Meaningful Use of HIT by RHCs
NOSORH Region A Meeting
Providence, RI
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Maine Rural Health Research Center

Learning Objectives

• Understand the status of adoption of HIT and EHRs by RHCs
• Discuss how RHCs with EHRs perform on Stage 1 meaningful use standards
• Review the technical assistance and HIT support needs of RHCs

Importance of HIT Under Health Reform

• Future of health care is linked to better HIT systems and is part of the solution regardless of what happens to health reform
• Necessary to participate in patient-centered medical homes, ACOs, pay for performance and other transformation initiatives
• Full adoption of HIT leads to:
  – Improved interaction with patients and caregivers
  – Transparency and the ability to document quality and performance
  – Improved treatment of chronic diseases
  – Improved operations
  – Improved collaboration among internal and external providers
Where Do RHCs Stand?

- Little national data on the status of HIT adoption by RHCs
  Evidence from small physician practices suggests that RHCs may not be able to meet standards for meaningful use of HIT
- As Medicare meaningful use incentives are based on fee for service/Part B billings, many providers in RHCs won’t qualify
- Individual RHC providers may qualify for Medicaid incentives if “needy individuals” make up 30% of their patient volume

Stage 1 Meaningful Use Standards

- Core Set (all 15 required)
  - Demographics
  - Problem list
  - Medication allergies
  - Pt clinical visit summary
  - Patient with electronic copy
  - Drug-drug/drug-allergy interactions
  - Clinical decision support
  - Report clinical quality (BP, BMI, Smoke, plus 3 others)

- Menu Set (select 5 of 10)
  - Drug formulary checks (one report)
  - Patients by conditions (one report)
  - Send patient-specific education
  - Summary care record/transitions
  - Send reminders for preventative/follow-up care (20% > 65yrs. < 5yrs.)
  - Pt electronic access to labs, problems, meds and allergies
Internet Access
(n = 153)

- None 2%
- Dial-up 1%
- DSL 30%
- Cable 22%
- Fiberoptic 23%
- Wireless 15%
- Not sure 8%

Practice Management/Billing System Implementation (n= 149)

- Fully implemented 70%
- Installed but not in full use 7%
- Purchased but not using 9%
- No practice management system 13%
- Common functions: registration (63%); scheduling (69%);
  accounts receivable (69%); electronic billing (69%);
  reporting/analysis (65%); insurance verification (41%); interim
  cost reports (18%); and management reports (62%)

Electronic Health Record Implementation
(n = 145)

- EHR in use 58%
- EHR purchased/implementation begun 16%
- RHC does not have an EHR 27%

- Most commonly used EHR brands: Allscripts, GE Centricity,
  Lake Superior Data Systems, McKesson

* Based on preliminary results – early adopters may be over-represented
### Use of EHR Data

- Create benchmark and clinical priorities: 43%
- Share data with providers: 63%
- Set goals around clinical guidelines: 43%

### Computerized Provider Order Entry Implementation (n=86)

- CPOE in use for some/all providers: 77%
- EHR has CPOE but functions are not in use: 9%
- EHR does not have CPOE: 6%
- Not sure: 8%

### Use of CPOE to Complete Medication Orders

- CPOE is used to complete medication orders/prescriptions
  - More than 30% of patients with medication orders: 88%
  - Less than 30% of patients with medication orders: 8%
  - Function not in use or turned off: 2%
Use of e-Prescribing Functions

• Transmit prescriptions using EHR e-prescribing functions
  – More than 40% of applicable prescriptions 75%
  – Less than 40% of applicable prescription 9%
  – Feature not in use or turned off 13%
  – Not applicable 1%

• Conducts drug-drug interaction and drug allergy checks 84%

• Implemented drug-formulary checks with at least one internal/external drug formulary 64%

EHR Patient Tracking Functions

• Up to Date Problem Lists and Active Diagnoses
  – More than 80% of all patients 80%
  – Less than 80% of all patients 13%

• Maintains active medication lists
  – More than 80% of all patients 84%
  – Less than 80% of all patients 9%

• Maintains active medication allergy lists
  – More than 80% of all patients 84%
  – Less than 80% of all patients 9%

EHR Patient Tracking Functions

• Tracks and records vital signs for patients 2 and older
  – More than 50% of all patients 84%
  – Less than 50% of all patients 6%
  – More than 50% but without growth charts 3%

• Tracks smoking status for patients 13 and older
  – More than 50% of all patients 70%
  – Less than 50% of all patients 10%
Patient Access to Data

- Provides patients with electronic copy of health information
  - More than 50% of all patients within 3 business days 55%
  - Less than 50% of all patients within 3 business days 7%
- Provides written clinical summaries
  - More than 50% of all patients within 3 business days 38%
  - Less than 50% of all patients 13%
- Timely electronic access to health information
  - More than 10% of all patients within 4 business days 31%
  - Less than 10% of all patients within 4 business days 0.7%
  - Provides electronic access but takes longer than 4 business days 0.2%

Patient Reminders and Education

- Send reminders for preventative care for patients age 65 and older and age 5 and younger
  - Relevant of patients 52%
- Provide patient-specific educational resources
  - 10% or more of patients 55%
  - Less than 10% of patients 13%

Quality Improvement Functions

- Uses EHR to generate a disease registry 60%
  - Asthma 26%
  - Congestive heart failure 28%
  - Hypertension 36%
  - Depression 12%
  - Diabetes 44%
  - Coronary artery disease 20%
### Disease Registry Use

- Population health management 28%
- Individual health management 28%
- Share information with providers 30%
- Share information with administrative staff 21%
- Generate patient reminders 29%
- Track quality of care (e.g., A1C, eye exams) 33%
- Identify groups of patients for follow up 26%

### Quality Improvement Functions

- Uses EHR to generate at least one report that lists patient by a specific condition (i.e., disease registry) 60%
- Implemented at least one clinical decision support rule 75%
- Uses EHR to collect and submit quality measures to CMS or state quality improvement organization
  - Yes 41%
  - Reports but does not use EHR, only paper chart 12%

- Incorporate lab results into EHR as structured data
  - More than 40% of lab results 70%
  - 40% or less of lab results 12%
- Use of evidence based guidelines
  - Yes 58%
  - No 26%
- Demographic data is captured in EHR
  - More than 50% of patients seen 86%
  - For 50% or fewer of patients seen 2%
### Quality Improvement at Transitions

- Perform medication reconciliations at transitions
  - More than 50% of transitions: 53%
  - 50% or less of transitions: 4%
- Provides electronic summary of care records at transitions
  - More than 50% of care transitions and referrals: 59%
  - 50% or less of care transitions and referrals: 8%

### Information Sharing and Exchange

- Uses or performed at least one test of EHR’s ability to electronically exchange key clinical information: 45%
- Submits or performed at least one test of EHR’s ability to submit data electronically to immunization registries: 35%
- Submits or performed at least one test of capability to submit electronic syndromic surveillance to PH: 6%
- Conducted a security assessment, implemented security updates, and corrected identified security deficiencies: 61%

### Implementation Plans for RHCs Without an EHR

- Plan to purchase and implement within 12 months: 46%
- Plan to purchase/implement > more than 12 months: 41%
- No plans to implement an EHR/Not sure of plans: 13%
- Purchase certified system?: 68%
What Does It All Mean?

- **Caution**: Results are based on a small set (150) preliminary respondents and should be interpreted with caution.
- 58% of RHCs have partially/fully implemented an EHR.
- Mixed performance compared to meaningful use standards:
  - RHCs seem to perform better with patient tracking functions.
  - RHCs do less well with providing access to data, sending reminders, QI functions, QI at transitions, and information sharing and exchange.
- A substantial number of RHCs will need support in acquiring/fully implementing an EHR to achieve meaningful use.

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