

Electronic Medical Records and Registries: Challenges and Opportunities

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Noam H. Arzt, Ph.D., President, HLN Consulting, LLC
Susan M. Salkowitz, Consultant, Salkowitz Associates, LLC

Agenda

- The Problem: Barriers to Registry Use
- Electronic Medical Records (EMR)
- The Opportunity
- Possible Strategies
- Implications for Action

The Problem

- Barriers to Registry Use:
 - Double entry of data
 - Confusing array of computer systems and applications
 - Data fragmentation across systems

Electronic Medical Records (EMR)

Definition:

Use of information technology to store comprehensive, clinical information about patients, including medical history and treatment.

Electronic Medical Records (continued)

- Use among physicians
 - HarrisInteractive survey (2003):
 - 22% of physicians using EMR in 2001
 - 30% of physicians using EMR in 2002
 - Annual HIMSS Leadership Survey (2002)
 - Fully operational CPR: 19%
 - Begun installing CPR: 37%

The Opportunity

- EMRs can provide access to Registry data without introducing a new application to the user.
- EMRs can eliminate double data entry!
- EMR-Registry partnerships strengthen ties within healthcare communities

Possible Strategies

1. Simple Records Exchange
2. Records Exchange with Registry Access
3. Records Exchange with Registry Features
4. System Integration

Possible Solutions (continued)

- Simple Records Exchange
 - Registry and EMR agree to routine exchange of patient and immunization records
 - Can be in one or both directions
 - **No direct access to registry by users**
 - Issues:
 - Frequency
 - Records matching rules, especially *to* the EMR
 - **Possible functional limitations**

Possible Solutions (continued)

- Records Exchange with Registry Access
 - Registry and EMR agree to routine exchange of patient and immunization records
 - Can be in one or both directions
 - Users may access registry in *read-only* mode
 - Issues:
 - Frequency
 - Records matching rules, especially *to* the EMR
 - User confusion over which system to access

Possible Solutions (continued)

- Records Exchange with Registry Features
 - Registry and EMR agree to routine exchange of patient and immunization records
 - Can be in one or both directions
 - Users do not access registry but have registry features within the EMR
 - Issues:
 - Frequency
 - Records matching rules, especially *to* the EMR
 - EMR must support rich feature set

Possible Solutions (continued)

- System Integration
 - EMR is modified to directly access key registry screens and functions
 - Immunization data is entered directly into the registry
 - Issues:
 - While access is seamless, users will know they are in different systems
 - Records matching rules must follow native registry matching rules
 - Immunization data not captured in local EMR and must be independently returned to clinic if desired

Implications for Action

- Need to compare level of sophistication of EMRs in their jurisdictions with their own feature sets.
- Over time, EMRs will increase in degree of penetration and functionality.
- Need to survey providers to determine if there is leverage in a few common EMRs.