Post-Live Implementation Playbook:
Achieving Meaningful Use Stage 1 and
Preparing for Health Information
Exchange

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Disclaimer

The Office of the National Coordinator (ONC) and ONC’s Beacon and EHR Vendor Affinity Group do not assume responsibility for the accuracy of or the advice presented in the Post Implementation Guide. This document serves as a guide to Meaningful Use and considerations that providers, Beacon Communities, and other communities may find helpful when implementing Meaningful Use.

1. Introduction

1.1. Intended Audience

The audiences for this white paper are physicians, clinical practices, and healthcare organizations in various phases of implementing Electronic Health Records (EHR) who are anticipating next steps for achieving Meaningful Use, integrating workflows, and interoperability.

One key element in pursuing and achieving Meaningful Use is the relationship with the EHR vendor. The goal is a collaborative effort that benefits physicians and staff to maximize success and productivity. Training is the single most important element of a successful implementation, and shortcuts inevitably lead to reduced productivity, frustration, and delays in reporting, Meaningful Use, quality improvement, etc. The most successful approach is comprehensive training during implementation, with follow up optimization and user-group attendance at the local, regional, or national level. Likewise, it is incumbent upon the EHR vendor to communicate regularly and promptly with the practice, especially during the first few months of implementation.

The Office of the National Coordinator and ONC’s Beacon and EHR Vendor Affinity Group collaborated on this paper to promote the important relationship between practice and vendor for successful planning and implementations. This group was brought together in 2011 to share the most successful ideas and lessons from 17 Beacon Communities and the 7 largest EHR Vendors as the evolution of EHRs continues. Beacon Communities are identified as early adopters and innovators in forwarding the improvement of healthcare delivery, improving outcomes, and reducing costs. Much of these successes is a result of maximizing the information and knowledge gained from utilizing data available through EHR use and Health Information Exchange (HIE). The Affinity Group EHR vendors have the most experience with data elements and reporting that are needed to support Beacon work, and the technical expertise to develop innovative methods to support data reporting and exchange. This work will continue to stimulate the development of interoperability between EHRs and HIEs so that communities can better manage population health.

1.2. Purpose

Healthcare clinics, hospitals, and physician practices are in different stages of implementing Electronic Health Records (EHR), operating a live EHR, or achieving Meaningful Use (MU) all of which involve operational and workflow changes. This playbook offers next steps and information to adopt best practices, support providers and organizations that have adopted EHR technology. Additionally, the playbook provides an overview of how to achieve MU, process adjustments for organizations and providers to consider when contemplating next steps for HIT/workflow integration, as well as information on connecting to Health Information Exchanges if available. Examples are included to illustrate real-world examples of EHR implementations and working with vendors.
The Office of the National Coordinator and ONC’s Beacon and EHR Vendor Affinity Group collaborated on this paper demonstrating the important relationship between practice and vendor for successful planning and implementations.

1.3. Background

The HITECH Act and Meaningful Use

Included in the American Recovery and Reinvestment Act (ARRA) of 2009 was the $22 Billion Health Information Technology for Economic and Clinical Health Act, or HITECH Act; $20 Billion is for Meaningful Use incentives, with the remaining $2 billion is for grants and programs to support physicians through EHR adoption and achievement of Meaningful Use. Among its many provisions was the establishment of an EHR Incentive Program to be managed by CMS, and a complementary Electronic Health Record (EHR) Certification Program to be managed by ONC. This program is targeted at increasing EHR adoption and achievement of Meaningful Use of certified EHRs by hospitals and eligible professionals (EP), and promoting true electronic exchange of patient information between healthcare providers. This program supports the “Triple Aim” adopted by the Department of Health and Human Services: Better Health, Better Healthcare, at Lower Cost.

Beacon Community Program

Authorized under the HITECH Act of the American Recovery and Reinvestment Act (ARRA), the Beacon Community Program provides support and technical assistance to 17 communities across the country so that each can test and apply strategies designed to enhance care coordination, improve health, and reduce (or at least control) health care costs. Beacon Communities were given Federal grants over a three-year period to support three aims:

1. Build and strengthen health IT infrastructure and exchange capabilities, positioning each community to pursue a new level of sustainable health care quality and efficiency over the coming years.
2. Improve cost, quality, and population health - turning investments in health IT into measurable improvements in outcomes, population health, and cost.
3. Test innovative approaches to care delivery, performance measurement, and technology integration thereby accelerating evidence generation for new technologies and design characteristics.

Each Beacon Community is distinct, and each is designing activities and setting improvement goals that reflect its unique healthcare environment. Beacon Communities are creating new IT architectures for provider and community-level information systems, and testing innovative technologies that show great promise. The expectation is that along with other initiatives at the local, state, and national level, this work will promote coordinated strategies for transforming health care in “real-world” settings. The Beacon programs have demonstrated benefits from research studies and small-scale pilot projects that will hold up when deployed across diverse communities with complex employer, provider, payer, and other market interactions.

1.4. Objectives

This playbook discusses next steps and opportunities for practices, providers, and organizations that have acquired health information technology and are looking for the best path forward to optimize success and minimize barriers. It is not intended to be a comprehensive guide or resource towards
achieving Meaningful Use. Eligible Providers are encouraged to contact their EHR vendor and Regional Extension Center for more information and support.

This discussion covers a portion of the Meaningful Use requirements. It assumes that Eligible Providers (EP) and practice staff have at least a basic understanding of the Stage 1 Meaningful Use requirements. If you need additional information on the Meaningful Use requirements for Stage 1, the reader is encouraged to refer to the resources listed throughout the document, and in a table following the paper.

This guide provides:

1. **Stage 1 Meaningful Use Best Practices** - An overview of Meaningful Use information and best practices, Meaningful Use Quality Metrics, and an overview of Attestation.

2. **Change Management** - Considerations for organizations and providers when anticipating continued HIT integration, as well as information on connecting to Health Information Exchanges where available. Examples from practices are included to demonstrate real-world examples of implementations of working with vendors.
2. Overview of Meaningful Use – Stage 1

2.1. Recommended Resources

Locate and keep a copy (electronic or printed) of the Meaningful Use User Guide for your specific EHR. If you cannot locate it on your vendor’s website, contact them to send it to you. Take advantage of all information on their websites: tutorials, articles, webinars, etc.

In addition, refer to CMS resources, including:


3. Commonly Misunderstood Concepts Regarding Meaningful Use

1. The requirements for Medicare and Medicaid are different for EPs, who must choose one program to participate in for the incentive.

2. Medicare pays 75% of allowable charges up to $18,000 in the first year if an EP attested to MU Stage 1 in 2012. The maximum possible incentive begins to shrink in 2013, and the last year for Medicare incentive payments is 2016. Downward payment adjustments for not being a “Meaningful User” of EHR technology begin in 2015.

3. Medicaid incentives are available if an EP has 30% of patient visits attributed to Medicaid. Some mid-level providers may be eligible for payments from Medicaid. A practice group may qualify for the incentive if individual providers do not meet the 30% visit volume threshold, but the group volume average is over 30%. EPs can start the Medicaid incentive and earn the full $63,750, ($21,250 in the first year) for Adopting, Implementing or Upgrading a certified EHR (AIU), provided they start by 2016.

4. There is no penalty for not participating in the Medicaid incentive; however the Medicare penalties still apply to Medicare payments if the EP does participate in Meaningful Use. Contact your Regional Extension Center or state Medicaid organization for additional details.

3.1. Stage 1 Meaningful Use Best Practices

- Practices need to make sure that staff understands the intent, numerators, and denominators of each Meaningful Use requirement, and how each data element is generated in your EHR. Begin running Meaningful Use performance reports early in your learning process on a weekly basis; run the dashboard report each Friday afternoon, and follow up with providers and staff on Monday with positive reinforcement and training as indicated. Track how each provider is doing in your practice. Midlevel staff’s performance must support their supervising physician, and they are responsible for meeting the criteria at the same level. If
your system cannot run the MU report frequently enough, contact your EHR vendor to get the performance reports you need to make your work effort effective.

- Remember that MU performance is measured and reported by NPI, and cannot be aggregated or averaged.
- Enable specific functionalities required to be turned on for the entire reporting period before starting your 90 day or 365 day reporting period:
  1. Ensure that your EHR vendor turns on the drug interactions function at installation.
  2. Turn on the formulary functionality that comes with the e-prescribing program in your system.
  3. Activate (at least) one Clinical Decision Support (CDS) rule that has relevance to a high priority medical condition commonly managed by your practice; it is optimal to have the participating eligible professional(s) choose the CDS rule(s). Make sure you know how to track/report on the CDS chosen for MU. Clinical alerts may be connected to a clinical quality measure (CQM) to assist with this data collection as well.
- Complete the following one-time requirements before the end of the 90 day reporting period.
  1. Unless you qualify for an exemption, complete a test of the ability to submit immunization data to your state or other immunization registry. If the test is successful, you must continue electronic submissions. In some cases, a Health Information Exchange (HIE) may be available to facilitate this exchange. Providers may be exempt from this Meaningful Use objective if they do not provide immunizations or if there is no immunization registry that supports the standards or necessary data transport methods. Contact your Regional Extension Center or state Immunization Registry for specific information to meet this requirement.
  2. Complete a security risk analysis as required by both HIPAA and Meaningful Use, which will likely take between 30 and 40 hours to complete, depending on the size of the practice. The Assessment and Remediation plan are not difficult; however it is a very detailed, intensive task. Once you have completed this work, you will have a thorough understanding of Protected Health Information (PHI) security, and risk issues for your practice. The Regional Extension Centers have resources and tools that can demonstrate how to complete this part of the requirements, but they cannot do it for you. You may also hire a third party to complete all or part of it.
- All the Core Meaningful Use requirements must be met (or reported as an exclusion) during the reporting period. Some Core requirements do not allow for an exclusion.
- Monitor eligible professionals closely on their performance of Computerized Provider Order Entry (CPOE), problem list, e-prescribing, and clinical summaries. These are the most common areas of difficulty for providers to adopt into their workflow.
- Ensure that providers and staff know how and where to enter the data elements needed to track Clinical Quality Measures before starting your 90 day reporting period to ensure that data is being collected throughout this period.
- Choose five Menu items from the Meaningful Use requirements and meet all minimum thresholds for those five. One of the menu items must be either syndromic surveillance data reporting or immunization registry reporting. The Regional Extension Centers in your state
are the best resource to determine which public health measure to attest to, and the correct process for doing so, or claiming exclusion(s).

- All Meaningful Use requirement thresholds require that provider exceeds the threshold, not simply meet it.

3.2. Meaningful Use Quality Measures

Quality measures are important for external reporting but, even more importantly, can help identify opportunities for improved care delivery. When choosing quality measures that relate to a clinical area (e.g., diabetes), it is important to understand: the intent of the measure, what data should be entered into the patient’s record, and which fields are necessary to create the record and generate a valid report. Teach staff to integrate data collection into their workflow so that good data collection can be turned into valuable information and knowledge for clinical performance improvement. Train appropriate staff and providers how to perform, capture, and enter clinical quality measures (CQM) data elements. Be sure to take advantage of the EHR Meaningful Use Guide provided by your vendor to document quality measures correctly.

There are no minimum performance requirements for CQMs as part of the MU program. You will enter the numerator and denominator in the attestation section exactly as they are reported by your EHR, and are only responsible for accurately reporting these measures based on the results generated by the EHR. Take special care to note that the numerator and denominator fields are reversed in this section of the attestation website, and are actually denominator / numerator.

3.3. Registration and Attestation

You must have registered each eligible provider prior to attestation; this task is best completed early in the project. The provider’s NPI login user and password are used. Find the applicable NPI here:

1. To find your National Provider Identification (NPI) number (NPI website):
   https://nppes.cms.hhs.gov/
2. If you do not have a NPI, register here:
   https://npiregistry.cms.hhs.gov/NPIRegistry/NPIRegistryHome.do
3. In the event you did not have your National Plan and Provider Enumeration Systems (NPPES) user code and login, go to the NPPES website: https://nppes.cms.hhs.gov/
4. Proceed to the EHR registration and attestation website for a login:
   https://ehrincentives.cms.gov/hitech/login.action
5. Refer to the Registration User Guide for additional information:
6. Contact your Regional Extension Center if you have questions.

Attestation is the process of reporting the physician, or (where applicable) mid-level provider’s performance against the MU criteria to CMS. It is a legal function, and not to be delegated or taken casually. A designated manager/administrator can attest for the providers, however each
will need to be attested for separately. The Attestation User Guide on the CMS website is a very good reference to help prepare and have the correct information ready:


Key Steps
1. Enter the correct NPI number, and have someone check your numbers and demographics before you attest; errors may delay payment.
2. You will enter numerators and denominators for the Meaningful Use measures, not percentages.
3. CMS and/or the State Medicaid programs have the authority to audit all attestation data pre or post incentive payment for up to 6 years after each attestation year; therefore you should save all of your reports for a potential audit.
4. As indicated above, the CQM attestation section switches the numerator and denominator order. Be careful when entering data for quality measures. Most specialists will not have data and entering zeros is acceptable. Enter what is displayed on your EHR report.
5. You can track the status of your attestation submission under the Status tab of the CMS website where you registered and attested.
6. If you are unsure of the status of your attestation, refer to the following website:

https://ehrincentives.cms.gov/hitech/login.action

4. Continuity of Care Document

4.1. Summary of the Continuity of Care Document - Why is the CCD Important?
The Continuity of Care Document (CCD) is a defined standard electronic report of the patient summary (with associated technical specifications) enabling health care providers to share patient information between one practice/hospital and another practice/hospital directly or through a Health Information Exchange (HIE).

The CCD was developed by the HL7 standards development organization to allow health care entities to exchange patient data securely.1 ONC-ATCB certified Electronic Health Record (EHR) vendors can produce CCDs.2 Working with vendors and the HIE practices can help determine how best to share this information with other providers and community reporting registries.

Note that in 2013, the test of data exchange is not required. However beginning in Stage 2, EPs are required to have established, secure methods for electronic communication with patients, and patient access to their health information.

4.2. Examples of CCD Submission Pilot Implementations

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1 The CCD has been defined by the Health Information Technology Standards Panel (HITSP v2.5 2009) of the Dept. of Health and Human Services (DHHS). HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component, HITSP/C32, July 8, 2009, Version 2.5, IBR approved for § 170.205.
2 Meaningful Use Certification requirements require certified EHRs to be able to generate either a CCD or a Continuity of Care Record (CCR). Most certified EHRs and HIEs are focusing on CCD.
**Generation of CCD at the Close of Encounter (Greater Cincinnati Beacon Community):** Upon completion of the medical office visit, the EHRs included within this project create a summary of care, and transmit the record to the Beacon disease registry electronically. When a patient is new to the registry, the summary record will contain historical information. When an existing patient returns to the clinic for care, the EHR performs a data extraction for updated clinical or demographic data. The care summary is transmitted to the Beacon registry application. The customized summary is well-structured and encoded with standard medical terminology to ensure unambiguous processing and interpretation by the registry and registry users. This capability helps to improve patient care by identifying gaps in care, tracking of patient outcomes (e.g. HbA1C is under 8) and measurement of physician, practice, and community quality scores. This approach provides an opportunity for community networks using HIEs to measure quality and improve population health using a consolidated database.

**Referrals (Western New York Beacon Community):** EHR to EHR data exchange allows a practice to send clinical information from their EHR to another practice to provide a comprehensive clinical summary of the patient for referrals and other continuity of care communication. The information is automatically extracted from the sending physician’s EHR into the CCD as discrete data. This data can then be added into the receiving physician’s EHR from the CCD to generate a new patient record or to update an existing record.

The secure exchange of CCDs allows PHI to be distributed in a manner that is HIPAA compliant when electronically referring a patient to another provider. This capability saves considerable time for the referring primary care provider, patient and the specialist. The patient’s health information is “shared” with the specialist’s EHR and the patient’s information is readily available for use by the specialist. Use of CCDs in this way helps to eliminate the need to request, fax and scan patient records. New information (e.g. consultation or new tests) can be sent via CCDs back to the referring primary care provider by the specialist to enable effective care coordination.

The use of a secure, standards-based health information exchange (HIE) facilitates this secure data exchange and interoperability, with key functions including maintaining master patient and provider indices. Using an HIE to exchange CCDs eliminates the need for patients to carry around all of their paper records and X-ray images when they go to new providers. The HIE greatly enhances the ability of multiple providers and health delivery systems to synchronize care, and avoid redundant and costly visits and diagnostics.

5. **Change Management and Communication**

John Kotter, a nationally regarded authority on leadership and change, refers to change management as a set of processes, tools, and mechanisms that are designed to clarify the need for and urgency of change, engage all stakeholders, and make the new processes stick successfully. In the context of the Meaningful Use program, change management needs to be employed at all levels and modalities of the practice, including the EHR Vendor and all HIT applications to achieve the clinical and quality improvement-based interventions defined by CMS. Healthcare providers and communities need to engage with vendors early in the relationship, laying the foundation for the important work being done.

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3 Using the IHE XDS.b profile for several of the EHRs – Medent, NextGen, eClinicalWorks
5.1. Establishing the Foundation for Change

A key approach is leveraging existing working relationships and partnerships to enable program goals. In the early stages of the program it is essential to meet and involve the key decision makers and influencers within the practice in framing and shaping the project goals. The resulting framework may bring new partners to the table. The resulting outcome should be a cohesive and productive collaborative that allows for rapid change management across multiple entities, supported by their respective leadership.

5.2. Change Management, Local Assistance, Vendor Communication

Physicians and Practice managers should plan ahead with their EHR vendor to support change management with the following initiatives:

- Flexible training methodologies: web based, onsite training, role-based learning
- Efforts to ensure that the implementation team understands practice workflow and has strategies to address unique requirements by specialty
- Implementation planning to achieve MU as well as improved workflow, productivity, information flow and patient care processes
- IT infrastructure recommendations or requirements for hardware and/or software
- Optional: consulting services addressing workflow redesign (often available through EHR vendor)

5.3. Aligning the Vendor Community with Program Change Goals

Regardless of the size or complexity of the organization, the first stage is to engage all partners and stakeholders. Vendor representatives need to be engaged and informed as to the importance and scale of the efforts involved in the implementation project and IT strategic plan. Leveraging previous work relationships is always preferable, however new projects can be very complex even with existing vendors.

The next step is helping the vendors to identify and prioritize the work effort required relative to the defined project scope. This work effort can be enhanced by focusing on the value proposition for the provider, the patient, and the practice.

5.4. Change Management Responsibilities

- Identification of qualified and committed clinical and administrative champions and Super Users. At least one physician must be committed and supportive of the program
- Staff buy-in, ownership, and accountability
- Acknowledgement of work to be done by physicians and staff to achieve successful go-live and MU
- Early agreement on required training and project management are essential to project success

5.5. Operational Change and Collaboration
Once the practice has successfully established the appropriate level of engagement with the vendor(s) involved, it becomes critical to establish working teams, team leaders (both on the practice and vendor sides) and to begin setting clear expectations for delivery of work, the allowable cost and timelines, and establishing clear regular communication protocols. Critical to this stage is ensuring that the practice has sufficient staffing to carry out the work intended, as well as assurance that the scope of work defined can be delivered by the vendor according to the contracted schedule. Any deviation from plan must be justified and an impact assessment should be conducted to ensure milestones and costs are not affected. It is important to recognize that changes may involve costs beyond the project scope.

5.6. Managing Communications through Project Lifecycle and Beyond

As mentioned previously, it is critical to establish and maintain a clear series of project milestones and deliverables with each vendor, regardless of the contract size; this need includes any support arrangements beyond the term of the contract. The Practice Manager should be assigned to monitor and manage the vendor relationship, and any issues that are not resolved should be escalated to the appropriate level for resolution.

5.7. Communication Best Practices

- Promptly reporting problems to EHR technical support and for enhancement requests
- Use of the client support portal for opening and tracking of support requests
- Up-front understanding of reasonable response timeframes and escalation pathway
- Keep contact information for key staff updated and ensure key staff receives service and product alerts, client newsletter, etc.
- Take advantage of user groups, webinars, online communities, and other communication methods
6. Helpful Links and Resources

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