Section D

Examples, Participation, and Leveraging Standards
Harmonization Products
Implementation

- Public health-related specifications

- Require standards-based solutions (RFPs)
  - Participation: if IT products are to work for public health, we need to specify how they should work

- Verify conformance
  - Integration statements
  - Connectathon results
  - Certification testing

- Certification ≠ interoperability
  - Know your standards requirements
  - Custom interfaces can be costly
Ten IHE Development Domains

- Ten IHE development domains—helping public health more directly
- Eleven years of steady evolution (1998-2010)

Proven Standards Adoption Process

1. Identify available standards (e.g., HL7, DICOM, IETF, OASIS)
2. Develop technical specifications
3. Testing at Connectathons
4. IHE demonstrations
5. Products with IHE
6. Easy to integrate products
7. Timely access to information
8. Document use case requirements
Why Get Involved?

- Why health professionals and your vendors should get involved
  - If as a health IT professional you are involved in evaluating and/or selecting IT products and consultants, you and/or your consultants and vendors can and should do the following:
    - Use IHE integration profiles to develop interoperability strategy
    - Use Connectathon results and integration statements to evaluate vendors
    - Demand IHE integration profile compliance in RFPs
## IHE Integration Statement

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Product Name</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Medical Systems</td>
<td>Mega CT</td>
<td>V3.2</td>
<td>17 Oct 2002</td>
</tr>
</tbody>
</table>

This product implements all transactions required in the IHE TF to support the IHE Integration Profiles, Actors and Options listed below:

<table>
<thead>
<tr>
<th>Integration Profiles Implemented</th>
<th>Actors Implemented</th>
<th>Options Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled Workflow</td>
<td>Acquisition Modality</td>
<td>Patient-based Worklist Query, Assisted Acquisition Protocol Selling</td>
</tr>
<tr>
<td>Portable Data for Imaging</td>
<td>Media Creator</td>
<td>No options defined</td>
</tr>
</tbody>
</table>

Web address for vendor’s IHE information: [www.integratedmedicalsystems.com/ihe](http://www.integratedmedicalsystems.com/ihe)

Links to Standards Conformance Statements for Implementation:

- HL7: N/A
- DICOM: [www.integratedmedicalsystems.com/ihe/MegaCT-DICS.pdf](http://www.integratedmedicalsystems.com/ihe/MegaCT-DICS.pdf)

Links to general IHE information:

- In North America: [www.ihe.net](http://www.ihe.net)
- In Europe: [www.ihe-europe.org](http://www.ihe-europe.org)
- In Japan: [www.ihe-japan.org](http://www.ihe-japan.org)
IHE for Communities

- Sharing information between
  - Providers
  - Specialists
  - Patients
  - Public health

Home

Hospital, ambulatory, or specialty center

Public health
Cross Enterprise Document Sharing

Community or sub-network

Hospital record

Clinic record

Specialist record

Repository of documents

Public health

4. Patient data presented to physician

Clinical IT system

Aggregate patient info

Clinical encounter

Index of patient records

Sharing system

1. Reference to records

3. Records returned

2. Reference to records for inquiry

Source: ONC. Public Domain.
IT Infrastructure Components Supporting Public Health

- Cross-Enterprise Document Sharing (XDS)
- Cross-Enterprise Document Reliable Interchange (XDR) (point to point)
- Cross-Enterprise Document Media Interchange (XDM) (media)
- Patient Identifier Cross Reference Manager (PIX)
- Patient Demographics Supplier (PDQ)
- Pediatric Demographics Option (PDO)
- Retrieve Form for Data Capture (RFD) (surface forms within the EHR)
- Audit Record Repository (ATNA)
- Time Server (CT)
IT Infrastructure Components Supporting Public Health

- Personnel White Pages (PWP)
- Cross-Enterprise User Assertion (XUA)
- Cross Community Access (XCA)
- Basic Patient Privacy Consents (BPPC)
- Cross-Enterprise Sharing of Scanned Documents (XDS-SD)
- Document Digital Signature (DSG)
- Enhanced Sharing Value Sets (ESVS)
- Document Metadata Subscription (DSUB)
- Multi-Patient Queries (MPQ)
- On-Demand Documents
Quality, Public Health, and Research Profiles

Profiles
- Anatomic Pathology Reporting to Public Health (ARPH)
- Drug Safety Content (DSC)
- Maternal and Child Health (MCH)
- Physician Reporting to a Public Health Repository-Cancer Registry (PRPH-Ca)
- Early Hearing Detection and Intervention: Screening, Short-Term Care, and Clinical Surveillance for Hearing Loss (EHDI)
- Retrieve Protocol for Execution (RPE)
- Redaction Services (RSP)

White papers
- Newborn Screening (NBS)
- Performance Measure Data Element Structured for EHR Extraction
- Public Health Data Standards Consortium White Paper
IHE integration statements
  - E.g., what interoperability is supported by product version for a given vendor

Connectathon results
- http://connectathon-results.ihe-europe.net/
  - E.g., who has successfully tested as an XDS registry and repository
  - Who has successfully tested clinical content