A Web-Based Software Application for Casefinding from ePath Reports

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Kentucky Cancer Registry
Rich Source of Casefinding Data

> 375,000 total cancer-specific ePath messages

~ 8,000 new cancer-specific ePath messages per month

> 95% coverage of KY Hospitals

> 90% coverage of KY Non-Hospital Facilities
How are they retrieved?

Order ePath Report

Search Reports

Kentucky Cancer Registry

Copy of Report

EPath Facility
How are they organized?

• Every Message has:
  • Sending Facility (~ 35)
  • Ordering Facility (~ 800)

• Every Sending/Ordering Pair is assigned to a Hospital Registry

• Searchable by any field in ePath report
KCR is Unique

- All state hospitals use registry software provided by KCR
- Registry software is a web-application
- All hospital registry databases are maintained at KCR
- Small hospitals and non-hospital facilities are abstracted by KCR staff
How are they protected?

- Central User Directory for all Hospital Registries
- Every user has access to one or more Hospital Registries
- Software Only shows data from your Hospital Registry
# Search ePath Reports

- **Search Multiple Fields**
- **Choose Sending/Ordering Facilities**
- **View Summary Results**
- **Download Custom Reports**

**EPath Index**

**Search**
- SSN
- Medical Record
- Cervix Flag
  - Set  or  Unset
- First Name
- Last Name
- State
  - Empty
  - KY
  - TN
- Path ID
- Exact Matches

**Final Diagnosis**
- Clinical History

**Specimen Date**
- Report Date
- KCR Load Date

**Sending Labs**
- Large Hospitals / Groups
- Group Members / Facilities
  - Sending Facility
- Facility Id
- Facility Name
- Facility Id
- Facility Name

**Results**
- Sending Lab
- Last Name
- SSN
- Medical Record
- Specimen Date
- Report Date
- KCR
Custom Reports

![Excel spreadsheet showing a list of case findings.](image-url)
View ePath Reports

View multiple reports at once

Jump to Text Sections:
- Final Diagnosis
- Clinical
- All Text
- Raw HL7 Text

Download as PDF
Roadmap

- Setup Electronic Feeds
- Parse ePath Reports into Searchable Database
- Create Web Application for Viewing, Searching, and Generating Reports
- Link Demographics Data with Patients in Hospital Registry
- Link Case-Level Data with Hospital Registry
# Software Technologies

<table>
<thead>
<tr>
<th>Name</th>
<th>Purpose</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySQL</td>
<td>Database</td>
<td>Open Source</td>
</tr>
<tr>
<td>Apache/Tomcat</td>
<td>Middleware</td>
<td>Open Source</td>
</tr>
<tr>
<td>ExtJS</td>
<td>Web Application Development</td>
<td>Open Source</td>
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<tr>
<td>PHIN-MS</td>
<td>Transmission</td>
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<tr>
<td>Artificial Intelligence in Medicine (AIM)</td>
<td>Filtering and Transmission</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Linux</td>
<td>Server Operating System</td>
<td>Open Source</td>
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