
Health informatics — Provisions for health applications on mobile/smart devices

*Informatique de santé — Provisions pour les applications de santé sur
les dispositifs smart/mobiles*



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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	3
5 Mobile health applications based on Registry and Repository (Reg/Rep)	5
5.1 Transportation of emergency patient	6
5.2 Manage medication	7
5.3 Telehealth	7
5.4 Referenced Standards	7
6 Mobile health applications in a health provider	8
6.1 Mobile electronic medical record system	8
6.2 Scheduling medical examination	8
6.3 Manage chronic diseases patient	9
6.4 Nursing home	9
6.5 Mobile PACS architecture	9
6.6 Veterans personal electronic health record	10
7 Mobile medical application	10
7.1 Mobile application for the purpose of processing patient medical device data	11
7.2 Mobile application to function as a medical device	11
8 Analysis of required architectures for mHealth	12
8.1 IHE MHD	12
8.2 Mobile EMR	12
8.3 Mobile Medical Application	13
Bibliography	16

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 215, *Health informatics*.

Introduction

Development and implementation of smart devices are rapidly progressing around world. An appropriate deployment of smart health applications and services on smart device platforms will enhance various aspects of healthcare delivery. Smart devices will also enable health organizations to provide essential care and health information anytime, anywhere through information and telecommunications technologies. This includes a broad spectrum of capabilities including health sensors, devices, manager, server, health information systems, and call centre services of patient information.

Recent development of smart devices such as smart phone, TV, and electronic book where the patients' services are stored and distributed securely whenever necessary (sharing EHR information at point of care) requires a robust architecture to be able to manage the mobile data effectively.

This Technical Report describes the status and requirements of health applications and services on smart devices platforms and suggests the reference architecture for these. The report is not intended to be prescriptive either from a methodological or technological perspective.

Health informatics — Provisions for health applications on mobile/smart devices

1 Scope

This Technical Report is applicable to the developments of smart health applications available anywhere, anytime and supporting new health businesses based on the smart devices. This Technical Report is to investigate the areas of ongoing developments and analyses of emerging interoperability standards for smart mobile devices.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

There are no normative references.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

accelerometer

device that measures proper acceleration

3.2

access

provision of an opportunity to approach, inspect, review, make use of data, or information

3.3

android

open source operating system for mobile devices developed by a group of organizations led by Google

3.4

application

software program or set of related programs that provide some useful healthcare capability or functionality

3.5

Apple iOS

previously iPhone OS

mobile operating system developed by Apple Inc. and distributed exclusively for Apple hardware

Note 1 to entry: It is the *operating system* ([3.12](#)) that powers iPhone, iPad, iPod Touch, and Apple TV.

3.6

BlackBerry

line of wireless handheld devices and *services* ([3.20](#)) designed and marketed by BlackBerry Limited, formerly known as Research In Motion Limited

3.7

bluetooth

standard for sending information wirelessly over short distances