

**Testimony to HIT Standards Committee Implementation Workgroup  
Early Adopters of Meaningful Use Seeking Attestation—Hospital Experience**

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Co-Chairs Johnson and Murphy and members of the Implementation Workgroup, thank you for this opportunity to testify for a hospital seeking attestation under the EHR Incentive Program. My name is Joanne Sunquist, and I am the CIO at Hennepin County Medical Center (HCMC) in Minneapolis. I am an active member and past board chair of CHIME, which has publically commented on the CMS and ONC proposed rules and other program aspects. As an organization that represents the senior IT leadership within health care organizations, we appreciate the opportunity to have our voice heard today.

**Organizational Overview**

HCMC is a 440 bed safety net teaching hospital with 37 outpatient clinics. We are a Level I Trauma Center for Adults and Pediatrics with more than 100,000 ER visits annually. HCMC has been recognized for fourteen straight years on the US News and World Report list of top hospitals and we provide training for over 1000 medical residents each year. We support a larger safety net continuum of care through our affiliated organizations including the Hennepin Faculty Associates (HFA) clinics, neighboring Federally Qualified Health Community (FQHC) clinics, Hennepin County Public Health/Mental Health/Homeless Shelter clinics and the Hennepin County Jail.

**Electronic Health Record History**

HCMC embarked on the journey towards an Electronic Health Record in late 2004. We chose to replace a “best of breed” model and implement a fully integrated clinical and revenue cycle system (Epic) for our hospital and clinics. This \$68M capital investment was supported by a Return on Investment analysis demonstrating a seven year payback which we are on schedule to deliver. We were driven by the following vision and guiding principles:

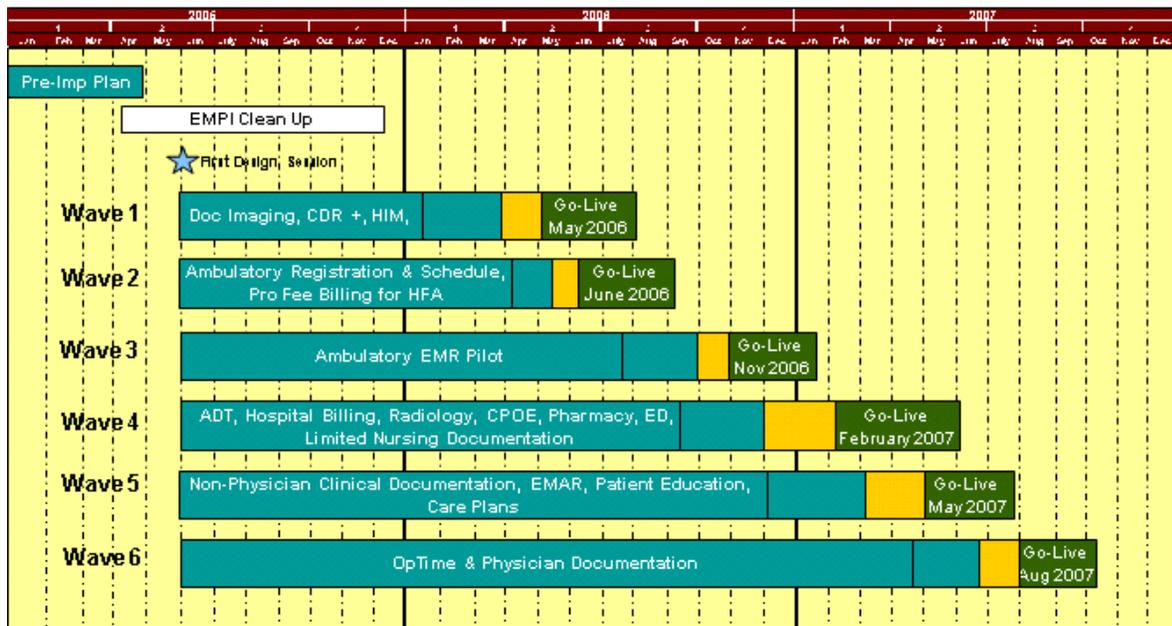
HCMC Vision: The Electronic Health Record (EHR) supports standardized workflow transformation to create an environment that enhances the patient and provider experience, and improves clinical and financial performance.

HCMC Guiding Principles:

- Design an environment that is patient focused and actively engages patients in their care
- Design to what is best for Hennepin as a whole
- Standardize processes and tools throughout the enterprise
- Implement leading practices based on evidence where it exists
- Provide seamless access to relevant knowledge and appropriate patient information through an integrated system
- Capture data that allows us to measure current performance, help meet external reporting requirements, and support continuous improvement
- Facilitate communication between caregivers to enable coordinated interdisciplinary care across the continuum

HCMC used a phased enterprise approach to implementation with six waves from 2006 through 2007. Since that time we have continued to add functionality for nurse triage, OB, oncology and PHR as well as becoming an early adopter of the CareEverywhere module for record sharing across Epic sites. We also completed several major hardware and software upgrades and rolled out the EHR to our affiliate organizations.

With executive and senior medical staff support, we achieved a high level of standardization in our implementation, which ultimately helped position HCMC well for Stage I Meaningful Use (MU). An example of this is our current 97% CPOE utilization.

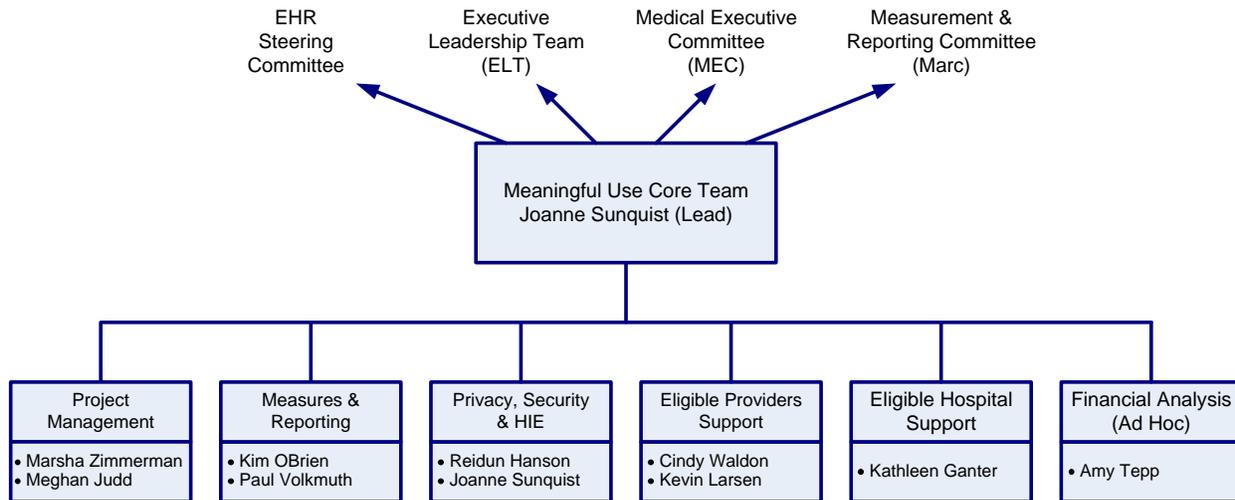


**Identify your challenges, barriers, and successes as an early adopter of meaningful use seeking attestation.**

**Challenges:**

1. Knowing when to begin working on our “Readiness Assessment” while waiting for the Final Rules to be published for Stage I MU. We did not want to get too far ahead of ourselves.
2. Defining the cross-organizational structure, processes and resource needs to meet MU requirements. Obtaining resource commitment from areas including Executive Leadership, Performance Measurement and Improvement, Medical Staff, Nursing, Privacy/Security, Finance, Information Services and our affiliates. Our initial estimate on resource requirements has proven to be insufficient, and we are now working on expanding the resources available to support our attestation process.

## Meaningful Use Structure



3. Educating our Board, leaders, physicians and staff on MU and “what it means to me”.
4. Estimating the potential financial impact of MU for our organization with complexities on the formulas and timing of payments (especially for Medicaid).

**Largest Challenge:**

1. Creating the reports for Eligible Hospital MU objectives and quality measures has become an onerous, difficult and time consuming process. This is in spite of the fact that we are working closely with our certified vendor who has provided certified reports. It is our understanding that only one Epic customer has been able to successfully run all of the Eligible Hospital MU reports.

We know that one of the pitfalls of being an “early adopter” is that we are on the cutting edge of figuring out the report logic, and those who follow will benefit from our efforts. However, we are concerned that the difficulties organizations will face in producing the reports will result in significant delays in attestation, while not inherently adding value to the overall intent of MU.

2. The primary reasons for the reporting difficulties include:
  - a. While our vendor has attempted to define primary and alternative workflows and structured data elements required to support reporting on each objective and quality measure, organizations may or may not have implemented the system using these exact workflows. Therefore, the reports provided by the vendor will not produce accurate results unless we change our workflow and/or documentation requirements. Testing and validating the reports is an iterative process with changes to workflow and ongoing feedback to providers. This effort multiplied by the number of reports is quite sizeable.
  - b. We have thoroughly reviewed the quality measure specifications provided on the CMS website. However, the specifications are so specific, the development and records created for MU quality measures are unique and the same records used for the measure in other programs (such as the PQRI) are not uniformly shared for MU. Our organization might already be reporting on a measure or similar measures for other programs, but we must redo the quality measure record build for MU reporting. In many cases, we will be able to share decision support and documentation tools and use the same workflows for capturing the quality measure data, but the measure results are calculated and reported using unique quality measure records and logic. Many of the required elements to support the numerator or denominator for the reporting are already part of Core Measures or other quality initiatives. However, that reporting is done with a combination of Epic produced reports as well as some manual auditing. To demonstrate this point, we can look at the following example:

<b>Hospital Quality NQF 0371 VTE Prophylaxis within 24 hours of arrival</b>
<b>NUMERATOR:</b>
<i>Patients who received VTE prophylaxis or why VTE prophylaxis was not given:</i> <ul style="list-style-type: none"> <li>• <i>the day of or the day after hospital admission</i></li> <li>• <i>the day of or the day after surgery end date for surgeries that start the day of or the day after hospital admission</i></li> </ul>
<b>DENOMINATOR:</b>
<i>All patients</i>
<b>EXCLUSIONS:</b>
<i>Patients less than 18 years of age</i> <i>Patients who have a length of stay (LOS) less than two days and greater than 120 days</i> <i>Patients with Comfort Measures Only</i> <i>Patients enrolled in clinical trials</i> <i>Patients who are direct admits to intensive care unit (ICU), or transferred to ICU the day of or the day after hospital admission with ICU LOS greater than or equal to one day</i> <i>Patients with ICD-9-CM Principal Diagnosis Code of Mental Disorders or Stroke as defined in Appendix A, Table 7.01, 8.1 or 8.2</i> <i>Patients with ICD-9-CM Principal or Other Diagnosis Codes of Obstetrics or VTE as defined in Appendix A, Table 7.02, 7.03 or 7.0</i>

As highlighted, patients on comfort measures are to be excluded from the denominator. In our electronic record, comfort measures documentation is found as part of the End of Life order sequence, within a provider's note as a discussion with the family or entered by the coders after the inpatient stay. MU reporting has required us to standardize the method so that we have discrete data for comfort measures. This is just one of many examples of how we need to change workflow and documentation to collect the necessary data.

**Successes:**

The initial analysis of HCMC's status relative to the Stage I Eligible Hospital requirements leads us to believe that we will be able to meet the Core and required number of Menu objectives. As previously stated, we are confident that our implementation approach, which focused on standard workflow of a fully integrated system and required demonstrated competency for all users, will support this success.

**Outline the implementation approaches and methodologies you used that worked and didn't work. Include any real-world user stories, illustrations, or examples.**

The structure HCMC has put in place for attaining MU, with oversight of a Project Manager using standard PM tools, is working well for us. Each of the MU subcommittees has a charter and clearly defined responsibilities and timelines. A formal communication plan was developed to ensure that all key stakeholders get information on MU on a regular basis. A tight partnership with our Performance Measurement and Improvement and Knowledge Management (Data Warehouse) teams has been key as we strive to integrate the MU quality measures with other quality activities in our organization. Once we can generate all the reports, we will review the results on an individual basis with physicians and other required participants and will develop individual development plans as needed.

In the state of Minnesota, HCMC has representatives on all the major e-Health Committees, including HIE (co-Chaired by myself), Privacy and Security and Standards. We are also active in the Minnesota Epic User Group, which is sponsoring joint activities to support achievement of MU. Through active involvement, we are able to influence direction at the state level and collaborate with our peer organizations. An example of this is a joint effort to create standard processes and tools for sharing patient information at the time of a transfer from the hospital to a nursing home. We are now working with the State to apply for a HIE Challenge Program funding through the ONC to broaden this initiative.

The working relationship we have with our vendor, Epic, is also important to our success. We have partnered with them for the past several months on report development (see tracking document on last page). They also produce monthly MU "Readiness Review" reports for us and are providing assistance with workflow changes as required. Lastly, they provide numerous webinars and networking opportunities to help us implement the reporting tools, support operational changes and further understand the interpretation of the measures.

**Discuss your outcomes/results. Include any surprises or unexpected outcomes and how you addressed them?**

As previously discussed, our largest surprise in preparing for MU attestation was the difficulty in producing the required reports. In addition to all the workflow changes, we also had to upgrade our reporting database and change our current database support practices to meet the reporting requirements and the evolution of the reports. Resources and timelines have been expanded beyond our original estimates. Our early plan was to attest in April of 2011, but that will be delayed until later in 2011 due to the reporting challenge.

**Describe your experience using the ONC and CMS communications regarding the meaningful use criteria, standards specifications and measurement.**

We have extensively used the web site and materials made available by ONC and CMS to better understand the MU requirements. We have found these resources to be extremely helpful.

We have appreciated Dr. Blumenthal's appearance at the last two CHIME Fall Forums as well as the 2010 Minnesota e-Health Summit. He has provided significant insight to the MU process.

We individually, and through both CHIME and Epic, gave input into the Stage I requirements and were pleased with ONC and CMS response.

The majority of our current interactions with ONC as we seek clarification on the requirements and the reports, have been through Epic rather than individual hospital inquiries.

Thank you for providing me with this opportunity to testify. I appreciate your leadership and the dedication of the HIT Standards Committee Implementation Workgroup.

# Hospital Quality Measure Build Tracker

Original Sort Order	Build Complete	Category	ID	All Decisions Made	Grouper Build					Additional Numerator Documentation							Exclusion Documentation					ED		
					Diagnosis Groupers	Procedure Groupers	Medication Groupers	Result Component Groupers	Allergen Groupers	Documentation Flowsheet	SmartText	SmartPhrase	SmartList	Communication Orders	BestPractice Advisory	Patient Education	BestPractice Advisory	Documentation Flowsheet	Communication Orders	SmartText	SmartPhrase	SmartList	ED Event	Patient Class
1	X	ED	NQF 0495	Yes	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	X	ED	NQF 0497	Yes	X	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	X	General Stroke and VTE	General Grouper Build	Yes	X	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	X	General Stroke and VTE	Comfort Measures Only	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
5	X	General Stroke and VTE	Clinical Trial	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA	NA
6	X	General Stroke and VTE	Elective Carotid Intervention	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
7	X	Stroke	NQF 0435	Yes	NA	NA	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
8	X	Stroke	NQF 0436	Yes	NA	NA	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
9	X	Stroke	NQF 0437	Yes	NA	NA	X	NA	NA	X	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
10	X	Stroke	NQF 0438	Yes	NA	NA	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
11	X	Stroke	NQF 0439	Yes	X	NA	X	X	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
12	X	Stroke	NQF 0440	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA	NA	NA	NA
13	X	Stroke	NQF 0441	Yes	NA	NA	NA	NA	NA	?	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	X	VTE	NQF 0371	Yes	NA	X	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
15	X	VTE	NQF 0372	Yes	NA	X	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA
16	X	VTE	NQF 0373	Yes	NA	X	X	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	X	VTE	NQF 0374	Yes	NA	X	X	NA	NA	NA	NA	NA	NA	?	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	X	VTE	NQF 0375	Yes	NA	X	X	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	X	VTE	NQF 0376	Yes	NA	X	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA	NA	NA	NA