CCTS Biomedical Informatics Core Research Data Service

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Introduction
- Data obtained from electronic health records (EHR) has great potential towards solving clinical research questions. However, the ability to reproduce a successful request for data from one scenario to another can vary significantly.
- Successful delivery of useful data requires effective communication between the clinical research team, data query experts & data analysts.
- It is important to translate the high level vision of the research question acquired through verbal conversations, electronic communications, & other interactions into discretely available data variables.
- Data abstraction & extraction require reusable methods.

Methods
- Establish Workflows
- Researcher Engagement
- Query Mediation
- Abstraction of Data Warehouse Complexity
- Data Extraction - Delivery & Support with Analytics.
- Data Quality Analysis & Profiling

Conclusion
- Feasible to establish workflows with commonly available tools to support reproducibility for research data mediation, abstraction, extraction & delivery.

Results & Discussion
- The Research Data Service has processed over 100 requests that contributed to the development of the workflow.
- Many other requests were initially investigated & incomplete due to lack of funding or available data.
- Requests have covered several domains of care & research such as:
  - Intensive Care
  - Vascular Surgery
  - Immunizations
  - Sexually Transmitted Infections
  - HEIDS Measures
- Data delivered has been useful to various clinical research teams, healthcare students, & Study Design & Biostatistics Centre (SDBC) resources.
- Challenges locating data & managing researcher expectations persist but are constantly improving.

References

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