



IHE Work Item Proposal (Short)

1. Proposed Work Item: Cross Enterprise Basic eReferral Workflow Definition Profile

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Domain: Patient Care Coordination

2. The Problem

The management of the workflow related to clinical process has becoming a fundamental topic with the increasing of the use by different sectors of document sharing related IHE profiles with their different types of document and information.

This profile proposal born as development of the ITI XDW profile to manage the Cross Enterprise Basic eReferral Workflow.

The management of the workflow related to the eReferral is involved in many clinical and organizational process for its important role in the process of digitalization. The lack of a workflow management, at the moment, blocks the use of the eReferral in an extended way. Without an instrument which manage its workflow, the eReferral is only an order without any information about the status of the order itself. The definition of a workflow with fix rules and task is needed in a scenario cross enterprise in which many actors are involved in the same process.

To have a scale of the problem, an analysis has been performed on some data of the Veneto Region (4.9 million of citizens): now we have 22 million referrals issued each year. We have estimated that the introduction of the use of digital referral (eReferral) will entail a saving of about 56 million Euro thanks to:

- a better quality control of the process
- the reduction of the errors in the management of all clinical documents and related workflows
- the increasing of the efficiency of the process itself.

These data are based on the Veneto Region but the definition of a line guide international known for the eReferral workflow would increase this saving.

3. Key Use Case

A patient attends a consultation to his GP for a health problem. The practitioner examines him and some of his reports in relation with his health problem. After the visit, the practitioner prescribes an exam. The software of the doctor produces three objects: one report for the visit, one eReferral and one Workflow Document to track the steps of the workflow of the eReferral and the document of interest related. In the Workflow Document, at the moment, there is one task which describe that the eReferral Workflow is in the step “ordered” and there are the references to the eReferral document and to all the clinical document which the practitioner has considered of interest.

From this moment the e-Referral is available to a wide range of care providers. The patient can call or go to a healthcare care provider of his choice to have the exam. The HCP checks the step in which the e-Referral is and he books the visit. Once the visit has been booked, the HCP updates the Workflow Document to track that the visit has been booked. From this moment no other HCP can book the same visit.

After a few days the patient is admitted at the hospital, the HCP consults the e-Referral and the Workflow Document related and the process for the visit starts. The exam takes place and the doctor can analyze all the documents of interest related (such as the e-Referral and some reports that the GP has related) and proceeds with the exam. At the end, he generates the clinical report of the exam and updates the workflow document. The e-Referral Workflow is closed.

At any time, during this process, in case the patient visits his GP to assess progress, the GP may consult the Workflow Document and access related new document produced as a result of this execution of this workflow or any of its steps. This process is possible through a simple query and retrieve by the GP’s software to the Registry and Repository. It is also possible to manage a system of subscription and notification to communicate the progress between the different steps throw the use of the Document Metadata Subscription (DSUB) profile or the Notification of Document Availability (NAV) profile.

4. Standards & Systems

Afferent IHE Domains: IT Infrastructure, Patient Care Coordination

Afferent IHE Profiles – Existing: XDW, XDS, XDM, XDR, DSUB, NAV, BPPC, ATNA, CT, PIX, XUA, XCA

5. Discussion

This profile proposal born as development of the ITI XDW profile to manage the Cross Enterprise Basic eReferral Workflow. The value statement of this proposal is:

- the standardization of the workflow for eReferrals and of its management;
- the use of an instrument, the ITI XDW profile, which provides a shared solution with different process which guarantees the interoperability between the different workflows and their management.

The ITI XDW profile is a core component of a common, workflow-independent interoperability infrastructure that provides a platform upon which a wide range of specific workflows can be defined by “content specialization” with minimal specification and implementation efforts by the different Domains. Through the definition of a Workflow

Definition Profile is possible to use the ITI XDW profile as an infrastructure layer and to define on it a set logical or clinical tasks definitions and rules to apply. The rules in the workflow definition ensure that the different participants in a workflow operate jointly to advance within tasks and to move from one task to an other in a consistent way.

The specification of Workflow Definitions is distinct from the XDW Profile, out of the scope of the ITI Domain and is currently best handled with a natural language expression (See Basic Unstructured Workflow Definition Profile, ITI TF-3:Appendix X), it is specific duty of each domain to define the workflow definition profile to manage the different specific workflow.