Innovations in Information Technology:

Achieving increased cancer incidence reporting through use of electronic health records (EHRs)

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Presenter Disclosure

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Co-authors

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Background

- Cancer not in Stage 1 of MU, but we were hopeful that it would be included in Stage 2 of MU
- Now, cancer is included as one of six options a physician can choose in Stage 2 of MU.

Objectives of Presentation

- Describe steps taken by one CCR to obtain data from physician office EHRs.
- Discuss why use of EHRs can improve reporting of cancer cases to CCR
- Describe two or more challenges facing CCRs as they strive to implement EHR reporting
To increase case completeness by obtaining previously unreported cases and treatment information from EHRs, we:

- Partnered with the Missouri Health Information Technology (MO HIT) Assistance Center

Original Focus

- non-reporting oncology practices
- small critical access hospitals (CAH) that report by submitting paper copies of medical records

Work with other state and national organizations

- to identify and assess options for software that allows secure transfer of encrypted data via the internet
Methods - Continued

- Collaborate with facilities’ EHR vendors and CDC software developers to:
  - Export files
  - Develop interfaces and
  - Import, store and process data

Results: Project Participation

- Six clinic/physician offices (C/POs)
  - 3 – completed EHR implementation
    - One has sent test data to CCR
  - 2 – EHR selected but not implemented
  - 1 – EHR implemented but degree unknown

Results: Project Participation

- Three CAHs
  - All have selected EHRs but have not implemented
- Urologist
  - Completed EHR implementation
    - Test data sent to CCR
Results: Project Status

- Story #1:
  - Received test data and subsequent live data from fully-electronic clinic EHR
  - Working with Vendor to update from CCD to a CDA formatted report to ensure full cancer data capture

Results: Project Status

- Story #2:
  - Urologist who had created his own certified EHR
  - Received test data and finalized data elements to be captured in the report
  - Vendor willing to change report formatting to CDA before Stage 2 of MU; expect next testing round in Nov 2012

Challenges - CCR

- Interoperability between software
- EHR vendors to change programming
- Funding cuts resulting in staff deficits and resource availability
Challenges – CCR Continued

- Processing data and internal workflow
  - Storage
  - Consolidation of reports
- Sustainability
  - Convincing C/POs to choose cancer reporting as one of three in Stage 2

Challenges – C/POs

- Required cancer data elements in EHR report
- EHR vendor cooperation
- Cost??

Challenges – EHR Vendors

- Adapting EHR formatting before required for Stage 2 of MU
- Cost of changes to EHR reporting
- EHR Certification and recertification after any update/change
Challenges – EHR Vendors

- Secure transmission and automated triggering of EHR reports
- Similar challenge as CCR in convincing C/PO to choose cancer reporting in Stage 2

Overall Conclusion

- Obtaining C/PO cases through EHR transmissions will reduce potential bias brought about by missed cases (melanoma, prostate, etc.) and offers a feasible yet challenging means of obtaining these cases

Overall Conclusion - Continued

- Trying two options:
  - Pros
    | Trigger Event | Physician Driven |
    |---------------|------------------|
    | Automated     | Physician decides when to send |
    | More data     | CCR gets critical data |
    |               | Easier to process at CCR |
**Overall Conclusion - Continued**

- **Cons**

<table>
<thead>
<tr>
<th>Trigger Event</th>
<th>Physician Driven</th>
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<tr>
<td>May overwhelm CCR</td>
<td>Some detailed data won't be sent</td>
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**Questions?**

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