The Department of Health and Senior Services
Time Critical Diagnosis
Quality Assurance Meeting
1/18/2011

Meeting Highlights

Attendees: Teri Ackerson, Mark Alexander, Lisa Anderson, Shawn Andreasen, Kristi Baden, Rebecca Baker, Stephen Barnes, James Baysinger, Carol Beal, Peggy Brand, Jo-Ann Burns, Annette Casey, Ben Chlapek, Karen Connell, Susan Crum, Peggy Crutchfield, Rich Dandridge, Lori Davis, Linda Dean, Doug DeVore, Robert Dodson, Lisa Donnelly, Rose Donnelly, Joan Eberhardt, Beth Eidson, Rebecca Eller, Maureen Falcone, Noreen Felich, Mary Fischer, Brian Froelke, Carolyn Galkowski, Shirley Gastler, Cindy Gillam, Pam Golden, Paul Guptill, Carol Hafley, Robin Hamann, Heather Hawley, Belinda Heimericks, Lanis Hicks, B.J. Hipsky, Emily Hollis, Lindy Huff, Lisa Hutchison, Stacey Jett, Janice Kelley, Manish Kharche, Amy Knoernschild, Diana Kraus, Kathy Lainhart, Jin-Moo Lee, Kaisey Martin, Nelda Martin, Willie Maxwell, Steve Marso, Darla Merideth, Amy Mehaffey, Michael McGee, Bryant McNally, Janelle Miller, Jason Moburg, Susan Mutto, Samar Muzaffar, Julie Nash, Carol Nierling, Tony Occhipinti, Jennifer Parreira, Patty Parrish, Sharon Pulver, Monica Pfau, Cheryl Phillips, M. Jane Puszkar, Lisa Randazzo, Beverly Raymond, Lisa Riggs, Kathe Russo, Chris Schulze, Anita Smith, Jace Smith, Mary Spencer, Debbie Sprandel, Patsye Stanley, Rita Stiles, Jean Stippich, Debbie Summers, Jessica Thomas, Kelly Thomas, Kathy Vickery, Myrna Ward, and Jason White.

The TCD Quality Assurance workgroup met for the first time to establish goals and objectives related to building a data registry for stroke and STEMI and to pull information and strengthen the existing trauma registry database. An overview of national and state registry information was provided by The University of Missouri-Columbia department of Health Informatics. This allowed participants to observe benchmarks and data elements that are already considered national benchmarks. The groups then broke up into pre-hospital, trauma, stroke and STEMI to discuss logistics for the workgroups and to begin work on the establishment of data points specific to Missouri.

Logistics & Documents provided to the group included the following:

- Guiding Principles
- Ground Rules
- QA Workgroup Charter
- QA Workgroup Leads

Quality Improvement Work Groups	Work Group Lead	DHSS Lead Support
STEMI QA	Dr. Steve Marso, Kansas City Lisa Riggs, RN, MSN, Kansas City Nelda Martin, St. Louis	Cindy Gillam
Stroke QA	Dr. Jin-Moo Lee, St. Louis Dr. Marilyn Rymer, Kansas City Debbie Sprandel, RN, Cape Girardeau Janice Kelley, Springfield	Belinda Heimericks Karen Connell
Trauma QA	Dr. Robert Dodson, Joplin Dr. Doug Schuerer, St. Louis Patty Parrish, Springfield Patsye Stanley, St. Louis	Samar Muzaffar, MD Joan Eberhardt
Pre-Hospital QA	Dr. John Russell, Cape Girardeau Dr. Brian Froelke, St. Louis	Shirley Gastler

*These documents were emailed to participants prior to the meeting. Please contact Emily Hollis if you need these documents resent.

MU Health & Informatics Presentation:

Dr. Lanis Hicks & Manish Kharche presented Structure and Use of Healthcare Registries based on nationwide and Missouri specific Trauma, Stroke and STEMI information.

Dr. Hicks is the current Interim Director of the University of Missouri-Columbia Department of Health Informatics. With over 30 years of experience in health informatics, health economy and evaluation of cost and quality measurements, Dr. Hicks a great asset to TCD in data registry development.

Manish Kharche has worked under Dr. Hicks' since May of 2009 as a graduate research assistant. He is pursuing a duel degree in Masters of Healthcare Administration and Masters of Science in Health Informatics. Mr. Kharche will graduate in May of 2011.

To view the slides from the presentation, please visit:
http://www.dhss.mo.gov/living/healthcondiseases/chronic/tcdsystem/pdf/StructureUseHealthcareRegistries.pdf

Summary of MU Health Informatics Q & A session

- Are there finances secured to build the registries? Yes.
- There seems to be a growing trend to make QA data publicly available. There is a national trend towards doing this as it encourages facilities to quickly improve quality and services (for example, current CMS activity with infection rates). Manish states that

literature is supporting this trend. The state has no plans to open the data to the public but could share reports in aggregate. There is hope that regional level data will also be provided in aggregate.

- As there is the possibility data will be open to the public in the future due to the national trend, we need to get this data registry correct now so when and if the public has access to data in some form, the data will be accurate. The overall goal is to have better input and better outcomes.
- Vendors: Who will build and maintain? The state has gone through several transitions and now is using Imagetrend. The state will use Imagetrend with stroke and STEMI data collection also. Collector has built an interface for the trauma registry for Collector users. American Heart Association and Imagetrend have been working together to discuss interfacing. We hope that we can bring on an EPI person from the department to work with the report and provide data analysis.
- Will data be audited in the databank?
- TCD has given us the opportunity to have the whole department working with us in a way that was not available when the Trauma data registry was built. There also were not audits with trauma and we have the opportunity to address the data, registry, and performance improvement issues that trauma faces. There is an opportunity to make big steps towards a more comprehensive database for trauma, stroke and STEMI.
- The group would like to have more knowledge of the data on Imagetrend to avoid the same problems that we have had in the past. It will be good for stroke and STEMI to have clear guidelines, processes; learn from the growing pains trauma has and is navigating through; and establish what criteria, data elements and processes are needed.
- A unique aspect to this group is the four proposed levels for trauma, stroke, and STEMI. Some data points are equal and the metrics will apply to all four levels. Others may only apply to certain levels depending on who is doing what.

Full Group:

Work Group Charter and Mission Statement
Ground rules
Roles of Members
Review and discuss professional groupings

Subgroups: Breakout Sessions

Pre-Hospital (all three conditions)
Hospital Trauma
Hospital Stroke
Hospital STEMI

Tasks for each sub-group

- List what your institutions want from this effort
- Review tasks & compile work plan with respective leads for each major task.
- Determine meeting approach(es) you will use, e.g., webinars, in-person meetings and support needed from DHSS staff
- List future meeting dates

Breakout Sessions

(see pages 6-12 of this document)

Full Group breakout reporting

Stroke: Group decided they would like to build quality metrics on CMS core measures. Identified two other areas would like to build further. 1. To increase surveillance of acute therapies. Looking at intervals with patient transfer. Transfer times, etc. Link individual patient data from pre-hospital to hospital. Do not want to lose pre-hospital data. 2. In-hospital complication as well as outcomes and longer term outcomes. They will have two groups within the subgroup:

1. Acute measures
2. Demographics outcomes

* Group will meet Tues., Feb. 15th and also Tues., Feb. 22nd from 1 to 2 on conference call.

STEMI: Discuss from institution level. Discuss barriers, time, money, effort, duplicity. Hope to develop strategy to minimize barriers. Identified several national databases of elements they could review and choose from to pick. Thought there should be minimal standards for Levels III and IV, and higher standards for Levels I and II. Will likely need to roll out in a stage-fashion. One task will be to determine how one might roll out the collection changes in stages. First tackle the minimal metrics, collect CMS metrics together then decide what the next level of data elements we would collect. Some concern about critical access hospitals. Want to engage them midway to discuss what they would collect.

*Group will meet by conference call on Thurs., Feb. 10th from 1:30-2:30.

Pre-Hospital: Group discussed what should be the core group of data points. Plan to look at the 3000+ points in NEMSIS. Shirley Gastler is going to arrange to have ImageTrend do a webinar with the group. Looking at an issue with transfer of information between the systems related to concerns about HIPAA. Want to work on education for those who enter data into ImageTrend. Work with import of transmitting time with time stamps and work with agencies already using EMR and get most data into the system as possible.

*Group will meet by conference call Mon., Feb. 14th from 1:30-3:30pm.

Trauma: 1. Regional process improvement from trauma standpoint: Benchmarks; bring in EMS; difficult being able to look at data from other hospitals; cannot evaluate regionally if chain is broken; Streamline Regional EMS councils' PI process and use similar PI process for trauma, stroke, STEMI. 2. How the state does PI from a 100,000 view. If identify problem from birds-eye view. Drive that out as an initiative. 3. We need to get a good data dictionary so that all registrars know exactly what the definitions mean. Try to use the ACS-COT to develop the data dictionary to get all the registrars on the state. Going to try to get the individual from ACS-COT and bring the T QUIP person to discuss with group.
*Group will meet by conference call on Wed., March 9th from 3:00-5:00p.m.

Quality Assurance Meeting
Pre-Hospital Subgroup Highlights
January 18, 2011

Participants: Susan Crum, James Baysinger, Ben Chlapek, Emily Hollis, Shirley Gastler, Brian Froelke, Doug DeVore, Rich Dandridge.

For your information, the QA Pre-Hospital Leads are as follows:
Dr. John Russell, Cape Girardeau; jrussell@clas.net
Dr. Brian Froelke, St. Louis; froelkeb@wusm.wustl.edu
Shirley Gastler, DHSS; Shirley.Gastler@dhss.mo.gov

I. Brian Froelke gave sample plan:
1) Can take many valuable minutes to get the proper information for a patient after arriving at the hospital.
2) Suggest having EMS bring the key "witness" with the patient to the hospital
    a. This person could state onset of symptoms, what happened, medications, how long it has been occurring, etc.
3) It is possible to convince 2 of 3 medical directors to make this change.
    a. How to convince medical directors that this is a good practice?
4) It is important to look at the outcomes – 6 months or more down the road:
    a. What has this process done to the system?
    b. What has worsened/improved on the hospital side?
    c. Did patient care speed up or slow down?
        1. Extended time to transport due to extra people on rigs, incidents with witnesses (witness falls, auto accidents, etc.)

II. Discussion of data points

Question: Can the core required information be narrowed down to 25 questions?
Discussion: If there are less data elements in the system, there is less information that can be observed.

Question: Was this an issue when NEMSIS came out in that 30-40 requested data points were "dumped" into the system?
Discussion: Yes; however, there appears to be no reason to not have as much data as possible.

Question: Can we have a minimum amount of data in required fields, and then additional fields to be filled in when information is available?
Discussion: Pre-hospital will not have much available at the time except for what is received from the witness. Air will not be able to take a witness with them, so they will have even less data available. The issue of minimum data will need to be discussed further.

1) There needs to be improvement in the EMS to Hospital link so that there is a more timely availability of information. Need to improve on the process in place.
2) Bad data is worse than no data.

3) Costs of implementation and staff will play a large part in the system.
4) Would like to get 105 EMS services that do not have automated reporting systems the computers necessary to use Imagetrend.
    a. Some services to not report
    b. Some services send paper reports once per year
    c. Ideally would get monthly electronic reports

III. Discuss Imagetrend/NEMSIS
1) Shirley Gastler states that it is our job to define the data elements that are wanted for the QA workgroup.
    a. NEMSIS has 3,000 data elements, but only 125 are collected.
    b. Group can pick & choose whatever elements are wanted.
2) Education is needed for EMS staff on use of Imagetrend.
    a. Cannot use text boxes instead of drop-downs in required fields. Information recorded in text box is not calculated into reports.
    b. Are data elements time-stamped, or is it up to the provider to change the time-stamp to the time an action was completed? (i.e. vitals, meds, etc)
3) Separate fields are needed for different periods of a patient's treatment
    a. EMS to Hospital to Neurology, etc. must each have the ability to enter separate data on a patient so that data is not overwritten (i.e. new vital signs overwriting previous data)
4) Each vendor is supposed to be using MO XXD (?), but most using only a spreadsheet of some kind. These do not code into the system.
5) By 2014 there will be mandates from the Hospital Reform bill – Continuity of Care.
6) NEMSIS will be going to HL7 in a few months. This will not affect Imagetrend users, but will affect other data programs.
7) Question as to why more services don't use Imagetrend. Stated that the program is web-based and free.

IV. Discuss plan to choose data points
1) Must have a core number of data points, but can have alternates based up on the region (some may need to add additional data)
2) Plan is to go through the list of data points and choose "yes" or "no"

V. Group would like letters sent to transporting services that information CAN be shared with hospitals and shared. This is NOT a HIPAA violation.

Future meetings:

1) First webinar/conference call will take place on **February 14th from 1:30-3:30pm**. This will be a webinar with Imagetrend. (this date was changed from February 21st to February 14th after the January 18th meeting due to scheduling conflicts with the QA Pre-hospital subgroup leads)

2) Webinars/conference calls are scheduled for March 21st and April 18th as well.

3) The group will reassess later to determine if additional webinars/conference calls are needed.

4) There will be an in-person meeting tentatively scheduled in June 2011 for the entire QA workgroup. Date and location TBD.

Quality Assurance Workgroup
STEMI Subgroup Highlights
January 18, 2011

Participants: Steve Marso, Lisa Riggs, Nelda Martin, Cindy Gillam, Amy Mehaffey, Monica Kleffner, Rita Stiles, Myrna Ward, Anita Smith, Beth Eidson, Carolyn Galkowski, Darla Merideth, Mary Fischer, Maureen Falcone, Kristi Baden, Rebecca Eller, Jessica Thomas, Rebecca Baker, Lisa Donnelly, Lisa, Hutchison, Lindy Huff, Tony Occhipinti, Willie Maxwell, Linda Dean, Jace Smith, Annette Casey, Chris Schulze

I. Cindy outlined the outcomes tasked to this subgroup by the state.
   a. List national benchmarks
   b. Recommend PI Process for STEMI TCD program
   c. Determine reports to be generated
   d. Develop a data dictionary

II. Agenda for the afternoon listed four areas of focus
   a. List what your institution wants from TCD efforts
   b. Review tasks and compile work plan
   c. Determine meeting approach
   d. Define future meeting dates.
   e. Two additional agenda items requested
      i. Understand what is required from the state to achieve accreditation
      ii. List outcome goals for the state and/or the regions

III. Discussed hurdles to an additional regulatory source requiring data
   a. Duplicate data – data required needs to be manageable. Vote of number of those present that participated in the ACTION or Cath/PCI registry showed about 75% participation. One suggestion was to view the elements in these registries and then limit by what is needed for outcomes.
   b. Formatting of data for importing into state registry.
   c. Financial and Human Resources needed to accomplish this task. Only potential Level 1 and Level 2 centers represented at this subgroup meeting. Need to engage the level 3 and 4 centers. Need to understand their hurdles with data collection and submission.

IV. List what your institution wants from TCD.
   a. Minimal data for all levels: CMS - All MO hospitals must submit data on all or a sample of MI discharge Dx
   b. Optional Data elements for higher levels
   c. Define PI Elements
   d. Subgroup represents only level I or II right now, Need to recruit/encourage Level III and IV hospitals involvement
   e. List goals for state and region

V. What are the possible data sources already being used?
   a. ACTION: Mission Lifeline
   b. NCDR Cath/PCI
   c. CMS – same as TJC
   d. TJC
   e. SCPCP – asks for internal measures, no established measures
   f. Missouri state registry – volumes will be required. Cindy will get a list of other elements required

VI. Brainstormed task and prioritized a work plan
   a. What are the data elements required for state recognition? Cindy reported that there is a draft set of about 280 elements mirroring the trauma elements started. These are only draft elements but were added last year because of timing and availability of funding. Also can look at the application form for a broader look at the possible state requirements.
   b. Develop a staged approach to implementation
   c. Define the PI elements
      i. Potential Categories
         1. Demographics
         2. Medication
         3. Time
         4. Procedure
         5. Post Care
   d. Meet with the Image Trend vendors and understand the architecture of the database
   e. Define goals of performance. Some suggestions were:
      i. False + cath activation
      ii. Time to 12 lead
      iii. ASA time
      iv. Time transfer out to another hospital
      v. Door to Balloon/Needle
   f. Choose elements of the registry
      i. Start with a minimum – mirror CMS
   g. Should it be concurrent or retrospective data submission
      i. How will we manage a patient that was transferred and prevent the patient from being entered in the registry twice?
      ii. Develop timeframes for due dates of data submission eg: quarterly or concurrently?
   h. Talk with the potential Level 3 and 4 centers about participation

      Categories: Demographics
      Medication
      Time
      Procedure
      Post Care

   i. Top three priorities as chosen by the group
      i. Choose elements
      ii. Determine goals of performance
      iii. Examine the data elements required by the state for recognition

Meeting Approach

Meet with ImageTrend with pre-submitted questions
Teleconference between group leads 10-14 days before the STEMI group Teleconference to decide agenda.
2nd Thursday of each month, 1300-1400: STEMI QA group. This will give us 6 meetings, plus the 2 face to face meeting listed below.

Future Meetings
*Face to face meeting in Jefferson City: June, 2011 and end-product meeting in Sept or Oct, 2011

Quality Assurance Workgroup
Stroke Subgroup Highlights
January 18, 2011

Attendees: *Stacey Jett, Debbie Summers, Jessica Thomas, Carol Beal, Peggy Crutchfield, Kathy Vickery, Kathy Lainhart, Lisa Randazzo, Kelly Thomas, B.J. Hipsky, Robin Hamann, Dr. Jin-Moo Lee, Karen Connell, Belinda Heimericks, Debbie Sprandel, Rose Donnelly, Jo-Ann Burns, M. Jane Puszkar, Janice Kelley, Shawn Andreason, Sharon Pulver, Jason Moburg, Beverly Raymond, Jean Stippich, Teri Ackerson, Jennifer Parreira, Mary Spencer.*

Workgroup Lead: Dr. Jin-Moo Lee
Other Workgroup Leads: Debbie Sprandel, Janice Kelley
DHSS Lead Support: Belinda Heimericks, Karen Connell

Dr. Lee welcomed the attendees and asked that each give their name and facility. He asked for a rough idea how many have in mind to become a Level I, II, III, or IV Stroke Center. Today's attendees represented prospective Level I and II. Dr Lee encouraged attendees to contact representatives from hospitals that may become Level III or IV and invite them to attend the next meetings so the group would represent the spectrum of viewpoints.

Dr Lee asked key questions:

1) **<u>What do you (your facilities) want to learn from a TCD stroke registry?</u>**
   - Raise the bar for stroke care
   - Benchmark data
   - Establish acute care statewide and regional data
   - Simplicity, streamlined data collection, not costly
2) **<u>What should TCD use as the core set of measures?</u>**
   - The group agreed to use CMS data measures as primary
3) **<u>What additional measures should be discussed?</u>**
   A. Acute measures, including
      - Level I measures
      - Level III and IV measures
      - In-house stroke

B. Linking of EMS data with hospital data
C. Long term outcomes
D. Intra hospital transfer times
E. In hospital complications – possibly identify 5 to 10
F. Risk factors –possibly LDL, hypertension, atrial fib

4) <u>How should the Workgroup move forward?</u>

- The group agreed to work in two parallel tracks:

  Acute Measures: A, B, D (from above)
  Outcome & Demographic Measures: C, E, F (from above)
- Next meetings are to be Feb 15 and Feb 22 – 1:00 to 2:00

Quality Assurance Workgroup
Trauma Subgroup Highlights
1/18/2011

Attendees: Michael McGee, Pam Golden, Patty Parrish, Julie Nash, Susan Mutto, Linda Anderson, Jan Miller, Lori Davis, Cheryl Phillips, Robert Dodson, Stephen Barnes, Karen Hawley, Noreen Felich, Patsye Stanley, Kathe Russo, Paul Guptill, Joan Eberhardt, Samar Muzaffar, and Kaisey Martin.

Leads:	Dr. Robert Dodson, Joplin	Dr. Samar Muzaffar, DHSS Internal Lead
	Dr. Doug Schuerer, St. Louis	Joan Eberhardt, DHSS Internal Lead
	Patty Parrish, Springfield	
	Patsye Stanley, St. Louis	

Timeframe:
Plan to have the QA Trauma goals and objectives completed by September 2011. During the process leaders will gauge progress to see if the timeframe will need to be extended.

Goals:
To enhance the Time Critical Diagnosis system as a whole-by using good data points based on nationally recognized benchmarks, indicators and standards
To establish a statewide data dictionary that is understood by all participants in order to collect the cleanest data possible
To help the Trauma community have a common understanding of the data dictionary
To determine what reports and analysis will be produced with collected data
Create Missouri specific data elements and list them out
Mature registry group for all to be connected locally, regionally and statewide
Stabilize and standardize registrars' understanding of the Trauma, stroke and STEMI registry and make certain that Level 1, 2, 3 and 4 centers have the same access and understanding of the process
Mature what a statewide and a regional PI process would look like

Visualize and describe the structure and function of the Regional EMS Council in regards to the PI process
Create a template and framework in order to provide recommendations to regions
Bring all of this back to the group.

Challenges:
There is a significant issue with the fact that for some entities records have to be closed 60 days after the patient is discharged. We need to consider changing the timeline to reflect that issue.
Additional trained and credentialed people are needed to validate and do data collection. It is far too common for people without proper training to get into the registry jobs; therefore, it is easy to create inaccuracies in the data.
Standardize the data dictionary to provide a common framework before moving forward on other parts of this process.
The issue for TCD is that there is a need for stroke and STEMI registrars. A hospital is not going to continue funding positions for registrars as we add stroke and STEMI to the registry. It will require more man power and these positions will be underfunded.
Would it be possible to populate registry with electronic medical records? That has been discussed; however, there are legal issues with that path so unfortunately that is not possible at this time.
When data is entered with MARS, we need to focus on seeing the collection through from dispatch to arrival. Need 100% reporting to MARS. It would ease the stress on the registrars.
Information is needed quarterly but there is still the issue that records cannot be closed quarterly. This needs to be addressed.

Actions:
Overall, our goal is to understand the definitions

*Group will meet by telephone conference at a time to be determined.