OPTIMIZING THE USE OF YOUR ELECTRONIC HEALTH RECORD

A collaborative training offered by Highmark and the Pittsburgh Regional Health Initiative
Introductions
Disclosures

- Successful completion of training
  - Participation for full 2 hours
- Conflicts of Interest
  - All planners and presenters have signed Conflict of Interest Disclosures
  - No conflicts declared
- Commercial Support
  - No commercial support has been received
- No recording of any kind, please
Transforming Care in Provider Practice: Offerings

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
Objectives

- Define the current national and regional landscape related to EHR adoption and reasons to optimize use of functionality.
- Define meaningful use standards.
- Discuss the current condition of EHR optimization in your practice.
- Recognize common challenges to and improvement strategies for optimizing the use of functionality.
Where are you on the Implementation Spectrum?

- Not yet started
- Product selection, purchasing
- Implementation planning
- Implementation
- Fully functional
EHR Implementation: National Perspective

Shea & Hripcsak (2010). NEJM, 362 (3)
EHR Implementation: The Regional Perspective

Highmark Western PA Network

Highmark Network Practices in CMS Demonstration Project

- Practices in CMS e HR Demo: 264
- Number of Practices with e HR: 174 (66%)
- Number of Practices without e HR: 90 (34%)

Date: 4-15-2010
Regional Use of EHR Functionality

- Online viewing of lab results: 100%
- Printing or faxing Rx: 96%
- Online reports of results and/or digital films: 95%
- Electronic patient visit notes: 87%
- Electronic patient specific problem lists: 85%
- Patient specific educational materials: 76%
- Clinical messaging with other providers: 70%
- Online rx transmission to pharmacy: 63%
- Electronic disease specific registries: 61%
- Alerts and reminders: 61%
- Clinical decision support: 56%
- Online order entry of labs: 55%
- Transmission of records to hospitals/other facilities: 39%
- Online referrals to other providers: 37%
- Online order entry of radiology tests: 27%
- Patient Email: 10%

CMS EHR demo application results, Fall 2008
Why Optimize?

- Improved quality, safety and efficiency
- Financial incentives for optimizing
- Future financial disincentives for failing to optimize
Improved Quality and Efficiency

- 78% of primary care physicians with high IT capacity report feeling well prepared to care for patients with multiple chronic diseases, vs. 66% of those without high IT capacity

  Davis et al, 2008

- Efficiency and safety savings of $142 billion in U.S. physician offices and $371 billion in U.S. Hospitals over the next 15 years

  Anderson et al, 2006
EHR functionalities, particularly e-prescribing, have significant implications for patient safety

- Potential avoidance of more than 2 million adverse drug events annually (130,000 of which are life threatening)
- Patients getting e-prescriptions had less severe potential drug/drug interactions

AHRQ (2008) Pub No 08-PFS015
Financial Incentives: The National Landscape

- Centers for Medicare and Medicaid (CMS) Electronic Health Records Demonstration
- American Reinvestment and Recovery Act (ARRA)
- Payer incentives
- Hospital incentives
CMS EHR Demonstration: Overview

- 5-year pay-for-performance demonstration, began May 2009
- Goal: Accelerate adoption of EHRs and maximize use to enhance quality of care and patient outcomes
- Southwestern PA is one of 4 regions in the country selected for participation
- 280 participating practices
  - ½ treatment group—eligible for financial incentives
  - ½ control group—not eligible for financial incentives
CMS EHR Demonstration: Financial Incentives

- 2 separate per-beneficiary incentive payments:
  - Health Information Technology (HIT) incentive as measured by completion of the Office Systems Survey (OSS)
    - MUST be a CCHIT-certified EHR system
  - Quality incentive payment for reporting and performance on 26 clinical measures
    - Diabetes
    - Congestive Heart Failure
    - Coronary Artery Disease
    - Preventive Services
# CMS Demonstration: Maximum Potential Incentive Payments

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<tr>
<th>Year</th>
<th>EHR Adoption (OSS)</th>
<th>Reporting of Clinical Measures</th>
<th>Performance on Clinical Quality Measures</th>
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**TOTAL:** $58,000 $290,000
Next Steps for CMS EHR Demo

Treatment Group Practices

- Complete the Office Systems Survey (OSS)
  - To qualify for an incentive payment you must be using a CCHIT-certified EHR for minimal core functionality
    - Clinical notes
    - Recording laboratory orders and entering lab results
    - Recording imaging orders and entering imaging results
    - Recording prescriptions
  - The more advanced use of functionality, the higher your score on the OSS
Practices will be paid a maximum of $45 per assigned beneficiary with a chronic condition.

Incentive payment = 
# of beneficiaries x OSS score x $45
The Health Information Technology for Economic and Clinical Health (HITECH) provisions of ARRA appropriate $2 billion to “jump start” funding to the Office of the National Coordinator for Health Information Technology.
ARRA: Who Gets What?

- $300 million for Health Information Exchange initiatives
- $20 million to the National Institute for Standards and Technology (data standards)
- $5 million for Administration
ARRA: Who Gets What?

- Remaining $1.7 billion:
  - Developing Certified Electronic Health Records software (if the private market cannot meet provider needs)
  - Training and support
  - Infrastructure creation & telemedicine
  - Promoting interoperability of clinic data (repositories or registries)
  - Expanding the use of Information Technology (IT) in Public Health Departments
ARRA: How Will the Money be Distributed?

- Most at the state level via grants and initiatives
- The law doesn’t specifically state that providers will get grants or loans—but it is implied
- Initiatives for federal and state programs to offer loan programs to physicians to access capital
ARRA: How Will the Money be Distributed?

- $100 million to train IT professionals to work in health care
- $70 million grant to community colleges for healthcare IT training
The Medicare Incentives for Meaningful Use

“Meaningful use” of EHRs will yield up to $44,000/provider over 5 years

- Year 1: $18,000/provider (2011 or 2012)
- Year 2: $12,000/provider
- Year 3: $8,000/provider
- Year 4: $4,000/provider
- Year 5: $2,000/provider
The Medicare Disincentives

The law also mandates decreasing Medicare payments to physicians that fail to “meaningfully use” EHRs.

- 2015: 1%
- 2016: 2%
- 2017: 3%
The Medicaid Incentives for Meaningful Use

- To qualify for Medicaid incentives you must be a:
  - Physician
  - Nurse Practitioner
  - Certified Nurse Midwife
  - Dentist
  - FQHC
  - Pediatrician

- AND have 30% volume Medicaid patients (20% for pediatrics)
Medicaid Incentives

- Potentially as high as $63,750/provider over 6 years

- Medicaid Incentives differ from Medicare incentives
  - Broader range of qualifying providers
  - No disincentives for not adopting HIT
  - Potentially higher payments
  - Potentially longer time frame (2021 vs. 2016)

- Note that providers will need to choose Medicare OR Medicaid incentives—not eligible for both
What Does it Mean to Optimize Your EHR in this Landscape?

MEANINGFUL USE STANDARDS
What is “Meaningful Use?”

- Using a certified EHR system to:
  - Improve quality, safety and efficiency
  - Engage patients and families in their health care
  - Improve care coordination
  - Improve population and public health
  - Ensure adequate privacy and security
Meaningful Use—the Big Picture

Computerized Physician Order Entry (CPOE)

Drug-drug & drug-allergy checks, formulary checks
Maintain updated problem, meds and allergies list
e-prescribing
Record key demographics and clinical data
Vital signs, including height, weight and blood pressure
Send reminders to patients for preventive/follow up care

Use of evidence-based order sets
Chronic care management using registries and decision support tools
Use of clinical decision support at point of care
Report to external disease or device registries

Achievement of minimal performance levels on quality, safety & efficiency measures
Implement clinical decision support for high priority conditions
Medical device interoperability
Multi-media support (e.g. x-rays)

ONCHIT Policy Committee, draft, December 2009
Meaningful Use: The Details

- CPOE
- Drug-drug, drug-allergy & drug-formulary checks
- Problems, meds & allergy lists
- ePrescribing
- Record demographics
- Record and chart changes in vitals
- Record smoking status
- Incorporate lab results as structured data
Meaningful Use: The Details

- Generate patient lists by specific conditions
- Report ambulatory quality measures to CMS or the state
- Send reminders to patients for preventive/follow-up care
- Implement 5 decision support rules and ability to track compliance with rules
- Check insurance eligibility electronically
- Submit claims electronically
Meaningful Use: The Details

- Engage patients and families in their health care

- Provide patients with an electronic copy of their health information
- Provide patients with timely electronic access to their health information
- Provide clinical summaries to patients for each office visit
Meaningful Use: The Details

- Electronically exchange key clinical information (e.g. problem, med & allergy lists, test results) with care providers
- Perform medication reconciliation at relevant encounters and each transition of care
- Provide summary care record for each transition of care and referral
Meaningful Use: The Details

- Submit electronic data to immunization registries where required and accepted
- Electronic submission of syndromic surveillance data to public health agencies according to applicable law and practice
Meaningful Use: The Details

- Protect electronic health information maintained using certified EHR technology through the implementation of appropriate technical capabilities

Ensure adequate privacy and security protections for personal health information
Other Incentive Programs

- Highmark Quality Blue
  - ePrescribing and EHR components
  - Quality incentives for chronic disease management (e.g. diabetes, cholesterol) and preventive care (e.g. breast cancer, cervical cancer screening)
  - $3, $6, and $9 per eligible E&M encounter

- Other payer quality incentives

- Hospital-funded support for EHR adoption
  - Software discounts
  - Hosting options
  - Implementation support
Discussion

WHERE ARE WE NOW?
Time for a Break!

Please return promptly in ten minutes.

Thanks!
Common Barriers to Optimization

- Work Design
- Organizational Culture
- Technology
# Work Design

## Common Challenges
- Limited understanding of workflow prior to implementation
- Failure to fully integrate EHR into workflow
- Failure to reassess & redesign post implementation

## Common Outcomes
- Inefficiencies
- Duplicate Work
- Frustration
Work Design: Improvement Strategies

- Observe your existing EHR workflow to understand:
  - What’s working well
  - What’s not working well
  - Opportunities for Improvement
  - Who interacts with the EHR? In what ways?

- Use observation data to perform Process Mapping
Process Mapping: A Tool for Understanding Workflow

A process map is a visual depiction of the current state that identifies:

- Roles—people who complete activities
- Activities—steps in the process
- Problems—opportunities for improvement
- Strengths—what’s working well
Example of a Process Map: Prescribing Meds Without ePrescribing Functionality

**Physical Exam**
- MD/NP/PA
  - Record in EHR:
    - Allergies
    - Problems
    - Clinical notes

**Prepare script for brand name med**
- MD/NP/PA
  - Write script
  - Give to pt
  - Record in EHR

**Deliver script to pharmacy**
- MD/NP/PA
  - Clarify script
  - Decide upon appropriate substitution, revise script

**Request substitution**
- Pharmacist
  - Call answering service to clarify script, wait for call back from provider

**Authorize substitution**
- MD/NP/PA
  - Revise script
  - Dispense meds

**Dispense meds**
- Pharmacist

**Double work documenting script**
- Med not in formulary

**Rework for provider and pharmacist**
- Illegible handwriting

**Real-time documentation in EHR**
Continuous Quality Improvement to Optimize Your EHR

- Use data to understand the current state
- Make incremental improvements to move closer to the ideal
- Measure success of the improvements—do the improvements move you closer to the ideal?
- Use tools to make work easier and processes flow more smoothly
- Involve the people who do the work—”the experts”—in work redesign
Plan-Do-Study-Act Cycle

Plan:
- Identify your goal
- Understand the current state
- Design experiment
- Identify metrics
- Predict results

Do:
- Test the change
- Carry out a small-scale experiment

Study:
- Review the test
- Analyze results
- Assess learnings

Act:
- Take action based on what you learned
- Adopt, Adapt, Abandon
Continuous Improvement Toward the Ideal

Current State → Experiment → Experiment → Experiment

Each improvement moves the organization closer to the ideal

Ideal / Best Practice
Example of a Process Map: Prescribing Meds Using ePrescribing

Physical Exam

Enter order for brand name med into EHR

MD/NP/PA
Record in EHR:
• Allergies
• Problems
• Clinical notes
• Scripts

MD/NP/PA

Clinical Decision Support Alert

MD/NP/PA

Substitute covered med

EHR

• Alert provider med not covered by formulary.
• Recommend substitutions

Drug-drug & drug-allergy safety checks

Real time alert that med’s not covered

MD/NP/PA

Dispense meds

Pharmacist

• Review electronic script
• Dispense meds

Electronic script clear and legible

Patient

• Present insurance card
• Pay co-pay

No rework

Pick up meds from pharmacy

No delay for pt. Meds ready when pt arrives

Real time alert that med’s not covered
Organizational Culture, Attitudes and Behaviors

**Common Challenges**
- Technical competency
- Resistance to the “new way of doing things”
- Inertia—not wanting to make changes & improvements post-implementation
- Competing demands
- Finite Resources
- Changing Roles

**Common Outcomes**
- Inefficiency
- Inconsistency of usage among providers/staff
- Limited use of advanced functionality
Organizational Culture: Improvement Strategies

- Identify and mobilize a leader/champion to maintain momentum for change
  - Someone who is respected by the practice team
  - A good communicator
  - A die-hard supporter
  - Someone who will continually drive change
Organizational Culture: Improvement Strategies

- Ongoing computer competency training
  - If you didn’t assess staff & provider competency/comfort level using computers prior to implementation, assess it now
  - If you did assess, reassess
  - Identify training and support needs and training resources
Organizational Culture: Improvement Strategies

- Recognize the need for ongoing change management—implementation is just the beginning!

Letting go of the old  Neutral Zone (Transition)  New Beginnings (Sustainment)
# Technology

## Common Challenges
- Insufficient technical support
- Inadequate data exchange and fragmentation
- Customization (or lack thereof)
- Underdeveloped interoperability

## Common Outcomes
- Limited use of advanced functionality
- Duplicate work
- Manual data entry
Technology: Improvement Strategies

- Work with vendor to secure ongoing technical support
- Consider 3rd party technical support
- Work with vendor to customize templates and workflow
- Participate in your vendor’s user groups
- Take advantage of technical support and interfaces that may be available through your local hospital
Survival of the Fittest

“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.”

Charles Darwin
Discussion and Questions