

Meaningful Use Workgroup Hearing

May 13, 2011

Experiences from the Field: Weill Cornell Physicians Testimony

About Weill Cornell Physicians

The Weill Cornell Physician Organization is grateful for the opportunity to share its early experience with preparation for the Meaningful Use requirements.

The Weill Cornell Physician Organization is the faculty practice plan of Weill Cornell Medical College. Based in New York City, the Weill Cornell Physician Organization consists of approximately 800 multi-specialty faculty practitioners who see approximately one million annual ambulatory visits. The majority of practitioners at Weill Cornell provide highly sub-specialized care. Our primary care base is relatively small, though it has been slowly expanding.

The Physician Organization has been very progressive in its adoption of health information technology. It first began implementation of a shared ambulatory EHR (EpicCare) in 2001. The roll-out of the EHR was relatively slow and required a great deal of customization to meet the highly specialized work-flows of our providers. At the time of the finalization of the Meaningful Use regulations, Weill Cornell had completed the majority of its implementation and had fairly broad adoption of electronic documentation, CPOE, results review, and messaging.

Meaningful Use: Strategy and Preparedness

The Meaningful Use program has been enthusiastically embraced by Weill Cornell PO leadership. It coincided with our own goals to optimize and enhance our local use of the EHR and thereby added a financial incentive to one of our most important internal strategic goals. Only through EHR use optimization would the PO be able to achieve better clinical integration, improve the patient experience, and enhance revenue opportunities.

The clinical and administrative leadership of the Physician Organization is committed to complying with the evolving Meaningful Use standards. As a federated group of clinical departments, the PO directly debated the critical issue of how best to align the financial incentives in order to succeed. Ultimately, we devised a funds flow model which attempts to incentivize the providers who have to do the majority of the “heavy-lifting” with regards to behavior change, while accumulating a central fund for ongoing investment in our IT infrastructure. Our model allows 75% of reimbursement money to flow to the qualifying providers, while retaining 25% of the reimbursement for a central IT reserve. Perhaps most noteworthy, we also accelerated penalties for failure to achieve Meaningful Use such that non-qualifying providers will be assessed 25% of their bonus potential.

We have modeled our number of potential eligible providers and determined it to be approximately 350 providers. Of those, approximately 50 will likely be eligible for the Medicaid reimbursement program. Over half our of our faculty will be ineligible for the “EP”

reimbursement program based on either the fact that they are hospital-based providers or their specialty scope prevents them from using the ambulatory EHR. Weill Cornell intends to begin its stage 1 Meaningful Use reporting in the last ninety days of calendar 2011.

Stage 1 Objectives: Ease of Implementation

Weill Cornell greatly appreciated the flexibility that was introduced into the final legislation with regards to meeting the Meaningful Use objectives. Many of the both the core and menu objectives are relatively straightforward for us to meet or exceed based on excellent vendor support of the function in combination with our relative head-start on EHR adoption. However, many others are proving more challenging. Those that are more difficult generally are problematic either because the objective is technically difficult to implement, requires an unwieldy work-flow, or relies on profound behavior changes by the providers.

Table 1 summarizes our assessment of the both the core and menu objectives. To simplify we have grouped the objectives into three high-level categories based on our experience to date: *Straightforward/Easy*, *Moderately Challenging*, and *Extremely Challenging*. Each objective is rated in terms of the technical complexity involved in supporting the objective and the degree of behavioral or work-flow adaptation required of providers. Our ratings are no-doubt influenced by both the particular vendor solution employed (Epic) and our institutional culture. As is probably universally true, items of high technical complexity generally require disproportionately large effort by our central IS staff, while those with high work-flow impact require a great deal of training and change management at the local practice level.

It is hard to find truly unifying themes for those objectives that we have found difficult. Generally speaking, they are requirements that necessitate a great deal of re-engineering of work-flow, some of which often seem impractical. It is challenging to cram more and more required actions into very brief encounters. There is a breaking point in terms of what a clinician can be reasonably expected to do in any given encounter—and we seem to be rapidly approaching that limit. This seems especially true in highly sub-specialized visits. Many of the patient engagement objectives rely heavily on use of the patient portal. We are convinced that broader use of the patient portal will be good for providers and patients alike. That said, the education process for both staff and patients is intense and there are serious administrative costs to enrolling thousands of patients. Perhaps most vexing are the objectives that may in fact be sensible public health interventions, but have very little to do with adoption and proficient use of the EHR. For example, debating the merits of measuring blood pressure with a dermatologist or head and neck surgeon is perhaps not the best use of our limited resources to achieve Meaningful Use.

Clinical Quality Measures

Of the core objectives, the implementation of the clinical quality measures is proving most difficult. There are a variety of reasons for this. First, is the widely recognized need to harmonize the Meaningful Use CQMs with existing quality measures. Coincident with the introduction of the Meaningful Use measures, Weill Cornell had just completed a rather large

effort to achieve success with the PQRS program. A new set of similar (but not identical) measures has generally resulted in a great deal of confusion.

Additionally, there is a reasonable amount of ambivalence amongst our providers as to the appropriateness of the core measures and the relative lack of support for specialty measures. Our highly sub-specialized providers believe that the measures skew towards primary care. Many feel strongly that the core measures are not necessarily within their scope of practice. Even when a measure is deemed clinically appropriate, the relationship between the measure documentation and the actual quality of care seems suspect.

The technical aspects of CQM reporting have also been daunting. First, the discrete data capture for many of the measure outcomes is cumbersome. For non-automated measures, the work-flow can be awkward and time consuming. The vendor solution for deriving the quality measure statistics is extremely system-intensive. We've had to dedicate very elaborate testing systems to insure that the CQM calculation algorithms don't actually cripple our production EHR system.

Preparation Challenges and Costs

Weill Cornell had a relative head-start to meeting Meaningful Use given our long-standing use of a robust, shared EHR. That said, our ability to ultimately qualify for the majority of our reimbursement potential will have been the result of a very significant re-prioritization of our internal IT initiatives. Many worthwhile optimization and integration projects have been deferred by virtue of the fact that they are not directly related to the defined Meaningful Use Objectives. Similarly, there are many very important strategic initiatives of the Physician Organization that have had to "compete" for a limited IS bandwidth. Among these are clinical integration projects, Patient Centered Medical Home, and community-connect initiatives. A very significant looming risk is the under-resourcing of the massive ICD-10 conversion effort while we continue to staff the Meaningful Use initiative.

In addition to our own internal prioritization struggles, we certainly have also noted the degree to which the Meaningful Use program and EHR certification standards have affected our vendor's capabilities. Almost all development resources at Epic have been diverted to keeping up with the Meaningful Use and Certification requirements. This may be largely appropriate and we certainly feel that Epic has done an outstanding job providing us with a tool set to succeed. However, many system functions that are sufficient to achieve certification are not necessarily ideal. Very urgent needs for other areas of system enhancement and innovation have gone unaddressed while the vendors scramble to achieve "least common denominator" level functionality.

While Weill Cornell administrative leadership has been very engaged in the Meaningful Use requirements, bringing the message to the rank-and-file clinicians has been quite difficult. Though most clinicians appreciate the concept that the use of the EHR has the potential to improve care quality and the patient experience, they certainly can't keep up with the intricate nuances of the legislation. Not surprisingly, the providers are more interested in what the regulations mean to their practice and productivity in very concrete terms. We have attempted to bridge this gap with educational materials and training. As our clinicians digest the specific

requirements, most express apprehension about the degree to which their practice may need to be re-engineered and succumbing to “death by a thousand clicks.” These fears are often warranted. The current implementation of the objectives do add more than a few system clicks. Further, some of the necessary process re-engineering does seem misguided. Should an ophthalmology practice, for example, re-design their work-flows to make sure every patient is weighed?

Clearly our institutional focus has been on our full-time faculty providers, but it is worth noting that the Meaningful Use program has motivated our small practice affiliates to install EHR systems. Surely this was the intended effect. However, the gold-rush mentality amongst the small practice groups is problematic as they generally have a very unsophisticated understanding of the Meaningful Use objectives and the potential hurdles involved to achieve them. Our own anecdotal experience with these groups supports the fears verbalized by many others that these groups will rush to install a system, only to determine that the system does not meet the needs of the practitioners. This may ultimately prove to be a very costly cycle.

With regards to accounting for our own institutional investment in preparing to become Meaningful Users, it is a very difficult exercise. To date, most of our costs have been in the diverting of effort of existing IS resources. Though hard to estimate precisely, this probably amounts to 3FTEs for approximately two years. This would translate into roughly \$500K. However, we have not yet borne all the costs. As we continue to engage in process re-design, it is our strong hypothesis that we will need to hire additional physician-extenders to standardize aspects of the pre and post-MD patient experience. In the end, it is likely that we will have spent \$1M-1.5M to implement Meaningful Use. Assuming the majority of our eligible clinicians qualify for reimbursement, we consider this to be a very substantial return on investment, likely to pay other important dividends.

Summary

The Weill Cornell Physician Organization has made achievement of Meaningful Use a top strategic priority. We have made a substantial effort to prepare our infrastructure and clinicians to be ready to achieve the Stage 1 objectives within 2011. It has been a challenge to reach this state of preparedness despite a reasonably robust pre-existing EHR install. Many of the objectives are easily within our reach. Several have been technically challenging and others will require profound (but worthy) process re-engineering and behavioral changes by our clinicians. The providers are confused about the regulations and many are unconvinced that all of the objectives are relevant or even appropriate. Vendor solutions for even non-controversial objectives are often awkward and time-consuming. We have attempted to align the financial incentives of our clinicians, while underscoring the important underlying spirit of the regulations which promotes the key role that health information technology must play to improve care delivery. Though our preparation for Meaningful Use has been a relatively costly endeavor, we feel strongly that the intent of the program is consistent with our own internal strategic goals. It is our hope that the majority of our eligible providers will qualify for reimbursement. No matter what the amount of the ultimate funds flow, our education and process re-design efforts will definitely reap ongoing benefits as we strive to improve the efficiency, safety, and quality of our care.

Table 1: Implementation Ease of Stage 1 Core and Menu Objectives

| Straightforward/Easy Objectives | | | |
|--|-----------------------------|-------------------------|--|
| Requirement | Technical Complexity | Work-flow Impact | Comment |
| CPOE for medication orders | Low | Low | Excellent vendor functionality with high pre-existing adoption within user base |
| Maintain active medication list | Low | Low | Excellent vendor functionality with high pre-existing adoption within user base |
| Maintain active allergy list | Low | Low | Excellent vendor functionality with high pre-existing adoption within user base |
| Drug-drug, drug-allergy checking | Low | Low | Good vendor content with pre-existing configuration within system |
| Implement drug formulary checks on medication orders | Med | Low | Vendor support for functionality is adequate, though formulary data and transmission is sub-optimal |
| Generate and transmit e-Rx | Low | Med | Excellent vendor functionality, recent very strong push for increased user adoption |
| Maintain up-to-date problem/ diagnosis list | Low | Med | Good vendor functionality with generally good adoption with user base |
| Incorporate test results into EHR as structured data | Med | Low | All existing HL-7 result interfaces capture data in structured fashion |
| Record smoking status | Low | Med | Good vendor support for data capture, but work-flow to collect information varies greatly amongst specialties |
| Information to immunization registries submitted electronically | Med | Low | Excellent vendor support via standard interface. Weill Cornell had pre-existing interface with New York City immunization registry |
| Implement one CDS rule with ability to track compliance | Low | Low | Excellent vendor support for best practice alerts and health maintenance rules. Weill Cornell has built and implemented a large library of CDS rules |
| Generate list of patients with specific conditions | Med | Low | Good vendor support for ad-hoc case-finding queries. Similar reports can be generated via Weill Cornell's Epic-based clinical data warehouse |
| Moderately Challenging Objectives | | | |
| Requirement | Technical Complexity | Work-flow Impact | Comment |
| Record demographics | Low | High | The relevant data fields are discrete, but Weill Cornell had previously refrained from collecting data on race and ethnicity. This required a substantial educational process and was met with some patient push-back |
| Record vital signs | Low | High | Data capture is straightforward within EHR, but many highly sub-specialized practices do not routinely capture this information. Recording vitals in some of these practices requires expensive process re-design and possible addition of staff |
| Perform medication reconciliation | Low | High | Vendor support for this is adequate, though it could be much better. This is a good example of something that we are not doing well, but should be. Many sub-specialists have a somewhat misguided notion that this is solely the responsibility of primary care providers |
| Upon request provide patients with their electronic copies of health information | Med | Med | Records release is very de-centralized at Weill Cornell. We have had to begin implementation of a new "Release of Information" module which is training intensive. There are difficult technical challenges with generating exportable documents in a thin-client application environment |
| Use EHR technology to identify patient-specific educational resources and provide to patients as appropriate | Med | Med | This requires integration of high quality third party content into the EHR which Weill Cornell had not yet done. We have implemented "rich-link" functionality into the patient portal, but need to accelerate patient enrollment to the portal |
| Implement capability to exchange key clinical information among providers and with patient-authorized entities | Med | Med | The vendor support for this is quite good, but we are disappointed by the vendor's licensing scheme which essentially brands a mandated standard. The stage 1 requirement for the test should be straightforward, but robust implementation will require work-flow changes. |
| Electronic reporting of syndromic surveillance data | Med | Med | Weill Cornell has not aggressively researched our options, but presume this could be handled in the context of standard observation interfaces that are well-supported by our vendor |
| Implement systems to protect security and confidentiality of patient data | High | Low | This has required relatively straightforward effort, though some of the requirements have the potential to increase system maintenance costs |
| Extremely Challenging Objectives | | | |
| Requirement | Technical Complexity | Work-flow Impact | Comment |
| Report quality measures to CMS and the States | High | High | This is an ongoing challenge. The measures are not harmonized with existing PQRS measures. Sub-specialists are unhappy with the core measures. Many measures can't be easily automated and require awkward and time-consuming work-flows |
| Provide timely access to new results | High | High | The vendor has excellent support for automatic result release via the patient portal. It has required a great deal of effort to design appropriate release algorithms. A significant amount of process re-design has had to occur to improve enrollment and provider participation in the portal |
| Provide clinical summaries for each office visit | Med | High | The vendor has excellent support for generating an AVS. Weill Cornell has been slow to adopt this work-flow due to asynchronous nature of provider encounter documentation and the lack of standardized check-out procedures |
| Send reminders for preventive/ follow-up care | High | Med | This is a technically complex maneuver that either involves mass-mailings or very high enrollment in the patient portal. It requires more consistent use of the EHR health maintenance module or there is a risk of very poor data quality |
| Provide summary record at transitions in care and referrals | Med | High | Weill Cornell feels that most internal referrals benefit from the entire shared record. External referrals require consistent use of the AVS, which has been problematic for Weill Cornell |