

In a Heartbeat Metrics and Data Workgroup
January 29, 2007
Summative Notes

Present for meeting: Bud Kellett, Chair (MMC), Kim Tierney (MMC), Chris McCarthy (MQF), Joel Johnson (Nova), Sandy Parker (MHA), David White (United Ambulance), Jon Harvell (MHIC), Peter ver Lee (EMMC-via phone), Karynlee Harrington (MQF), Carrie Hanlon (MQF)

Notes:

Data Elements

The group decided to map the data elements according to the following:

1. Elements that exist within current data collection systems (CMS, EMS, NEMESIS)
2. Code by a) core metric, b) organizational level QI metric, c) “nice to know” metric
3. Review for inclusion necessity relative to IHB critical questions

Following mapping the group will develop a visual that shows hospitals what, if any, metrics need to be collected above those currently collected/abstracted. Further, elements deemed to be unnecessary to answer critical questions and which fall into the “nice to know” category will be dropped.

The initial mapping will be done collaboratively between Bud, Kim, and Chris for hospital data and David, Chris, and Jay for EMS data. Bud will follow up with ED providers to ensure correct assumptions re: ED data elements. Following mapping the workgroup will be asked to review and provide feedback (with a quick turnaround time).

This will lead to a comprehensive data dictionary developed and maintained by the MHIC.

Data Collection and Submission

The group agreed to use existing data submission processes to drive population and updating of the database to be created by the MHIC. This means using CMS data, to the extent possible, and likely means MHIC receiving an extract from the QIO. As well, it means linking across the EMS database (maintained by the MHIC).

The implications of this approach include:

1. minimized burden on submitting organizations
2. significant time delays from when services are provided until data about those services are available (EMS approximately 90 behind service date, QIO data approximately 180 days from service date).

3. The time delays suggest that it may be a full year before there is enough data to report on the system
4. There will not be “near real time” data collection available
5. Reduces the scope of work suggested in the RFP and may lead to reduced costs

There was discussion regarding the development of an online “lessons learned” document that can function as a dynamic FAQ re: data collection, submission, etc. This could be a component of an online data submission interface.

Data/Information Reporting

The group needs to complete an assessment of what questions will be answered in the aggregate state reports and in the organization specific reports. Further, the group needs to decide upon the reporting period.

Under discussion was a quarterly reporting model with an end of year summary report for individual organizations (hospitals and EMS). Further clarification is necessary relative to the reporting level for EMS metrics (e.g. state, region, service).

This process must be mapped back to the data elements to determine which “raw” variables are necessary for inclusion and which “calculated” variables will drive the report. For example, using the following raw variables:

- Arrival time (ED or Cath)
- Lytic administration time
- Balloon time
- STEMI Dx,
- Delay Reason/exclusions, and
- Established timeliness benchmarks

we can calculate the desired systemic variable of “% meeting timeliness goals.” With a small modification this becomes a hospital specific measure. For each question we wish to answer we need to develop the calculated metric and map that metric back to the variables in the data elements table.

There is general agreement that appropriateness and timeliness results are co-owned by referring and receiving hospitals.

Currently the broad questions associated with the IHB initiative are:

- How well is the health system doing in reducing the time from onset of symptoms to treatment?
- How well is the medical system doing in reducing the time from call to 911 to treatment?
- How well are EMS services and hospitals doing at maximizing the efficiency of the process of care for STEMI?

- How well are the outcomes of STEMI care improving within hospitals and across the state?
- What do the data tell us regarding the use of thrombolytics and percutaneous coronary intervention relative to care outcomes?
- What barriers to improved care can be addressed within hospitals and across the state?

A proposed subset of questions includes:

- What is the time on-scene for STEMI patients?
- Are all patients eligible for reperfusion therapy receiving that therapy?
- For patients receiving reperfusion therapy is the therapy delivered in a timely fashion?
- How long does it take to get from call to 911 to Tx (variation conditions?)?
- Is there a meaningful difference in timeliness of treatment relative to arrival via EMS versus walk-in?

We need to address what other questions to add and/or what questions to remove and then follow the mapping process described above for each of the questions.

There is agreement that a general reporting plan will adhere to the following:

- Initial reporting will return information to providers for assessment of collection and submission efficacy
- Providers will review reports to confirm accuracy
- Public reporting will consist of aggregate system analyses
- Participating providers will receive hospital specific analyses

IRB Process

The development of an appropriate and acceptable IRB application will be one of the deliverables in the contract with the MHIC. This will be developed in concert with the Data and Metrics Group and run through the Executive Committee for approval. It is possible that the MHIC will have to develop Business Associate Agreements with each hospital. The IRB application certainly will require:

- Comprehensive list of data elements
- Identification of PHI elements
- Data security plan for PHI elements throughout the collection, submission, linking, analysis, and reporting processes
- Data use agreement
- Business Associates Agreement
- Review of threats to privacy relative to public reporting plan
- Review of potential harm to human subjects/participants

The application will be submitted to all PCI centers in the state (MMC, CMMC, EMMC, and York).

Following IRB approval, all privacy officers, across all care settings, will receive a letter that demonstrates how the project has addressed privacy concerns relative to data collection, submission, linking, analysis, and reporting.

Relative to EMS, we should be covered for any data elements that are state-level/state collected and any that are collected for QI purposes. Beyond that scope we are challenged by whether or not we would need approval from every service's privacy officer. We need to review the degree to which the regional organizations can function in that capacity.

All of this work will be subject to Attorney General review.

Next Steps

DHA-MQF will develop contract with MHIC

Establish an acceptable project plan with timelines (contract deliverable)

Complete review and coding of data elements (by February 12) *Chris and Dave White to meet on 2/8 to review EMS and Transfer elements*

Complete review of questions/report frames (by February 12)

Contact QIO re: submission of data to MHIC

Develop IRB application (contract deliverable)

Create data tables that are user/viewer friendly

Create comprehensive data dictionary (contract deliverable)