



**ISO 21549-7**

**Health informatics — Patient  
healthcard data —**

**Part 7:  
Medication data**

*Informatique de santé — Données relatives aux cartes de santé  
des patients —*

*Partie 7: Données de médication*

**Third edition  
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This third edition cancels and replaces the second edition (ISO 21549-7:2016), of which it constitutes a minor revision.

The changes are as follows:

- update normative references;
- editorial update;
- correct errors in tables.

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With a more mobile population, greater healthcare delivery in the community and at patients' homes, together with a growing demand for improved quality of ambulatory care, portable information systems and stores have increasingly been developed and used. Such devices are used for tasks ranging from identification, through portable medical record files, and on to patient-transportable monitoring systems.

The functions of such devices are to carry and to transmit person-identifiable information between themselves and other systems; therefore, during their operational lifetime they may share information with many technologically different systems which differ greatly in their functions and capabilities.

Healthcare administration increasingly relies upon similar automated identification systems. For instance, prescriptions may be automated and data exchange carried out at a number of sites using patient transportable computer readable devices. Healthcare funding institutions and providers are increasingly involved in cross-region care, where reimbursement may require automated data exchange between dissimilar healthcare systems. Administrative data objects may require linkage to external parties responsible for their own domains which are not within the scope of this document. For instance, cross-border reimbursement of healthcare services is usually regulated by law and intergovernmental agreements.

The advent of remotely accessible databases and support systems has led to the development and use of "Healthcare Person" identification devices that are also able to perform security functions and transmit digital signatures to remote systems via networks.

With the growing use of data cards for practical everyday healthcare delivery, the need has arisen for a standardized data format for interchange.

The person-related data carried by a data card can be categorized in three broad types: identification (of the device itself and the individual to whom the data it carries relates), administrative and clinical. It is important to realize that a given healthcare data card "de facto" contains device data and identification data and may in addition contain administrative, clinical, medication and linkage data.

Device data are defined to include:

- identification of the device itself, and
- identification of the functions and functioning capabilities of the device.

Identification data may include unique identification of the device holder or of all other persons to whom the data carried by the device are related.

Administrative data may include the following:

- complementary person(s) related data;
- identification of the funding of healthcare, whether public or private, and their relationships, i.e. insurer(s), contract(s) and policy(ies) or types of benefits;
- other data (distinguishable from clinical data) that are necessary for the purpose of healthcare delivery.

Clinical data may include

- items that provide information about health and health events;
- their appraisal and labelling by a healthcare provider (HCP), and
- related actions planned requested or performed.

Medication data may include

- a record of medications purchased by the patient for self-administration,
- copies of prescriptions including the authority to dispense records of dispensed medications,

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- pointers to other systems that contain information that hold medication data, either medication history or prescribed medicines, (or both) and in the case of prescribed medicines, the authority to dispense.

Because a data card essentially provides specific answers to definite queries while having at the same time a need to optimize the use of memory by avoiding redundancies, “high level” Object Modelling Technique (OMT) has been applied with respect to the definition of healthcare data card data structures

Patient Data Cards may offer facilities to

- communicate prescription information from one healthcare professional to another healthcare professional such as to a healthcare agent or healthcare organization, and
- provide indexes and/or authority to access prescription information held other than on the patient data card.