



AHRQ / TEP Update

Feb 1 – 2, 2010

Key Challenges

GLIDES PROJECT

GuideLines Into DEcision Support

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the Agency for Healthcare Research and Quality



Yale School of Medicine



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 (eg. 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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