Data & Analytics Council
April 18, 2014
Data Acquisition for Quality Measurement

The Data & Analytics Council webinar on April 18, 2014 explored data standards for clinical quality measurement under the Meaningful Use program as well as one organization's role in meeting the quality reporting needs of providers in Massachusetts. Speakers included:

- **Maggie Lohnes**, Director, Quality and Regulatory Programs, McKesson Strategic Intelligence
- **Micky Tripathi, PhD**, President & CEO, Massachusetts eHealth Collaborative

Maggie Lohnes
Maggie described the process for extracting and reporting on electronic quality measures, specifically for the Meaningful Use (MU) program. The process for quality measurement under MU involves capture of clinical data in an EHR, importation of the data into a clinical quality reporting engine, calculation of the measure, and submission of the results to a receiving system.

Electronic clinical quality measures and reporting are comprised of a number of components/processes:

- Quality Data Model (QDM) – The National Quality Forum (NQF) developed the QDM to describe clinical concepts in a standardized format to enable electronic quality measurement. Measures are categorized under value sets[1] (e.g. medications → RxNorm) and are described by data type (e.g. dose) and data flow (e.g. health record field → medication administered) attributes. The QDM enables human-readable quality measures to be translated into a machine-readable format.

- Value Set Authority Center (VSAC) – The National Library of Medicine maintains the VSAC, a centralized authority for the value sets which stratify different categories of measures. Related measures are grouped under unique identifiers called OIDs.

- Measure Authoring Tool (MAT) – The National Quality Forum also developed the MAT, a web-based tool which leverages the QDM to enable measure developers to create electronic clinical quality measures.

- Healthcare Quality Measure Format (HQMF) – The HQMF is a standard format for documenting the content and structure of measures for inclusion in electronic systems like EHRs. The MAT can publish measures in HQMF.

- Quality Reporting Document Architecture (QRDA) – QRDA is a data source and reporting format for delivering quality measurement reports to CMS programs. QRDA Category 1 is for a single patient and therefore contains identifiable information, while Category 3 is for aggregated patient data and summary reports.

Outside the world of quality reporting to CMS for federal programs, other options for exchanging data include Fast Healthcare Interoperability Resources (FHIR) and the Continuity of Care Document (CCD). MU stage 3 will likely expand options for data

[1] Value sets provide list of numerical values and the individual descriptions from standard vocabularies used to define the clinical concepts within quality measures - http://www.healthit.gov/policy-researchers-implementers/clinical-quality-measures

exchange, especially as standards improve and electronically extracted quality measures get better at representing actual care processes.

Micky Tripathi
Micky serves as president and CEO of the Massachusetts eHealth Collaborative (MAeHC), a non-profit collaboration among healthcare stakeholders in the state. MAeHC began as a pilot program which funded EMR adoption, offered implementation and project management support, and stood up health information exchange (HIE) and data warehousing capabilities in three communities. The data warehousing component of the program was originally intended to benefit researchers studying the impact of health IT on clinical outcomes. However, organizations contributing clinical data soon began asking for access to the information, and MAeHC realized that it could play a greater role in the state. Eventually, MAeHC evolved to serve the end-to-end data integration needs of its customers, from documentation/extraction to transport to data warehousing to access.

Data from customers' EHRs and community HIEs feed into MAeHC's Quality Data Center (QDC). MAeHC is certified for reporting measures to federal programs, such as Meaningful Use, PQRS, and Pioneer ACO, as well as a variety of commercial programs. Customer demand determines which measures and programs are ultimately incorporated into MAeHC's core offerings. When customers join, MAeHC evaluates their interoperability environment, data sources, and organizational needs. From there, MAeHC will work with vendors and healthcare settings to set up data feeds and resolve any data quality or integration issues.

Growth areas include generating patient-centric measures for care management, developing parameters to enable risk stratification, maintaining flexibility in provider attribution strategies, and decoupling the presentation layer so data can be integrated with existing tools the customer has. MAeHC has been able to play a vital role in the Massachusetts healthcare landscape by:

- Focusing on execution
- Buffering customers from market variations
- Meeting customers/vendors where they are
- Focusing on practical problems
- Remembering that the customer owns the data

Questions
Q: How are you incorporating patient safety reporting? Do you facilitate adverse event reporting to FDA?
A: (Micky) We don't, because providers haven't asked for it. We very much follow where customer need and customer demand is. In some cases we might invest a little bit in advance of demand to be able to build capability, but so far we haven't seen the demand.

Q: Have you had to address restrictions regarding self-pay data and sharing data with payers?
A: (Micky) MAeHC focuses on the data warehouse as an agent of the provider organization, which gets back to the concept that it's their data. Because we're a collaborative that's involved with HIE, people have confused us for an HIE and asked about who we're sharing data with. We establish a one-to-one relationship with our customers. They send us the data as a business associate, and we run analytics and provide the results back to them or to any other organization they give us permission to give it to. So far we haven't run into the self-pay issue. I expect that when we do, we'll have a conversation about who is in the best position to enforce the restrictions. Are they going to filter out self-pay data on their end before sending it to us, or are we going to? If we are, then they'll have to send us a flag

for the information that's subject to the self-pay restrictions. Most provider organizations that I know don't really have that enabled yet, so it's kind of a near-future type of thing that we don't have a ready solution for yet.
A: (Maggie) From the provider side, in terms of the technical architecture, we have some ability to filter information for quality reporting systems. Some CMS programs, for instance, require reporting only on Medicare/Medicaid patients, while others require reporting for all patient populations.

Q: To what extent are you analyzing data? Is it simply quality reporting, or is it more in depth to give providers early warning for intervention opportunities?
A: (Micky) Our primary business is to generate nationally validated or commercial vendor measure results. We present more advanced services in two ways. (1) We can 'drill-down' into the numerators, denominators, or exclusions for a given measure and make that available through a portal or custom data mart. (2) We can provide data in a patient-centric context for the customer to incorporate into their own applications.

Q: Have you seen overlap in the measures being used in federal programs and the measures used private payers?
A: (Micky) We haven't, but I hope we get there. Even though private organizations are participating in public measure development efforts, the commercial measures they're actually using are always slightly different. For example, they might use a particular way of identifying the inclusion criteria that changes one or two fields. At this point the commercial and public sides are close, but different enough that it could result in different output. We're unfortunately not seeing commercial plans opt for the nationally validated MU or ACO measures.

Q: Have customers asked for measures that could potentially be incorporated into federal reporting programs in the future?
A: (Micky) I'm not aware if this is happening, because I'm not part of the measure development process. We take measures from customers without getting involved in where the measure comes from. Maybe this is something we should do more of to better control our future. In a post-MU world, it seems that CMS could start to use their influence as a large payer rather than a government agency to better try to align commercial plans.