

Standardization Required for Meaningful Use Implementation

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Meaningful Use for Public Health Professionals: Basic Training

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Disclaimer

- ❑ **The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.**

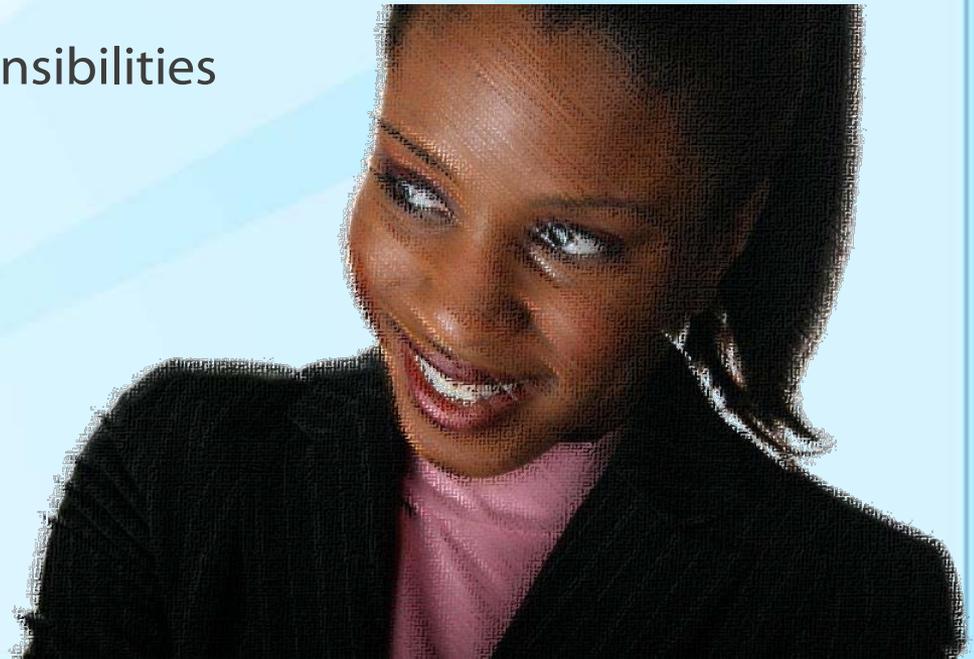


Objectives

- ❑ **Describe why standards are necessary but not sufficient for interoperability and exchange**
- ❑ **Define key terms**
- ❑ **Describe types of standards related to meaningful use**
- ❑ **Identify domains that require local implementation guides**

Your Challenge During This Session

- ❑ **Identify one key term or concept that is new to you and be prepared to:**
 - Define the concept
 - Explain what you learned about that concept today, or what new insights you had
 - Relate the concept to responsibilities within your organization





Topics for Discussion

A Perspective and Context

- The Role of Public Health Informatics

Meaningful Use Incentive Program

- Requirements for Public Health
- Standards and Interoperability
- Immunization Example

Implications and Opportunities

- Recommendations for Action

The Role of Public Health Informatics

A PERSPECTIVE AND CONTEXT

Context: Public Health Systems in Transition

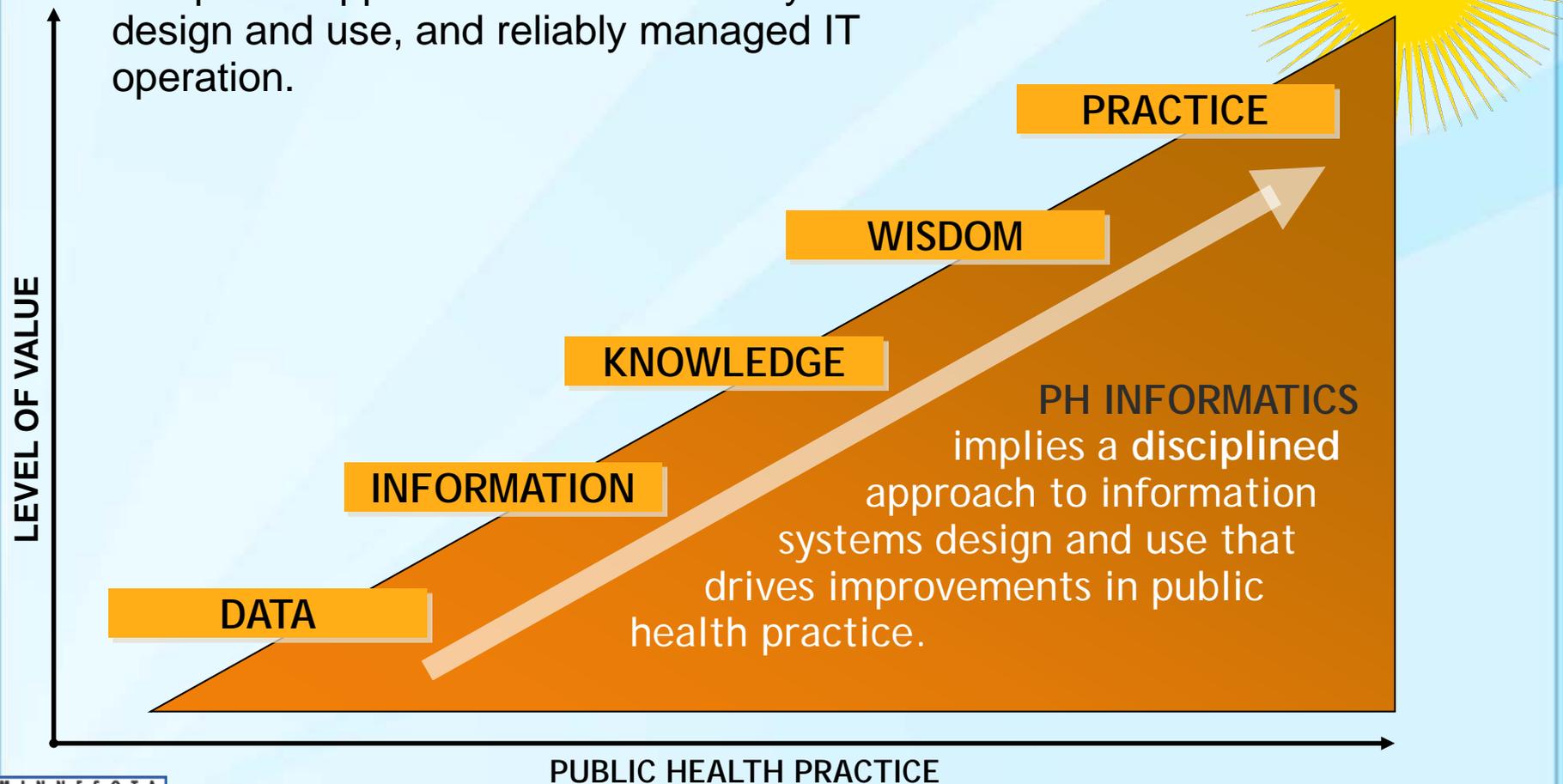
Public health information systems today need to:

- ❑ Adapt to the accelerated pace for e-Health – especially expectation for interoperability
- ❑ Increase pace for modernization and sophistication
- ❑ Foster cross jurisdictional collaboration for requirements, standards and implementation



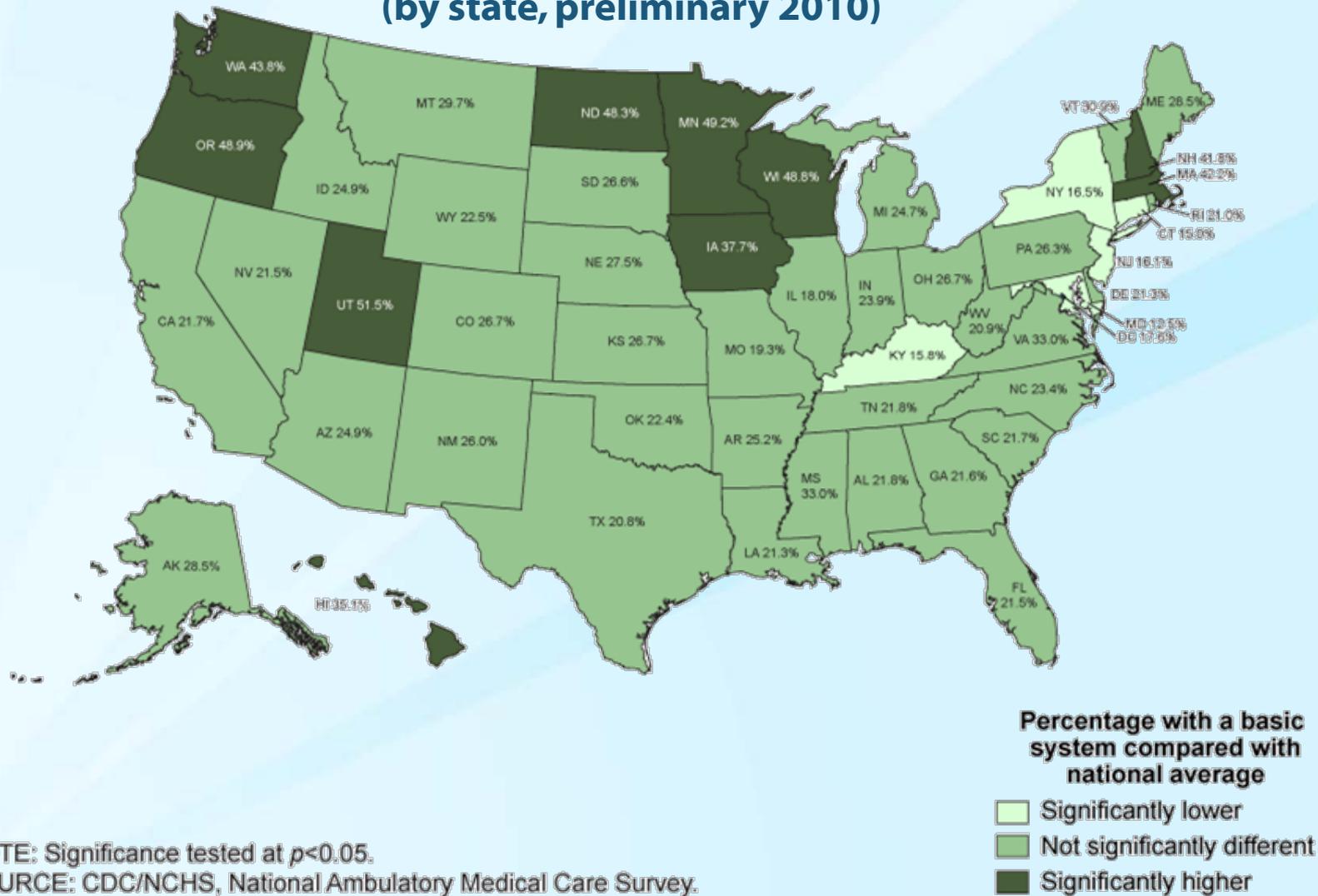
Using Informatics to Improve Public Health Practice

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.



% Office-based Physicians With Basic Systems

(by state, preliminary 2010)



NOTE: Significance tested at $p < 0.05$.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

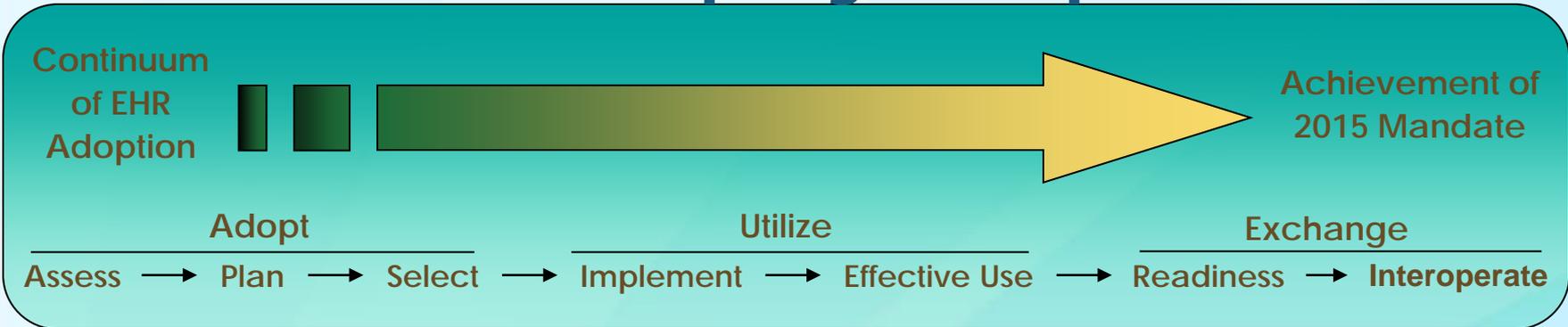
Example: EHR Adoption of Clinics (N = 1121) - Minnesota 2010

Status of EHR Adoption	Number (%) of Clinics
EHR installed and in all/most of areas of the clinic	687 - (61%)
EHR installed and in use by some areas of clinic	63 - (6%)
Purchased/begun installation of an EHR but not using	101 - (9%)
Have no EHR	270 -(24%)

"Physician clinic" means any location where primary or specialty care ambulatory services are provided for a fee by one or more physicians in the state of Minnesota.

2010 MN Health Information Technology (HIT) Ambulatory Clinic Survey (87% response rate)

MN Model for Adopting Interoperable EHRs



What strategies will shorten these lines and help move them to the right?



Estimated range of adoption based on various surveys and other sources Minnesota Department of Health, rev 2010.



Requirements for Public Health Standards and Interoperability
Immunization Example

MEANINGFUL USE INCENTIVE PROGRAM

Stage 1 (2011-2012) Meaningful Use Menu: Improve Population and Public Health

Communicate with public health agencies

Objective ¹	Ambulatory Measure	Hospital Measure
Immunization Registries ²	≥ 1 test of submission to state immunization registry (unless no registries are capable) with continued submission if successful (y/n)	≥ 1 test of submission to state immunization registry (unless no registries are capable) with continued submission if successful (y/n)
Reportable Lab Results ² (ELR)	N/A	≥ 1 test of submission to public health (unless no ph agency is capable) with continued submission if successful (y/n)
Syndromic Surveillance ²	≥ 1 test of submission to public health (unless no ph agency is capable) with continued submission if successful (y/n)	≥ 1 test of submission to public health (unless no ph agency is capable) with continued submission if successful (y/n)

1. Unless an EP, eligible hospital or CAH has an exception for all of these objectives and measures they must complete at least one in this group as part of their demonstration of a meaningful use to be eligible for incentives.
2. Public health agencies may specify how to test the data submission and to which specific destination

Source: Dr. Paul Kleeberg, Clinical Director, Key Health Alliance

Standards for Public Health Transactions in Stage 1 Meaningful Use

Public Health Domain	Exchange Standards	Vocabulary Standards
Immunization Registries (IIS)	<p>Standard - HL7 2.3.1</p> <ul style="list-style-type: none"> • Implementation Guide for Immunization Data Transactions using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol Implementation Guide Version 2.2 <p>Standard - HL7 2.5.1</p> <ul style="list-style-type: none"> • HL7 2.5.1 Implementation Guide for Immunization Messaging Release 1.0 	HL7 Standard Code Set CVX - Vaccines Administered, July 30, 2009 version
Reportable Lab Results (ELR)	<p>Standard - HL7 2.5.1</p> <ul style="list-style-type: none"> • HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 	Logical Observation Identifiers Names and Codes (LOINC®) version 2.27
Syndromic Surveillance	<p>Standard - HL7 2.3.1</p> <p>Standard - HL7 2.5.1</p> <p>UPDATE: 5-05-11: Request for public comment on the HL7 2.5.1 messaging guide is posted in the Federal Register and can be found a www.regulations.gov.</p>	

Health Information Exchange (HIE)

- ❑ **The electronic movement of health-related information among organizations according to nationally recognized standards.**

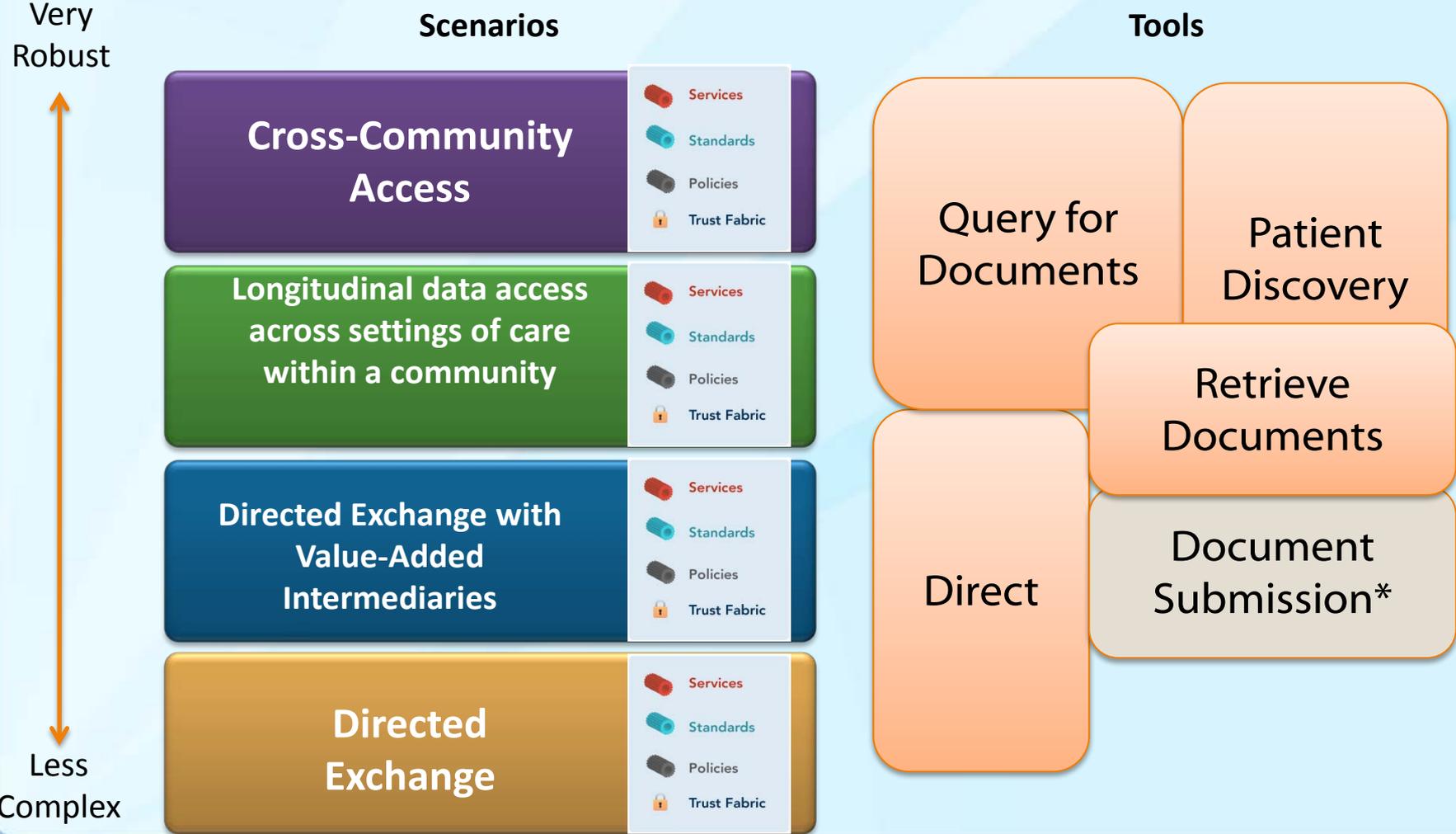
Source: Report to the ONC on Defining HIT Terms, April 2008.

http://www.nahit.org/docs/hittermsfinalreport_051508.pdf

Related Terms

- ❑ **HIO** – Health Information Organization
- ❑ **NwHIN** – Nationwide Health Information Network
- ❑ **Connect Project** – Federal Agencies and NwHIN
- ❑ **Direct Project** – Standards, Services and Policy
- ❑ **HISP** – Health Information Service Provider

What are the tools in the Nationwide Health Information Network toolkit?



Meaningful Use and Public Health Reporting for Immunizations

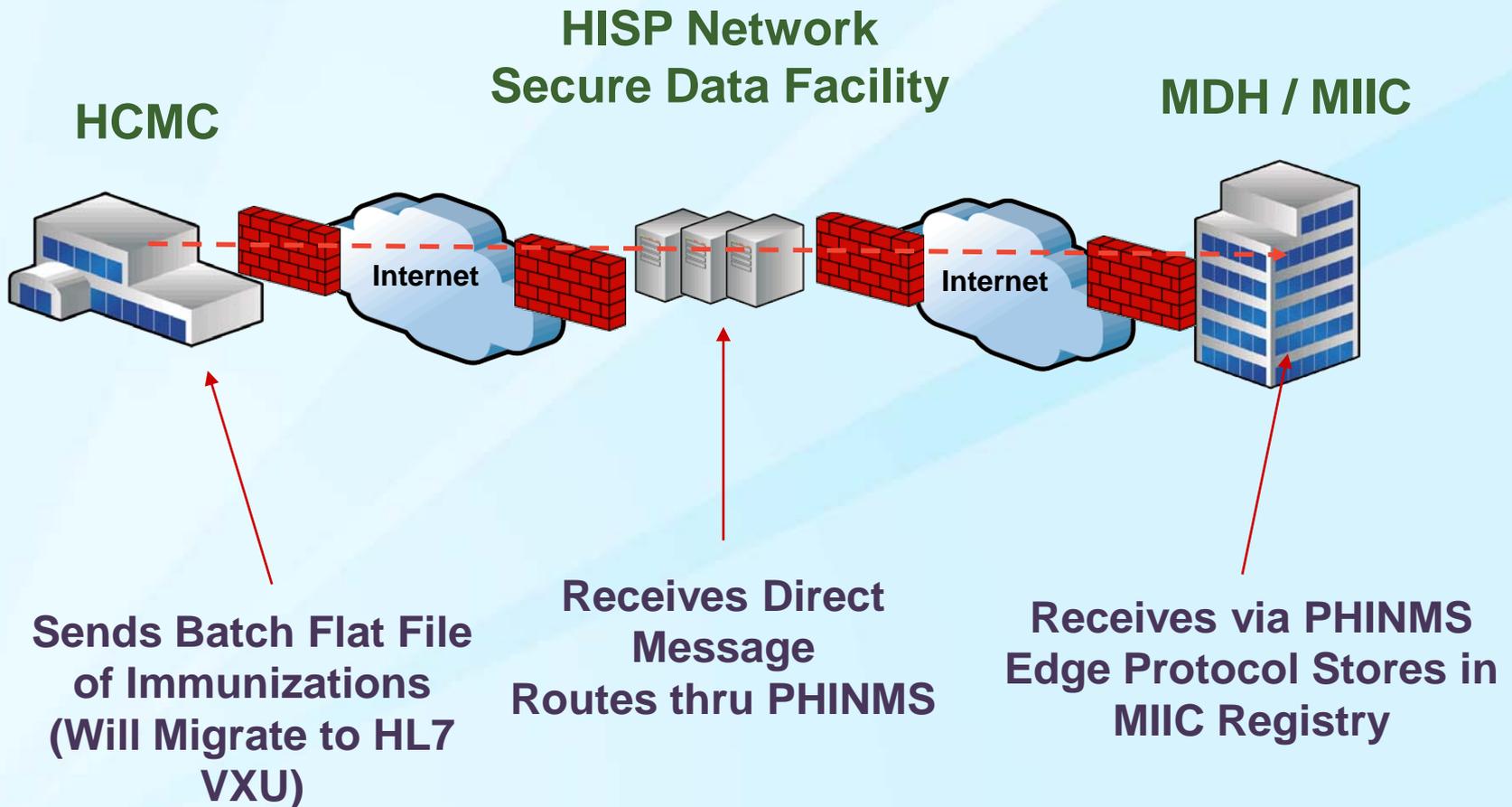
❑ **Successful data submissions to MIIC* include these characteristics:**

- Submitted from a certified EHR technology and,
- Follows HL7 Version 2.3.1 / 2.5.1 specifications
- Includes accepted CVX codes
- Sent via a secure transport mechanism such as:
 - File upload via HTTPs
 - PHINMS message
 - Transfer via a secure ftp server
 - Message via HIO or other Intermediary
 - Other options are being evaluated



**Minnesota Immunization Information Connection (MIIC)*

Example: Minnesota Direct Pilot Project



Definition of Interoperability

Interoperability: The ability of two or more systems or components to exchange information and to use the information that has been exchanged accurately, securely, and verifiably, when and where needed.

And “it is comprised of ‘technical,’ ‘semantic’ and ‘process’ interoperability,”

Reference: <http://www.ehealthinitiative.org/>

Adapted from Minnesota Department of Health and HL7, guide to interoperability



Components of Standards Guide – Updated June 2010



- ❑ **Electronic Health Information Exchange**
- ❑ **Coordination with National Efforts on Standards**
- ❑ **Minnesota e-Health Framework for Interoperability**
- ❑ **Key Actions for Achieving and Advancing Electronic Health Information Exchange**
- ❑ **Standards Recommended for Use in Minnesota (as of June 2010)**
 - Interoperable Electronic Health Record
 - Requirements
 - Electronic Prescription Drug Program
 - Laboratory Results Reporting
 - Immunization Information Exchange
 - Exchange of Clinical Summaries
- ❑ **Annotated Resource List**

The arena of standards and health information exchange is highly dynamic; check for the latest updates at www.health.state.mn.us/e-health

Critical Role for Implementation Guides

- ❑ **The current HL7 guide for immunization messaging was**
 - Created with CDC and AIRA*
 - Involved large state grantee base in its creation
 - Published in 2000
 - An example of CDC, a volunteer organization, and grantees working together

* *American Immunization Registry Association (AIRA)*

Recommendations for Action

IMPLICATIONS AND OPPORTUNITIES

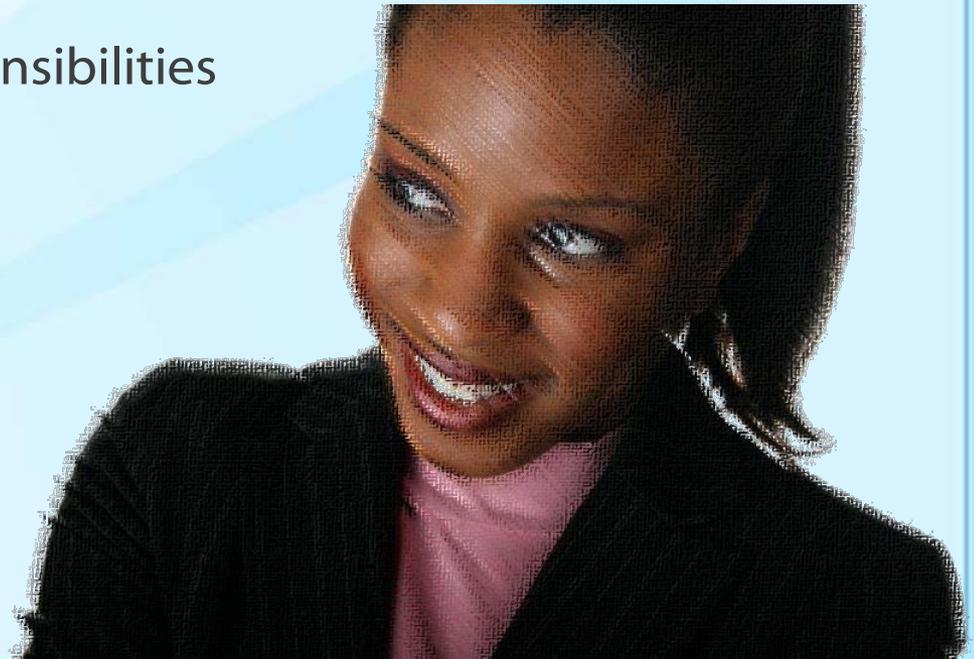
Summary / Action Recommendations

- ❑ **Understand** that meaningful use is part of larger e-health transformation
- ❑ **Support** workforce information / education
 - Especially in public health informatics
- ❑ **Develop, adapt, and distribute resources quickly**
 - Guides, templates, tools, protocols, policies
- ❑ **Monitor** state and national activities
- ❑ **Actively communicate** and coordinate agency efforts

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Share with a neighbor, and identify any further questions you have.



National Resources

Standards and Meaningful Use

- ❑ **Health IT Standards Committee (a Federal Advisory Committee) == Make recommendations to ONC on standards, implementation specifications, and certification criteria for the exchange and use of health information.**
<http://healthit.hhs.gov/standardscommittee>
- ❑ **Final Rule – HIT : Initial Set of Standards, Implementation Specifications, & Certification Criteria for EHR Technology -**
<http://edocket.access.gpo.gov/2010/pdf/2010-17210.pdf>
- ❑ **HL7 v2.5.1 Implementation Guide for Immunization Messaging (release 1.1; 08/15/2010)**
<http://www.cdc.gov/vaccines/programs/iis/stds/downloads/hl7guide-08-2010.pdf>
- ❑ **HL7 v2.5.1 Implementation Guide for Electronic Lab Reporting - *In development through collaborative efforts and will be available in Summer 2011***

State Resources From Minnesota Standards and Meaningful Use

- ❑ **Minnesota e-Health Initiative**
- ❑ **<http://www.health.state.mn.us/e-health/index.html>**
- ❑ **Minnesota Public Health Reporting for Stage 1 Meaningful Use - <http://www.health.state.mn.us/e-health/phreportmu0411.pdf>**
- ❑ **Meaningful Use Incentives and MIIC**
- ❑ **<http://www.health.state.mn.us/divs/idepc/immunize/register/hp/mu.pdf>**
- ❑ **MN e-Health Standards Guide (updated 2010)**
- ❑ **<http://www.health.state.mn.us/e-health/summit/g2standards2009.pdf>**

Acknowledgement

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