## Key Elements of an Informatics-Savvy Health Department

<table>
<thead>
<tr>
<th>Informatics Vision &amp; Governance</th>
<th>Skilled Workforce</th>
<th>Well-designed &amp; effectively used systems</th>
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<tbody>
<tr>
<td>• Well-articulated informatics vision for how the agency uses information and IT</td>
<td>• Training strategies for improving informatics knowledge and skills across a broad range of staff</td>
<td>• Information systems effectively meet the information needs, workflows and practices of staff and programs.</td>
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<td>• Organization-wide approach to interoperability</td>
<td>• Informatics unit with agency-wide responsibilities</td>
<td>• Systems are interoperable with other internal &amp; external systems</td>
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<td>• Effective relationship with community partners and with central IT</td>
<td>• Policies to ensure confidentiality, security, integrity of data</td>
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Developed by Bill Brand, MPH, Public Health Informatics Institute; Marty LaVenture, PhD, Minnesota Department of Health; Priya Rajamani, PhD, University of Minnesota; Wu Xu, PhD, Utah Department of Health.
## Example Workforce Roles and Types of Informatics Competencies

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<th>Executive / Leadership Role</th>
<th>Manager / Program Leader Role</th>
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<td>Plans, directs, and formulates policies, sets strategies and provides the overall direction of agency’s informatics Activities.</td>
<td>Directs, manages, and executes day to day operational objectives of public health programs.</td>
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<th>Professional Role</th>
<th>Health / Clinical (Licensure) Role</th>
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<td>Applies specialized informatics knowledge, informatics theories, concepts, methods, and tools to ensure effective programmatic use of information and information technology.</td>
<td>Applies informatics theory and practice to the design and use of clinical information systems within a public health agency, or in the design of public health information or decision support systems to better support Health/care.</td>
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</table>
Minnesota Example Components for Immunization Interoperability

**Process / Function**
- Process, workflow, rules for integrating data into programs

**Vocabulary & Code Sets**
- CVX [Codes for Vaccines]
- MVX [Makers of Vaccines]
- NDC [National Drug Code]

**Content Structure**
- HL7 v2.5.1 [Implementation Guide for Imm. Messaging, Rel. 1.4]
- HL7 v2.3.1 [Implementation Guide for Imm. Transactions: V. 2.2]
- HL7 v2.5.1 [Implementation Guide for Imm. Messaging, R.1.5 In development]

**Transport**
- SOAP/Web Services
- PHINMS
- Secure FTP
- Manual Upload in Application
- SMTP-Direct Based Exchange

**Services [Unique to IIS]**
- Clinical Decision Support [accessible at point of care in EHR – branded as “Alternate Access”]

Recommended standards in Green
Accepted standards in Yellow
Standards capability under development / Future

Adapted from Dr. Doug Fridsma, ONC; by Priya Rajamani, Univ of MN; Erin Roche, MDH, Jennifer Fritz MDH. Marty LaVenture, MDH
Using Informatics to Change Public Health Practice

An **INFORMATICS SAVVY ORGANIZATION** is one that has an informatics-skilled workforce, a disciplined approach to information system design and use, and reliably managed IT operation.

**PH INFORMATICS** implies a disciplined approach to information systems design and use that drives improvements in public health practice.

**DATA**

**INFORMATION**

**KNOWLEDGE**

**WISDOM**

**PRACTICE**

**HEALTHIER COMMUNITIES**

Adapted by: Marty LaVenture, Bill Brand, Minnesota Department of Health. Karen Zeleznak, Bloomington Division of Public Health, 2005