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

WS/T 543.1-2017

**Resident health card technical specifications - Part 1: General
specification
(English Translation)**

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Foreword

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

WS/T 543 "Technical Specifications for Resident Health Cards" is divided into 6 parts.

--Part 1: General provisions;

--Part 2: Technical Specifications of User Card;

--Part 3: User Card Application Specification;

--Part 4: User card command set;

--Part 5: Terminal technical specifications;

--Part 6: User card and terminal product testing specifications;

This part is part 1 of WS/T 543.

Drafting organizations of this section. National Health and Family Planning Commission Statistical Information Center, Liaoning Provincial Health and Family Planning Commission Information Center, Henan Provincial Health and Family Planning Commission Statistical Information Center, Foshan Municipal Health and Family Planning Bureau, Inner Mongolia Autonomous Region Health and Family Planning Commission Information Center, Fourth Army of the Chinese People's Liberation Army Medical University.

1 Scope

This part of WS/T 543 specifies the basic concepts and requirements of nationally unified resident health cards, terminals, security mechanisms, and product testing.

This part is applicable to health and family planning administrative departments, medical

and health institutions, and third-party joint organizations that produce, issue, and use resident health cards.

Card issuers and 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.

3 Terms and definitions

The following terms and definitions apply to this document.

Resident Health Card Owned by residents of the People's Republic of China, used for identification in medical and health service activities to achieve cross-regional and cross-institution medical treatment, data the information medium for data exchange and fee settlement satisfies the basic carrier of health information storage and a computer-recognizable CPU card.

Integrated circuit card with central processing unit, storage unit and card operating system.

Chip

Integrated circuit devices used to complete data processing and storage functions.

Chip operating system Stored and runnable in the CPU card chip to protect the confidentiality and integrity of application data and programs, and to control the CPU card chip to the outside world Embedded for the purpose of information exchange.

Encryption Algorithm in order to hide or reveal the transformation algorithm of data information content.

Symmetric encryption algorithm the encryption key can be calculated from the decryption key, and vice versa. That is, the encryption/decryption keys are the same in most algorithms.

Asymmetric encryption algorithm the encryption key and decryption key of the encryption algorithm are not the same, and one key cannot be derived from another key.

Key

The sequence of symbols that control the operation in the encryption conversion.

Terminal

A device used to perform read and write operations on residents' health cards.

4 Overview of Resident Health Card

Resident health cards include applications such as identification, storage of basic health information, cross-institution and cross-region diagnosis and treatment, and expense settlement.

5 User Card

In each part of WS/T 543, the user card is the resident health card, and the card number is the resident ID number (see GB 11643).

6 Security Mechanism

The resident health card security mechanism adopts the symmetric algorithm SM1 algorithm, asymmetric algorithm SM2 algorithm and hash calculation promulgated by the State Cryptography Administration Method SM3 algorithm. The security access module (SAM) card loaded with the national secret algorithm is used to realize the security authentication during the use of the user card.

The resident health card adopts a nationally unified, two-level three-level key system to realize the use of resident health cards across regions.

7 Product testing

Products such as resident health card chips, chip operating systems (COS), finished cards and terminals should pass the inspection of authoritative inspection agencies. product testing for technical requirements, see WS/T 543.6.