SHRINE: Research Networks for Querying Clinical Data

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SHRINE Overview

- What it is
- Networks
- Open Source
- Resources
SHRINE Use Cases

• Allows investigators to query clinical data across a network of hospitals
• Supports hypothesis validation, population research and cohort discovery
• First step to access more detailed data directly from hospital informatics systems
• Web application to perform real-time queries
• Data protection architecture
  – Provides obfuscated, aggregate results
• Installs on top of popularly used research data warehouses such as i2b2
• Expandable network
• Open Source software
• Extracted from EHR systems
  – Data quality based on EHR system/practices
• Loaded into research data warehouses
• Connected to network
• Common query language, data domains
  – Demographics
  – Diagnosis (ICD9, ICD10)
  – Laboratory Test Results
  – Medications
• **SHRINE @ HMS**

• **SHRINE Open Source**
  - CICTR
  - CARRA\textit{net}
  - National Pilot
  - UCR\textit{ex}
  - PCORI SCILHS and other CDRNs
  - CTSA ACT
  - and more
• 17 years of electronic health records
• 5 Harvard Affiliated Teaching Hospitals
• 6+ million patients
• 1+ billion facts
CTSA ACT Network: 22-64 sites
Open Source Community

open.med.harvard.edu
SHRINE Resources

- **HMS Network**
  FAQ, Tutorials, Policies, Data Steward
  [https://catalyst.harvard.edu/services/shrine/](https://catalyst.harvard.edu/services/shrine/)

- **ACT Network**
  [https://www.act-network.org/](https://www.act-network.org/)

- **Open Source Site**
  [https://open.med.harvard.edu/wiki/display/SHRINE/Welcome+to+SHRINE](https://open.med.harvard.edu/wiki/display/SHRINE/Welcome+to+SHRINE)
• Questions
catalyst.harvard.edu