



22ND eHEALTH NETWORK MEETING 7 NOVEMBER 2022, BRUSSELS, BELGIUM

COVER NOTE

1.3 Readiness and action plan towards eHealth Network guidelines on Imaging Studies and Imaging Reports

1. Issue at stake

Following the eHealth Network Common Semantic Strategy plan and the mandate assigned by the eHealth Network during the June 2022 meeting, the subgroup on Semantics started to work on the readiness assessment for **eHealth Network guidelines on Medical Imaging domain**.

The purpose of this work was:

- to provide the eHealth Network with insights about the existence of **mature specifications** to be used as blueprint for the eHealth Network interoperability guidelines for Medical Imaging;
- report to the eHealth Network on Member States **readiness to implement** such guidelines.

The work performed reused the outcomes from X-eHealth project (2022) and other relevant sources like the EC study “Interoperability of Electronic Health Records in the EU (2020)”.

Based on this work and follow up discussions at the eHealth Network, it is expected that the eHealth Network will take a decision on how to proceed with the preparation of the guidelines on Imaging Studies and Imaging Reports and the timeline for such work.

2. Summary

The Medical Imaging domain is well characterised, and the interoperability challenges well identified. Detailed information is available in the annex at the end of this cover note.

The Member States readiness for implementing guidelines in the Medical Imaging domain is significantly distinct. Based on X-eHealth survey,

- regarding Imaging Studies, 4 Member States have solutions suitable to be used as reference for cross-border guidelines while 2 have a partly suitable solution and 6 Member States have solutions not suitable for this purpose.
- Regarding Imaging Reports, 2 Member States have solutions suitable to be used as reference for cross-border guidelines while 7 have a partly suitable solution and 8 Member States have solutions not suitable for this purpose.

About the potential use cases to be in scope of the guidelines, there is a common understanding that a Professional in the country of treatment should be able to get access, for healthcare purposes, to Imaging Reports and Imaging Studies (in country of affiliation).

There is as well a common understanding about the datasets to be included in the guidelines, namely a dataset for the Imaging Study Report and a dataset for metadata for Imaging Studies.

On the interplay with other eHealth Network Guidelines, there is the need to further explore the interplay with the Observation section in the Patient Summary guidelines.

There are however open questions for each the strategic guidance from the eHealth Network would be necessary, namely towards:

- a) Considering the complexity of these guidelines but also its importance for implementation projects (i.e. Myhealth@EU), it is recommended to adopt a 2 step approach for the preparation of this guidelines. The first step (ready by June 2023) would be the outline of the guideline including candidate content in some of the key chapters. The second step - the consolidated guidelines (including a wider stakeholders consultation) - would be available by Nov 2023.
- b) Considering the technical nature of some of the interoperability challenges (i.e. medical images formats and standards, file sizes and bandwidth implications) it is recommended that the preparation of the guidelines is a joint effort from the Semantic and Technical subgroups of the eHN.
- c) Considering that the need for metadata to describe clinical documents is horizontal to the different type of documents (i.e. Patient Summary, ePrescription, Laboratory results, Imaging Reports, Imaging Studies), it is recommended to reflect on how to provide such guidelines (i.e. include in General Guidelines, prepare specific guidelines document on metadata for clinical documents) and how (by subgroups or Joint Action) and when such guidelines should be prepared.

3. Format of procedure in the meeting

For eHealth Network decision, regarding recommendations a), b) and c).

Annex – Medical Imaging domain

Definitions

TERM	DESCRIPTION
Imaging study	An imaging study can be seen as a folder containing a number of images and accompanying metadata, in the context of a certain study request (and usually created in one encounter with a patient). An imaging study may contain multiple images, using different technologies.
Medical images	<i>Medical Images</i> can be any visual representation of a body structure, by any technological means. It encompasses radiological images, light photography, ultrasound images, endoscopy videos, microscopic slides, measurements such as electrocardiograms, a series of blood pressure measurements et cetera.

Imaging report	An imaging report reflects the observations and interpretations of <i>Medical Images</i> . These can be produced by human and/or software analysis. An <i>Imaging Report</i> usually contains elements or paragraphs such as the reason why the study is requested, relevant contextual medical information, the used modality and its settings, procedures and body localisations that were used, a description of the observations and findings, and a conclusion and advice. The Imaging Report also includes metadata about the <i>Imaging Study</i> .
----------------	--

The diagram below depicts the relation between the key concepts for the medical imaging domain.

