Examples

Below some examples of healthcare applications can be found to help the reader to understand what the scope is of these Health IT Developer Guidelines and to provide some guidance as towards the risk classification of the application.

Website

The health literacy website is a website/web application that provides to the general public, scientifically proven information about healthy living and healthy living habits. The content of the website is oriented to the total population and contains tips, tricks, knowledge etc. about having and keeping a healthy lifestyle.

Risk Classification: LOW

Drugtest

This web application provides information and helps the user to determine what type of drug addiction you have and which steps or help you can get. The website asks personal data such as age, sex, drug use etc. Information collected by the website helps the organisation to have population relevant numbers and provides statistical relevant information.

Risk Classification: MEDIUM

Pedometer

This product consists of an application (and possibly a device) that provides users with information about how many steps were taken during the span of a day. This information can be elaborated with sleeping date, data about body weight and height, etc. The product can be a web application, a native app and possibly a device. To conform to above guidelines it needs a safe and secure authentication mechanism and respect European privacy regulations. The pedometer works stand-alone for preventive purposes and does not connect to the official healthcare network such as Vitalink or others.

Risk Classification: MEDIUM

Electronic Patient Record

Electronic Patient Record systems are tools used for managing patient medical data associated with the care and treatment given by a caregiver such as a nurse, general practitioner, pharmacist, psychologist, etc. Patient record systems hold information regarding diagnosis, treatment, drug prescriptions and can collect external information such as laboratory results, discharge letters, pre-op reports, etc. In Belgium, a caregiver can use his/her electronic patient record system to have access to the eHealth network to check patient relevant data, generated by other caregivers or to obtain information about health insurance status. The electronic patient record thus presents facts entered by the user or imported via other ways.

Risk Classification: HIGH

Pill Reminder (native app)

A medication reminder app is a native mobile application that is installed on the smartphone of the patient or his/her caregiver. The medication reminder application holds the overview of all medication the patient takes and reminds the patient or his/her caregiver on the moment a pill, injection, etc. should be taken. This medication reminder app connects in the background to the Vitalink platform and reads out the medication scheme that is regularly updated by the patient's caregivers. Via a notification subscription, the patient is alerted to update the medication scheme in the app to the latest version on Vitalink. Medication reminder apps can have extra features or extensions such as order repeat-prescription at the GP, order medication at the pharmacist, alert when pills need to be bought, connection to pill box controlling the actual intake of the medication.

The medication reminder app contains information about the patient's medication and intake. It can be connected to an external data source and has thus to be able to interpret the Vitalink data format and calculate when exactly to take the pills, injection, etc. If the system underperforms medication errors could take place. This causes a risk to the patient's health and can have serious consequences.

Risk Classification: HIGH

Personal Health Record

http://wiki.ivlab.iminds.be

A personal health record system is an electronic health record system where all health-related data an information about the patient is kept by the patient. The purpose of the personal health record is to collect, maintain and gather the most complete view of a personal medical history and actual status of the patient. It is thus foremost connected to several external data sources such as hospitals, GP information systems, laboratories etc. but can also contain patient-reported data available from wearables, single apps etc., can contain patient administration data about insurance status, reimbursement rates, etc. or health literacy information about how to treat a disease or maintain your own health.

Depending on the functionalities of the personal health record, if it merely collects and displays data or also provides some intelligence; e.g. According to your disease, informing you about how to keep up your health or how to treat yourself, the personal health record will be classified in a higher risk scale.

Risk Classification: MEDIUM - CRITICAL, depending on the included functionalities

Insuline Management web application

The glucose regulation app + device consists of a glucose meter that allows the patient or its caregiver to measure instantly the glucose level of a patient and is via bluetooth connected to a mobile health application. This mobile application aggregates all blood glucose measurements over time. It also connects to Vitalink Medication Scheme and adapts the insulin shots the patient needs to administer himself, according to his own blood glucose measurements. This devices is a clinical decision support tool.

Risk Classification: CRITICAL

http://wiki.ivlab.iminds.be