Contra Costa Emergency Medical Services

CONTRA COSTA HEALTH SERVICES

Stroke System Program
Preliminary System Plan as of April 2010

The following is a description of the preliminary system implementation plan for the Contra Costa Stroke System. The final plan will require input and support from a Stroke System Advisory Group to be determined.

Our Objective: To develop a Stroke System in Contra Costa County within Local EMS Agency and stakeholder resources that is inclusive and supports enhanced stroke care for the community.

The process for application as a stroke center would be:

- Completion of Stroke Application/Interest form (see attached).
- Documentation of Joint Commission primary stroke center certification.
- Agreement to abide by EMS Stroke Designation Policy to be developed.
- Signed contracts defining roles and responsibilities of stakeholders, confidentiality, data access and management and CQI processes.
- Informational EMS site visit with mock stroke alert demonstration.
- Agreement to participate in the CDC: Cardiac Arrest Registry for Enhanced Survival (CARES).
- Fees of $5,000 annually per designated stroke center would be assessed for access to prehospital records, supporting stroke system oversight, and community educational efforts. Fees would be collected by Contra Costa EMS and first installment due with signed contract.

Contra Costa EMS Stroke Center Designation Criteria:

- Written agreement specifying the following:
  - Primary Stroke Center Certification by JCAHO.
  - Roles and responsibilities of stakeholders, confidentiality, data access and management, CQI and Stroke System oversight.
  - Description of processes, policies and or procedures for supporting CT availability and reducing CT diversion.
  - Compliance with EMS policy to report CT diversion via ReddiNet.
  - Annual Stroke Designation Center Fees of $5,000 supporting:
    - Hospital access to prehospital records to support stroke center data collection using JCAHO, CMS or American Heart Association, Get-With-The-Guidelines (GWTG) stroke registries.
      - Hospitals are encouraged to participate in stroke data systems that support GWTG and collect prehospital measures to evaluate stroke outcome for patients over the continuum of care.
      - Raw and risk adjusted stroke center data reports will be part of the Stroke System CQI oversight.
    - Support Stroke System CQI Oversight
  - Stroke System CQI will include:
    - Stroke center metrics
    - Prehospital metrics
    - Oversight meeting attendance and participation
  - A written community stroke education plan.

    - Participation and support for prehospital and community education.
    - Willingness to participate in web-based patient outcome reporting in the Cardiac Arrest Registry for Enhanced Survival (CARES).
- Preliminary or provisional stroke designation may be considered on a case-by-case basis if facilities are in the process of "Primary Stroke Certification," by January 2012. Provisional stroke-designated hospitals would need to have their JCAHO Primary Stroke Center Certification be completed by January 1, 2013.

Stroke Scale: The Cincinnati Stroke Scale will be used as the prehospital stroke identification assessment tool. This is currently the tool used in our system for stroke patients.

Training: Prehospital training will be based on the evidence-based educational program for prehospital providers developed by the National Stroke Association called "Stroke Rapid Response." The educational module has a turn-key training package that is off the shelf. These prehospital training materials are efficient and cost effective. Preliminary pre-stroke system prehospital training focusing on assessment and prehospital patient care priorities will begin in September 2010. Final training of all prehospital providers will occur in September 2011, including all destination protocols, so that prehospital providers are fully prepared for the January 2012 stroke system launch.

Data Management: Stroke Coordinators at each facility will be the EMS liaison contacts for their stroke center. They would be given access to Transport Prehospital ePCR records via MEDS (AMR's electronic patient record system) PCR viewer to complete their data collection. Fire stakeholders using Zoll electronic patient care system (representing < 10% of all EMS transports) will be accessible through the Fire CQI Coordinators and EMS Agency.

Stroke Center Coordinators would periodically submit copies of their stroke center risk-adjusted reports based on whatever reporting system they use (e.g. JCAHO, GWTG and CMS), to track stroke system hospital performance. Risk adjusted data may take up to 6 months for hospitals so EMS may only require these reports annually.

In addition, CT down-time data will be compiled using Reddinet for each facility at appropriate intervals. Performance data would be disseminated to stakeholders through EMS System reports and CQI meetings and presentations. CT downtime quarterly reporting has already begun at the EMCC Facilities and Critical Care Committee.

Prehospital Stroke system performance monitoring: Evidence-based hospital and prehospital performance measures would be used to evaluate stroke system performance, rather than case-by-case review. Prehospital performance would be based on applicable metrics from best practice programs such as CDC/North Carolina Prehospital Stroke Toolkit (see attached). No separate EMS database for the stroke system would be required thus streamlining data management. The stroke toolkit performance measures for the stroke system include:

- Prompt recognition of stroke through the use of stroke screening.
- Documentation of stroke symptom onset.
- Screening the blood glucose of the patient for hypoglycemia.
- Possible use of appropriate/abbreviated thrombolytic checklist.
- Maintaining EMS scene times of 10 minutes or less.

- Rapid transport (with early notification) to a stroke center.

Automated prehospital stroke system reports would be built for these metrics into the current prehospital electronic patient care documentation platforms; e.g., Zoll and MEDs. The EMS Agency would compile "blinded" stroke center reports at intervals with the risk-adjusted data provided from the centers.

Patient/Community Education: A best practice evidence-based patient education program supported by appropriate materials would be adopted by the entire stroke system. Stakeholders would be encouraged to use these materials to assure a consistent message of stroke recognition and support for calling 9-1-1 is promoted in the community. This could be further integrated and supported as part of the Contra Costa EMS *HeartSafe* community program. For more information on the *HeartSafe* community program contact Pam Dodson, RN, Prehospital Care Coordinator at (925) 646-4690 or email at pdodson@hsd.cccounty.us.

Stroke System Oversight: Appropriate members for the Stroke Advisory Oversight Group, would be identified among participating stakeholders. Stroke system performance reports, would be made available at appropriate intervals, and biannual or annual oversight meetings could be considered. These meetings would be hosted by participating stroke centers. Patient safety events or concerns would be directed through the current prehospital patient safety, reporting program "EMS event reporting." For more information on our EMS event reporting program visit www.cccems.org.

Timely feedback and respectful, solution-focused, communication would be expected from prehospital and hospital participants in the performance of stroke system patient care and program oversight. Contra Costa EMS encourages stroke system participants to strongly support patient safety, by promoting collaborative teamwork, between the field and hospital providers.

Appropriate Stroke System performance metrics would be available for public review on the Contra Costa EMS website at www.cccems.org.

For Questions contact:

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