

# Integrating the Healthcare Enterprise

IHE LAB committee

Face to Face meeting in Chicago

## **Japanese Activities**

February 5 , 2013

IHE-Japan Laboratory Planning/Technical Committee

# Agenda

- IHE Implementations
- Connectathon Japan 2012
- Deployment activities
- JLAC10

# Implementations in Japan (IHE-LAB)

- **Okazaki City Hospital: 2006**

LTW &LTW-MB& LBL (2013)



- **National Institute of Radiological Sciences (NIRS) Hospital: 2006**

LTW &LTW-MB& LBL (2012)



- **Fujitsu Healthcare Center and Fujitsu Hospital: 2009**

LTW



- **Akita University Hospital: 2009**

LTW



# Implementations in Japan (IHE-LAB)

- **Kyoto 1st Red Cross Hospital: 2009**

LTW & LBL



- **University of the Ryukyus Hospital: 2010**

LBL



- **Yokosuka City Hospital: 2010**

LTW



- **Okayama Red Cross Hospital: 2010**

LTW



# Implementations in Japan (IHE-LAB)

- **Osaka Medical college Hospital: 2012**  
**LTW &LTW-MB& LBL**



**Total 9 hospitals**

# Hos





# Connectathon Japan 2012

# Connectathon Japan 2012



**October 29-November 2, 2012 @Tokyo**



# Tested Integration Profiles for Connectathon 2012

**Only for Laboratory Domain**

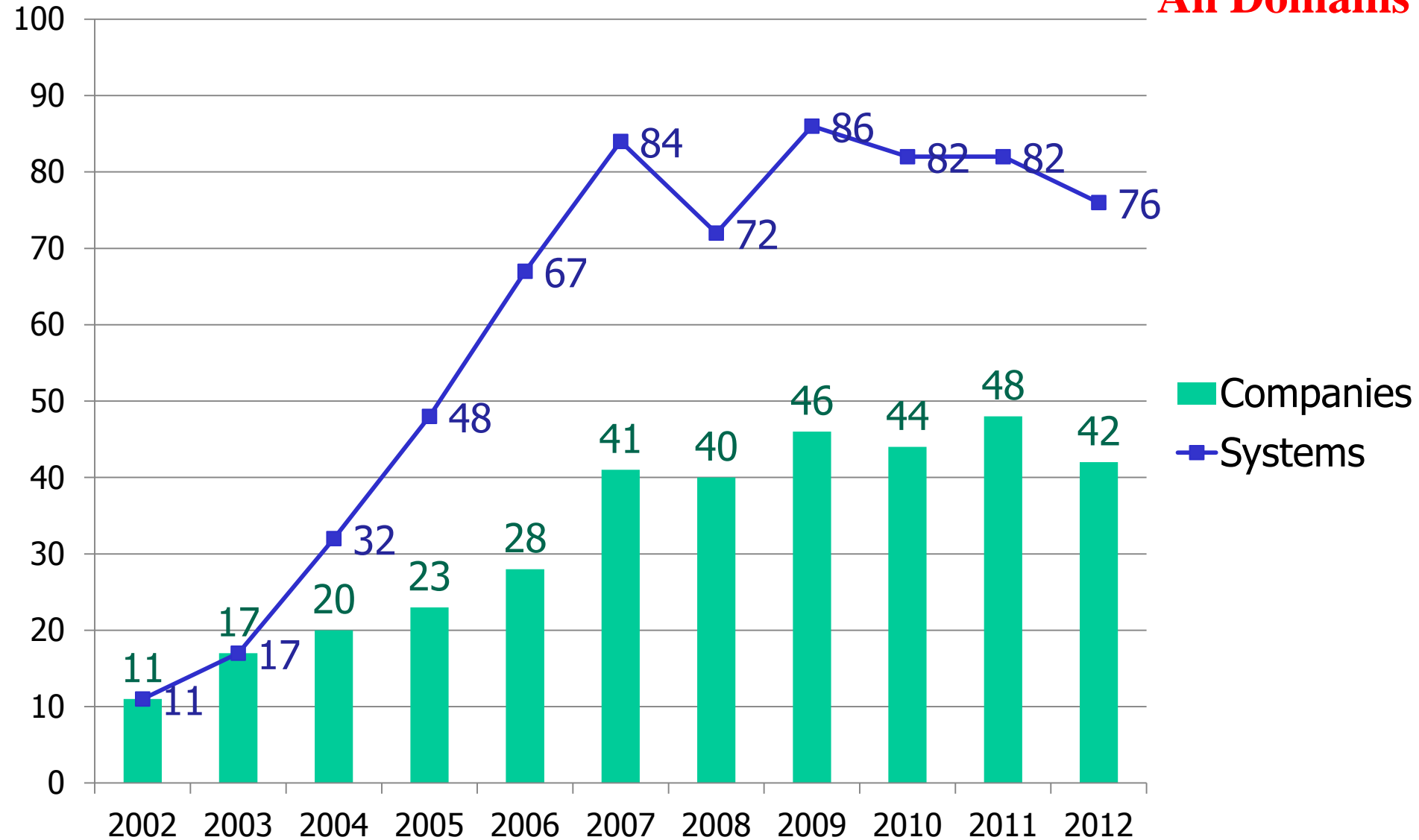
- **LTW**
- **LTW-MB (Micro Biology)**
- **LDA**
- **LBL**
- **LPOCT**
- **GIR LTW Option**

## Only for Laboratory Domain

- **Test code : JLAC10 code**
  - **By Japanese Society of Laboratory Medicine**
    - **Used for information systems and analyzer**
- **Bacterial name : JANIS code**
  - JANIS: Japan Nosocomial Infections Surveillance**  
**(committee of hospital infection surveillance)**
- **Patient Information : PAM, PDQ profile (ITI)**

# # of participant of Connectathon Japan

All Domains



# Connectathon Japan 2012 Result (Laboratory)

**14 Companies and  
18 Systems**

PROFILE	LBL		LDA		LPOCT		LTW			LTW-MB (Micro Biology)			
					OF	POCDM	OF	OP	ORT	OF	OP	ORT	
PASSED	1	11	4	1	1	2	1	6	8	8	3	4	4
A&T		○	○			○		○			○		
Apius									○	○			
BECKMAN COULTER (New)		○						○*					
Fujitsu		○	○					○		○		○	○
Hitachi									○	○			
Hitachi High-Tec				○									
Hitachi Solutions					○								
Hitachi Solutions		○	○					○			○		
IBM Japan		○							○	○*		○	○
iTEC Hankyu Hanshin		○	○			○		○*					
NEC		○							○	○			
NEC		○						○					
Ryobi Systems		○							○	○		○	○
Software Service		○							○	○		○	○
Techno Medica	○												
Toshiba Medical Information Systems							○						
Toshiba Medical Information Systems									○	○			

\*: Supplement (GIR Graphics and Simple Image in Result)



# Deployment Activities

# IHE–Japan Lab Planning/Technical Committee

- The PC/TC joint meeting is held once a month
- Members : Physicians, Medical technologists, HIS venders, LIS venders, Analyzer manufacturers



- JAHIS is one of the sponsor of IHE lab



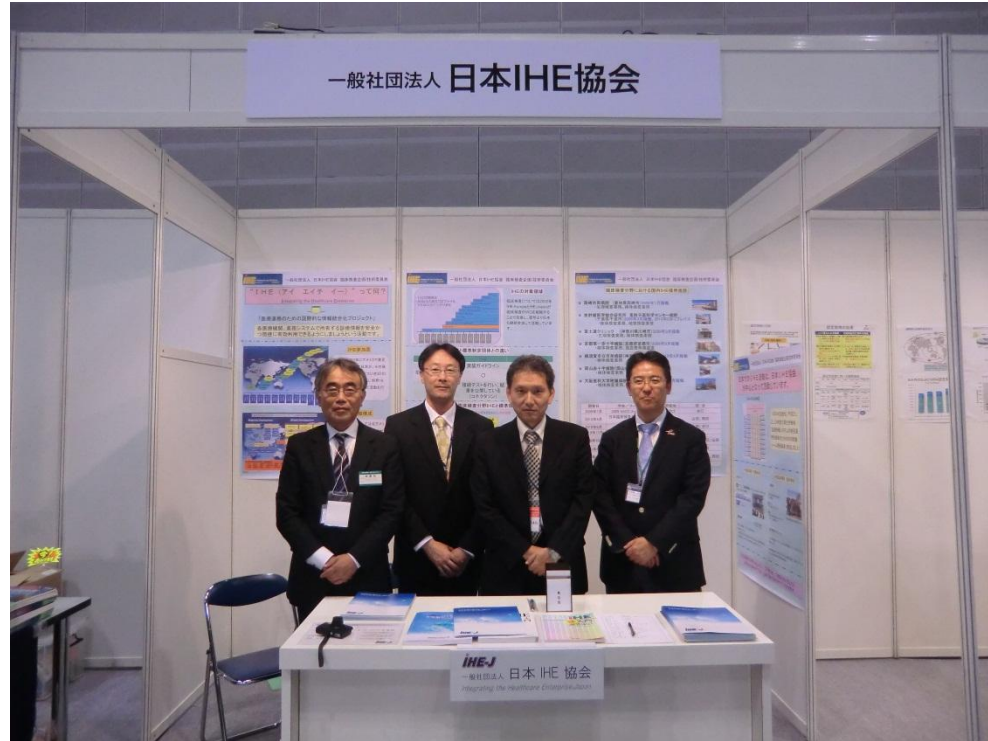
# Congresses and Workshops

Date	Congress/Workshop	City, Country	Member
June 8-10,2012	The 61th Annual Scientific Meeting of the Japanese Association of Medical Technologists and Scientific Exhibition	Tsu ,Japan	Hirasawa and many
September 1,2012	IHE-J LAB Workshop in Tokyo	Tokyo, Japan	Kato Iguchi Yamada Chiba Ishii Hirasawa
October 11-13, 2012	The 44th Annual Meeting of Japan Society for Clinical Laboratory Automation	Yokohama, Japan	Yamada Shimizu Okada etc.
November 16-17, 2012	The 32th Joint Conference on Medical Information	Niigata, Japan	Iguchi Yamada Chiba Ishii Hirasawa etc.
November 30- December 1,2012	The 59th National Congress of Japanese Society of Laboratory Medicine	Kyoto, Japan	Yamada Kato Okada
December 8,2012	IHE-J Workshop in Kumamoto	Kumamoto, Japan	Iguchi
January 12,2013	Ishikawa Association of Medical Technologists Seminar	Kanazawa, Japan	Iguchi Okada

# Information Booth of IHE-Japan



The 61th Annual Scientific Meeting of the Japanese Association of Medical Technologists and Scientific Exhibition



The 44th Annual Meeting of Japan Society for Clinical Laboratory Automation



# Session on IHE Lab at Congress



The 32th Joint Conference on Medical Information



# JLAC10



# JLAC10

- Background
- Structure of JLAC10
- Why JLAC10 ?

# Background

- Government and Societies decision to use JLAC10
  - Government standards
  - Japanese Society of Laboratory Medicine
  - Japan Association for Medical informatics
- Purpose
  - National Database
  - Research
  - Multi axis code : 5 components
    - ✓ Ease of derived statistics

# Government (MHLW) Standards

MHLW : Ministry of Health, Labour and Welfare

We have 12 standards for medical informatics now.

- HS001 Standard Master for Pharmaceutical Products (HOT reference numbers)
- HS005 ICD10 Based Standard Disease Code Master for EMR
- HS007 Patient Referral Document & Clinical Data Document
- HS008 Referral Document
- HS009 IHE PDI Integration Profile, and Its Application Guideline
- HS010 ISO/TS11073-92001:2007, Health informatics -Medical waveform format
- HS011 Digital Imaging and Communications in Medicine (DICOM)
- HS012 The JAHIS Protocol for Clinical Laboratory Data Communication
- HS013 Standard Dental Disease Code Master (ICD)
- **HS014 Laboratory Test Code Master (JLAC10)**
- HS016 The JAHIS Protocol for Radiology Data Communication
- HS017 Interoperability Guideline (JJ1017 Guideline)

# Structure of JLAC10

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Analyte code					Identification code				Specimen code			Methodology code		Result Identifying code		

- **Analyte code**

It serves to classify the material subjected to test by 5 digit numbers according to the predetermined by laws. As exception, “reaction” may be substituted by “substance” in some cases.

[i.e.] occult blood reaction, TTT, ZTT

- **Identification code**

When the tests needs further classification of the analyte code above, it will be done so by applying 4 digit numbers.

[i.e.] classification of viruses, virus antibody titer, allergens, lymphocytes

- **Specimen code**

It serves to classify the specimen of a test item by applying 3 digit numbers.

- **Methodology code**

It serves to classify the Methodologies of a test item by applying 3 digit numbers.

- **Result Identifying code**

It serves to classify the test results, regardless of the number of the result, of a test item by applying 2 digit numbers.

# Example of JLAC10 (for order)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Analyte code					Identification code				Specimen code			Methodology code				

- Example**

serum herpes simplex virus IgG antibody titer(ELISA)

spinal fluid herpes simplex virus CF antibody titer(CF)

serum herpes simplex neutralizing antibody titer(NT)

- Analyte :** herpes simplex **5F190**

- Identification:** virus antibody **1430**

virus antibody IgG **1431**

- Specimen :** serum **023**

spinal fluid **041**

- Methodology:** ELISA **022**

CF **141**

virus neutralizing **151**

- JLAC10 code for order**

serum herpes simplex virus IgG antibody titer(ELISA) **5F190-1431-023-022**

spinal fluid herpes simplex virus CF antibody titer(CF) **5F190-1430-041-141**

serum herpes simplex neutralizing antibody titer(NT) **5F190-1430-023-151**

# Example of JLAC10 (for result)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Analyte code					Identification code				Specimen code			Methodology code		Result Identifying code		

- JLAC10 code for order**

<b>serum herpes simplex virus IgG antibody titer(ELISA)</b>	<b>5F190-1431-023-022</b>
<b>spinal fluid herpes simplex virus CF antibody titer(CF)</b>	<b>5F190-1430-041-141</b>
<b>serum herpes simplex neutralizing antibody titer(NT)</b>	<b>5F190-1430-023-151</b>

- Result Identifying:**

<b>dilution titer(General)</b>	<b>05</b>
<b>HSV-1 antigen(inherent)</b>	<b>51</b>
<b>HSV-2 antigen(inherent)</b>	<b>52</b>

- JLAC10 code for result**

<b>serum herpes simplex virus IgG antibody titer(ELISA)</b>	<b>5F190-1430-041-141-05</b>
<b>spinal fluid herpes simplex virus CF antibody titer(CF)</b>	<b>5F190-1430-023-151-51</b>
<b>serum herpes simplex neutralizing antibody titer(NT)</b>	<b>5F190-1430-023-151-52</b>



- Government and Societies decision
- Many hospitals and national database are using
- Historical reason : using more than 20 years
  - Many equipment and systems support them
  - We are familiar with JLAC10 code
- No reason of change code JLAC10 to LOINC
  - If LOINC code is required, we can convert them

# Agenda

- IHE Implementations
- Connectathon Japan 2012
- Deployment activities
- JLAC10

The logo for IHE-J Laboratory features the text "IHE-J" in a bold, purple, sans-serif font with a small red and yellow sphere above the "i". To its right, the word "Laboratory" is written in a purple, italicized serif font.

**IHE-J** *Laboratory*

Integrating the *Healthcare Enterprise* – *Japan*



<http://www.ihe-j.org>