Clinical Decision Support Consortium
Technical Expert Panel

Challenges and Questions

February 2, 2010
Governance Challenges

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Content Governance Committee Team Lead
Overview

- Why governance became an issue
- Content Governance Committee
- Challenges
- Results to date
- Future plans
Why governance became an issue

• Based on Partners experience with shepherding CDSC research content into the LMR, there emerged two concerns about implementing rules at other collaborating institutions
  – How would similar governance challenges at the other sites be handled locally?
  – How to promote fair and equitable inter-institutional governance?
Content Governance Committee

• Convened Jan 6, 2009

• Membership: at least one physician (preferably IT-active) from each site (“clinical champions”):
  – PHS – S Maviglia, A Wright, L. Tsurikova, C. Kucera, M. Kim, Z. Turechek, J. Miller
  – Regenstrief – L Simionitis
  – UMDNJ (GE) – F Sonnenberg
  – MidValley IPA (NextGen) – G Fraser
  – Kaiser – M Krall
  – VA Health Administration – M Burton, J Saleem, Nareesa Muhammed
Base Year 1-2 Accomplishments

- Ratified a charter which defined mission, roles, and responsibilities, voting procedures, etc.
- Analyzed “similar” rules from each of our institutions (DM, CAD, HTN)
  - Bulk of rules very similar – ex. Promote regular HgbA1c measurements in diabetics
  - Significant variation in details
    - How diabetes is defined
    - Exclusion criteria
    - Threshold to trigger alerts
- Completed vignettes of local CDS governance policies
- Completed survey of local CDS knowledge management processes and tools
- Settled adhoc issues of controversy – ex. metadata value sets, definition and names of the content specification levels, etc.
- Provided Optional Year 3-5 project proposals
## Challenges Encountered

### Early
1. Initial skepticism and unfamiliarity with each other
2. Defining CGC’s role with respect to the CDSC steering committee  
   - advisory vs policy setting vs policy enforcing

### Middle
1. Bottom-up vs. top-down content development  
   - is the portal a "library" or a "certified corpus" of content  
   - how to accommodate local customization?
2. Desire for quality ratings, but reluctance to be judges  
   - Formal evaluation vs procedural vs empiric methods
3. Protecting intellectual property while promoting sharing and collaboration
4. Pushback on identifying “top 200 rules” -- What is the unit of comparison?

### Late
1. Enthusiasm
2. Uncertainty about years 3-5
Challenge 1: Content Development

- Submission of content is voluntary
- Submitted content may be any level (1-4)
- Content may be co-developed by any subset of the CDSC membership, but all submitted content must be endorsed by at least one CGC representative with voting rights
Challenge 2: Member Rights and Protections

• Other CGC members are licensed to use and make derivatives of content, as long as it...
  – Is not-for-profit
  – Indemnifies the original submitter
  – Acknowledges the source
Challenge 3: Quality Assurance

• Satisfying a minimal set of quality criteria is the responsibility of the endorsing CGC representative:
  – Content has been developed in accordance with the site’s typical quality assurance policies
  – Content is active at the host site at time of submission
  – All level 2 (semistructured) and level 3 (structured) documents are valid according to the schemas developed by the Knowledge Translation and Specification (KTS) team of the CDSC, with fully specified required metadata elements
  – Content is reviewed and updated at least every three years, or else noted in metadata that the item is no longer being actively maintained

• Content that has not been updated in 3 years will be deprecated, but remain on the portal
• Quality should be implicitly “recognized” rather than explicitly measured or judged
  – Utilization metrics
  – User comments on the portal
  – Highlighting rules that have been universally implemented
Policy: Pending Issues

• Rules for versioning content, translating between levels, linking content specs, and submitting derivative works
• Content naming conventions (rules, modules, and guidelines)
Near Future

• Challenges
  – Maintaining momentum
  – Waning enthusiasm

• Strategies
  – Rotating the meeting leader
  – Annual face-to-face retreat
Proposed Projects for Year 3-5

- Development of prioritization metrics to guide clinical decision support rule authoring and implementation
- Compilation of an inventory of the top 200 clinical decision support rules
- Specification of functional requirements for rating the quality of content submitted to the portal
- Reverse engineering clinical decision support rules currently in production
- Forward engineering new clinical decision support rules
- Maintain clinical rules (for L4 specifications)
- Develop Editorial Policies for Submission and Maintenance of Content
CDSC Challenges

Blackford Middleton
Principal Investigator
Challenges (1 of 2)

Research Team
- Keeping all core projects, identifying and cutting other projects and fitting remaining work into the 1.25M

Knowledge Management Portal Team
- Need for a disclaimer (for liability) or contract regarding intellectual property (copyright)
Challenges (2 of 2)

CDS Services

• How to handle cross-site sharing of data
  – Need for HIM involvement?
  – HIPAA?
  – Encryption?
  – De-identification?

Evaluation Team

• Ensuring evaluation metrics be uniformly measureable across sites to the greatest extent possible
Optional Year 1 Project List

- Revisit CDS Consortium sites that implemented CDS services
- Refine the CDS Knowledge Model
- Support and maintain KM Portal
- Submit recommendations to CCHIT or any other certifying body, HITSP, and vendors (health IT and knowledge)
- Support implementation and demonstration of the CDS web service at Regenstrief
- Demonstration of the CDS Web service at Regenstrief
- Overall coordination of demo activities across sites
- Implement CDS dashboards at collaborating sites
- Manage evaluation and consult with teams
- Develop metrics for prioritizing CDS rule authoring/implementation efforts.
- Maintain clinical rules (for Level 4 specifications)
- Develop Editorial Policies for Submission and Maintenance of Content
Questions for TEP

Optional Years Planning
• Any other projects CDSC should work on?

Evaluation
• What evaluation metrics can be used with highest uniformity across trial sites?

Rules
• Does TEP have any recommendations on rules they want us to collect in regards to compiling “top” actionable decision support rules for the Content Governance Committee efforts?

Access
• Does TEP have any recommendations on how to handle secure access for ECRS outside users outside the Partners network?

Dissemination
• What are the newly available dissemination channels (conferences, societies, journals)?