Enabling the Expansion of Health Information Technology

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Overview

- 3 presentations examining **EHR adoption** (and its challenges) from **different perspectives**:
  - Small, urban primary care practices with underserved patient population (Smith Ryan)
  - Regional Extension Centers (Farrar)
  - Regional health care markets and state environments (Blavin)

- 1 presentation examining a pilot that demonstrates **novel applications of advanced HIT** that can be used to enable **delivery system reform** (Kharrazi)
Lots of hard work over the past decade... ... and much more lies ahead.
What are Small Practice Providers in Underserved Settings Most Challenged with Six Months after Adopting an Electronic Health Record?

- Examine impact of EHR adoption on perception of clinical task performance
  - Pre/post survey of 121 participating practices
  - Examined positive and negative “flippers” across various tasks

- More positive than negative flippers for all tasks
  - Positives dominate for most (e.g., documenting physical exams)
  - More balanced between positives and negatives for ordering and reviewing lab and radiology tests
What are Small Practice Providers in Underserved Settings Most Challenged with Six Months after Adopting an Electronic Health Record?

• Contribution:
  
  ○ Helps identify the **particular tasks** which appear to be most challenging to perform using EHRs in small practice setting

• Questions:
  
  ○ How many non-flippers?
  
  ○ Different results before and after meaningful use?
What are Small Practice Providers in Underserved Settings Most Challenged with Six Months after Adopting an Electronic Health Record?

- Future work?
  - Clusters of tasks with similar perceptions (e.g., those that struggle with X and also likely to find Y challenging)
  - Practice characteristics that are associated with challenges
  - Relationship between challenges and performance
Preliminary Findings from the Program Evaluation of the Regional Extension Center Program

- Characterize and explain **variation in REC program implementation and operation**
  - Key themes from case studies of 9 RECs (plus exposure to 27 additional RECs)

- 5 contextual factors (largely challenges) that shaped REC approach
Preliminary Findings from the Program Evaluation of the Regional Extension Center Program

• Contribution:
  - Identifies the **different types of challenges** faced by those working to help implement EHRs as well as **strategies for addressing them**

• Questions:
  - Clear that some challenges were contextual/local (e.g., Medicaid EHR program), but not clear why others were identified as contextual/local (e.g., EHR product market)
  - How consistent was the relationship between context and “accommodation strategies”? (i.e., did all RECs in rural areas use the same accommodation strategies?)
Preliminary Findings from the Program Evaluation of the Regional Extension Center Program

- Future work?
  - If accommodation strategies varied in similar contexts, understand what drove these differences
  - Evaluate effectiveness of accommodation strategies
    - Use self-reported data on “challenges” from CRM?
Variation in HITECH Implementation and Providers’ Willingness and Ability to Achieve “Meaningful Use”: Insights from Diverse Regions of the Country

- Relationship between regional health care markets and state environments – and MU readiness, facilitators/barriers, achievement
  - Case studies of four varied, but “typical” regions

- If you’ve seen one region... you’ve seen one region
  - Not a lot of common ground
Variation in HITECH Implementation and Providers’ Willingness and Ability to Achieve “Meaningful Use”: Insights from Diverse Regions of the Country

- Contribution:
  - Identifies early regional differences in perceptions of and response to MU

- Questions:
  - Are the differences driven by regional factors? If so, which are most salient factors?
  - What are the “red flags” that emerged that may threaten success of MU?
Variation in HITECH Implementation and Providers’ Willingness and Ability to Achieve “Meaningful Use”: Insights from Diverse Regions of the Country

- Future work?
  - Focus on sustainability and what is required to ensure progress is not undone
  - Identify what differentiates those making faster versus slower progress
Clinical Knowledge Hub
Conceptual Integration of Rules, Data Sets, and Queries

- Develop and demonstrate feasibility of a new approach to creating and sharing clinical decision support (CDS) and NQF quality measure (QM) knowledge
  - Used retrospective patient data from a large HIE -- Indiana Network for Patient Care
- A solution that works at “scale”
- Promotes dissemination of evidence-based guidelines and tracking adherence (which are important in ACOs and elsewhere)
Clinical Knowledge Hub
Conceptual Integration of Rules, Data Sets, and Queries

**Contribution:**
- Demonstrates that “high-value” uses of HIT are viable and scalable

**Questions:**
- Who is using the data on guideline adherence? What actions are being taken in response to it?
Future work?

- Applying to other HIEs (as planned)
- Tie to Learning Health System
- Impact of individual provider feedback on guideline adherence
Now it’s your turn...

Questions for the speakers?