AHRQ / TEP Update
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Key Challenges

GLIDES PROJECT
Guidelines Into Decision Support
sponsored by
the Agency for Healthcare Research and Quality

Yale New Haven Health
Yale School of Medicine
Nemours
Key Challenges

- Project Organization
- Project Scoping
- Knowledge Transformation
- Guideline Implementability
- Central vs Local Activity
- Adjusting Design Approaches For Different Communities
- Implementation and Roll-Out
- Technical Challenges
Project Organization and Staffing Challenges

• Engaging and retaining committed, respected and visible “guideline champions” at each clinical location
• Gaining sanction and support of existing governance structures (e.g., Nemours – AIDHC)
• Securing adequate time/participation from clinical staff for design and training
  – Scheduling time with multiple clinicians concurrently
• Requisite EHR technical knowledge for challenging UI and CDS logic programming
Project Scoping Challenges

• Narrow focus on implementation of guideline logic within EHR
  – Broader considerations emerged
  – Inefficiencies with data capture and screen flow
  – Availability of data required to trigger CDS
  – Influencing physician behavior if not using EHR during clinic

• Broadening scope created challenges for funding and keeping stakeholders engaged and committed
Knowledge Transformation Challenges

• Knowledge transformation was relatively straightforward (moving from the Narrative Guideline to the Semiformal level)

• Moving from Semi-formal to Formal level is complex and needs further investigation

• Other knowledge representation work adds to a profusion of approaches
Guideline Implementability Challenges

• Expect to encounter problems with guidelines
  – Missing details, vague and underspecified text
  – Lack of guidance re anticipated level of adherence

• Asthma guideline assumed symptoms consistent with asthma are always caused by asthma
  – This was a main source of disagreement with guideline recommendations (i.e. cough due to URI/seasonal allergies/pneumonia etc., not asthma)
Central Vs Local Activity Challenges

• Many (most?) implementation challenges are local

• CDS must be highly customizable to reflect these local factors
  – CDS design methodology and documentation
  – Clinical policies and workflow designs
  – UI designs and screen flows
  – Integration of CDS logic with local EHRs
  – Preferences of local designers and clinicians
Challenges Of Designing For Different User Groups

• Need to consider different needs of different user groups. For example:
  – Specialists vs primary care physicians
  – Different ways of using the EHR
  – Variety of users at academic medical institutions

• Be ready to consider different techniques for different groups. For example
  – Mandate vs guideline
  – Prescriptive vs critiquing
  – Choice of appropriate CDS modality
Implementation and Roll-Out Challenges

• Building user commitment and adoption takes time and focus
  – CDS does not “sell itself”

• Several months of “encouraging adoption” may be required before meaningful evaluation can begin
Technical Challenges

• Different capabilities of EHRs

• Availability of and access to data for evaluation and reporting

• Limitations in EMR time-stamping

• Limitations of local IT skills and expertise

• Encoding concepts in a variety of terminology systems
Thank You!

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