TIME CRITICAL DIAGNOSIS-TRAUMA SYSTEM TASK FORCE
MEETING THREE-FEBRUARY 25, 2009
MEETING HIGHLIGHTS

- **Those participating:** Dr. Samar Muzaffar, Department of Health and Senior Services (DHSS); Dr. Lynthia Andrews, State Advisory Council; Angela Christesen, Salem Memorial District Hospital; Karen Connell, DHSS; Dr. Jeff Coughenour, University Hospital and Clinics; Lori Davis, North Kansas City Hospital; Marcia Dial, Scotland County Memorial Hospital; Dr. Robert Dodson, St. John's Regional Medical Center; Kelly Ferrara, The Vandiver Group; John Fuller, St. Anthony Medical Center; Shirley Gastler, DHSS; Dolly Giles, Pike Memorial County Hospital; Robert Grayhek, St. Francis Medical Center; Christina Green, Cardinal Glennon Children's Medical Center; Paul Guptill, Missouri Hospital Association; Mike Hicks, Mid-America Regional Council; Shannon Hobson, Freeman Health Center; Sara Howard, The Vandiver Group; Jody Hyman, DHSS; Dr. Kelly James, Centerpoint Medical Center; Antoinette Kanne, St. John's Mercy Medical Center; Jerry Kirchhoff, Air Evac Lifeteam; Mary Kleffner, DHSS; Amy Knoernschild, Lake Regional Health System; Ken Koch, St. Charles County Ambulance District; Diana Kraus, St. Louis Children's Hospital; Dr. Jeffrey Leonard, St. Louis Children's Hospital; Dean Linneman, DHSS; Dr Charles Ludy, Capital Regional EMS; Bryant McNally, Missouri Hospital Association; Deborah Markenson, DHSS; Cathy Menninga, Golden Valley Memorial Hospital; Michelle Miller, Missouri Foundation for Health; Julie Nash, Barnes-Jewish Hospital; Greg Natsch, DHSS; Carol Nierling, University Hospital and Clinics; Patty Parrish, CoxHealth; Dr. Douglas Schuerer, Washington University; Ted Shockley, St. John's Regional Hospital; Mark VanTuinen, DHSS; Sandy Woods, St. John's Regional Medical Center; Dr. Timothy Woods, CoxHealth; and Monroe Yancie, St. Louis Fire Department EMS; Beverly Smith, DHSS.

A total of 44 individuals participated in the third meeting of the Time Critical Diagnosis (TCD)-Trauma System Task Force. The American College of Surgeons/Committee on Trauma (ACS/COT) will conduct a review of Missouri's trauma system on June 22-25, 2009. The Missouri Foundation for Health provided funds so the Department of Health and Senior Services (DHSS) could contract with ACS/COT to conduct this review.

Mark Van Tuinen, Bureau of Health Information, DHSS, presented an overview of hospital discharge, emergency room, mortality and motor vehicle crash and outcome data that is available on-line through the DHSS website http://www.dhss.mo.gov/MICA/. He demonstrated how the data elements could be selected and tables and maps compiled to analyze trends and rates of incidence of various trauma issues for the state and select regions. Shirley Gastler, Bureau of Emergency Medical Services, provided an overview on the Missouri Ambulance Reporting System (MARS) http://emsweb1.dhss.mo.gov/mars/ and the MOSTORM system that supports the required data elements for the trauma registry. Ms. Gastler highlighted key data elements collected, the connectivity between programs, and the reports available.

Level IV Center Proposed Regulations

Dr. Muzaffar reviewed the changes in the draft of the proposed regulations that had been made based on the input from the conference call that was held on January 28, 2009. The group subdivided by regions to discuss questions regarding the current draft.

1. **What role do small hospitals play in the system?**

   - Evaluate, stabilize and facilitate rapid transfer of severely injured patients to higher level of care as indicated. Follow standardized protocols and provide medical direction.
   - Provide access to care in the rural regions of the State.
   - Serve as a community resource.
   - Report system data elements and participate in regional quality assurance processes to improve quality of patient care.

1. **Do the proposed regulations outline the criteria your region believes are appropriate for Level IV centers?**

   Overall the current regulation draft is close to complete. The following issues were raised:

   Distance between trauma centers [19 CSR 30-40.450 (1) (M)]

   - Currently the regulation states that there shall be no level IV trauma center designated within 15 miles of any Missouri level I, II or III trauma center.

     Support to keep current provision or modify from 15 to 30 miles:
     - Maintains consistency with current practice for Levels I, II and III.
     - Helps minimize patients being transported to lower level trauma center when their conditions warrant care at a higher level center.
     - Do not currently have quality assurance process that can provide timely feedback to evaluate and improve appropriate patient routing and care.

     Support to eliminate mileage restriction:
     - Recommend that trauma center designation be based on capacity of facility.
     - The restriction creates an unfair advantage for some institutions.
     - Mileage may be somewhat arbitrary. Many variables influence transport time.

   Performance improvement patient safety measures [19 CSR 30-40.450 (4)(B)7]

- Currently the regulation states that "trauma patients remaining greater than six (6) hours prior to transfer will be reviewed as part of the performance improvement and patient safety program."

  Suggestions to reduce time from current six hours to two hours to 60 minutes (range of suggested time frame) for time from arrival at emergency department through assessment and stabilization to transfer for patients determined to be in either trauma classification I or II.

Staff and training issues

- Trauma program manager requirement was reviewed. It currently states that "the trauma program manager shall be a registered nurse or other qualified individual." 19 CSR 30-40.450 (1) (F)

  Some believed the term "qualified" was too broad of term and more specific language should be used in the regulations. This term is defined in the definitions section 19 CSR 30-40.410 (1) (LL).

- Discussion on various trainings and certifications that should be required for members of the trauma team.

2. Does your region support Level IV regulations as discussed?

All regions expressed support for the regulations with the modifications they had proposed.

3. What supports will out-of-hospital services need to assure that trauma patients are transferred to appropriate center if add Level IV Centers?

- Education on following items:
  - Trauma system (coordinated network with support available from higher level centers and regional committee to all within the system),
  - Trauma team roles,
  - Field triage protocols,
  - Trauma classification criteria,
  - Standardized injury specific protocols, and
  - Hospital and out-of-hospital performance improvement processes.

- Make resources available
  - Field triage protocols, address role of Level IV centers in out-of-hospital protocols,
  - Trauma classification criteria, and
  - Standardized injury specific protocols.

- Practices
  - Case reviews and feedback,
  - Clear performance improvement indicators, and
  - Participation in regional committee and support from regional medical director.

4. What incentives could be created to increase the number of hospitals that participate in the system as a Level IV Trauma Center?

- Provide funding through grants to cover costs incurred by hospitals to meet Level IV center designation (e.g. staff training, equipment purchases, mechanism to support data collection and reporting).
- Complete assessment of needs of hospitals to meet criteria to inform plans.
- Provide training opportunities.
- Conduct outreach to eligible hospitals.
- Market professional benefits that trauma centers gain by participating in regional quality assurance discussions and networking with colleagues from other trauma centers in regional committees.
- Promote public value of trauma center designation. This designation represents a higher level of commitment to the community. Designated centers follow standardized protocols and participate in performance improvement processes for both out-of-hospital and hospital practices at the institution, regional and statewide basis.
- Identify ways to get buy-in from local physician groups.
- Evaluate if there is financial advantage to being a Level IV Center.

Helicopter Early Launch Process Guidelines

Jerry Kirchhoff presented a PowerPoint that reflected the Helicopter Early Launch Process Guidelines that the Missouri Air Ambulance Subcommittee of the State Advisory Council developed and finalized in January 2009. Due to limited time at this meeting, full discussion of this topic is planned for the next meeting. This discussion will address the criteria and times for use of helicopters.

Trauma Classification Criteria and Field Triage Protocol

An extensive discussion was held in each of the regional groups regarding the protocol and criteria. The following issues were raised by the regions.

Trauma Classification Criteria

There were a number of modifications proposed for the draft classification criteria. These will be incorporated into the next draft and shared with the group. Strategies recommended for adoption of the common classification framework:

- Mandate training when first introduced and annually thereafter. Provide training to EMS medical directors and hospitals. Use trauma coordinators and regional committee structure to conduct trainings on classification criteria.

- Issue via e-mail with reply and follow-up.

- Consider making use of classification criteria a requirement in the regulations.

Field Triage Protocol

There were also a number of modifications proposed for the field triage protocol that will be incorporated into the next draft. Strategies recommended for adoption of field triage protocol included:

- Charge regional committees with this responsibility to adapt training and use of protocol within the region.

- Consider producing a more succinct version that could be used as a field tool by EMS personnel.

- Educate EMS system directors and medical directors.

- Provide continuing education units for out-of-hospital personnel that complete field triage training.