Electronic Health Records: The OSCAR Experience

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December 5, 2014

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Background

- Understanding practice patterns of Ontario chiropractors:
  - Survey/qualitative study (costly)
  - Abstracting case files (time consuming/costly)
  - Administration data bases (no clinical data)

- Community-based research studies:
  - Paper-based (recruitment, time)
  - Paper-based +electronic (missing data, admin data)

- Merging health and administrative data: EHR?
Electronic Health Records (EHR)

- Digital infrastructure increasingly used in healthcare
- Templates aid adoption of treatment guidelines
- Prompts/reminder systems improve safety & pathway adherence, enhance preventive activities
- Improve reimbursement and financial management
- Research: academic health centres vs community

Delaney, Ann Fam Med 2012
EHR’s: Community & PBRNs

• Community important to facilitate research
• Recruit variety of patients, diverse case mix
• EHRs can be used to recruit, identify potential subject
• Developing standards for exchanging clinical data is expanding rapidly
• Need assurances for privacy, standards for remote data capture, searchable anonymized database

Delaney, Ann Fam Med 2012
EMR: Gaps in knowledge & research*

• Primary care practice & research:
  – Uncertainty of value in patient care
  – Implementation /adoption influencers
  – Innovative data entry/extraction procedures
  – Agreement/understanding of data share
  – Limited funding/resources in e-health
  – Creating collaborative initiatives

Terry et al, Healthcare Policy 2014
EHRs: OSCAR Experience @ CMCC

- **Why OSCAR** *(Open Source Clinical Application Resource)*
  - Open source product – core readily available
  - Centralized (APC) or de-centralized (LCS)*
  - Certified by OntarioMD; Class II Medical Device®

- **Suite of web-based linked applications**
  - EMR – core functionality
  - Pt controlled health record; MyDrugRef; Client Access
  - Expandable: templates; eForms; graphical interface

*APC: Application Service Provider; LCS: Local Client® Server*
EHRs: Key modifications/lessons

- Standardizing relevant patient data
  - Expert panel defined key patient information
  - Creation of e-forms, intake and billing applications

- Ensuring security and privacy controls
  - Preventing unauthorized access to patient level data
  - Queries originate and terminate from dedicated server

- Collection of clinical data
  - Promote standardized inputs via training
  - Importance of maintaining good quality data

Delaney, Ann Fam Med 2012
Theory to practice: Implementing OSCAR

- Intake: collecting clinical data
- Invoice: collecting service data
- Outcomes: tracking change
- Implementation strategy
Preparing OSCAR for “meaningful use”

Examples of CMCC’s modifications to core EHR functionalities…….
Thank you ....