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Health informatics — Survey of mHealth projects in low and middle income countries (LMIC)

Informatique de santé — Étude de projets de santé mobile dans les pays à revenu bas et moyen

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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*.

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Introduction

Mobile Health (mHealth) is a hot topic in the health information technology (IT) industry because it can make a big difference in healthcare services. The United Nations (UN) and World Health Organization (WHO) are interested in mHealth technology to help overcome the current low quality healthcare services in low and middle income countries (LMIC).

The UN describes use cases that are applicable to mHealth in LMIC: Education and Awareness; Remote Data Collection; Remote Monitoring; Communication and Training for Healthcare Workers; Disease and Epidemic Outbreak Tracking; and Diagnostics and Treatment Support. WHO also describes use cases: Health call centres/Healthcare telephone help line; Emergency toll-free telephone services; Treatment compliance; Appointment reminders; Community mobilization and health promotion; Raising awareness; Mobile telemedicine; Public health emergencies; Health surveys and surveillance; Patient monitoring; Information Initiatives; Decision support systems; and Patient records. For more use cases, see References [1] and [2].

There are several eHealth frameworks already developed by a number of organizations such as Health Level Seven (HL7), ISO/TC215, CEN/TC251, and Standards Australia (SA). Before suggesting an interoperable mHealth framework, currently available eHealth frameworks are surveyed and investigated to recognize how suitable each eHealth framework is for mHealth.

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Health informatics — Survey of mHealth projects in low and middle income countries (LMIC)

1 Scope

This Technical Report surveys ongoing national mHealth projects in LMIC, to which some emerging technologies such as zero configuration and proximity computing are applicable, especially when the information and communication technology (ICT) infrastructure is not established in those countries.

The scope is constrained to mHealth use cases and technologies for information and communication infrastructures that are useful for LMICs. In addition, the purpose of this Technical Report is to survey not only national mHealth projects in LMICs, but also possible mHealth frameworks that might be used.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

3.1
clinician
health professional who delivers health services directly to a patient/client

3.2
patient
individual person that is a subject of care

3.3
HIV/AIDS
human immunodeficiency virus infection
acquired immunodeficiency syndrome
disease of the human immune immunodeficiency virus

3.4
SIM card
subscriber identity module
subscriber identification module
(SIM)
integrated circuit that securely stores the international mobile subscriber identity (IMSI) and the related key used to identify and authenticate subscribers on mobile telephony devices (such as mobile phones and computers)

3.5
infrastructure
basic physical and organizational structures needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function

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