EMS encourages all of our EMS System partners to use this information to create effective strategies to support timely patient handoff.

The Institute of Medicine, National Quality Forum, Centers for Medicare & Medicaid Services, National Association of EMS Physicians and the California Hospital Association/Emergency Medical Services Authority Ambulance Patient Offload Delay Collaborative all recommend establishing benchmarks, metrics and engaging in data sharing to support patient safety between EMS System stakeholders.

⁷ Delays in timely transfer of care are also known as “offload” or patient “handoff” delays.

The County EMS System standards for patient handoff between Emergency Department (ED) and 9-1-1 ambulance personnel for all Contra Costa Community Hospitals include:

- Conducting 9-1-1 transported patient handoff as soon as possible upon ambulance arrival;
- Activating appropriate measures to effectively manage ED saturation
- Reducing 9-1-1 ambulance stacking during peak conditions.
- Treating handoff delays of 60 minutes or more as “Never Events”.
- Practicing optimal patient handoff times of 20 minutes or less

The Contra Costa EMS System patient handoff standards were established after 4 years of EMS System stakeholder participation. Beginning in January 1st, 2015, EMS began to post public reports at www.cccems.org website at appropriate intervals. We would like to thank all of our Contra Costa community hospitals for making this a high priority in their organizations. Questions about this report should be directed to Contra Costa EMS by visiting us at www.cccems.org or calling 925 646-4690.

The Metrics

Transfer of care time interval: Time from ambulance arrival on hospital premises to documented transfer of care. Transfer of care is defined as the patient being physically off the gurney and EMS personnel having completed an appropriate verbal report to hospital staff (where EMS crew has no further direct patient care duties). Any activity performed after the patient care transfer occurs is not included, e.g. clean up of ambulance and completion of prehospital patient care record.

Data elements used in reporting: Arrival of ambulance time is defined as the time the ambulance reaches hospital property and captured as an automated data point using a link to the ambulance CAD (Computer Aided Dispatch). Transfer of care time is the time that the EMS provider documents as the point in time where the patient is both physically off the gurney and the ED staff have received a verbal patient report.

Fractile Performance: Measurement of percentage of time interval associated with completed transfer of care (e.g. 90% of patients with transfer of care within 20 minutes).

Average patient handoff time (min): The average time in minutes it takes to handoff patients at an individual facility or group of facilities.

Total number of patients: The total count of patients transported to the individual facility or group of facilities during the data collection interval.

90% Percentile (min): The amount of time (in minutes) associated with patient transfer of care for 9 out of 10 patients for a facility or group of facilities.

“Never Events” by Facility: The total count of EMS patient care transfers (handoffs) taking 60 minutes or longer. This information is displayed by year and year to date.

Demographic Patient Data associated with “Never Events”: These charts and tables capture descriptive information about patients who experience “Never Events” and includes the paramedic’s primary impression, patient’s age, sex, and ethnicity.

The Standards and Benchmarks

The following are the standards and benchmarks for the Contra Costa County EMS System in support of prompt ambulance and emergency department patient transfer of care:

- Optimal patient care transfer of care (handoff or drop time) time: 15 minutes 90% of the time
- Delayed patient care transfer of care (handoff or drop time) time: 30 minutes or more
- A “Never Event” for patient care transfer (handoff): 60 minutes or more

Management of Delays in Patient Transfer of Care

Contra Costa EMS works with emergency ambulance, hospital and emergency department leadership to assure prompt patient transfer of care in the emergency department. Prompt transfer of patient care enables timely definitive care and the return of 9-1-1 emergency ambulance assets to availability for the next emergency call. The Contra Costa EMS Agency provides routine reports on patient handoff to hospitals, ambulance providers, the Contra Costa Emergency Medical Care Committee and the County Board of Supervisors.

Contra Costa EMS encourages hospitals to measure overcrowding as part of internal quality and patient safety efforts to improve ED/Hospital throughput. Two resources that have demonstrated value in this area include the use of the California Emergency Department Overcrowding

Scale (CEDOCS) or the National Emergency Department Overcrowding Scale (NEDOCS). Both scales provide an objective assessment of ED overcrowding, and may be useful in helping hospitals to reduce ambulance offload delays. These tools incorporate measurement of patient census, ED bed count, ED admits, in-patient bed counts, door-to-bed time in the ED, longest wait for admission and number of patients receiving 1:1 care in the ED. The score provides a measure of overcrowding that can be used to provide an early warning to hospital personnel when overcrowding is worsening. Many hospitals have developed internal response plans to address patient flow based on these overcrowding scores. By managing flow issues early, crowding can be addressed and ambulance offload delays can be minimized or eliminated.

Report Limitations

This report is based on computerized dispatch and electronic patient care records for 9-1-1 ambulance data from American Medical Response (AMR). AMR provides approximately 90 % of all emergency ambulance transports within the County. The report does not include patient handoff data from Fire ambulance providers, non-emergency ambulance providers or out of county emergency ambulance providers.

Data for patient transfer of care reporting is not available from San Ramon Fire and Moraga Orinda Fire Transport Providers. Transports from these providers may significantly add to the emergency ambulance volume as they provide up to 10% of the emergency ambulance services in the county. In particular San Ramon Regional Medical Center is served almost exclusively by the San Ramon Fire Department is not included in this report while Kaiser Walnut Creek, John Muir Walnut Creek and Contra Costa Regional Center would be most affected by additional transports provided by fire ambulance providers. As fire department ambulance transfer of care data becomes available in the future it will be included in this report.

Doctor's Medical Center closed to emergency ambulance traffic on August 7, 2014. Data collection on ambulance transfer of care stopped on Aug 7, 2014. On April 21, 2015 the hospital closed all emergency department, inpatient and outpatient services.

AMR Transports in Contra Costa Resulting in Never Events (> 1 Hour Patient Handoff Time) during 2014 and 2015 YTD EMS System Goal: Reduce or Eliminate Patient TOC Never Events

Patient transfer of care delays of 60 minutes or more are considered “never event” within the Contra Costa EMS System. This data reflects the total number of patient transfer of care of an hour or longer.

Number of Never Events by Hospital

Never Events by Facility (>1 Hour Drop Time)	2014 Never Events Grand Total	2014 Total Number of EMS Transports Received	Never Event Rate per 100 Transports	Average Number of Daily CCEMS Transports	Never Events 2015 YTD (1/1/2015-5/31/2015)
CCRMC	15	6,694	0.22	18	26
CCRMC - PES	34	4,796	0.71	13	22
John Muir - Concord	19	9,345	0.20	26	2
John Muir - Walnut Creek	17	8,008	0.21	22	11
Kaiser - Antioch	10	5,259	0.19	14	10
Kaiser - Richmond	13	6,289	0.21	17	3
San Ramon ⁸	0	2,021	0.00	6	0
Kaiser - Walnut Creek	8	6,907	0.12	19	13
Sutter Delta	285	8,433	3.38	23	169
Total	401	57,752	5.24	158	256

⁸ Limited to AMR data, San Ramon Fire never event data not available.

Never Events Demographics

Never Events (>1 Hour Drop Time) By Patient Gender	2013 (8/1/2013 - 12/31/2013)	2014 (1/1/2014 - 12/31/2014)	2015 (1/1/2015- 5/31/2015)	<i>Grand Total</i>
Female	32	235	144	411
Male	30	166	112	308

Never Events (>1 Hour Drop Time) By Patient Ethnicity	2013 (8/1/2013 - 12/31/2013)	2014 (1/1/2014 - 12/31/2014)	2015 (1/1/2015- 5/31/2015)	<i>Grand Total</i>
Asian	2	17	10	29
Black/African American	19	106	66	191
Caucasian	29	200	121	350
Hispanic or Latino	11	49	40	100
Other Race	1	29	19	49

Never Events (>1 Hour Drop Time) By Patient Age	2013 (8/1/2013 - 12/31/2013)	2014 (1/1/2014 - 12/31/2014)	2015 (1/1/2015- 5/31/2015)	<i>Grand Total</i>
0-9	1	9	5	15
10-19	5	21	9	35
20-29	7	41	33	81
30-39	5	37	32	74
40-49	8	58	31	97
50-59	10	65	42	117
60-69	10	70	39	119
70-79	8	41	27	76
80-89	4	42	25	71
90-100	4	16	13	33
> 100	0	1	0	1

Understanding the Clinical Characteristics of “Never Event” Patients May Assist Hospitals in Identifying At-Risk Populations

Paramedic Primary Impressions Never Events (>1 Hour Drop Time)	2013 (8/1/2013 - 12/31/2013)	2014 (1/1/2014 - 12/31/2014)	2015 (1/1/2015- 5/31/2015)	Grand Total
Pain	15	96	40	151
Other - Sick/Dizzy/Weakness	11	50	22	83
Trauma	5	45	16	66
Behavioral / Psychiatric	7	51	25	83
Neurological	5	36	15	56
Respiratory	4	26	12	42
Gastrointestinal	5	24	15	44
Toxicological	3	25	14	42
Cardiac	5	17	14	36
Vascular	1	23	12	36
Diabetes	0	5	2	7
OB/GYN	0	3	1	4
Allergic Reaction	1	0	1	2

Many of these conditions may be minor; however no patient should wait more than one hour for EMS/ED transfer of care.

In California, when 9-1-1 is contacted the ambulance provider is required by law to take the patient to an emergency department although up to 60% of all EMS transports are “treat and release” within 24 hours. Future EMS and Hospital partnerships could redirect patients to non 9-1-1 resources and encourage the use of alternative primary or urgent care settings more appropriate for the patient condition. Such options could play an important role in conserving EMS ambulance and Emergency Department resources for the sickest of patients.

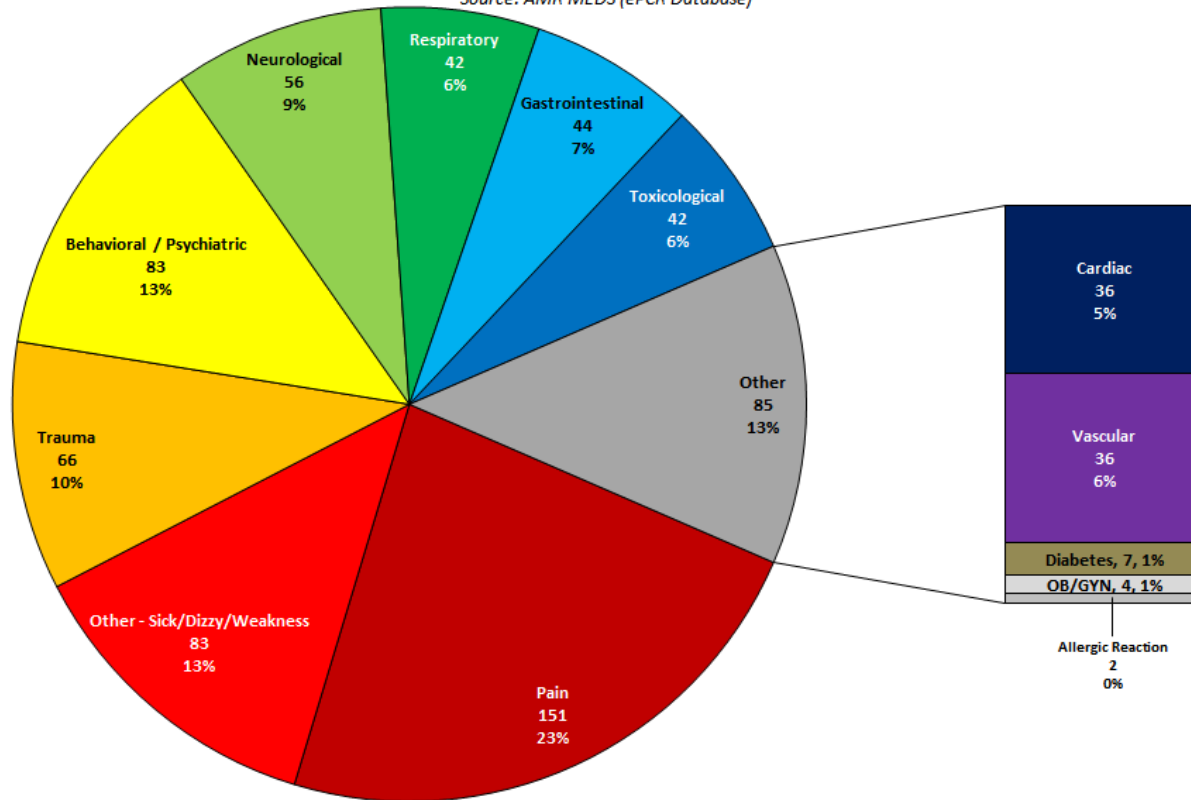
“Never Events” Affect a Wide Range of Patient Conditions

Patients with low, moderate or high acuity conditions can experience prolonged patient transfer of care events of greater than an hour. Patients with low acuity conditions may be better served by urgent care or same day appointments. Paramedic primary impressions are not verified clinical diagnoses. Paramedic primary impression categories reflect the field paramedic assessment of the patient prior to the Emergency Department.



**Paramedic Primary Impressions
Never Events (>1 Hour Handoff Time)
8/1/2013 - 5/31/2015**

Source: AMR MEDS (ePCR Database)



- Trauma “Never Event” data reflect patients who do not have major trauma by paramedic impression

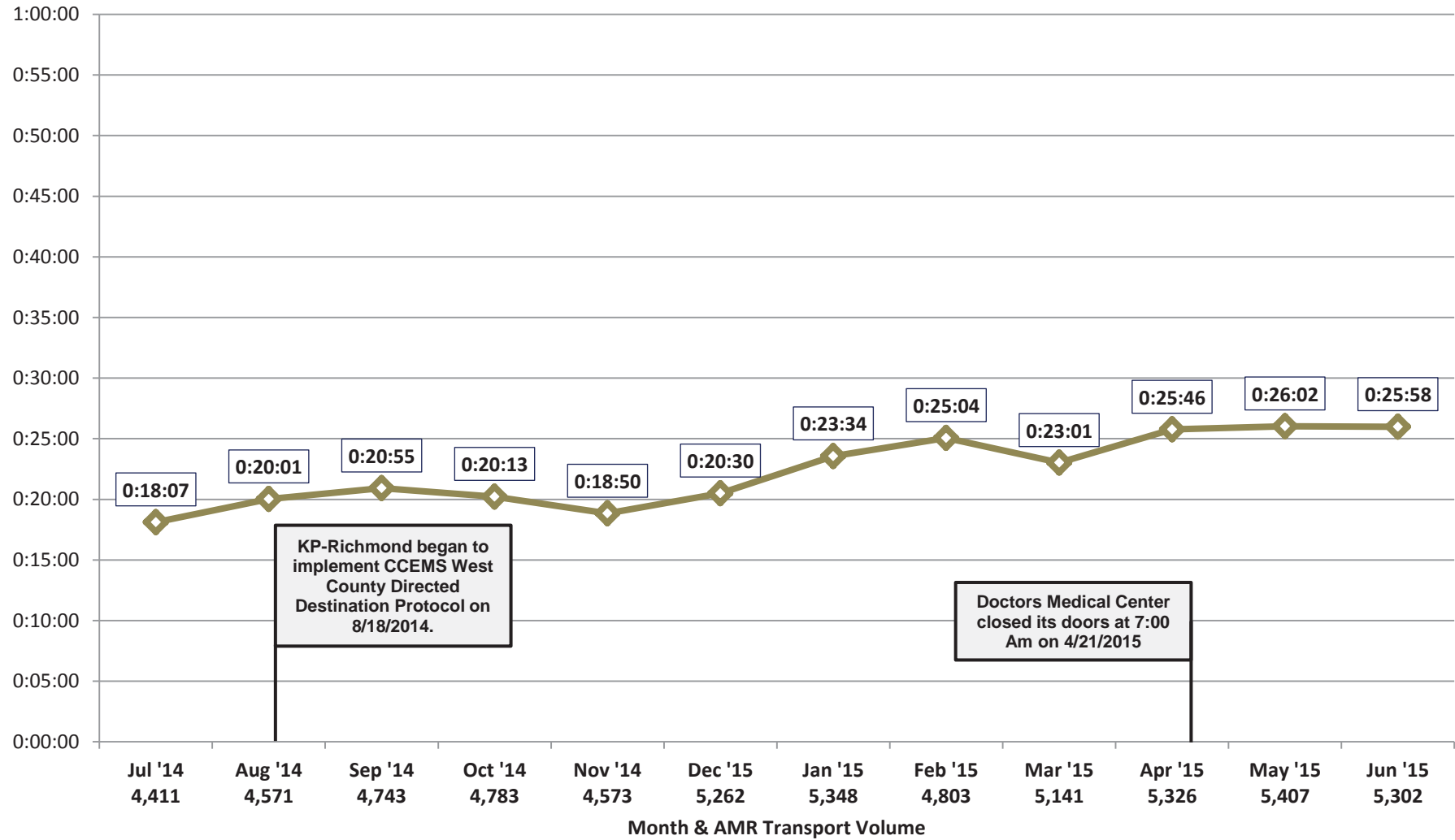


Patient Handoff Times by Facility 90th PERCENTILE OF ALL FACILITIES

July 2014 - June 2015

59,670 Transports (4,973 per Month)

Source: AMR MEDS (ePCR Database)



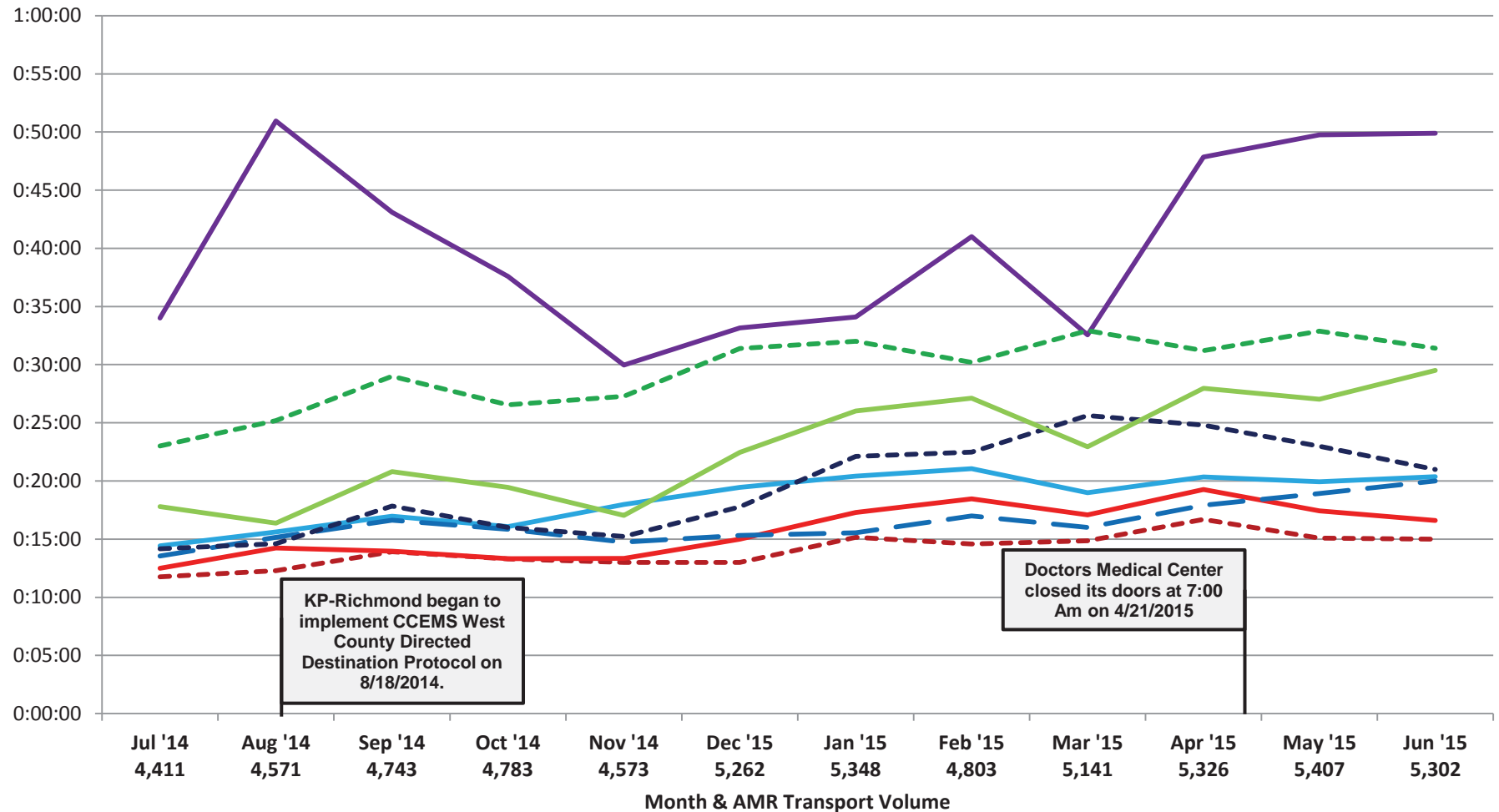


Patient Handoff Times by Facility (90th Percentile)

July 2014 - June 2015

Source: AMR MEDS (ePCR Database)

- - - John Muir - Concord
- John Muir - Walnut Creek
- Kaiser Hospital - Antioch
- · - Kaiser Hospital - Richmond
- - - Kaiser Hospital - Walnut Creek
- Contra Costa Regional Medical Center
- Sutter Delta Medical Center
- - - PES - Contra Costa Regional Medical Center





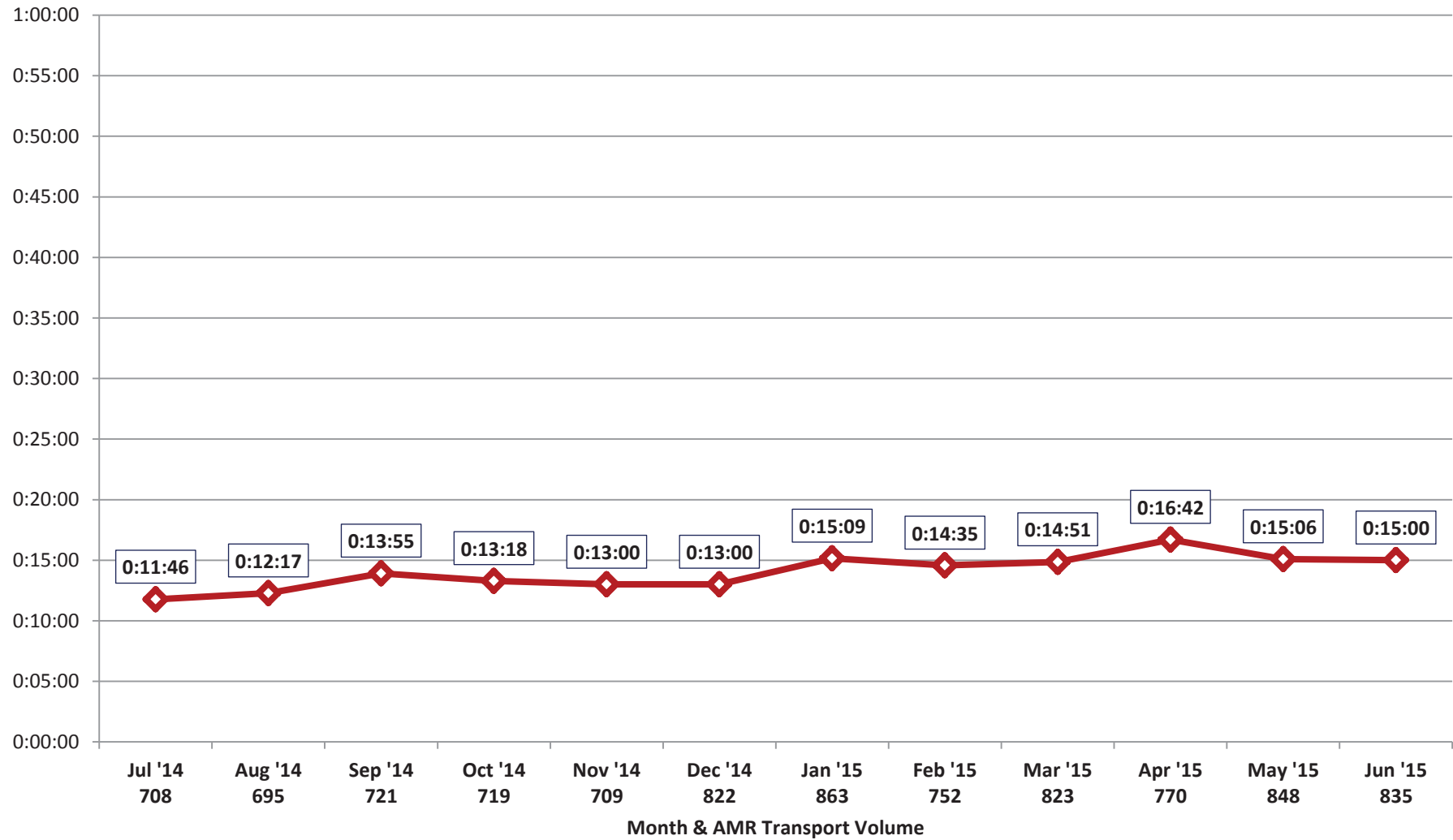
Patient Handoff Times by Facility (90th Percentile)

John Muir - Concord

July 2014 - June 2015

9,265 Total Transports (772 per Month)

Source: AMR MEDS (ePCR Database)





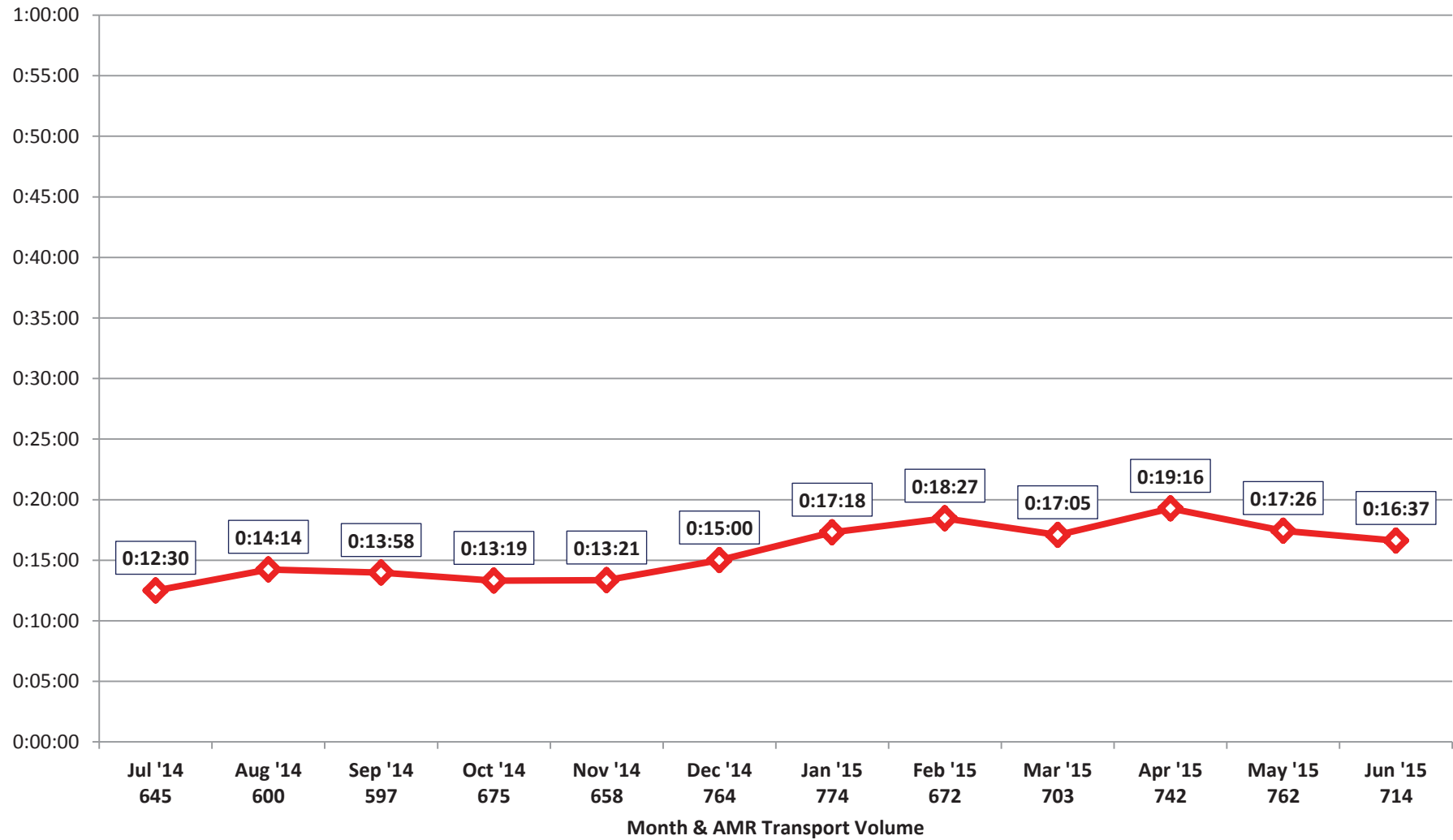
Patient Handoff Times by Facility (90th Percentile)

John Muir - Walnut Creek

July 2014 - June 2015

8,306 Total Transports (692 per Month)

Source: AMR MEDS (ePCR Database)





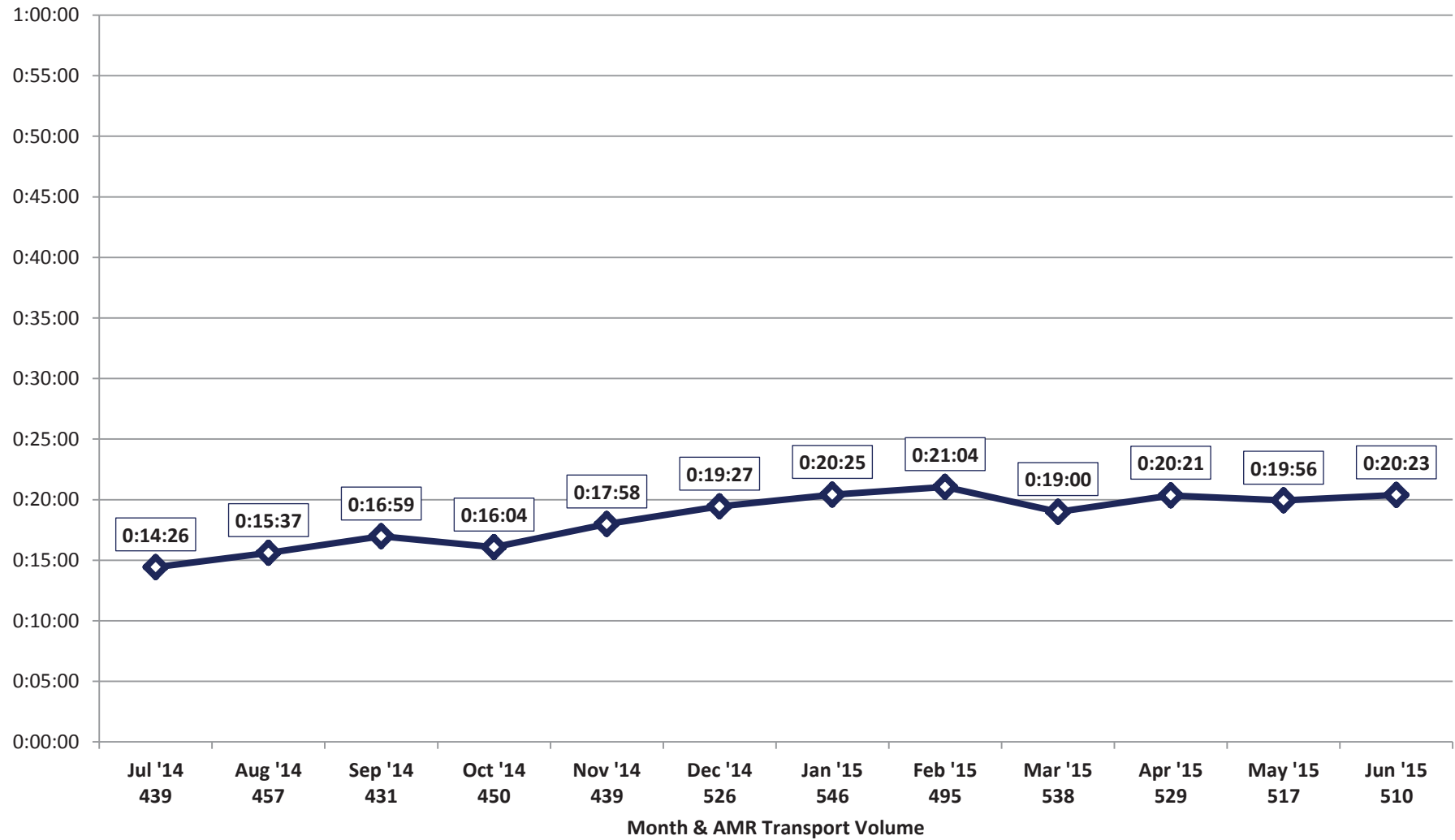
Patient Handoff Times by Facility (90th Percentile)

Kaiser - Antioch

July 2014 - June 2015

5,877 Total Transports (490 per Month)

Source: AMR MEDS (ePCR Database)





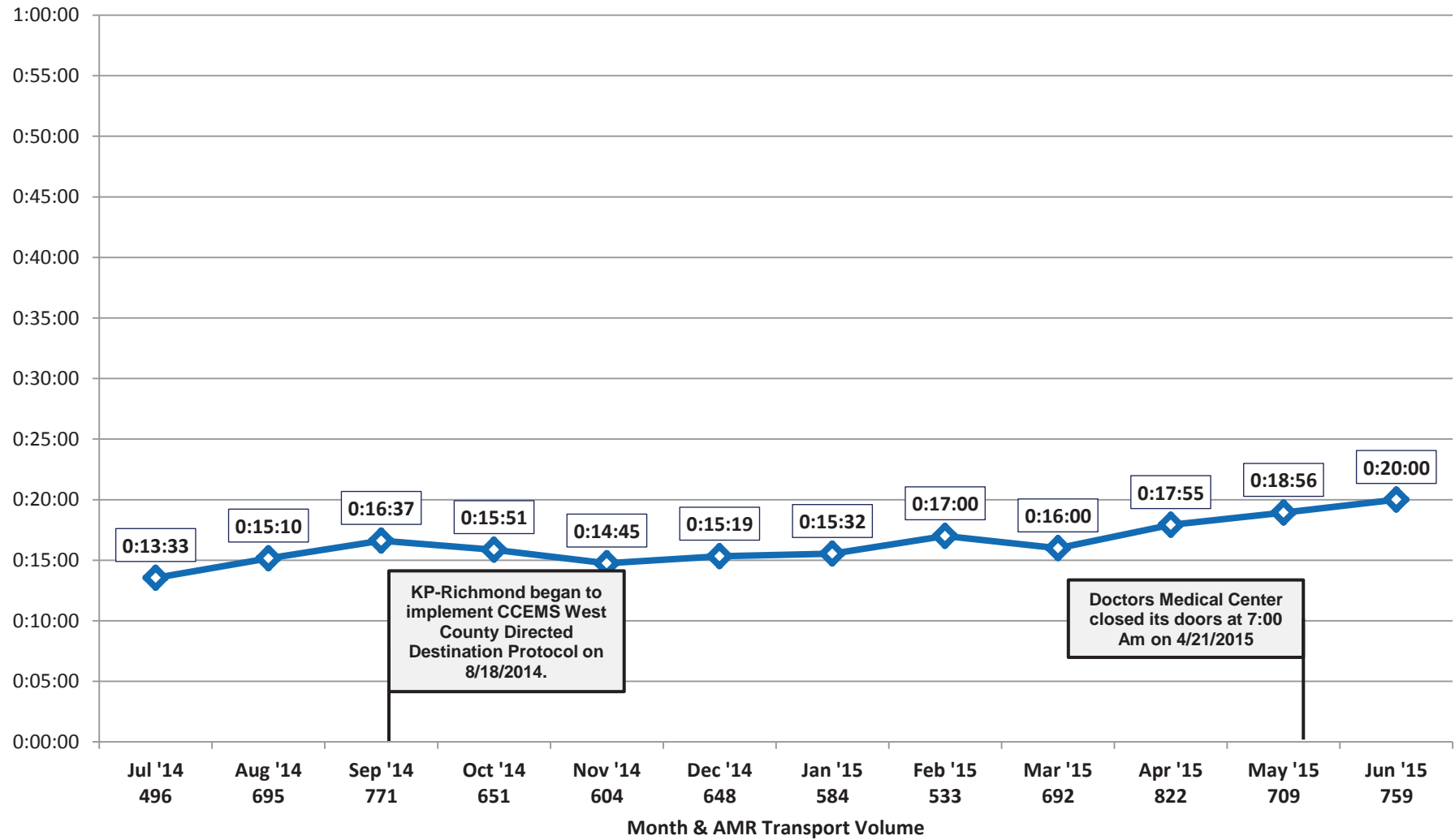
Patient Handoff Times by Facility (90th Percentile)

Kaiser - Richmond

July 2014 - June 2015

7,964 Total Transports (664 per Month)

Source: AMR MEDS (ePCR Database)





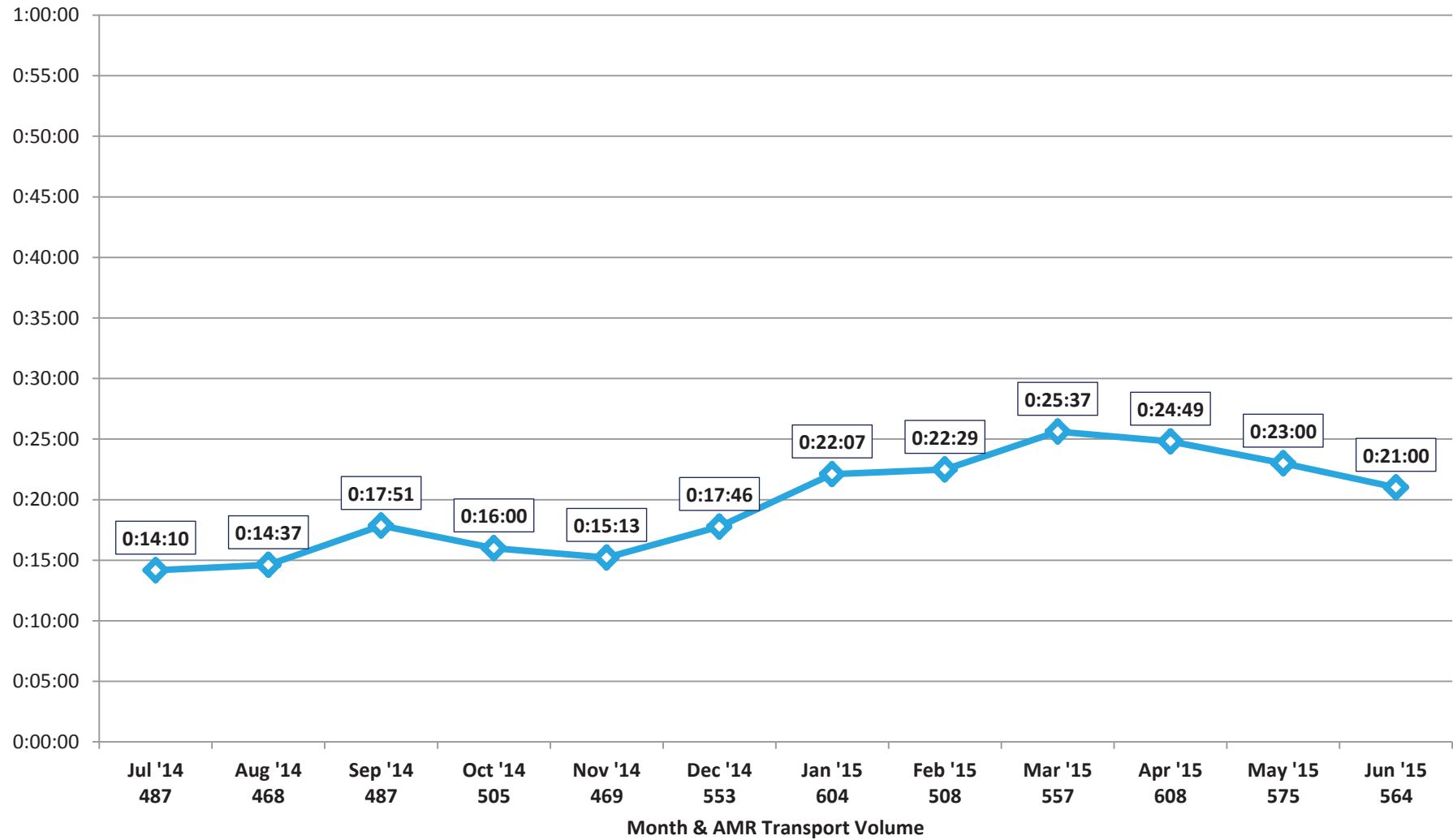
Patient Handoff Times by Facility (90th Percentile)

Kaiser - Walnut Creek

July 2014 - June 2015

6,385 Total Transports (532 per Month)

Source: AMR MEDS (ePCR Database)





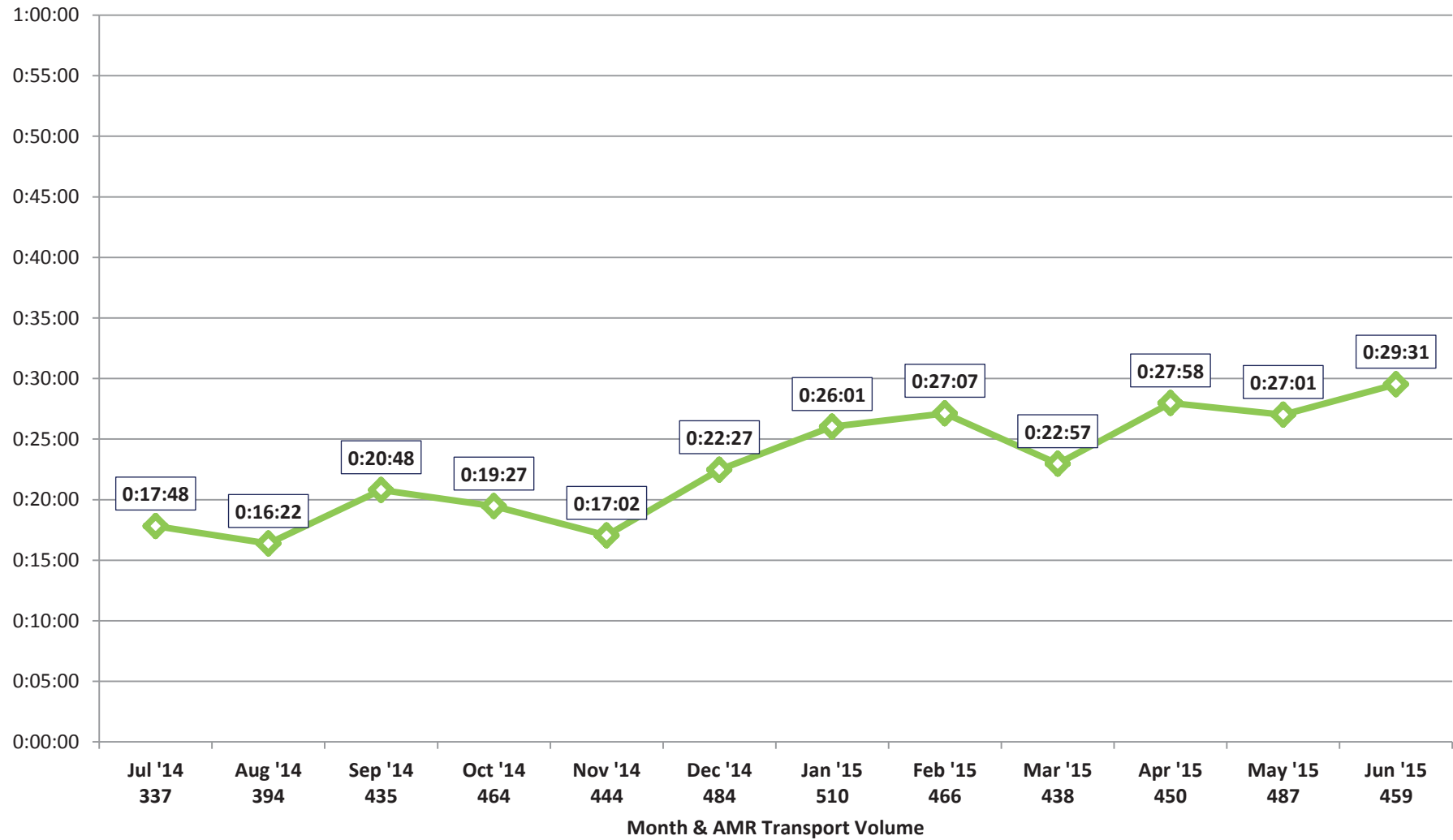
Patient Handoff Times by Facility (90th Percentile)

Contra Costa Regional Medical Center

July 2014 - June 2015

5,368 Total Transports (447 per Month)

Source: AMR MEDS (ePCR Database)





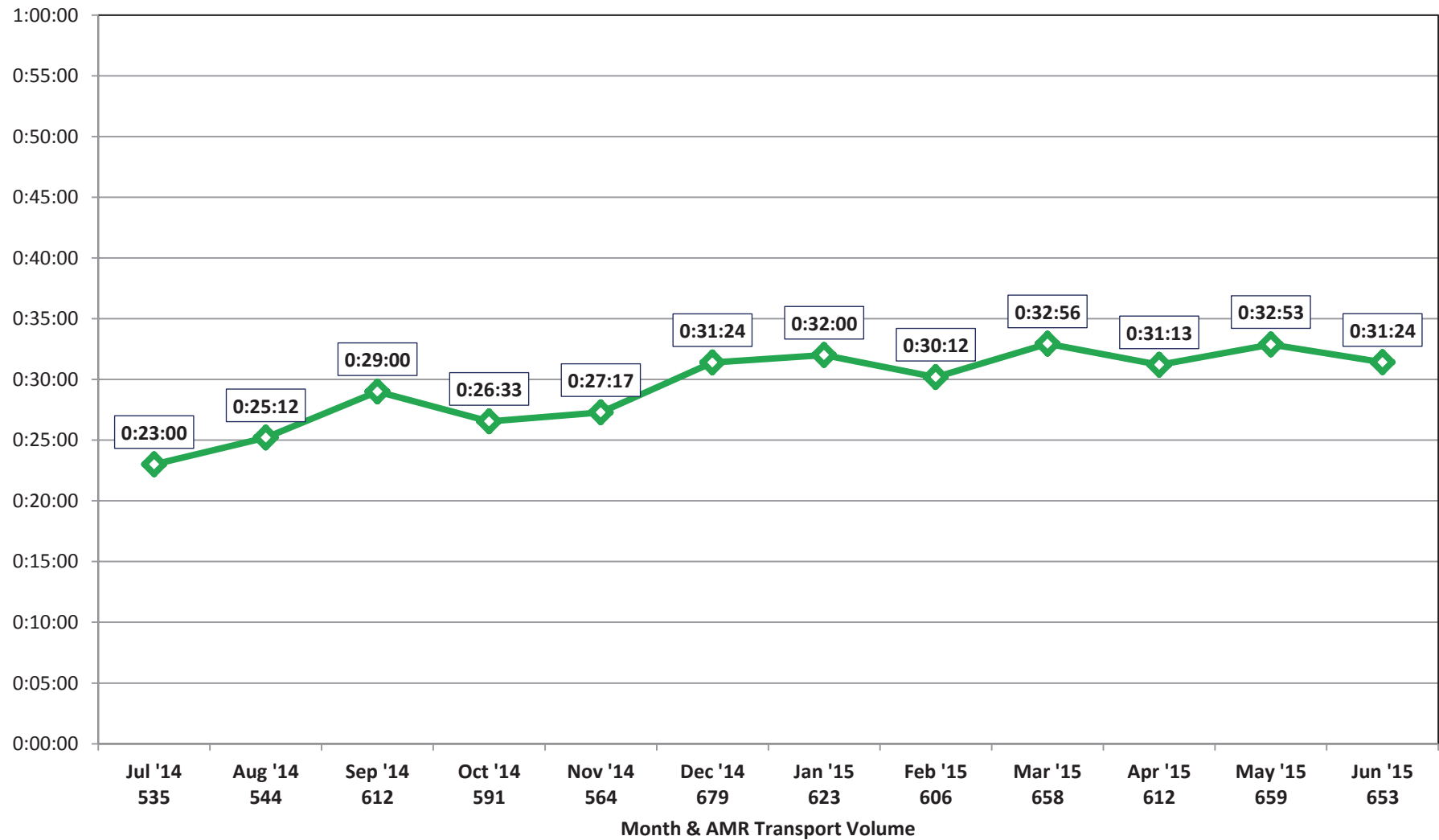
Patient Handoff Times by Facility (90th Percentile)

CCRMC - PES

July 2014 - June 2015

7,336 Total Transports (611 per Month)

Source: AMR MEDS (ePCR Database)





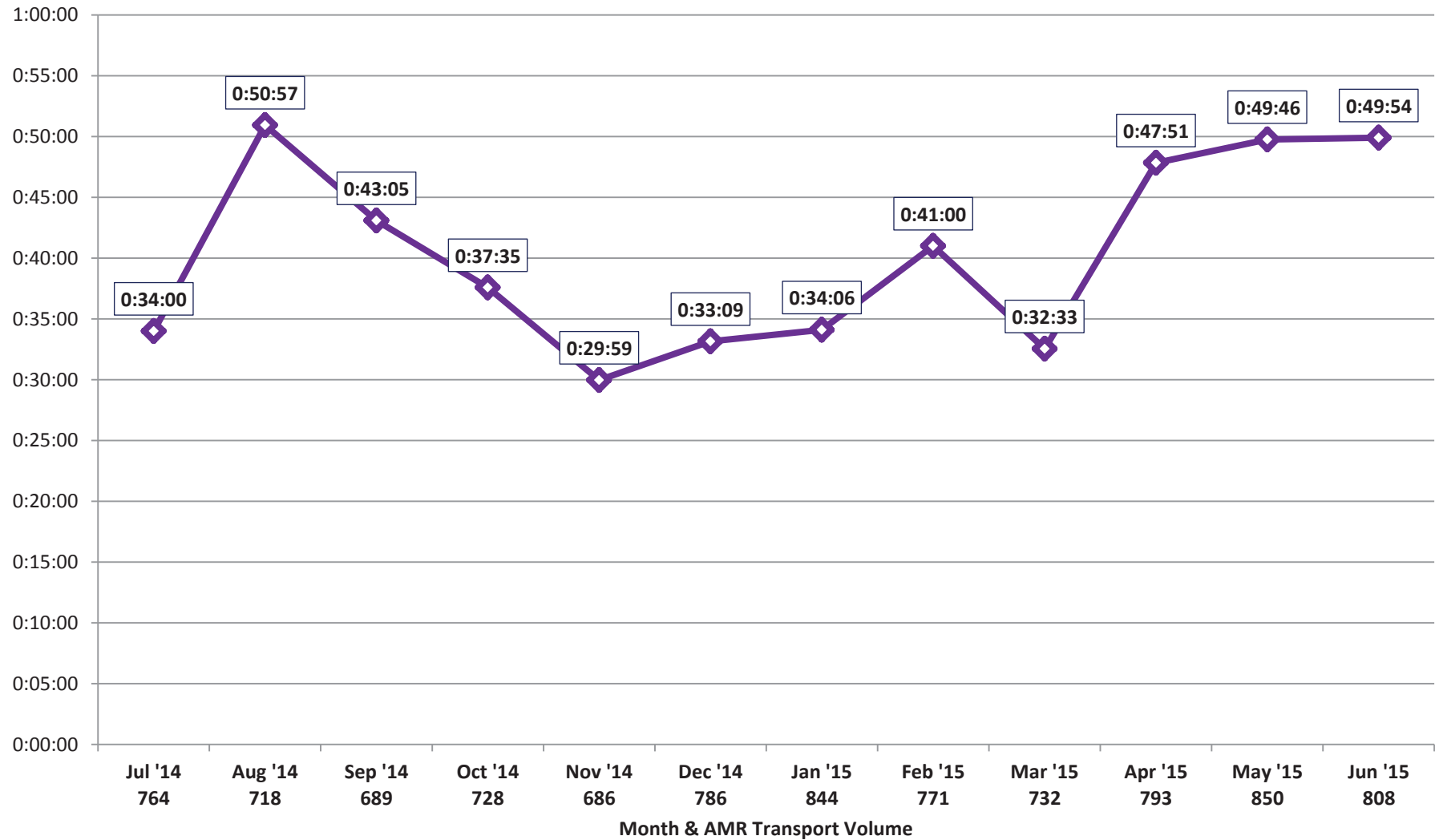
Patient Handoff Times by Facility (90th Percentile)

Sutter Delta Medical Center

July 2014 - June 2015

9,169 Total Transports (764 per Month)

Source: AMR MEDS (ePCR Database)



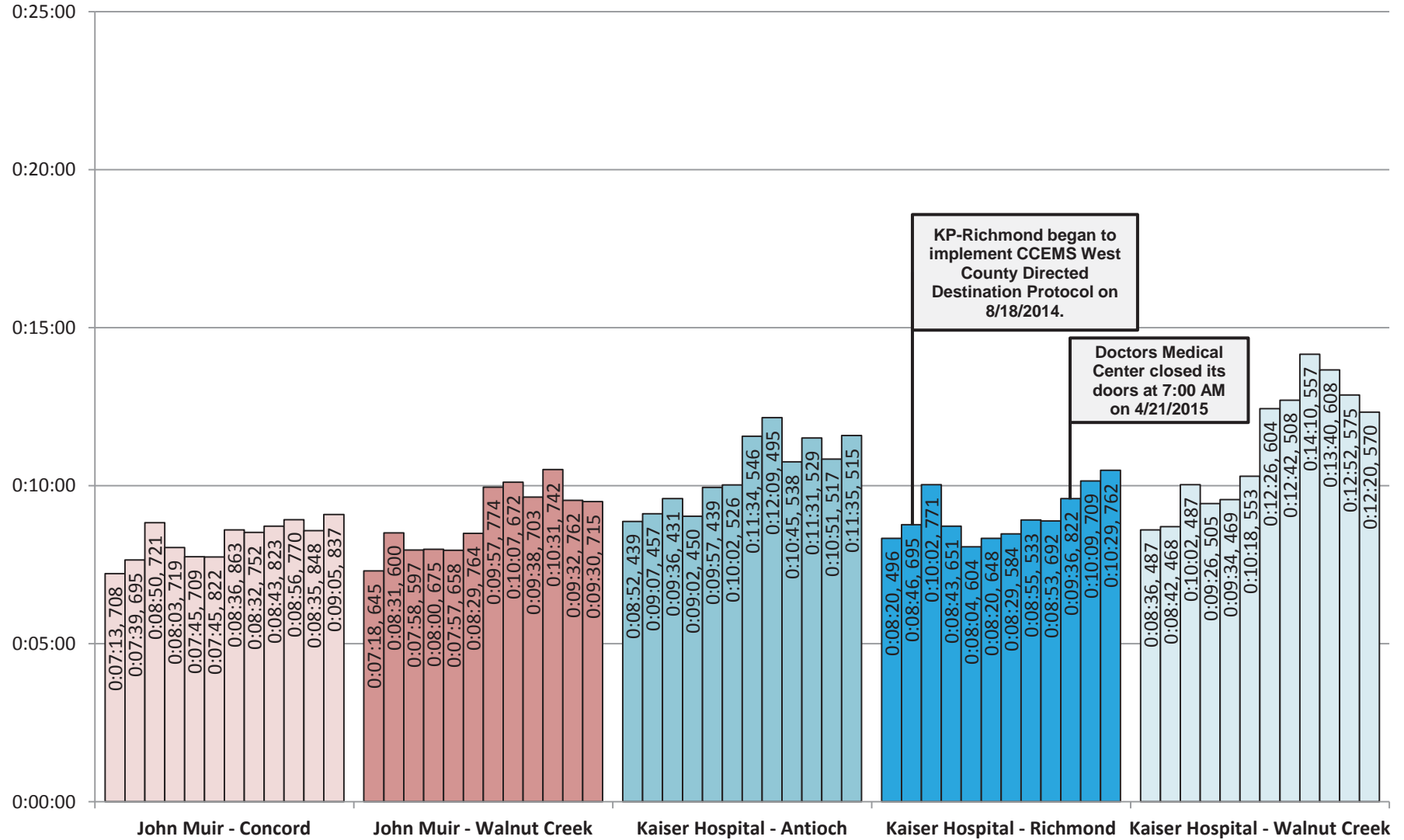


Average Patient Handoff Times by Facility

July 2014 - June 2015 by Month

37,814 Total Transports

Source: AMR MEDS (ePCR Database)



KP-Richmond began to implement CCEMS West County Directed Destination Protocol on 8/18/2014.

Doctors Medical Center closed its doors at 7:00 AM on 4/21/2015

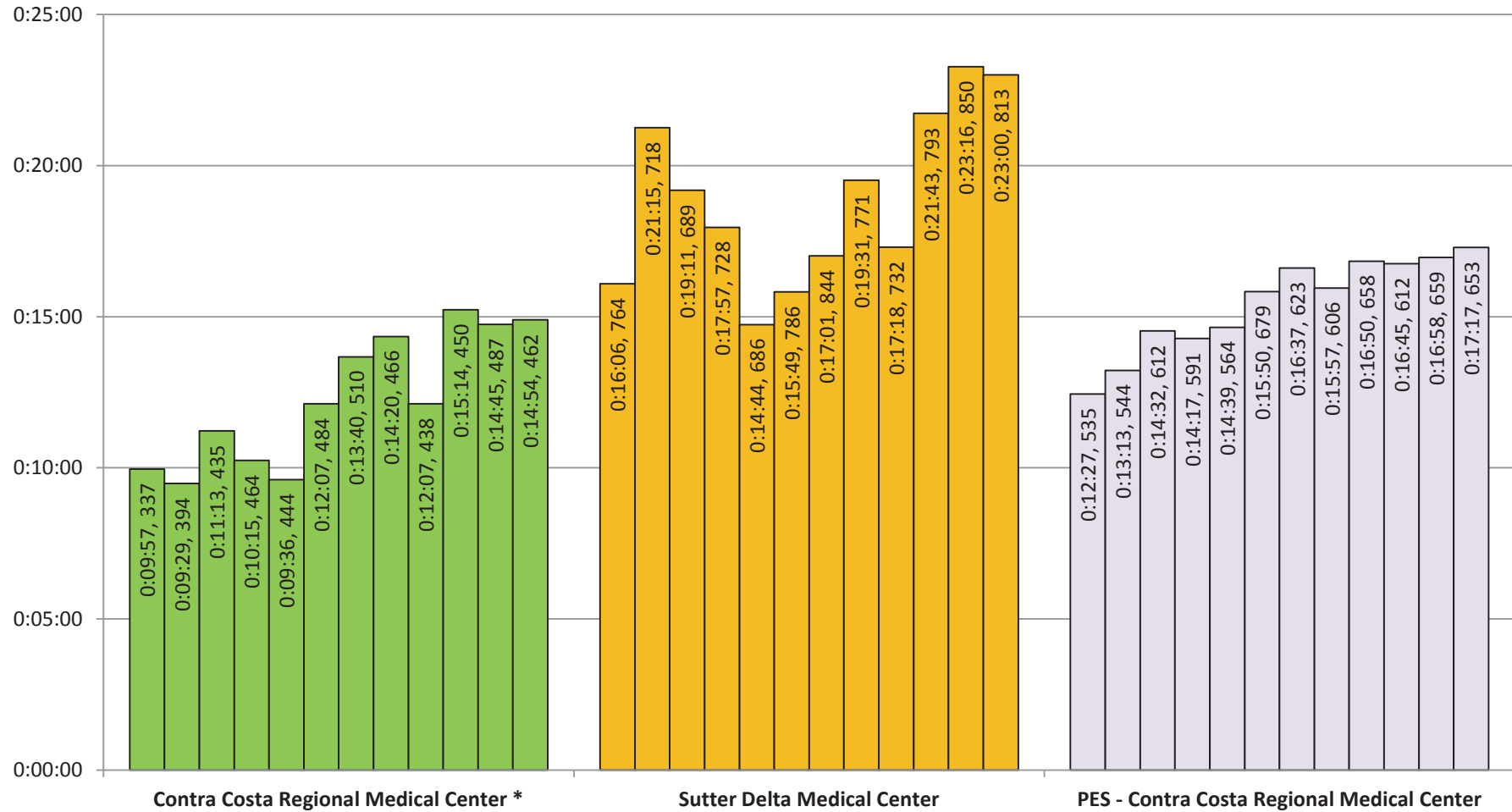


Average Patient Handoff Times by Facility

July 2014 - June 2015 by Month

21,881 Total Transports

Source: AMR MEDS (ePCR Database)



*Note: CCRMC data may include patients who were actually taken to PES. Contra Costa EMS is working to more accurately identify whether patients were taken to CCRMC ED or PES.