A Public Health Use Case for MCBK

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Caregivers aided by thoughtful, effective information technology are more effective than caregivers alone.
## The Problem: % Reporting by Source

<table>
<thead>
<tr>
<th>Disease</th>
<th># cases</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>2605</td>
<td>44.4%</td>
</tr>
<tr>
<td>Histoplasmosis</td>
<td>73</td>
<td>42.5%</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>810</td>
<td>36.5%</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>246</td>
<td>30.1%</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>1137</td>
<td>10.6%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>445</td>
<td>6.3%</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>3718</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
Notifiable Condition Detector

Inbound Message

Potentially Reportable

Record Count as denominator

Realtime

Compare to NCMT

Abnormal flag, Organism name in NCMT, Value above threshold

Reportable Condition

E-mail Summary

Daily Batch

Reportable Conditions Databases

To Public Health

To Infection Control

Reports
Workflow and Stakeholders: Traditional
Workflow and Stakeholders: With CBK
Diagnostic Procedures to Detect *Chlamydia trachomatis* Infections

Thomas Meyer
Eberhard Straube, Academic Editor

**5. Nucleic Acids Amplification Tests (NAATs)**

NAATs are the most sensitive tests to detect chlamydia. These tests also have a high specificity comparable to culture, but in contrast to culture, do not depend on viable pathogens, facilitating specimen transport. Therefore, NAATs are generally considered the test of choice for chlamydia and have replaced culture as the diagnostic gold standard [14,17]. Antigen tests (EIA, DFA, RDTs) are no longer recommended for chlamydia testing due to insufficient diagnostic accuracy [14,17].
Computable Artifacts

• Decision model(s) (algorithm)
• Algorithm domains (e.g., conditions-to-model mappings)
• Feature selection and other parameterization metadata
• Validation data
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