A Journey through Meaningful Use at a Large Academic Medical Center: Lessons of Leadership, Administration, and Technical Implementation

by Melissa D. Unger; Alison M. Aldrich, MSI, MPH; Jennifer L. Hefner, MPH, PhD; and Milisa K. Rizer, MD, MPH

Abstract

Successfully reporting meaningful use of electronic health records to the Centers for Medicare and Medicaid Services can be a challenging process, particularly for healthcare organizations with large numbers of eligible professionals. This case report describes a successful meaningful use attestation process undertaken at a major academic medical center. It identifies best practices in the areas of leadership, administration, communication, ongoing support, and technological implementation.

Introduction

The Centers for Medicare and Medicaid Services (CMS) electronic health record (EHR) incentive program gives financial incentives to providers and hospitals for the implementation and meaningful use of EHRs.[1] Therefore, organizations are expediting their EHR implementations to receive funds now and avoid penalties in the future. While the effort to receive meaningful use incentive payments requires the implementation of an EHR system, it also requires meaningfully using the system. This requirement includes specific criteria outlined by the Office of the National Coordinator for Health Information Technology.[2] These criteria fall into five main categories: quality, safety, efficiency, and reducing health disparities; engaging patients and their families; improving care coordination; improving population and public health; and ensuring adequate privacy and security protections for personal health information. The path to successful reporting of meaningful use requires attention to several areas to stay on time and on target.

Background

In 2012, 42 percent of hospitals reported having implemented EHR functionality to meet or exceed stage 1 meaningful use requirements.[3] This progress is good, but many hospitals are still in danger of failing to complete their meaningful use attestations. A 2010 survey by the American Hospital Association found that 55 percent of hospitals expected to incur penalties for failure to demonstrate meaningful use by 2015.[4] To fully realize the potential of EHRs, health systems that have successfully reported meaningful use need to communicate their best practices for efficiently achieving these standards. This case study adds to the discussion of how hospital systems can successfully track meaningful use statistics for large numbers of eligible professionals (EPs).

Setting

The Ohio State University Wexner Medical Center (OSUWMC) comprises six hospitals, two campuses, and 46 outpatient sites in the greater Columbus, Ohio area. It serves all patients and populations, with the underserved and Medicaid population being approximately 25 percent of the patient mix. The organization's mission is to improve people's lives through innovation in research, education, and patient care. The information technology department employs more than 330 individuals to support the spectrum of technology needs for the organization. Meaningful use is supported by the applications team, with two professionals focused full time and several other specialized staff spending portions of their time on it. Responsibility for meeting the program requirements is spread across all areas of the EHR.

Implementation of OSUWMC's EHR system was a well-conceived plan. We started by implementing an ambulatory EHR in February 2008. We have since completed implementation in the majority of our outpatient sites as well as our hospitals with a "big bang" implementation of the rest of the enterprise system in October 2011. This process resulted in one EHR system for ambulatory and inpatient documentation, registration, scheduling, and revenue cycle. In January 2012, we began our first year of stage 1 meaningful use reporting for EPs, who are physicians and midlevel providers who meet eligibility criteria for the EHR incentive program.[5] In the first quarter of 2012, 48% of our 555 EPs were compliant, and we were able to increase the compliance rate to 95 percent by the end of 2012. Through reflection on our experience in the first year of stage 1 meaningful use tracking, we identified several best practices that can inform the future efforts of other healthcare organizations. These best practices are in the areas of leadership, administration, report building, documentation, audit preparation, communication, and ongoing support.

Best Practice Areas

Leadership

Leadership plays a key role in the successful adoption of meaningful use processes. All levels of leadership, including the board, all executives, administrators, and individual clinic managers, need to be involved. At OSUWMC, we have a special team for high-level decision making related to meaningful use. This team includes the deputy chief information officer, the chief medical information officer, and the application leads. This group was responsible for selecting the clinical quality measures to which the EPs would be held accountable. In choosing, they gave preference to measures that applied broadly across the most specialties. The board and executives used multiple channels to send the message that participation in the program was a requirement and that "meaningfully using" the EHR was a part of delivering the best patient care. They sent regular updates through e-mail and mass mailings as well as making meaningful use a high-priority agenda item at most leadership meetings. Administrators and clinic managers worked in their respective locations to implement new clinical workflows that were necessary to meet the meaningful use requirements, developing detailed tip sheets to outline each change. They routinely reviewed their specialty's EP meaningful use reports and addressed the areas for improvement with their EPs, clinical support staff, and front-desk staff.

Administration

Healthcare organizations may be composed of multiple departments, locations, practices, and specialties, but the administrative functions of meaningful use should be centralized. Having one unit responsible for registering the EPs into the EHR incentive program and submitting their attestations makes the completion of this task more efficient. At OSUWMC, the credentialing office is responsible for provider enrollment, on-boarding, and delegated credentialing with multiple insurers, so having that office involved in the attestation process made sense. The internal legal department at OSUWMC created forms for each EP to sign authorizing a surrogate to register and attest for the Medicare and Medicaid EHR programs (see Figure 1). This internal requirement formally documented each EP's authorization for the credentialing office to register and attest with CMS or the state on the provider's behalf. These authorization forms have also been incorporated into the on-boarding process for new providers.

Additionally, the credentialing staff set up proxy accounts, as required by CMS in the Registration and Attestation User Guides,[6] to complete the registration and attestation processes on behalf of the EPs. Finally, we created a new position, the meaningful use coordinator, to translate rules and regulations, guide users through the maze of metrics, work with the administrators and clinic managers to modify their clinical workflows, provide periodic status updates to leadership, and track each EP's registration, attestation, and payment status. Establishing the meaningful use coordinator position was critical to our success. A well-qualified meaningful use coordinator should have the following skills: project management and meeting facilitation experience, strong communication skills, data management experience, and the ability to comprehend, incorporate, and educate others on government regulations. Figure 2 provides a position description for the meaningful use coordinator.

Communication

There is no such thing as overcommunicating about meaningful use. At the outset, the organization should provide interim summary reports of meaningful use for all EPs and their corresponding administrator and clinic manager on a weekly basis so that EPs performing below expected levels can be counseled in a timely manner to make the necessary adjustments. These reports list goals and percentage scores with numerator and denominator for each core, menu, and quality measure. As the organization progresses through the meaningful use program and new processes become standard, the frequency with which administrators and clinic managers receive EP status reports could decrease to biweekly, monthly, or quarterly. We do not provide formal meaningful use training as part of orientation for new EPs. EPs who join the organization come with varied levels of understanding of meaningful use; therefore, we find that a one-on-one approach to training, between the new EP and his or her supervisor, works best.

Additionally, we recommend including meaningful use highlights and updates in newsletters, e-mail, and other forms of communication for the purposes of educating and informing all medical staff. We found that meaningful use updates at board, executive, faculty, and operation committee meetings provided the best opportunity to keep leadership and management informed.

Ongoing Support

Ongoing support should be provided by the report building team to respond to reporting errors. The meaningful use coordinator should assist in troubleshooting issues regarding registrations, rejections, and attestations. He or she should also should keep everyone abreast of program changes and audit processes and be available to answer questions. Moreover, the EPs' CMS EHR registration accounts should reflect a central, secured e-mail address for which mailbox rights are assigned to the meaningful use coordinator and credentialing staff. This arrangement will allow the meaningful use coordinator and credentialing staff to respond quickly to all CMS e-mail notifications sent to the EPs regarding their EHR registration and attestation status, any rejections, or any audit requests. It will also prevent the EPs from being unnecessarily alarmed or confused by EHR CMS notifications.

Technological Implementation

Report Building. Building and validating the attestation reports necessary to submit data to CMS affirming that the providers have qualified for meaningful use requires much time and resources from the EHR architecture team. Reports need to be developed and reviewed to track the providers' progress, provide feedback to the EPs and leadership, and support reporting of the final attestation data to CMS. Even if an EHR system comes equipped with standard meaningful use reports, manual setup, testing, and quality review must take place prior to releasing the reports to users for individual feedback and submitting data to CMS. Upgrades to EHRs pose additional challenges because they can change workflows or the logic needed for the reports. Therefore, working closely with the organization's EHR vendor is important to ensure the accuracy of the reports and to resolve errors and issues expeditiously.

Report Validation. At OSUWMC, the meaningful use reporting team reviews current outstanding reportable EHR issues prior to performing an extensive quality assessment on each objective and clinical quality measure. From each objective or measure detail report, the team randomly selects at least three EPs. Every effort is made to select EPs that have patients in each category: Met, Not Met, and Excluded.

A minimum of five patients in each category are reviewed. The team documents and tracks any issues identified during the quality assessment process and works with the EHR vendor to resolve the issues.

Once the meaningful use reports have been validated for accuracy, the reports are provided to the meaningful use coordinator to determine the EPs' qualification for attestation in that specific reporting period.

Documentation for Internal Tracking. In addition to the interim and final attestation reports, other tracking mechanisms are needed for internal organizational purposes to track registrations and attestations, identify key areas for improvement, forecast financial data, and compare incentive accruals to actual incentives received. A central, secured spreadsheet to track registrations, rejections, program, stage, year in stage, attestation period, and attestation submission dates contributed to the success at our organization (see Figure 3). This information can also be imported into the EHR to update reporting parameters. Additional spreadsheets can be used to track progression, weaknesses, and financial impacts. Figure 4 provides an example of our meaningful use incentive tracker.

Audit Preparation. Prior to CMS's notification to the public of the incentive program audit process in summer 2012, organizations speculated about what auditors would request should an EP be selected for an audit. At OSUWMC, our proactive approach to document all planning, decision making, building, testing, updates, upgrades, and results for the attestation-only objectives paid off because these items were among those that auditors indicated would be requested to support attestation data submitted to CMS. We recommend archiving any surrogate authorization forms, detailed and summary attestation reports, attestation confirmations, EHR certifications, license summaries for each upgrade, and screenshots supporting functionality of the attestation-only objectives. This approach will allow for quick response to any audit request.

To further prepare for an audit, a review of the meaningful use processes for our EPs was completed by our internal auditors. No major risks were identified, and we received good recommendations on how to further refine our meaningful use processes.

Limitations

The OSUWMC, as a large academic medical center, is the type of organization most likely to achieve meaningful use in the first phases of EHR implementation. While the lessons outlined in this article might also apply to smaller and/or rural hospitals, these organizations may face additional challenges not highlighted here.

Conclusion

The meaningful use journey is not automatic and will be different for every organization. The process requires dedicated resources and thorough, ongoing oversight. Achieving meaningful use with large numbers of EPs can be especially arduous. This study identified three areas of focus to assist with successful stage 1 meaningful use documentation: leadership, including communication and ongoing support; administrative strategies, including creating the meaningful use coordinator position; and technological strategies, including report building, documentation for internal tracking, and audit preparation. We hope that sharing our organization's experience in this regard will be useful and informative for those still on the journey.

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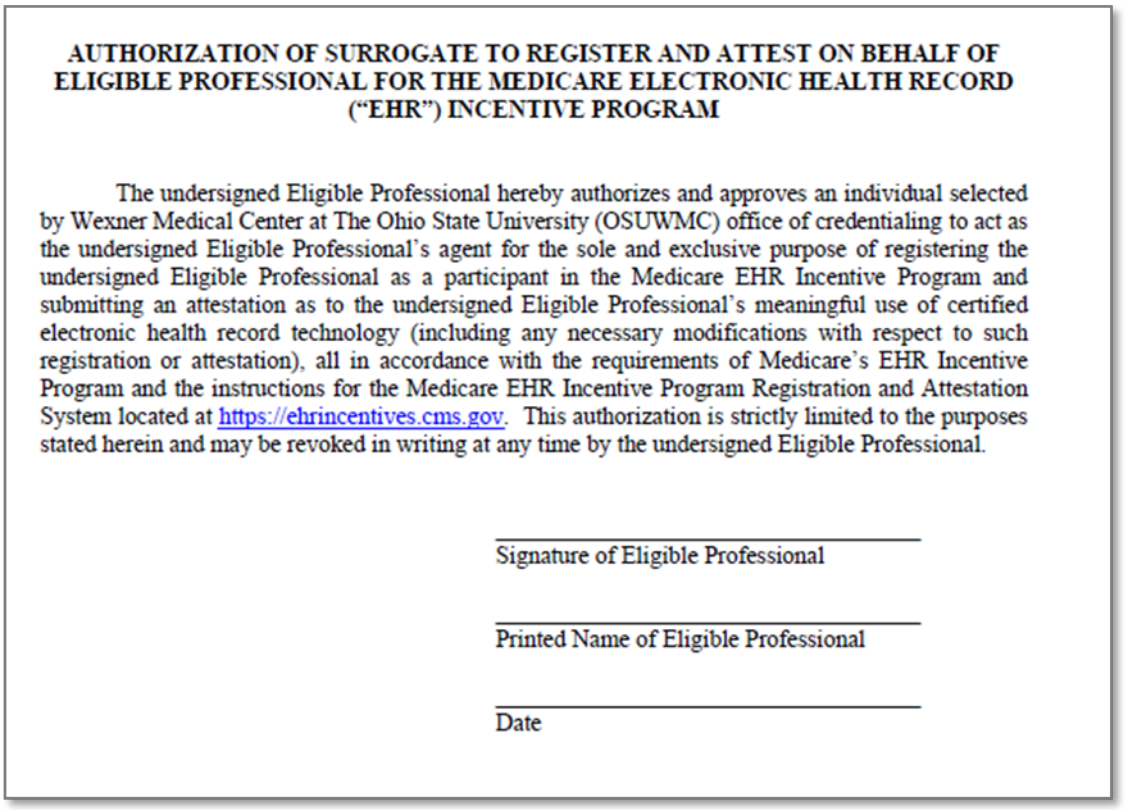
Notes

1. Centers for Medicare and Medicaid Services. "EHR Incentive Programs." Available at http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/ehrincentiveprograms/ (accessed November 5, 2013).
2. US Department of Health and Human Services, Office of the National Coordinator for Health Information Technology (ONC). "Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology. Final Rule." *Federal Register* 77, no. 171 (2012): 54163–54292.
3. Mathematica Policy Research, Harvard School of Public Health, and Robert Wood Johnson Foundation. *Health Information Technology in the United States: Better Information Systems for Better Care, 2013*. Princeton, NJ: Robert Wood Johnson Foundation, 2013.
4. American Hospital Association. "The Road to Meaningful Use: What It Takes to Implement Electronic Health Record Systems in Hospitals." *Trendwatch* (April 2010): 1–15.
5. Centers for Medicare and Medicaid Services. "EHR Incentive Programs."
6. Centers for Medicare and Medicaid Services. "Registration and Attestation." Available at http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/RegistrationandAttestation.html (accessed November 5, 2013).

Figure 1

Eligible Professional's Authorization of Surrogate to Register and Attest for the Medicare Electronic Health Record Incentive Program



AUTHORIZATION OF SURROGATE TO REGISTER AND ATTEST ON BEHALF OF ELIGIBLE PROFESSIONAL FOR THE MEDICARE ELECTRONIC HEALTH RECORD ("EHR") INCENTIVE PROGRAM

The undersigned Eligible Professional hereby authorizes and approves an individual selected by Wexner Medical Center at The Ohio State University (OSUWMC) office of credentialing to act as the undersigned Eligible Professional's agent for the sole and exclusive purpose of registering the undersigned Eligible Professional as a participant in the Medicare EHR Incentive Program and submitting an attestation as to the undersigned Eligible Professional's meaningful use of certified electronic health record technology (including any necessary modifications with respect to such registration or attestation), all in accordance with the requirements of Medicare's EHR Incentive Program and the instructions for the Medicare EHR Incentive Program Registration and Attestation System located at https://ehrincentives.cms.gov. This authorization is strictly limited to the purposes stated herein and may be revoked in writing at any time by the undersigned Eligible Professional.

_____
Signature of Eligible Professional

_____
Printed Name of Eligible Professional

_____
Date

Note: A similar form exists for the Medicaid program.

Figure 2

Position Description for Meaningful Use Coordinator

Position Description

Position Title:	**Meaningful Use Coordinator, Compliance**	
Department:	Compliance and Risk Management	
Location:	Ackerman	
Reports To:	Sr. Compliance Director	**Date**: 3/22/2011

Purpose: This position is responsible for the implementation, administration and maintenance of organizational compliance with governmental regulatory programs affecting healthcare information technology and payment systems. The position must maintain a working understanding of governmental regulatory programs and work collaboratively with a cross-functional team comprised of Clinic Operations, Revenue Cycle and Information Technology resources to determine needs and constraints while reporting project status, overseeing management of issues and risks, and planning/delivering communication to project stakeholders.

Requirements: Must have a bachelor's degree in business, healthcare, or related field and at least five (5) years of progressive, relevant experience related to clinical operations, IT projects, or healthcare finance. Demonstrated project management experience on large, complex IT projects, and previous experience in and knowledge of the academic healthcare environment. Demonstrated ability to plan, organize, coordinate, direct and control all aspects of projects. Ability to make administrative/procedural decisions and provide guidance and leadership to professional personnel with supervisory responsibilities in areas of expertise. Understanding of medical coding. Excellent written and oral communications skills, including the ability to give presentations to executive management. Strong interpersonal and conflict resolution skills. Experience working with electronic medical records software.

Preferences: Master's degree in business, healthcare, or related field. Proficiency with Microsoft Office products, including Excel and Access. Experience working with Epic electronic medical record software.

Duties and Responsibilities:

Meaningful Use Coordination

- Implements ARRA Meaningful Use functionality across the OSU Physicians practices.
- Works closely with the practice plan administrators, physicians, and Epic application support teams to ensure the required contractual support requirements are in place.

- Implements monitoring tools, and communicates with external entities such as Center for Medicare and Medicaid Services (CMS) and the Ohio Department of Job and Family Services (ODJFS) on the interpretation of the regulations. Communicates with software vendors on technical, operational and practical requirements, and with various professional associations such as COHIE and MGMA on industry interpretation and support.

- Trains physicians individually or in group settings on the regulatory requirements and on the proper use of the system.

- Attendance, promptness, professionalism, the ability to pay attention to detail, collaboration with co-workers and supervisors, and politeness to customers, vendors, and patients.

- Other duties or special projects as assigned.

Project Leadership

- Identifies and develops tools that will be used for measuring, monitoring and reporting project performance, including feasibility assessments.
- Develops and maintains project charter in accordance with approved scope changes.
- Collaborates with University steering committees on project status and guiding principles.
- Maintains close working relationships with the leadership teams at the Ohio State University Wexner Medical Center (OSUWMC) to ensure that process and policy changes are being implemented per regulatory guidelines.
- Develops reports and materials required for the State Department of Information Services and other public entities where applicable.

Project Management

- Develops a detailed project plan based on analysis of tasks, staffing requirements, interdependencies and timelines.
- Develops and maintains a contingency plan for each key milestone in the project plan, specifying actions to be taken in the event that the milestone is missed.
- Provides oversight of project plan. Ensures regular maintenance and updating by responsible project manager and team leads. Summarizes status of achievement against milestones on a bimonthly basis for Implementation Steering Committee. Implements contingency plans as needed.
- Communicates project status, key issues and risks to leadership, identifying issues requiring resolution.
- Manages performance requirements and escalates issues to the OSUP and OSUWMC leadership as necessary.

- Ensures effective project accounting, including an assessment of project performance (value) measured as expenditures compared to milestones. Reviews and approves unplanned project expenditures; reviews all project invoices.
- Oversees management of key project risks and issues.

Figure 3

Meaningful Use Status Tracker

Date EP MU Auth Form "Signed"	Date Registered in EHR Incentive Program	Registration Status	Date Added/Updated to List	Set up for Reporting	Exclude from EP Count	Comments	Date EP Record Updated in System	EP System ID	Program	Year Began	Stage	Year in Stage	Attested?	Attestation Reporting End Date Period	Submitted Attestation
		In Progress Registered Not Eligible Left Org		Yes/No	Yes/No				Medicare Medicaid		One Two	AIU First Second Third	Yes/No		

*There may be scenarios where an EP is shared with another organization or left prior to the end of the reporting period. Therefore, they will need to be set up for reporting in your system, but not included in your EP count.

Note: This status tracker is used to log electronic health record incentive program registration, eligibility status, year of participation, and attestations for all eligible professionals (EPs). Continuing to produce meaningful use reports for EPs beyond their first year who left the organization during the 365-day reporting period is important because this information may be requested from the EPs' new employer to complete their attestation. This information can be tracked by logging "Yes" under "Set up for Reporting" and "Yes" under "Exclude from EP Count" to indicate that reports need to be generated for these individuals, but they should not be included in the organization's meaningful use calculations.

Figure 4

Meaningful Use Incentive Tracker

			Stage One	2012 Medicare Max	2012 Medicaid		
			AIU	NA	$21,250.00		
			Year One	$ 18,000.00	$ 8,500.00		
			Year Two	$ 12,000.00	$ 8,500.00		
Program	**Stage**	**Year**	**At Risk?**	**2012 Allowed Charges**	**2012 Max Incentive**	**2012 Estimated Incentives**	**2012 Incentives Received**
Medicare Medicaid	One	AIU First Second	Yes/No; Based on Progress Reports	Total Charge Amount *minus* Total Adjustment Amount	Based on above table	Medicare = Formula* Medicaid = Incentive for Year	Actual Incentive Amount Received
Can filter or run pivot tables based on 'At Risk?' and exclude those that have since left your organization.							
Formula:	*If* 0.75*Allowed Charge Amount > Max Incentive = Max Incentive *Else* 0.75*Allowed Charge Amount						

Note: This tracker is used to log qualifying eligible professionals (EPs) and their participation status, which is necessary to calculate estimated incentives. This information can be shared with the financial department to be included in budget plans and/or to notify them of expected future deposits. Likewise, logging actual incentive payments received assists with the identification of missing incentive payments so that further investigation can be completed.