



21ST eHEALTH NETWORK MEETING 1-2 JUNE 2022, PARIS, FRANCE

COVER NOTE

6.1 eHealth Network sg on Semantics

1. Issues at stake

Following the guidance received from eHealth Network (Nov 2021 meeting) and comments received from the 2 extensive consultation periods (reaching out to eHealth Network and national experts, MyHealth@EU, EC, EMA, UNICOM, X-eHealth, IHE and HL7), the Subgroup on Semantics completed the revision of the General Guidelines and the ePrescription and eDispensation of Authorised Medicinal Products Guidelines (ePrescription guidelines), as well as the first version of the Laboratory Results Guidelines.

The 5-year plan defined in the Common Semantic Strategy indicates that hospital discharge reports and medical imaging and reports are the following health information domains to be addressed by the eHealth Network.

2. General guidelines – for adoption

The purpose and role of the eHealth Network General guidelines (latest release from 2016)¹ has always remained unclear. The impact and relevance of these guidelines has been limited by the inconsistent alignment with other eHealth Network guidelines and health interoperability recommendations. The version 3 of the eHealth Network General guidelines introduces the following enhancements:

- Clarified the interplay between General Guidelines and the use case specific guidelines, as well as removed outdated statements and references;
- Clarified the legal basis for the eHealth Network Guidelines, improved interplay with GDPR and other health interoperability requirements;
- Removed the duplication with Organisational Framework for NCPeH and removed project specific guidelines;
- Reinforced guidelines towards common terminology practices, such as the addition of the preferred code systems approach.

With this revision the eHealth Network General guidelines provide a consistent framework for the use case guidelines. This enables that use case guidelines are focused on use case specific interoperability recommendations while consistency across guidelines on general aspects is guaranteed. With a growing ecosystem of

¹ https://ec.europa.eu/health/sites/default/files/ehealth/docs/ev_20161121_co092_en.pdf

guidelines such overarching guideline is essential to enable a common approach within the health care systems.

3. ePrescription guidelines – for adoption

Since the release 2 of the eHealth Network ePrescription guidelines (2016), significant evolutions took place. MyHealth@EU services entered in real world operation and ISO IDMP standards have evolved. The version 3 of the eHealth Network ePrescription guidelines address some of the limitations faced during real world operation of cross-border ePrescriptions exchange and strengthen semantic interoperability of electronic prescriptions. Main improvements in the new version:

- Change in the name of the guidelines reflecting the scope of prescription and dispensation
- Introduction of Preferred Code systems acknowledging that ISO IDMP implementation is still ongoing and not yet complete
- Removing project specific guidelines to allow for a wider use of the guidelines within the future EHDS

This revision allows for continuity of the implementation of MyHealth@EU-Services and still setting the scope for future expansion of detail and semantic interoperability. The aim to revise the guideline again in 2-3 years' time once the ISO IDMP implementations is more complete is acknowledged.

4. Laboratory results – for discussion

Following the health information domains indicated in the eHealth Network Common Semantic Strategy and the work performed by the X-eHealth project, the eHealth network Subgroup on Semantics prepared the first version of the eHealth Network guidelines for Laboratory Results. These guidelines address the following use case:

- Sharing Laboratory Results of a patient from his country of affiliation (Country A) with a healthcare professional in the country of treatment (Country B) in two scenarios:
 - Sharing of individual reports
 - Sharing of laboratory summaries, including results from multiple reports, e.g. a cumulative list

Considering this is the first version of these guidelines, the following semantic aspects were considered:

- To assure flawless interpretation, laboratory results should be recorded in a universal manner by means of standard coding systems and data models including test methods, specimens, and results.
 - Laboratory tests should be precisely and unambiguously specified.
 - Laboratory result should include information about specimen type or the investigated system, analyte (component), the test method (measurement principle), the property of measurement, the timing (e.g., point in time, period of sample collection, if relevant), and measurement unit.

- The units must be scalable – use of derived units which can always be represented as products of powers of the base units must be possible.
- It should be possible to group and aggregate codes on a higher granularity level (for example the same items regardless of the method) or for comparable measurements.
- The laboratory result should be interpreted (reference ranges should be provided).
- Laboratory report recipients should be able to see the report in their preferred form regarding grouping of test results, using friendly test names and units, etc.
- Laboratory medicine is a rapidly evolving discipline that frequently comes up with new tests, test equipment or test methods. This will require flexible maintenance of corresponding value sets allowing cross boarder communication in the laboratory domain.

5. Sub-group on Semantics work plan

Considering the recent work conducted by the eHealth Network Subgroup on Semantics, the evolving context around digital health interoperability, the X-eHealth project progress, the subgroup proposes to conduct the following work until the eHealth Network fall 2022 meeting:

- Conduct a minor update of Patient Summary guidelines, to ensure consistency with new guidelines;
- Evaluation of the outcomes from X-eHealth to prepare the ground for upcoming guidelines on hospital discharge reports and medical imaging and reports;
- Proceed with supporting EU DCC guidelines update.

6. Format of procedure in the meeting

1. General guidelines – for eHealth Network **adoption**
2. ePrescription guidelines – for eHealth Network **adoption**
3. Laboratory results guidelines – for eHealth Network **discussion** (and possible adoption)
4. Sub-group on Semantics work plan – for eHealth Network **endorsement**