EHR Implementation by Small Primary Care Practices

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Chief Medical Officer
Pittsburgh Regional Health Initiative

National EHR Acquisition, Implementation, and Operations Summit
San Francisco, CA
October 5, 2010
How many office-based practices in your community use EHRs?

- < 10%
- 20%
- 30%
- 40%
- 50%
How many office-based practices in your community use EHRs?

- ☐ < 10%
- ☐ 20%
- ☐ 30%
- ✅ 40%
- ☐ 50%
EHR Adoption by Office-Based Physicians Achieved

- In the last decade, EHR use by office physicians has more than doubled.

Source: CDC/NCHS National Ambulatory Medical Care Survey
EHR Adoption by Office-Based Physicians Desired

- By 2014, the federal government has set a goal of 100% adoption of electronic health records in the United States.

Source: CDC/NCHS National Ambulatory Medical Care Survey
EHR Adoption by Office-Based Physicians Desired

- Desired growth is exponential, not linear. The traditional pace and method of implementation must be amplified – significantly.

Source: CDC/NCHS National Ambulatory Medical Care Survey
Forces Driving EHR Implementation in Office-Based Practices

1. CMS Meaningful Use incentives
   - Providers can earn up to $44,000 over 5 years for compliance.
   - Must begin collecting “meaningful use” structured data by 10/1/11 to leverage full Year 1 incentives.

2. Regional Extension Centers
   - RECs incented to train 100,000 providers by 2012.
   - Services highly subsidized to eligible providers for first 2 years.

3. Corporate consolidations
   - 50% of medical practices are now employed by health systems.
Small Primary Care Medical Practices

- 70% of regional medical practices have 5 or fewer physicians.
- 80% of regional physicians admit to only one hospital.
- Most practices rely on debt financing of major capital expenditures.
- Smaller practices = lower EHR implementation rates.
Implementation Rates are Lower in Small Medical Practices

Shea & Hripcsak (2010). NEJM, 362 (3)
How many office-based practices in your community use EHRs?

- < 10%
- 20%
- 30%
- **40%**
- 50%
Not All EHR Implementations in Office-Based Practices are Fully Functional

Source: CDC/NCHS National Ambulatory Medical Care Survey
http://www.cdc.gov/nchs/data/hestat/emr_ehr/emr_ehr.htm
How many office-based practices in your community use EHRs?

- ✔ < 10%
- ✔ 20%
- ❏ 30%
- ✔ 40%
- ❏ 50%
Variability of EHR Functionality

Source: CMS EHR demo application results (113 practices using EHRs), Fall 2008.
Regional Extension Centers

• Nationwide support to providers in becoming “Meaningful Users” of HIT through comprehensive, “on-the-ground” services.

• Support targeted at primary care providers “least likely to achieve Meaningful Use on their own:
  • Small practices with < 10 providers
  • Critical access and public hospitals
  • Community health centers and rural clinics

• Pennsylvania REC (REACH West) established to move 3300 eligible providers in western half of state.
CMS EHR Demonstration: Overview

- 5-year demonstration project, designed to examine the ability of incentives to accelerate EHR adoption in small (<20) PCP practices and improve quality/outcomes.
- Launched May 2009 (Note: Interim Meaningful Rule released January 2010).
- Case-control study design.
- Study sites empowered to create novel community engagement strategies, providing they were offered to both case and control groups equally.
- Goals:
  1. Implement a CCHIT-certified EHR performing “minimal functionalities”
     - Patient visit notes.
     - Record lab/diagnostic orders and results.
     - Record prescriptions.
  2. Reporting/performance on 26 clinical measures (year 2):
     - Diabetes
     - CHF
     - CAD
     - Preventive care
CMS EHR Demonstration: Roll-Out

• Cycle 1 Community Partners (May 2009):

<table>
<thead>
<tr>
<th>CYCLE 1 COMMUNITY PARTNER</th>
<th>PRACTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwestern Pennsylvania</td>
<td>279</td>
</tr>
<tr>
<td>Maryland/District of Columbia</td>
<td>255</td>
</tr>
<tr>
<td>Louisiana</td>
<td>204</td>
</tr>
<tr>
<td>South Dakota/North Dakota/Iowa/Minnesota</td>
<td>87</td>
</tr>
<tr>
<td>TOTAL</td>
<td>825</td>
</tr>
</tbody>
</table>

• Cycle 2 Community Partners:
  • Alabama, Delaware, Georgia, Maine, Oklahoma, Wisconsin, Virginia, Florida
  • Study suspended pending deployment of HITECH initiatives.
CMS EHR Demonstration: Randomization

- All primary care practices small-medium sized with <20 providers (IM, FP, GP, geriatrics).
- Enrollment of 1000 regional physicians (approximately 1/3 of primary care providers in region).
- 59 practices in large systems (UPMC 25, WPAHS 19, Heritage 15)
### CMS EHR Demonstration: Maximum Potential Incentive Payments

<table>
<thead>
<tr>
<th>Year</th>
<th>EHR Adoption (OSS)</th>
<th>Reporting of Clinical Measures</th>
<th>Performance on Clinical Quality Measures</th>
<th>Maximum/Provider</th>
<th>Maximum/Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$5,000</td>
<td>n/a</td>
<td>n/a</td>
<td>$5,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>2</td>
<td>$5,000</td>
<td>$3,000</td>
<td>n/a</td>
<td>$8,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>3</td>
<td>$5,000</td>
<td>n/a</td>
<td>$10,000</td>
<td>$15,000</td>
<td>$75,000</td>
</tr>
<tr>
<td>4</td>
<td>$5,000</td>
<td>n/a</td>
<td>$10,000</td>
<td>$15,000</td>
<td>$75,000</td>
</tr>
<tr>
<td>5</td>
<td>$5,000</td>
<td>n/a</td>
<td>$10,000</td>
<td>$15,000</td>
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**TOTAL:** $58,000 $290,000
PRHI’s Approach to Regional Engagement: “Transforming Care in Provider Practice”

• Partnership with Highmark BCBS, the dominant regional payer for the Project.

• Built a transformation team of 20 practice coaches, all trained in Lean Toyota healthcare methods and PCMH transformation.

• Develop a readiness assessment, work plan, and project timeline built from existing best-practice toolkits (e.g., DOQ-IT) and expert private consultants.

• Develop an outreach and education strategy.
Approach to Small Practice EHR Implementation

Unnecessary steps in practices that have already implemented an EHR, or practices in communities where the choice was pre-determined (health system, PHO, etc.)
Readiness Assessment

• Can you afford to reduce productivity by 50% for at least one month?
• Is now the time to do this?
• Will you need a new billing company?
• Do you have a line of credit?
• Should you do a total or scaled implementation?
• Have you planned for maintenance fees, interface fees, software updates, hardware replacement?
• Are you undercoding?
• What is the future of the practice?
Standardized Model REC Work Plan for Office Practices with No Pre-existing EHR

<table>
<thead>
<tr>
<th>DAYS</th>
<th>HOURS</th>
<th>PHASE</th>
<th>TASKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>Pre-Work</td>
<td>HIPAA Business Associate agreement</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
<td>Complete Work Plan</td>
<td>Designate team and champions, Readiness Assessment; assemble demographic data</td>
</tr>
<tr>
<td>45</td>
<td>11</td>
<td>Office Redesign</td>
<td>Workflow observations and adjustments</td>
</tr>
<tr>
<td>82</td>
<td>3</td>
<td>Vendor Preview</td>
<td>Define criteria, schedule and attend demos</td>
</tr>
<tr>
<td>55</td>
<td>1</td>
<td>Vendor Selection</td>
<td>Score demos, select finalists, negotiate contracts</td>
</tr>
<tr>
<td>110</td>
<td>1</td>
<td>Hardware Installation</td>
<td>Vendor training of staff, implementation</td>
</tr>
<tr>
<td>120</td>
<td>9</td>
<td>Meaningful Use</td>
<td>Align EHR use with MU objectives – 15 core and 5/10 menu</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>Reporting Meaningful Use</td>
<td>Each EP registers with EHR Incentive Program website, submits data by attestation (2011 only) or electronically</td>
</tr>
<tr>
<td>500</td>
<td>30</td>
<td>TOTAL</td>
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Work plan developed for Pennsylvania REACH West, based on 6-year experience in DOQ-IT program involving over 235 practices and 1000 providers. Work plan has been made available through ONCHIT.
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Between 5-8 months are committed to selecting a vendor and installing the product into the office practice. During this time, support may be provided by the vendor.
## Standardized Sample Model REC Work Plan for Office Practices with Existing Electronic Health Records

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<td>Pre-Work</td>
<td>HIPAA Business Associate agreement</td>
</tr>
<tr>
<td>12</td>
<td>Complete Work Plan</td>
<td>Designate team and champions, Readiness Assessment; assemble demographic data</td>
</tr>
<tr>
<td>105</td>
<td>Office Redesign</td>
<td>First conduct workflow observations and implement adjustments; second, review all EHR processes and upgrades, making recommendation to optimize system.</td>
</tr>
<tr>
<td>40</td>
<td>Reporting Stage</td>
<td>Develop /review processes for key reporting functions: e-prescribing send/print/check, laboratory data enter/retrieve, medication lists, problem lists, produce reminders and prompts, identify specific patients by disease.</td>
</tr>
<tr>
<td>40</td>
<td>Reporting Meaningful Use</td>
<td>Each EP registers with EHR Incentive Program website, submits data by attestation (2011 only) or electronically</td>
</tr>
<tr>
<td>200</td>
<td>TOTAL</td>
<td></td>
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</table>

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CMS EHR Demo Kick-Off Meeting (May 2009)
Educational Module Lecture Series

Module 1: Electronic Health Records: An Introduction to Purchasing and Implementation Planning

Module 2: Quality Improvement in Primary Care: An Introduction to Lean Health Care

Module 3: Building a Transformational Team in Primary Care

Module 4: Optimizing the use of Electronic Health Records

Module 5: Chronic Disease Management and Electronic Patient Registries

Module 6: Transforming your Practice to a Patient-Centered Medical Home

Module 7: Integrating Behavioral and Physical Health in Primary Care

Module 8: Primary Care Business Administration

Pittsburgh Regional Health Initiative
Spreading Quality, Containing Costs.
Presentation of EHR Educational Modules

- Live presentations in hospital communities
- Lunchtime webinars
- On-line
PRHI-Highmark Quality Forum
Pittsburgh, PA
June 30, 2010
Interim Results: Southwestern Pennsylvania Cohort of CMS EHR Demo

<table>
<thead>
<tr>
<th>TIME</th>
<th>PRACTICES</th>
<th>SELF-REPORTED USE OF A CERTIFIED EHR</th>
<th>SELF-REPORTED USE OF AN UNCERTIFIED EHR</th>
<th>SELF-REPORTED NO EHR</th>
<th>NO RESPONSE OR DROPPED OUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIATION OF PROJECT</td>
<td>138</td>
<td>28% (39)</td>
<td>14% (18)</td>
<td>58% (81)</td>
<td>N/A</td>
</tr>
<tr>
<td>(June 2009)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YEAR 1 SURVEY (June 2010)</td>
<td>138</td>
<td>54% (75)</td>
<td>10% (14)</td>
<td>22% (30)</td>
<td>14% (19)</td>
</tr>
</tbody>
</table>

- Self-reported implementation of a CCHIT-certified EHR increased by 90% after one year of engagement.
Sources of EHR Adoption Support for Small Primary Care Practices

<table>
<thead>
<tr>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Modules</td>
</tr>
<tr>
<td>Standard Vendor Support</td>
</tr>
<tr>
<td>Fee-Based Vendor Support</td>
</tr>
<tr>
<td>Private Fee-Based Consultants</td>
</tr>
<tr>
<td>Regional Health Information Organizations</td>
</tr>
<tr>
<td>Hospital IT Department</td>
</tr>
<tr>
<td>On-Site Practice Coaches</td>
</tr>
</tbody>
</table>
Lessons Learned

• Small unaffiliated practices do not make purchasing decisions in isolation; they often collaborate with hospitals or within PHOs when engaging vendors.

• Strategic offers of EHRs to independent practices by hospitals and other stakeholders is increasing, and does not preclude involvement of Extension Centers.

• Small practices, by their scale, may have a lesser need for guided workflow redesign than larger groups.

• The greatest early role of the “consultant” may be in the readiness assessment, and in guiding the office in team-building and staff engagement.
Lessons Learned

• The most important single factor in the success of an office EHR implementation is the emergence of a physician champion, preferably a senior figure.

• Financial incentives may be an insufficient motivator to compel many physicians – especially those closer to retirement – to adopt EHRs.

• The most important role of the consultant (and the REC) may lie in assisting practices in Meaningful Use reporting and optimization, which occurs late in the transformation process.