Learning Objectives

- Learn core principles and best practices in interoperable health IT testing and certification
- Learn the role of standards-based testing and certification in interoperability deployment
- Describe the business value of health IT product testing and certification
What is interoperability?

Interoperability describes the extent to which systems and devices can exchange data, and interpret that shared data. For two systems to be interoperable, they must be able to exchange data and subsequently present that data such that it can be understood by a user.¹

¹HIMSS 2013 Definition of Interoperability
What is the business value of HIT Testing and Certification?

- Provides a mechanism to validate deployed systems
- Automates interaction with external partners
- Reduces manual intervention increasing productivity and streamlining operations
- Improves the quality and efficiency of care delivery
Why Certification?

Affordable health information systems that are:

• Interoperable
• Secure
• Private
• Safe
Why Certification?

Purchasers/users need a way to confirm that products will:

- Interoperate & conform to
  - Privacy,
  - Security, and
- Safety requirements
Why Certification?

Vendors need a cost effective way to demonstrate that their products will:

• Interoperate & conform to
  • Privacy,
  • Security, and
  • Safety requirements
Why Certification?

Third party testing & certification provides additional assurance to purchasers & users of health IT that products will support:

• Workflow objectives
• Standardized info exchange
• Meet baseline levels of privacy
  privacy and security functionality
A. Enable individuals, providers, and public health entities to securely send, receive, find, and use electronic health information

B. Identify, prioritize, and advance technical standards to support secure and interoperable health information

C. Protect the privacy and security of health information

¹Federal Health IT Strategic Plan 2015-2020 (ONC) http://healthit.gov
1. Require that certified health IT products have functions that facilitate users’ compliance with requirements related to privacy and security
2. Advance standards that support interoperability between medical devices and certified health IT products and systems
3. Encourage the adoption and use of prioritized sets of common standards through health IT certification, federal regulations and programs, and research funding mechanisms

¹Federal Health IT Strategic Plan 2015-2020 (ONC) http://healthit.gov
Testing and Certification Build on a Foundation

• Leverages **industry standards** in a testing and certification framework

• Focuses testing on **high value**, industry vetted specifications necessary to achieve (and go beyond) Meaningful Use

• Product Update process streamlines the inheritance of certification for updated and enhanced products available in the market

• **Surveillance** component ensures that certified products continue to function as tested
The EHR/HIE Interoperability Workgroup (IWG) was formed by the New York eHealth Collaborative (NYeC) in 2011 to drive industry consensus on standards of connecting EHRs to HIE’s.

The IWG has formed a strong membership consisting of 19 states, representing over 50% of the population and 47 EHR and HIE vendors focused on driving seamless data exchange.

The IWG has developed strong functional, technical, and test specifications for DIRECT and QUERY-based exchange, driven pilots of these specifications, and built a robust and automated test tool.

The work of the IWG has been recognized by ONC and collaborated with many industry groups including HealtheWay, CareQuality, EHRA, HL7, and others.
A strong collaboration among different groups

**IHE USA** brings specifications that form the foundation of interoperability, industry expertise and support, and experience in system-to-system and product testing.

**HIMSS** is known for its consistent convening strength, public policy channels, stakeholder representation and sector support.

**ICSA Labs** provides expert health IT analysts, and a proven testing and certification framework.

**IWG** offers the specifications, a robust, automated testing tool, and significant workgroup membership of states and vendors.

Launching a NEW Testing and Certification Program
Why is this program important?

• It will fulfill a need for **tightly specified implementation-level requirements** and an automated compliance testing program to achieve interoperability.

• It’s an **active cross-industry collaboration** led by mission-driven, non-profit organizations building upon national standards.

• The anticipated result is a program that will:
  • Test that EHRs and other health IT can **enable reliable exchange of data** within and across organizational and state boundaries
  • **Reduce adoption barriers** due to high interface costs for providers, low reliability, and unknown development costs for HIT vendors
Why Now?

Changing industry dynamics and payment reform driving additional stakeholders to be concerned by interoperability necessitating stronger governance

A multitude of new industry groups have formed leading to additional approaches to networks and standards, but also new opportunities for collaboration to reduce redundancy

In order for us to be successful with a strong testing and certification program, we need to leverage all channels to support the end user and drive marketing of programs

*We have to partner in order to be successful at our mission*
The new program will accelerate the realization of widespread and secure interoperability and unlock its benefits:

• Improve patient safety and lower healthcare costs by leveraging standards-based specifications for patient/provider identification and clinical data exchange;

• Help purchasers and implementers make better, informed decisions by offering a health IT product certification with advanced capabilities in the marketplace;

• Develop new use cases and specifications to support the broader healthcare ecosystem; and

• Improve efficiency by aligning testing and certification initiatives in the US
In order to achieve our mission, we need to ensure these principles:

**Simplification for Purchase**
- Interoperability has to achieve something for the purchaser that is simple, based on what has been accomplished with technical specifications (e.g.: USB, Bluetooth).

**Simplification for Vendor**
- A simplified process will help vendors get through development and certification, and providers will know what they are buying. Given the complexity of health IT, this will be an evolutionary process.

**Testing Rigor**
- Testing capabilities must be rigorous, automated where possible, repeatable, documented and objective and tied to publically available specifications.

**Marketing**
- A strong marketing component is needed that promotes the brand, and the value proposition to the providers. The brand needs to be reinforced through multiple channels (e.g. events, programs, policy efforts and communication vehicles, vendors’ use of the certification mark, and providers via RFP requirements and purchasing decisions).
Two Distinct Specifications

**DIRECT Exchange**
- DIRECT Exchange - or Statewide Send and Receive Patient Record Exchange will enable interoperability for EHR and health information service provider (HISP) systems.
- Provides a simple way for providers to send secure health information directly to trusted recipients, including patients over the Internet.

**Query-Based Exchange**
- Query-Based Exchange - or Statewide Patient Data Inquiry Service leverages IHE Profiles and NwHIN Exchange specifications to facilitate patient queries and clinical document retrieval across communities.
• Robust, highly automated testing tools will verify that health IT products are capable of exchanging health information with other systems.

• Products that complete testing represent the capability to support a single set of standardized, easy-to-implement connections facilitating secure, interoperable communication among systems.

• The program aims to certify EHR and HIE vendor products that can reliably transfer data within and across organizational and state boundaries.

Testing will be performed virtually and/or at the HIMSS Innovation Center.
• HIMSS announced as the new governing body
• Certification Program will be one of many services offered by HIMSS Interoperability Services
  • Provides virtual and on-site testing, certification, and advanced technical support made up of comprehensive infrastructure and services to meet the testing and conformity assessment needs on a national and global scale
• On-site testing will be available at the HIMSS Innovation Center in Cleveland, Ohio
• Learn more about HIMSS Interoperability Services at [www.himssinnovationcenter.org/interoperability-services](http://www.himssinnovationcenter.org/interoperability-services).
The IHE USA Certification Program

Connectathon Testing; Certification Testing @ Connectathons; Virtual Testing
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<th>Wednesday, April 15</th>
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| **Title:** IHE USA Interoperability Breakfast  
**Location:** HIMSS Interoperability Showcase Booth #2084  
**Time:** 7:30-9:30am  
**Speakers:** Panel of speakers  
**Impact:** 100-150 attendees  
**Session Information** | **Title:** Experience Innovative Health Information Technology at the HIMSS Innovation Center  
**Location:** HIMSS Spot, North Building, Hall B  
**Time:** 11:30-12:00pm  
**Speaker:** John Baus  
**Impact:** 50-75 attendees  
**Session Information** | **Title:** Interoperability: Your Path Forward  
**Location:** HIMSS Interoperability Showcase Theater, Booth #2084  
**Time:** 2:30-3:00pm CT  
**Speaker:** Sandy Vance  
**Impact:** 50-75 attendees  
**Session Information** |
Questions?

Thank you!