Written Testimony
HIT Standards Committee, Implementation Workgroup

Panel 5A: Early Adopters of Meaningful Use Seeking Attestation – Hospital Experience, Part 1

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Thank you for the opportunity to testify. At Citizens Memorial Healthcare (CMH), we are strongly committed to using health information technology to improve the quality of care we deliver to our patients. We appreciate the opportunity provide input from our perspective as an early adopter of that technology. While CMH has been quite successful to date in the implementation and use of health information technology, we recognize that it is a journey and we continue to be excited about the potential of health information technology to support our goal to provide safe, effective and efficient care. I also serve as a member of the Missouri Hospital Association HIT Committee, a board member for the MUSE user association, a member of CHIME, and am an active participant in HIMSS.

Summary

- Challenges and barriers
  - Complex reporting for compliance
  - Certification, specifically questions and concerns about:
    - A requirement to own all of a vendor's certified complete EHR product
    - Certification of off-the-shelf tools, such as interface engines and reporting tools
    - A requirement that hospitals own certified products for all meaningful use measures, even those deferred during stage one of meaningful use
    - The "use the EHR as certified" clarification posted by CMS
- Implementation approaches and methodologies
  - The EHR was implemented at CMH over a period of years with multiple lessons learned and shared
  - Attaining meaning use incentive payments is a strategic initiative for CMH
  - CMH hopes to attest for the hospital by May 31, 2011 and for the CMH eligible providers by December 31, 2011
  - CMH is using a process improvement model and an internal validation process for each meaningful use measure
  - Individual meaningful use measures have required changes in the CMH EHR system, with some clarifications and questions still outstanding
- Outcomes/results
  - CMH has validated compliance internally for 9 core and 4 menu measures
  - The CMH Validation Committee is scheduled to validate the remaining meaningful use measures prior to February 2, 2011, again assuming outstanding clarifications and questions are resolved
  - Outstanding issues and questions for the remaining measures include:
    - Building fields and training users
    - Certification of interfaces
    - New functionality that will be received from the CMH EHR vendor
- Experience using the ONC and CMS communications
  - ONC and CMS communications have generally been helpful to CMH
  - Clarifications and frequently asked questions have been both helpful and confusing

About Citizens Memorial Healthcare

Citizens Memorial Healthcare is a rural healthcare network located in southwest Missouri. The network includes two corporations, one public hospital district and one non-profit corporation. Together these corporations are known as Citizens Memorial Healthcare (CMH). The CMH network offers these services:

- Rural, sole community provider hospital with 76 beds.
- Home care services, including skilled care, nurse aide services, rehabilitation, hospice, homemaker/chore services, health transit and home medical equipment.
- Ambulatory care, including ten certified rural health clinics and eleven specialty physician clinics.
- Long Term Care, including five skilled nursing facilities with a total of 500+ beds, one residential care center with 76 beds and eight independent living apartment complexes.

CMH Electronic Health Record Story

CMH implemented an EHR system as an organizational strategic initiative. The vision for the CMH EHR is:

- Enable a patient to enter anywhere into our continuum of care and have a personal identity that is maintained across that continuum
- Physicians and other caregivers will have access to all of that patient's information within the healthcare system
- Providers will be able to document efficiently within the software system, which will free them to have more time to spend with patients
- The investment of time, talent and money will enable CMH to be a technologically advanced healthcare organization poised to grow and offer new services to our patients and the community at large

The CMH EHR system includes one longitudinal record for each patient, including all encounters within the CMH system and for three independent ambulatory practices. CPOE is utilized throughout the system. Paper medical records have been eliminated.

CMH EHR Timeline

YEAR	HIGHLIGHTS
1999	Strategic planning goal established – seamless care across the continuum
2000	IT needs assessment, philosophy and vision adopted
2001	Vendor selection and implementation plan developed
2002	Core financial and clinical systems implemented
2003	Physician practice management system, home care, long term care financials, hospital nursing, CPOE, e-signature and physician documentation implemented – paper medical records eliminated at hospital
2004	PACS and long term care clinical systems implemented – paper medical records in long term care eliminated
2005	Electronic ambulatory record implemented – paper medical records in ambulatory practices eliminated
2006	Emergency room system and bedside medication verification with barcodes implemented
2007	In-home tele-management implemented, connected to home care system and EHR
2008	Speech recognition implemented, PACS expanded
2009	Patient portal implemented, integrated point-of-care vital signs monitors and glucometers, ePrescribing implemented
2010	Connected to the GoogleHealth PHR, Cardiac PACS implemented, interface engine and video interactive telehealth implemented

Recognition for EHR Successes

- HIMSS Nicholas E. Davies Award of Excellence for Health Care Organizations, 2005
- Health Care's Most Wired, Small & Rural, 2005-2007
- Health Care's Most Wired, Top 100, 2008-2010
- HIMSS Analytics Stage 7 on the EHR Adoption Model, 2010

Challenges and Barriers

1) Complex Reporting for Compliance

CMH will receive reports for meaningful use measures and meaningful use quality measures from their EHR vendors in a service release that will bring the EHR system up to a certified version.

In the meantime, CMH has written reports internally to understand where the organization stands on each measure. Significant resources have been utilized in this effort. CMH has participated with the CMH EHR vendors in development of the standard reports that will be delivered to all customers. CMH has shared reports with other users of the same software systems.

Development of these "pre-reports" has been labor intensive. Reporting on unique patients with multiple denominator definitions is complex and uncommon – requiring additional report writing resources.

These reports have required multiple revisions based on clarifications posted by CMS and ONC. For example, the entire population for the report was modified when CMS clarified that emergency room patients only count if they are admitted to POS 21 or 22 (22 not being identified at all in the final rule).

Reports have also been revised and re-written as processes and structured fields for compliance have been modified in the CMH EHR system. For example, CMH was collecting smoking status using a field standard for the EHR system. That field was a Yes/No field which was displayed with other patient medical, social and family history fields in the EHR. A new query using the recommended standard smoking inquiry answers was implemented and reporting modified to capture the counts using the new queries.

CMH recently received a new set of vendor-supplied reports for the meaningful use measures. CMH has begun validation of the internal reports with the vendor-supplied reports.

2) Certification

The vendors of the core CMH EHR systems (acute and ambulatory) are related vendors. Those systems are undergoing certification. The CMH EHR system for the acute care setting has been certified as of December 23 by the Drummond Group. The CMH EHR system for the ambulatory setting is scheduled to be certified in January. The vendor for interoperability connecting the CMH EHR to the GoogleHealth PHR is certified.

CMH has these certification challenges:

The "complete EHR certification" challenge. This is also known as the "mix and match" problem. A clarification posted for vendors indicates that EHR vendors "must have the separate components of a certified Complete EHR tested and certified as EHR Modules before the components may be sold separately as certified EHR Modules." If the corollary of this statement as also true (i.e. that a hospital must own all modules of a certified EHR system to be considered to have a certified system for each of those requirements), the result will be a significant waste of hospital and eligible provider resources - increasing health care costs unnecessarily at a time when the industry is challenged to reduce costs.

For example, CMH does not own three components of software certified by the CMH vendor as a part of a complete EHR. One of those modules is interoperability. CMH uses another vendor's certified product to accomplish interoperability with the GoogleHealth PHR. If CMH is required to purchase this product at a considerable cost from the core EHR vendor, CMH would be paying for a product that is not needed nor would even be implemented.

The other two modules are interfaces (immunization and lab reporting for public health). CMH hopes to use other products and methods for achieving those measures as described below.

We don't believe this is an issue unique to CMH. As a member of the board for the MUSE user group and a member of the Davies organizational selection committee, I have had the opportunity to analyze the configurations of leading adopters of EHR software. Even in hospitals with highly integrated systems, I've noted that they rarely, if ever, own all of their EHR software from a single vendor.

ONC may consider this is a vendor issue. CMH would disagree. To require vendors to certify their software in multiple configurations would add costs for vendors, which will be passed on to hospitals and physicians. It has been made clear that hospitals are responsible for assuring that certified modules from multiple vendors work together.

A second certification challenge is <u>certification of interface engines and reporting tools</u>. At CMH, we have been moving toward off-the-shelf tools for connectivity and reporting to both reduce cost and enhance functionality. It is unclear to CMH what value certification of these tools would add.

For example, CMH has been submitting syndromic surveillance data to the Missouri Department of Health for four years using a flat file produced as a scheduled report and submitted via a secure VPN. This method was implemented at a very minimal cost and has been successful without significant maintenance for four years. CMH plans to convert the format from a flat file to HL7 using an interface engine to comply with the meaningful use requirements. What remains outstanding is how CMH will certify this application. Our understanding is that CMH will be required to certify this use of our EHR software at a cost CMH understands will be $8,000 - $10,000 and will require CMH to *re-certify the use every time the EHR system or the interface engine is upgraded.*

CMH also plans to use an interface engine to format a similar submission of immunization data to the state of Missouri assuming the state does begin accepting electronic submissions as announced. Again, to certify these uses will cost CMH $8,000 - $10,000 and will require CMH to *re-certify the use every time the EHR system or the interface engine is upgraded.*

Since CMH attempts to adopt new versions and enhancements annually, CMH could end up paying $100,000 over the next five years to keep these two interfaces certified - or be required to purchase and maintain an interface from a vendor that CMH does not need. Again, this is in an era where healthcare organizations are under pressure to reduce unnecessary costs.

A third certification challenge is the recent clarification that hospitals and eligible providers <u>must own or possess software to meet the requirements for all meaningful use measures, even those deferred during stage one</u> of meaningful use. Just like CMH wouldn't purchase servers two years before they would be used, CMH would not purchase software with no intent of using it for two years. With hardware, we expect the technology to be better, the options greater and even the cost to be lower in two years. It is the same with software. Hopefully, there will be more options and potentially even lower costs on the market in two years. To pay for or even be locked into a specific product two years before it can be used does not make sense to CMH.

CMH is also concerned about the <u>"use EHR as certified" clarification</u> posted by CMS. The clarification as posted in response to a question about the use of data warehouses for quality reporting states "providers must use certified EHR technology in the way it was certified to accomplish that objective." Using EHR software "as certified"

appears to assume that the best practice implementation and use of EHR software is both known and as certified by EHR vendors. In contrast, CMH believes that the best practice use of EHR systems is still early and evolving. Some of the functionality being introduced for meeting the meaningful use measures by vendors is first-generation. Hopefully, there will be accelerated EHR adoption over the coming years due to the ARRA incentives. Hopefully, that accelerated adoption will lead to the development of consensus best practices across the industry that will be programmed into EHR software. For now, best practices are still in development and EHR vendors are not yet expert in what those best practices are for advanced clinical use. To require use "as certified" feels like a barrier to innovation and to what we would hope to see as the natural development of best practices that could otherwise occur in the coming years.

For example, the jury is still out on the best practice process for medication reconciliation in an EHR. CMH has utilized multiple processes for reconciliation that have evolved continually since 2003. The CMH EHR vendor has developed and delivered multiple iterations of the EHR software for use in medication reconciliation over that time period. At no point has CMH been satisfied that we have, or the EHR vendor has, achieved best practice in medication reconciliation processes.

Another example is quality reporting, or rather, collection of data for quality reporting. This is another area where best practices are very immature. With the electronically-specified quality measures only recently available, the best practice for collecting the data, particular the quality measure exclusions is simply not yet known.

What is the most effective format for providing electronic discharge instructions to patients? When should a clinical summary be delivered to a patient for the greatest understanding and engagement? Requiring use of EHR systems strictly "as certified" today seems premature.

Implementation Approaches & Methodologies

CMH is fortunate that the organization was already at an advanced stage of implementation when the ARRA funding was announced. Implementation of the EHR at CMH was accomplished over a period of years. CMH was able to implement the system to meet the needs of the community and the health care network, which included many priorities that are beyond the meaningful use requirements. For example, the CMH long term care facilities and residential care facility are connected to the CMH EHR and utilize the full functionality of the EHR. Medications are administered using barcodes at the bedside in the hospital and long term care facilities. Home care and hospice patients are connected via in-home tele-monitoring to the EHR. Radiology and cardiology PACS have been implemented.

Through use of the EHR, CMH has made improvements in quality measures across all care settings where quality measures are publically reported, including the hospital, home care and long term care. The use of in-home tele-monitoring connected to the EHR has resulted in a dramatic drop in the re-admission rate for home care patients, which is now at 19% compared to the national average of 29%.

CMH financed the acquisition of the EHR software and hardware using both long term financing and operating revenue. CMH has also received grant funding from the Agency for Healthcare Research and Quality, Rural Utilities Service Distance Learning and Telemedicine Grant, Health Resources and Services Administration, Office for the Advancement of Telehealth and the Missouri Foundation for Health. Grant funding has enabled CMH to implement health information technology faster and to study the impacts of those implementations more thoroughly than would have been possible without grant funding.

CMH has shared lessons learned in the implementation of the EHR through multiple presentations, webinars and by hosting over 100 site visits from hospitals in 33 states and Dubai since 2004. Those lessons include broad inclusion in decision making, adequate resources, administrative support, proactive, two-way communication, physician engagement and elimination of the paper medical record as a milestone for the implementation.

CMH has had an opportunity to engage with many other rural hospitals through these presentations, site visits and user group meetings. We know from these rural friends that CMH is especially advantaged to have administrative and board support, physician engagement, a local talent pool and adequate resources with which to accomplish all that we have with health information technology. Not all, in fact not many, other rural hospitals have this combination of assets with which to work. Many don't even have a dedicated information services staff. For those rural hospitals, the curve will be much steeper than it has been for CMH to reach meaningful use in time to benefit from the incentive payments or even avoid financial penalties. CMH would encourage CMS and ONC to be cognizant of and sensitive to the challenges that face these rural hospitals as meaningful use is expanded over the coming years. From our CMH interactions with other rural hospitals, we have seen those challenges to include financial constraints, a lack of internet and computer resources and experience in the community, access to information technology support staff and difficult physician cultures.

Attaining meaningful use at CMH

Attaining meaningful use incentive payments is a strategic initiative for CMH. A project plan has been developed following the process improvement model used across the organization. Each meaningful use measure has a sponsor. The CMH IS Steering Committee appointed a sub committee to oversee validation of each measure. Measure sponsors present how CMH complies with each measure and the measure numerator and denominator to this Validation Committee. Any questions or concerns are addressed and brought back to the committee on a schedule. The Validation Committee meets weekly. In addition to measure sponsors, there is a sponsor for collecting and validating the information for registration, a sponsor for determining optimal programs for participation (Medicare and/or Medicaid) and a sponsor for implementing the service release that will move CMH to the certified version of the EHR software.

The CMH Validation Committee is tasked with validating the interpretation of the measures especially where there is ambiguity in what should be included in the measure numerators and denominators. Measure sponsors are asked to use the certification criteria as published for EHR vendors to help understand the meaningful use measures and to model their presentation for validation with the committee. These validation presentations are being preserved as a means to document compliance. CMH is unclear on what documentation will be needed to validate compliance or what a future audit of compliance might look like after attestation. Additional guidance on these documentation requirements from CMS would be welcome.

CMH expects the Validation Committee to monitor compliance through Stage 1 of Meaningful Use and to serve a similar role as CMH implements any changes necessary for compliance with Stages 2 and 3.

Meaningful Use Plans for Compliance

CMH hopes to attest to meaningful use for the acute care setting for a 90 day reporting period ending prior to May 31, 2011. The CMH fiscal year end is May 31. This goal will be possible only if the noted challenges can be met.

CMH plans to attest to meaningful use for qualified CMH ambulatory care providers prior to December 31, 2011.

- 25 physicians and nurse practitioners serving in certified rural health clinics. These providers will only be eligible for Medicaid incentives.
- 10 physicians operating in specialty clinics. These providers will be eligible for either Medicare or Medicaid incentives. CMH is currently testing for eligibility.
- 14 visiting specialists practicing at CMH part time and elsewhere part time. CMH is currently not expecting to qualify for any of these providers during 2011.
- 3 radiologists and 1 anesthesiologist who would qualify for Medicare incentives based on their percent of outpatients treated. These physicians use the hospital-based EHR. CMH is unclear on how we will report for compliance on these providers.

Program Eligibility

- CMH is currently reviewing reports to validate eligibility for both the Medicare and Medicaid incentives for the hospital.
- CMH is still evaluating the best possible eligibility for the CMH certified rural health clinics and specialty physician clinics.
- CMH also plans to qualify three radiologists and one anesthesiologist assuming the patient volume of outpatient services is sufficient and certification questions can be resolved.

Implementation of Specific Meaningful Use Measures

CMH was surprised by the extent of the changes necessary to meet the meaningful use requirements. Many of these changes are technicalities, such a use of standard questions and responses. Although these changes will have long term positive impacts on interoperability between EHR and PHR systems, system users are confused about how these changes are beneficial to the immediate care of their patients. The number of changes made in a short period of time has been taxing on these users.

This is a sample of the changes required in the CMH EHR system and for users to comply with the meaningful use measures for both the hospital and eligible providers.

CPOE MEASURE - numerator is a subset of a subset of the denominator

For the hospital, CMH is complying easily with the CPOE measure. Over 70% of unique patients have a medication order entered by a physician. CMH is reporting CPOE only for physicians and not other licensed healthcare professionals.

For eligible providers, there are additional issues, particularly for specialty physicians. If CMH understands this measure, the numerator is the number of unique patients with a medication order entered by the provider using CPOE and the denominator is the number of unique patients with a medication on their medication list. A study was included in the final rule showing that most patients with a medication on their medication list will have a medication ordered by their provider during an encounter. CMH is guessing that must have been a study including only or mostly primary care physicians because the CMH specialists frequently have patients with medications on their medication list that are prescribed or reported to have been prescribed by other providers and frequently have no medications at all prescribed by the specialist with whom the patient had an encounter.

For example, CMH was surprised to note that one conscientious orthopedic surgeon showed only 20% on the CPOE measure. This sample of patients shows why:

- 35 unique patients minus 2 patients with no medications at all = 33 (denominator)
- 26 patients only had medications prescribed by another CMH physician, reported to have been prescribed by a physician outside the CMH system, or over-the-counter medications (no medications at all prescribed by this physician)
- 7 patients had at least one medication prescribed by this physician
- 6 of those 7 patients had medications entered directly by this physician using CPOE
- 1 of those 7 patients had medications entered by a nurse

So, the physician's percentage on the meaningful use measure was only 18% (6/33) for this sample, whereas he actually entered medication orders on 86% (6/7) of the patients on which he prescribed any medications at all.

SMOKING STATUS – use of standard questions

CMH changed the format of the question asked of patients regarding smoking status to comply with the recommended standard. Standard responses were included in a new query. In addition, since the data needed for quality measurement is different from the meaningful use data, a response was added about tobacco use (other than smoking). This will enable the same query to be used for both the meaningful use smoking measure and the meaningful use quality measure for tobacco use for eligible providers. These queries are shared across the acute and ambulatory settings at CMH. These queries are required.

DEMOGRAPHICS – use of standard questions and formats

Like most providers, CMH was not previously using the OMB standard categories for race and ethnicity. Incorporating those standards required considerable effort. CMH was required to change the EHR system, and more importantly, to train registration staff to ensure data is collected accurately and sensitively. While these seem like small changes, it was resource-intensive to operationalize for all 24 registration locations throughout the hospital and CMH Clinics.

For capture of demographics, CMH modified the responses for race and separated ethnicity to use two-question format. Capture of preferred language was moved to registration from nursing to assure it is captured on all inpatients and ambulatory patients. All fields were made required during patient registration. Field changes were remapped for reporting to the Missouri Department of Health through the Missouri Hospital Association Hospital Industry Data Institute. Training was provided to all scheduling and registration staff. An explanation brochure was developed to provide to patients upon registration explaining the new questions. CMH will be adding a structured field for the preliminary cause of death in the EHR abstracting module for coders to complete per vendor recommendations.

PROBLEM LIST – use of Snomed codes

The problem list in the CMH EHR was already being populated with ICD-9 codes by coders. Active management of the list was being done by 30% of providers across the hospital and CMH Clinics. To encourage adoption, CMH loaded expanded Snomed codes and the CMH vendors improved the problem list look up functionality. CMH educated providers on the new functionality. The measure sponsor is monitoring use of the problem list daily for admitted patients. Physicians seem puzzled by the need to enter "no problems" on a newborn, but are trying to comply for all patients.

CMH expects that maintaining an up-to-date problem list will be one of the challenges going forward. CMH is exploring ways to use the data from the problem list in ways that will benefit providers as a way to reinforce the importance of the list. For example, by linking quality measure alerts to the problems on the list, by providing physicians with reports on their patient populations using the problems on the list and by enabling more real-time surveillance monitoring based on those problems.

ELECTRONIC COPY

CMH was contemplating how to record that an electronic copy of a record was provided that includes multiple provider records. Most requests for records from the CMH Clinics include multiple providers, both within a particular clinic and across the CMH Clinic system. It is not uncommon for a request for records for a year to include 6 or more providers, both primary care and specialists. CMH currently plans to record these requests multiple times in order to capture this information and has requested an enhancement in the release of information routines in the ambulatory EHR software to accommodate multiple providers in a single request.

A recent clarification to the measure has now added even more confusion to the measure definition and the reporting requirement for CMH.

The question to CMS: To meet the meaningful use objective "provide patients with an electronic copy of their health information" for the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs, how should the numerator and denominator be calculated for patients who see multiple eligible professionals (EPs) in the same practice (e.g., in a multi-specialty group practice)?

CMS answer: If the request for an electronic copy of their health information is made by a patient to a specific EP, then the patient should be counted in the numerator and denominator for that specific EP. If the patient makes a request for an electronic copy of their health information that is not to a specific EP (e.g., by request to the practice's administrative staff), then the patient should be counted in the numerators and denominators for all EPs with whom the patient has had an office visit during the EHR reporting period.

CMH comments about this answer: The defined denominator for the measure is not patients with an encounter. It is defined as the number of patients who request an electronic copy. These patients may or may not have had an encounter with the providers for whom they are requesting records during the reporting period. To credit providers who had an encounter with a patient doesn't make sense to CMH and will further complicate reporting for this measure.

CMH is hoping for a clarification of the clarification on this electronic copy measure.

EPRESCRIBING – one retail pharmacy not participating

CMH is excited about ePrescribing, which has been implemented in the CMH Clinics for some time and is scheduled to be implemented in the hospital in 2011. CMH was pleased to find that almost all retail pharmacies, even in the rural areas, were already participating in ePrescribing.

CMH serves only one community in which there is no retail pharmacy participating in ePrescribing. In that rural community, there is only one retail pharmacy and that pharmacy does not participate in ePrescribing. The pharmacy is located directly next door to the CMH rural health clinic. Although the providers in that clinic could use ePrescribing and the prescriptions would be faxed through the ePrescribing system to the pharmacy, that process takes longer than it takes for patients to walk next door to pick up the prescription. Those providers, understandably, have a lower percentage on the ePrescribing measure. CMH is working with the ePrescribing vendor and pharmacists to explore options.

ECOPY / EDISCHARGE INSTRUCTIONS / CLINICAL SUMMARIES AND ACCESS – use of patient portal and PHR

CMH uses both a patient portal tethered to the CMH Clinics and encourages patients to utilize the GoogleHealth PHR. These tools are also methods for providing electronic copies, electronic discharge instructions, providing clinical summaries and access to patients.

Since the PHR, in particular, is provided through another vendor, it is expected that the use of the PHR for these measures will be reported separately and manually combined with the EHR vendor reports for these measures during attestation.

For future reporting, when it is expected to be done electronically, it is unclear to CMH how these results will be combined with the information from the core EHR system for reporting.

Quality measures for meaningful use

CMH is excited to have electronically-specified quality measures available. For hospital quality reporting, CMH is already extracting quality measure data when possible from structured fields for the CMS core measures and for over 200 other quality measures. CMH uses a non-profit quality measures data extractor for this service. Since 2005, CMH has worked to increase the percentage of quality measure data elements that are available in structured fields and, therefore, extractable. To date, CMH is able to pull 70% of the core measure data elements from the EHR in structured fields. The remaining data for quality reporting is manually abstracted from narrative data within the EHR. CMH is looking forward to the day when these measures are also e-specified.

In addition, CMH conducted research on quality data collection in the CMH Clinics funded by the Agency for Healthcare Research and Quality in 2007-2009. 62 ambulatory quality measures were built in structured data fields within the CMH EHR system. The data was extracted by a quality measures vendor and formatted into reports.

From this work, CMH showed that quality measure reporting from data fields is more complete than manual abstraction for quality reporting. The results were clear. CMH was able to report on 100% of cases that qualified for inclusion in each measure population. If providers recorded quality measure compliance (for example, prescribed the recommended medication), that was reported. If the provider recorded an exclusion in a structured field, that was reported. If no compliance or exclusion was recorded in a structured field, failure of the measure was reported.

What the research didn't study was the accuracy of the reporting. Because the CMH providers had to record quality measure compliance or exclusions in structured fields, or fail the measure, CMH was able to report on all patients. Anecdotal evidence showed that exclusions (such as "patient refused") were frequently not recorded in the record at all or not in the structured field provided.

Learning from this research is leading CMH to build the quality measure exclusions into order sets that are more accessible to providers at the time they identify exclusions to a recommended order. Extensive training and concurrent auditing for at least the first reporting period will be utilized to improve accuracy of results for quality reporting. It is expected that multiple iterations of data collection strategies will be required before the best practice for the collection of quality measure data and exclusions will be resolved.

OUTCOMES AND RESULTS

The CMH Validation Team has internally validated compliance for the hospital on these core measures: vital signs, CDS, problem list, CPOE, smoking, demographics, drug-drug, medication list and allergy list. Compliance on these four menu measures has also been internally validated: medication reconciliation, drug-formulary, lab tests and advance directives.

Scheduled for validation over the next six weeks are: quality measures, interoperability, electronic discharge instructions, electronic copy, privacy and security and immunization and syndromic surveillance reporting.

These scheduled validations depend on various outstanding issues, such as building and training (quality measures), certification (immunization and syndromic surveillance reporting), new functionality to be received from the EHR vendor (electronic discharge instructions and electronic copy) and the completion of the annual risk assessment (privacy and security.)

All measures are being monitored weekly and will be revisited after the certified service release and reports are received into the EHR system in mid January, 2011. For the 35 CMH Clinic providers the results are similar, with various issues affecting the eligible providers as described above regarding CPOE and ePrescribing.

USING ONC AND CMH COMMUNICATIONS

Use of ONC and CMH Communications

CMH has used the websites and communications provided by ONC and CMS frequently. CMH has found these to be very helpful.

Timing for Requirements

CMH is sensitive to the immense work that CMS and ONC had to accomplish to define meaningful use for Stage 1 and appreciates that effort. Now that Stage 1 has been established, it would be helpful if future requirements were published at least 18 months before providers are expected to be in compliance. 18 months is a minimum for vendors, hospitals and eligible providers to safely implement new functionality into an EHR system. Within 18 months, vendors will still be challenged to program their EHR software for the requirements, certify the new features and deliver those changes to customers. After which, hospitals and eligible providers will be still be required to to configure the functionality for their specific environment, test, train users and implement the changes. Particularly as we look forward to Stages 2 and 3 of meaningful use, CMH is apprehensive about the effort required to meet those new meaningful use requirement while the organization is also implementing ICD-10, 5010 and adapting to health reform.

Even with the much appreciated change to allow qualification for only 90 days during the first qualification year, vendors and hospitals have a maximum of 11 months after the requirements were published to begin a reporting period as of July 2, 2011 and earn incentives during the first year they are available. That is a very short time frame for so many changes. It is a time frame in which CMH, as advanced as our organization is in the adoption of the EHR, is challenged to achieve meaningful use.

Posted clarifications and FAQs

The clarifications and frequently asked questions that have been posted have been helpful, though in some cases, the clarifications from both CMS and ONC have added even more confusion. An example is the electronic copy clarification referenced above.

For some clarifications, it seems the entire intent of a measure is even being modified. For example, when the clarification on the population was posted that hospitals should include only patients with POS 23 (emergency department) when they are admitted to POS 21 (inpatient) or POS 22 (observation status – not included at all in the final rule). This clarification changed significantly the strategy for compliance, as most community hospitals have a much larger volume of emergency room patients than inpatients. The later clarification of the clarification was appreciated in that it provided flexibility in this definition, but again caused hospitals to change their compliance strategies and products purchased and implemented at a very late hour in the process.

Summary

CMH is fortunate to be at an advanced level of adoption. Even so, the changes required to meet the meaningful use measures have been extensive and have been rapidly deployed. Both reporting and rework have been costly as the requirements have been defined and clarified. And, challenges, particularly surrounding certification, still loom before CMH can attest to meaningful use.

CMH is grateful to have the opportunity to present on this early adopters panel and to qualify for meaningful use incentive payments in the future. We applaud the work of ONC and CMS in facilitating this effort.

Thank you, again, for this opportunity to provide testimony for the ONC Standards Workgroup.