**IHE Work Item Proposal (Short)**

1. **Proposed Work Item: Cross-Enterprise Workflow Management (XWMm)**

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Date: 10 May 2024

Version: 1.0

Domain: IT Infrastructure

1. **The Problem**

The world of mobile is unceasingly growing, paving the way for computerization of some healthcare processes such as:

* communication from ambulances
* availability of professionals for remote consultation
* remote patient monitoring and visiting

which are hardly manageable by a computer. Even if the healthcare is going down this path, adopting mobile solutions to improve the quality of its services, managing workflows through mobile devices and applications is still very backward and not well-defined, even though it is a key aspect of the entire patient care process. Applications such as telemonitoring and remote consulting are particularly affected by this lack, not allowing to take full advantage of the potential of remote management.

IHE provides an excellent tool for managing workflows, the XDW profile. This profile seems to be the best choice to address those issues, but this solution, in a mobile application, has a too high computational cost (e.g. consumption of an XML structured document), and also many prerequisites. So it is necessary to use an instrument that pairs the potential of the XDW and the mobile world but in easier way.

A solution to this problem could be the use of FHIR, which offers the ability to use different resources suitable for managing clinical workflows. The idea is not to pair FHIR and the XDW profile to convert RESTful requests into Workflow Document creation/updates, but to use the FHIR resources fully alone to recreate the same capability offered by XWD in the workflow management.

1. **Key Use Case**

Mr Smith, a cardiopathic patient, is enrolled in a telemedicine program which consists in a series of EEG acquisition, televisits and encounters to be performed at his home, online or in person, according with the telemedicine care plan for cardiopathic patients assigned to Mr Smith by his Chief Doctor. The cardiopathic care plan requires two acquisition of ECG a week and a televisit per month with a cardiologist in order to eventually adjust the medication administration.

So, Mr Smith receives all the instrumentation to proceed with the program assigned and also the tablet to select, schedule and perform all the activities using the telemedicine platform and devices provided.

The first day, using his tablet, Mr Smith selects the first task to perform by himself the ECG acquisition using the devices. The telemedicine platform tracks the execution of the task, with all the clinical information correlated. And so on with all the ECG acquisition for the first month.

Unfortunately, Mr Smith forgets some of ECG acquisition during the first months. At the end of the month, Dr Lore, a cardiologist, performs the televisit with Mr Smith. Retrieving in his tablet the information registered by the telemedicine platform, Dr Love sees that Mr Smith did not perform some ECG acquisition during the first month. But he can evaluate the ECG data of the acquisition performed. At the end of the televisit, the telemedicine platform tracks the execution of the visit, with all the clinical information correlated.

After four months, the Chief Doctor decides to evaluate the cardiopathic program followed by Mr Smith. So, from his device, retrieve all the information registered by the telemedicine platform about the execution of the care plan during this period. The Chief Doctor sees that Mr Smith increased the missing ECG acquisition each month and that he even missed the last televisit. Seeing that, he decides to contact Mr Smith to discharge him from the telemedicine program.

1. **Standards & Systems**

* HL7® FHIR®
* IHE XDW

1. **Discussion**

This proposal is submitted as a new work item to the ITI domain for having the capabilities provided by XDW in mobile (like XDWm).