#### 2014 DICOM Chengdu Workshop

August 25th

Chengdu·China



# Health information standard conformance test system

Jianming Qu CIMICS

Chengdu China



#### **Content**



- Summary of background
- System introduction
- The scope and basis for measurement
- Work planning

# 1. Summary of background



CIMICS as DICOM organization founded in China, it is a bridge that integrated domestic and international DICOM organization. CIMICS cling to UESTC

University of Electronic
Science and technology of
China
UESTC

University-based support, standard tracking, learning and research.

#### **DICOM Standard**

China Committee of the international DICOM standard CIMICS

Chengdu goldisc
UESTC Multimedia
Technology Co., Ltd.
GOLDISC

Enterprises promote the application of DICOM standard in the market

# 1. Summary of background





### **CONTENT**



- Context
- System Introduction
- The scope and basis for evaluation
- Work plans

## System Introduction——





- ➤ Health Information Standards Conformance Test System is a scientific software systems of evaluation which mainly tests the ability of exchanging and sharing medical information in cross-system, cross-agency and cross-region. Through the test, It can promote the standardization of regional information platform based on standards of health records and The standardization of hospital information system based on EHR ,And It also can provide standards compliance for interoperability in different information system of hospital and multi-level platforms of The state, provinces and cities.
- The platform reference to "Electronic health records and regional health information" platform for standards compliance test specification." (draft) and "Electronic medical records and hospital information platform standards compliance test specification."(draft) enacted by National Health and Family Planning Commission which conform to the relevant national standards and industry regulations

# System Introduction—Logical structure DICOM Digital Imaging and Communications in Medicine

The tested agencies Evaluation agencies Management agencies Health Information Standards Conformance **Test System** System functions Standard Test case **Application** Executive Defect **Project** Configuration management management management management management management management Share documents Platform Service Data set Data set **Platform Services** Data set Share Documents **EHR EMR** DICOM Standard test case **Project Dictionary Template** Library Library Library Library library Health information standards compliance test platform accessing layer **Regional Health Information Hospital Health Information** PACS, Imaging Equipment

**Platform** 

**Platform** 

# 2. System Introduction- Function characteristic COM Digital Imaging and Communications in Medicine

- **1. Automated test:** The remote self testing, formal evaluation test full automation, automatic test case, test data generation, test results verify auto contrast.
- 2. Multi-environment test: Laboratory test, field test.
- **3. Full coverage test:** Dataset test of EHR and EMR, the sharing document test of HER and EMR, Full coverage test of regional platform, hospital platform services and DICOM Chinese standards; the test data generation full coverage: code type data element value of full coverage, non code type data element values of the random generation.
- **4. Flexibility test:** Test method and test process can be configured by the test case; test data standard value, intelligent generation super boundary value, realize the positive test and reverse test.
- **5. Traceability test**: The test case, test data automatic storage, to achieve traceability, repeatable test.
- **6. Visual testing:** Test process, test condition, test log, test visual defects.
- 7. Open, configurable: The test template, data dictionary can increase and can be maintained.
- **8. Multi-role management:** Management agencies to apply for institutions,, multi-role management, detection mechanism to control the test process.

August 2014 DICOM Chengdu Workshop

Jianming Qu

Health information standard conformance test system

#### The main content



- Background Introduction
- System Introduction
- Scope and Basis for Evaluation
- Work planning



Digital Imaging and Communications in Medicine

1. WS 363-2011	Health information data element directory (all)
2. WS 364-2011	Health information data element code (all)
3. WS 365-2011	The basic data set of health records of residents in urban and rural areas
4. WS 375.9-2012	The basic data set of disease control The ninth part:
	Medical certificate of death
5.WS 376.1-2013	The basic data set of child care The first part:
	Medical proof of birth
6. WS XXX-XXXX	Health records sharing document specification (all)
7. WS XXX-XXXX	The technical specification of regional health information platform based on resident health records
8. WS/T XXX-XXXX	The interface specification of resident health archives and regional health information platform
9. WS 445-2014	The basic data set of EMR (all)
10. WS XXXXX-XXXX	The sharing document specification of the electronic medical record
11. WS/T XXXXX-XXXX	
12. WS/T XXXXX-XXXX	The interaction specification of electronic medical record and health information platform of hospital
16. 2009-16-01	Chinese package of medical digital imaging and communication specification
17. 2011-15-84	The basic data set of digital imaging and communication in medicine
18. GB 3304	Ethnic category code table
19. GB/T 6565-2009	Classification of occupation and code

# 3. Evaluation basis and scope— Evaluations cope ( )

**Standard Test** 



Digital Imaging and Communications in Medicine

The standard test of electronic health record

- The basic data set of electronic health records (22个)
- The sharing documents of electronic health record (20 $\uparrow$ )
- Regional platform service (201)

The basic data set of digital imaging and communication

in medicine

Health information stand ard conformance test system **DICOM Chinese** 

The electronic medical record standard test

- The basic data set of EMR (55个)
- The sharing documents of electronic medical record (53个)
- **Hospital information services** platform (32个)

#### **Main contents**

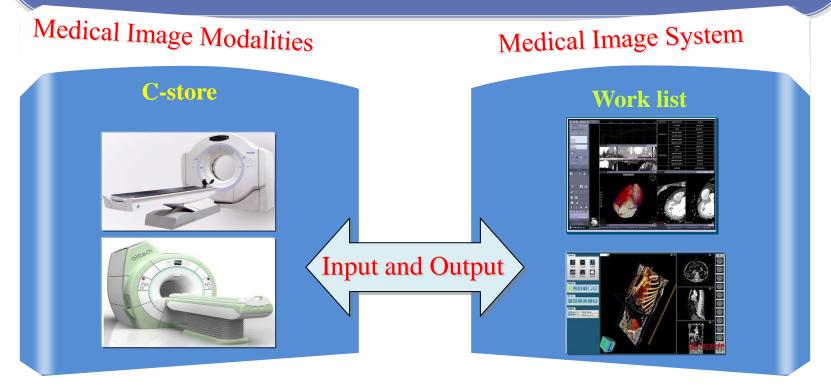


- Background
- System introduction
- Evaluation basis and scope
- Work planning

### 4.Work Plan



# DICOM Standard Conformance Test In Chinese-Test Content



### 4.Work Plan



# DICOM Standard Conformance Test In Chinese—Develop Pattern



#### 4.Work Plan



# DICOM Standard Conformance Test In Chinese-Apply Demonstrate

Sichuan **Expert Group** Institution

Health Informatics Center Of Sichuan

Health Expert Of Medical To Review

Medical Equipment Manufacturers
PACS and RIS Manufacturers
Demonstrated Hospital...

Health information standard conformance test system

### DICOM 2014 成都研讨会

8月25日 中国·成都



# Thank You!

