



EHRs: Current Debates and Future Considerations

Presentation given to:

Prairie Health Information Privacy Day

Regina, Saskatchewan

April 16, 2007



Patient Expectations

- Patients are guaranteed rights under HIA
- Practical experience to date shows that patients are really worried about:
 - Whether or not their information is private and secure; which means:
 - Who has accessed their record?



Custodian Expectations

- Custodians are invited to and expect to play a key role in the development of the EHR
- Completeness and Accuracy of the record very important
 - If either is missing, could cause potentially serious patient safety issues
- From a work-flow perspective, custodians want easy access with as little work-flow interruption as possible
 - Single Sign-On
- Any system implemented should conform to team-based health care or existing pharmacy models

Technological Challenges


- Patient Issues
 - Audit trail across disparate applications
 - Can be implemented with the IHE ATNA profile
 - More likely to be implemented with common transaction IDs between applications
- Custodian Issues
 - If EHR is not centralized (as in Alberta), SSO is very difficult to implement
 - Provincial EHR systems might not know anything about clinical systems in Regions
 - Limited Sign-On a more realistic goal

Technological Challenges – RBAC

- Role Based Access Control
 - Security industry standard method for applying access controls to groups of users
- Provincial Access Framework
 - A model to define RBAC for Alberta Netcare
 - Based on current roles of users
 - Physicians, nurses, pharmacists and other professions defined by the Health Professions Act (HPA)
 - Also needs to address non-professionals and health care providers not covered by HPA

Technological Challenges – RBAC

- RBAC can get unwieldy
 - One Region articulated EVERY role for all users - defined 2200+ individual roles
- Goal for PAF is to define as few roles as possible
 - Currently at 10 clinical, 4 pharmacy and 4 admin
- Alberta health model does not conform nicely to standard RBAC implementation
 - Your role changes based on which custodian you work for
 - To track custodian, facility is tracked so that proper role can be assigned
 - Using facility in addition to standard RBAC categories makes implementation difficult



Technological Challenges – Auditing versus Monitoring

- Currently have a detailed audit framework implemented in Alberta
 - Ability to audit activity on an client (patient), or provider
 - Look for suspicious activity
 - Searching same last name
 - Searching complete families
 - Can do ad hoc audits on request from individuals or custodians
- Currently no active monitoring in place
 - Ideally need a trigger-based reporting solution

Legal Challenges

- Recent HIA charges against an individual laid after an OIPC investigation
- To prosecute in HIA, need to show willful negligence
- Charges the responsibility of the Privacy Commissioner
- Escalation process theoretically exists to College of particular custodian
 - Never had to pursue that approach
- Custodians can protect themselves by doing due diligence
 - Security controls, awareness training, etc.



Policy and Procedure Challenges

- Every new requirement for audit, compliance, or new systems requires new procedures
- One of the biggest issues in Alberta is resourcing
- Audit work is a 1+ full-time position
- Design and implementation of new and enhanced security and privacy controls is 2+ full-time position

Thank You

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