



Legislation Text

File #: 11-0636, **Version:** 1

Health Services Department recommending the Board consider the following:

- 1) Authorize the Health Services Director to execute three (3) multi-party Memoranda of Understanding with the American Heart Association, Marshall Medical Center, and each of the following: Mercy General Hospital, Sutter Memorial Hospital, and University of California, Davis Medical Center, on behalf of the County, to implement medical transportation protocols for patients experiencing electrocardiograph-confirmed ST-elevation myocardial infarction. These agreements were developed in accordance with master Memorandum of Understanding provided by the American Heart Association and involve no remuneration for services. Each Agreement has a term effective on final signature with termination upon notice by one of the parties.
- 2) Authorize the Health Services Director to execute future similar agreements, contingent upon approval by County Counsel and Risk Management, so long as the master document does not materially change, and the agreements involve no remuneration.

FUNDING: Not applicable.

Fiscal Impact/Change to Net County Cost: There is no Net County Cost associated with these Agreements. There is no remuneration between the parties pursuant to these Agreements.

Background: The American Heart Association has developed a master agreement format in support of their "Mission Lifeline" program, to engage local Emergency Medical Services (EMS) Agencies and hospitals in ensuring timely and appropriate response for patients suffering ST-elevation myocardial infarction. The S-T segment is "an isoelectric line after the QRS complex on the electrocardiogram. It represents phase 2 of the cardiac action potential. Elevation or depression of the S-T segment is the hallmark of myocardial ischemia or injury and coronary artery disease." Ischemia is an insufficient supply of blood to an organ, usually due to a blocked artery.

An ST-elevation myocardial infarction (STEMI) is defined as "a severe heart attack caused by a prolonged period of blocked blood supply that affects a large area of the heart. These attacks carry a substantial risk of death and disability and call for a quick response by many individuals and systems."

A STEMI can be differentiated from a non-ST-elevation myocardial infarction via a 12-lead electrocardiogram (ECG). The 12-lead ECG is "a test using a device that measures the electrical activity of the heartbeat and can help medical personnel determine if a heart attack has occurred and whether the heart attack was a STEMI or a non-STEMI event. When a 12-lead ECG is done, 12 wires ("leads") are attached to the arms, legs and chest. These wires each record electrical impulses, but from a different position in relation to the heart." Each of the County's ambulance service contractors utilizes Zoll 12-lead ECG monitors.

Preferred treatment for STEMI is return of blood flow to an ischemic area via a method commonly called percutaneous coronary intervention (PCI). If a STEMI patient can receive PCI treatment within

a defined timeframe, chances of recovery are much improved.

Hospitals are categorized as PCI capable and non-PCI capable depending on whether they have the means to deliver percutaneous coronary intervention, the preferred means of treating a STEMI heart attack patient if done within the critical 90-minute window. Non-PCI capable hospitals (also known as STEMI Referring Hospitals) can refer STEMI patients to PCI capable hospitals (also known as STEMI Receiving Hospitals). The base hospitals providing medical control and direction to the ambulance service contractors in the County are Marshall Medical Center and Barton Healthcare System, both of which are non-PCI capable hospitals. By signing these Agreements, they are agreeing to facilitate transfer of STEMI patients to an available PCI-capable hospital, per EMS protocol.

Reason for Recommendation: By approving the Director to execute these and future American Heart Association Agreements, the County is agreeing to include in the EMS Agency protocol the policy that ambulance service contractors shall transmit 12-lead ECG data to the County base hospital(s) and transport STEMI patients to PCI capable hospitals participating in the program.

The EMS Agency is in the process of developing the STEMI protocol for the County ambulance service contractors, proposed to become effective September 1, 2011, contingent upon approval by the Board of these STEMI Memoranda of Understanding.

Action to be taken following Board approval:

1. Department Director to execute the three (3) Memoranda of Understanding as noted.
2. Department to process and return the signed Memoranda of Understanding to the American Heart Association for final execution.
3. Department to develop additional, substantially similar agreements with other hospitals as appropriate, and Department Director to execute such agreements on behalf of the County, subject to County Counsel and Risk Management approval of each agreement.

Contact: Kathy Lang

Concurrences: County Counsel & Risk Management have approved the three (3) above-noted Memoranda of Understanding and will review individual agreements with each additional hospital as they are developed and processed.

References:

1. Mosby's Medical Dictionary, 8th edition. © 2009
2. www.americanheart.org glossary