

Anatomy of Implementation

*The Structural Framework
for Meaningful Use
of Electronic Health Records*

National Health Care for the Homeless Council

June 2012

NATIONAL
HEALTH CARE
for the
HOMELESS
COUNCIL

DISCLAIMER

This publication was made possible by grant number U30CS09746 from the Health Resources & Services Administration, Bureau of Primary Health Care. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Health Resources & Services Administration.

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Suggested citation: National Health Care for the Homeless Council (June 2012). *Anatomy of Implementation: The Structural Framework for Meaningful Use of Electronic Health Records*. [Author: Anna M. Gard, FNP-BC.] Nashville, TN: Available at: www.nhchc.org

INTRODUCTION

Electronic Health Record (EHR) implementation often exposes an organization's strengths and weaknesses in leadership, communication, workflow, and staffing. This document outlines the key foundational elements identified by Health Care for the Homeless grantees for successful implementation of electronic health records.

ENGAGED LEADERSHIP

Leadership that demonstrates a commitment to health information technology and the transformation processes necessary for implementation sets a clear example for an organization that quality improvement is a priority goal and health IT is a necessary tool to succeed in meeting the organization's mission and goals.

Heart of Texas CHC, Inc., and Hudson River Health Care, Inc., both winners of the HIMSS Davies Award of Excellence for Community Health Organizations, emphasized that their leadership played a vital role in the strategic planning, acquisition, and implementation. They both credit engaged leadership as the most valuable component of their EHR success. The leadership in both organizations made a financial commitment to purchase an EHR despite financial challenges in their budgets. Key leadership personnel invested in their own professional HIT learning opportunities to ensure informed decision making and support for adoption and implementation.

STRATEGIC PLANNING

1. Understand the *why*, *how*, and *what* of adoption and implementation and how it aligns with your organization's mission and goals.

Meaningful use of the Electronic Health Record supports the ability to capture data in a structured organized format and enables data measurement and reporting to support quality improvement and safety processes, integration and coordination of care, and population management.

Hudson River Health Care developed a set of Strategic Aims and Measures (SAM) as its guiding principles, based on community access and organizational vitality as well as the Institute of Medicine's six domains of quality (safe, timely, efficient, effective, equitable, and patient-centered). They recognized that meaningful use of their EHR was vital to support the data-driven decision making necessary for quality improvement initiatives.

2. Focus on finance.

EHR purchase and ongoing costs associated with hardware and infrastructure, system maintenance, hosting, training, and decreased productivity during implementation must be part of your organization's annual budget. Register with Centers for Medicare and Medicaid Services (CMS) EHR Incentive Program to understand financial support resources and MU incentives/attestation to help subsidize the cost burden. <http://www.cms.gov/ehrincentiveprograms>

3. Build an EHR committee.

This multi-department committee will guide all aspects of the EHR project including initial implementation, rollout, introduction of new functionalities, building interfaces and reporting, and monitoring dashboards. A clinical subcommittee will review clinical content development, clinical

workflows, and clinical functionalities.

Advantage Health Centers convened a multi-departmental implementation team that included a vendor representative, a clinical director and project manager, a QI director, and an EMR/MU administrative executive assistant. This team meets weekly to facilitate the implementation strategy and execution. Each department representative provides feedback to his or her staff and the implementation team about workflow, process strategy, training needs, and data collection.

4. Design a communication strategy.

Keep all staff informed of progress to engage interest and buy-in to the new system with weekly updates via web portal, staff email, and flyers. Focus communications on workflow, information exchange, structured data standardization, education, and training, and provide avenue for feedback and questions.

Franklin Primary Health Center, Inc., releases monthly newsletter updates and posts weekly update flyers in clinic settings to keep staff informed of its EHR implementation progress.

5. Install an IT strategy.

HCH sites have multiple IT connectivity issues due to various infrastructural challenges: mobile sites, old buildings, clinics co-located in rented buildings with limitations on hardwiring/IT. Hire an IT connectivity consultant to assess strategy for remote connectivity, server location (locally or remotely hosted/cloud), printing/scanning, and security. Clinicians need to be involved in hardware considerations for usability to ensure and facilitate acceptability of system use.

Heartland Health Outreach Inc. relied on their partnership with Alliance of Chicago, a health center controlled network, to advise them on IT strategy for their EHR. Currently they use laptops with 4G mobile wireless cards for connectivity to an off site server. Advantage Health Care clinical staff decided on hardwired computers in exam rooms with full keyboards and password protection for privacy/security.

PROCESS DEVELOPMENT

1. Analyze workflow

EHR should not dictate workflow, but support goals for data capture and communication within a clinical visit. Develop an EHR strategy to ensure consistent documentation, where relevant data elements are captured as structured data. Analyze office processes for collecting demographic information including primary language, race, and ethnicity. Evaluate how problem lists, medications, and allergies are documented and updated. Design clinical workflows to support advanced clinical decision support with evidence-based guidelines. This may involve team redesign and assignment of roles to incorporate a team-based care model using team huddles for pre-post visit planning.

2. Implement clinical decision support.

Build order sets, templates, and customized forms, involving both IT and clinical staff, to help limit user error and improve adherence to evidence-based guidelines. This helps support evidence-based practice and reduces practice variations while concurrently standardizing care processes. Forms need to be clear, user-friendly, and minimize duplication of data capture to limit user burnout and avoid negative impact on workflow and productivity.

3. Create a Health Information Exchange (HIE) strategy.

Negotiate interface management and the responsibility of each party (vendor, hospital, specialists, immunization registries, lab, and radiology departments) for the cost and work of implementing the interface. Outline workflow strategy for HIE including referral tracking, ER/hospitalization and transitions of care, clinical service integration of labs, pharmacy, radiology and location and notification of results delivery.

Advantage HCH is working with its Regional Extension Center, Michigan Center for Effective IT Adoption (MCEITA), to liaise with the Michigan state immunization registry for information exchange.

WORKFORCE TRAINING

Adequate planning should be dedicated to developing a training strategy for initial implementation, system updates, new hires, and part-time/volunteer staff. EHR superusers (staff members with greatest familiarity with and enthusiasm for system who are available for questions and troubleshooting) are vital to successful implementation, engaging and educating clinical staff and developing strategies to address issues and ensure workflow efficiency and productivity. There are many training resources available: vendors, Health Center Controlled Networks, Regional Extension Centers, Primary Care Associations, and State Community Health Center Associations. Continued Staff development in health information technology is available through ONC training courses, HIT/HIM programs, Healthcare Information Management Systems Society (HIMSS), and HRSA Health Information Technology (HIT) workforce initiatives.

Advantage Health Centers began its phased implementation with the vendor practice management system. This allowed for staff to practice using the keyboard to look up information, to enter patient demographics, and schedule services and appointments. Next, the implementation team completed online vendor training classes to groom the superusers, who became a pilot team for customization, workflow development, and staff training. Medical assistants were trained before the clinicians on entering vitals/labs in EMR. The medical assistants became experienced users to support clinicians during clinical visits.

PATIENT ENGAGEMENT

1. Provide patient-specific, low literacy level, culturally sensitive educational handouts linked to patient diagnosis.

Many vendors have E-education materials included in the software. Be sure to evaluate patient education materials from vendors, as all are not low-literacy or population appropriate. Consider embedding video and text into the patient education materials to educate at the point of service.

2. Provide After Visit Summaries (AVS), which list medications, diagnoses, and office contact information.

Make sure these summaries are provided in simple language of preference. HCH sites may have challenges with printing capabilities given the array of practice sites. If portable printers are not an option, consider web-based Personal Health Records (PHR) for patients to access information securely. PHRs, such as HealthShack (www.healthshack.info) and MiVia (www.mivia.org), are specifically designed for homeless and migrant populations. Share community resources for Internet access (libraries, internet cafes, shelters, and other health centers). Consider having an Internet kiosk on site for patients to access their records through the EMR patient portal.

3. Utilize mobile health technology to support outreach, chronic disease management, appointment reminders, and test result follow up.

A 2010 Pew study found that mobile phone access for minority and lower socioeconomic populations reported 79% of Medicaid recipients, 83% of African-American adults, 79% of Hispanic adults, and 68% of white adults use text messaging (Fox, 2010). Invite a potential partnership with community voicemail (www.springwire.us) or programs like Text4Health to support patient-centered chronic disease management. Community Health Workers can play a vital role in accessing EHR to review with patients their care plan, after visit summary, and self-management goals.

At Heart of Texas CHC, Inc., the Community Health Workers (CHWs) use the EHR reports to recall patients due for diabetes exams and meet with patients to review self-management goal planning.

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HRSA Health IT Adoption Toolbox

A compilation of planning, implementation and evaluation resources to help community health centers, other safety net providers, and ambulatory care providers implement health IT applications in their facilities.

<http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/>

HRSA Network Guide

Health Center Controlled Network Guide provides fiscal, IT, managed care, and administrative resources for HRSA grantees.

<http://www.hrsa.gov/healthit/networkguide/networkguide.pdf>

Meaningful Use Resource Catalogue (2011)

<http://www.nhchc.org/wp-content/uploads/2012/01/Meaningful-Use-Resource-Catalogue.pdf>

The National Health Care for the Homeless Council Patient-Centered Medical Home and Meaningful Use Tools and Resources webpage

<http://www.nhchc.org/resources/general-information/health-care-reform/>

For further resources and inquiries on technical assistance, contact Juli Hishida, TA coordinator, at jhishida@nhchc.org.