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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

WS/T 548-2017

**Digital imaging of communication in medicine conformance
testing specifications in Chinese
(English Translation)**

Issued on: July 25, 2017

Implemented on: December 1, 2017

**Issued by: National Health and Family Planning Commission of the
People's Republic of China**

Table of Contents

Foreword	
1 Scope	
2 Normative references	
3 Abbreviations	
4 DICOM Chinese Standard Compliance Test Method	
4.1 Test methods for compliance with Chinese standards of medical digital imaging equipment	
4.2 PACS system Chinese standard compliance test test method	
Appendix A (informative appendix) DICOM Chinese standard compliance test tool description	

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The organization responsible for drafting this standard. University of Electronic Science and Technology of China, Digital Imaging and Communication in Medicine (DICOM) Standard National and Local Joint Engineering Practice Laboratory, the First Affiliated Hospital of China Medical University, the Statistical Information Center of the National Health and Family Planning Commission, the Health Information Standards Program of the Chinese Society of Health Information Industry Committee, International DICOM Standard China Committee

1 Scope

This standard tests the input and output services in the DICOM standard, and specifies the compliance test of the Chinese standard for medical digital imaging equipment Trial test method and PACS system Chinese standard compliance test test method.

This standard applies to all types of medical and health institutions, medical equipment manufacturers, and medical image storage and archiving systems (PACS) across the country.

Software development for manufacturers and radiological information system (RIS) manufacturers.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 2312-1980 Chinese character coded character set basic set for information exchange
GB 18030-2005 Information Technology Chinese Coded Character Set GB K Chinese character inner code extension specification
WS 538 Basic Data Set of Medical Digital Image Communication
WS/T 544 Chinese Packaging and Communication Specification for Medical Digital Imaging DICOM (2014B NEMA) Digital imaging and communications in medicine

3 Abbreviations

The following abbreviations apply to this standard.

4.1 Test methods for compliance with Chinese standards of medical digital imaging equipment

4.1.1

Test process and method of output request information from medical digital imaging equipment the test system Modality Worklist SCP Chinese standard compliance test, refer to the process shown in Figure 1, the key test process is as follows.

4.1.2

The output image test process and method of medical digital imaging equipment the test system CStore SCP Chinese standard compliance test refers to the process shown in Figure 2. The key test process is as follows.

4.1.3

Judgment criteria for compliance test results of Chinese standards for medical digital imaging equipment the criteria for determining the compliance test results of the Chinese standard for medical digital imaging equipment are as follows.

4.2.2 Judgment criteria for PACS system Chinese standard compliance test results

PACS system Chinese standard compliance test results judgment criteria are as follows.

a) Follow the WS/T 544 packaging rule test result judgment criterion, the test result is divided into "conformity" and "nonconformity". Its judgment principle Then. During the

Modality Worklist SCP test of the PACS system, the PDU package only needs to follow the WS/T 544 encapsulation rule in any of the methods, the result is judged as "conforming", otherwise it is judged as "not conforming".

c) Following the WS 538 package content test result judgment criterion, the test results are divided into "conformity" and "nonconformity". Its judgment principle as. During the Modality Worklist SCP test of the PACS system, as long as the PDU packet complies with WS 538, the result is judged as "Compliant", otherwise it is judged as "non-conforming". If one of the following abnormal situations occurs during the test, the result is judged as "incompatible".

Appendix A

(Informative appendix)