



# X-eHealth

Exchanging Electronic Health Records  
in a common framework

## WP 3 Evaluation - Glossary

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## Background


The primary objective of the X-eHealth project has been to develop the foundations for the future adoption of a European health governance framework that allows secure access to patient health information between Member States and other EU countries. As so, X-eHealth intended to contribute to the Digital Single Market Strategy of the European Commission.

At the beginning of the project the WP3 Evaluation team in cooperation with the other Work Packages developed a joint glossary with important concepts for the project. The intention of this glossary was to establish a common understanding and to allow it to be the reference in the different documents generated during the project. An assessment of existing glossaries identified in the stock-taking phase led to the decision that it is not reasonable to develop an overall new glossary which was the primary intention. Instead, WP3 collected concepts already available and linked them to the references to ensure a common understanding in the project. This allowed us to save resources. Concepts and acronyms were collected from the project consortium. After the collection phase the WP3 team assessed the input and revised it where necessary. The WP3 team then agreed on key concepts and acronyms to be published in a public glossary.

Two glossary types have been established, maintained and updated regularly in the course of the X-eHealth project:

- Project internal glossary with a more comprehensive collection of concepts and acronyms which was provided over the SharePoint platform;
- Public glossary with key concepts and acronyms ensuring a public understanding of X-eHealth's results/work which was available from the project's website.

In addition, the X-eHealth WP3 team established a glossaries catalogue, which listed relevant glossaries and recommended consulting them for supplementary reading to promote existing glossaries and harmonize work. The glossaries catalogue was available from the project website at <https://www.x-ehealth.eu/catalogue/>.

For further questions on the X-eHealth glossaries or inquiries please contact the  [X-eHealth WP3 GOeG Evaluation team](mailto:X-eHealth@goeg.at) under [iped@goeg.at](mailto:iped@goeg.at)!

## X-eHealth Glossary

The project glossary collects terms and definitions used within X-eHealth project and serves as a shared repository aimed to unify terminology across project work packages.

Concept preferred name	Acronym / Synonym	Definition	Definition Source	Note
Big Data in Health		Big Data in Health refers to large routinely or automatically collected datasets, which are electronically captured and stored. It is reusable in the sense of multipurpose data and comprises the fusion and connection of existing databases for the purpose of improving health and health system performance. It does not refer to data collected for a specific study.	<a href="#">European Commission, Study on Big Data in Public Health, Telemedicine and Healthcare. 2016</a>	
Continuity of Care		Efficient, effective, ethical care delivered through interaction, integration, co-ordination and sharing of information between different healthcare actors over time.	ISO/FDIS 27269	
Cross-Border Healthcare		‘cross-border healthcare’ means healthcare provided or prescribed in a Member State other than the Member State of affiliation;	<a href="#">Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients’</a>	

			<a href="#">rights in cross-border healthcare</a>	
Digital Health		,Digital Health' is a broad umbrella term encompassing e-health, as well as developing areas such as the use of advanced computer sciences (for example, in the fields of "big data", genomics and artificial intelligence).	<a href="#">WHO</a>	
Digital health literacy (or eHealth literacy)		Digital health literacy (or eHealth literacy) is the ability to seek, find, understand, appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem.	Norman, C. D. and Skinner, H. A. (2006a) 'eHEALS: The eHealth Literacy Scale', Journal of Medical Internet Research, 8(4)	
eHealth		eHealth is the use of ICT in health products, services and processes combined with organisational change in healthcare systems and new skills, in order to improve health of citizens, efficiency and productivity in healthcare delivery, and the economic and social value of health.	<a href="#">Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - eHealth Action Plan 2012-2020 - Innovative healthcare for the 21st century</a>	

Electronic Identification	eID	The process of using person identification data in electronic form uniquely representing either a natural or legal person, or a natural person representing a legal person.	<a href="#">Regulation (EU) No 910/2014 (eIDAS)</a>	
European Electronic Health Record Exchange Format	EEHRXF	The Commission Recommendation on a European Electronic Health Record exchange format of 6 February 2019 sets out a framework for the development of a European electronic health record exchange format in order to achieve secure, interoperable, cross-border access to, and exchange of, electronic health data in the Union.	<a href="#">Commission Recommendation on a European Electronic Health Record exchange format of 6 February 2019</a>	
European Health Data Space	EHDS	The creation of a European Data Space is one of the priorities of the Commission 2019-2025, including the health sector. In the Communication on “A European strategy for data” it states that the Commission will support the establishment of nine common European data spaces with one of them being the Common European health data space, which is essential for advances in preventing, detecting and curing diseases as well as for informed, evidence-based decisions to improve the accessibility,	<a href="#">European Commission, European Health Data Space</a>  <a href="#">European Commission, Communication from 19 February 2020</a>	

		effectiveness and sustainability of the healthcare systems.		
Health Professional		‘health professional’ means a doctor of medicine, a nurse responsible for general care, a dental practitioner, a midwife or a pharmacist within the meaning of Directive 2005/36/EC, or another professional exercising activities in the healthcare sector which are restricted to a regulated profession as defined in Article 3(1)(a) of Directive 2005/36/EC, or a person considered to be a health professional according to the legislation of the Member State of treatment	<a href="#">Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients’ rights in cross-border healthcare</a>	

Healthcare		Care activities, services, management or supplies related to the health of an individual.	ISO/FDIS 27269	<p>Note 1: Includes any: a) preventative, diagnostic, therapeutic, rehabilitative, maintenance, or palliative care, counselling, service, or procedure with respect to the physical or mental condition, or functional status, of a patient or affecting the structure or function of the body; b) sale or dispensing of a drug, device, equipment, or other item pursuant to a prescription; or c) procurement or banking of blood, sperm, organs, or any other tissue for administration to patients.</p> <p>Note 2: Healthcare may also include the management of clinical knowledge.</p>
Healthcare Provider	care provider, health provider, health service provider, healthcare service provider	<p>Definition 1: Healthcare actor that is able to be assigned one or more care period mandates</p> <p>Definition 2: 'healthcare provider' means any natural or legal person or any other entity legally providing healthcare on the territory of a Member State; Source: Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare</p>	<p>Source Def 1: ISO 13940:2015, 5.2.3</p> <p>Source Def 2: Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare</p>	<p>Notes Definition 1:</p> <p>Note 1: Healthcare Provider is described in the Attribute Collection HEALTHCARE PROVIDER</p> <p>Note 2: The personnel of a healthcare organization that is a healthcare provider may include both healthcare professionals and others which participate in the provision of healthcare.</p> <p>Note 3: According to the definition in ISO 13940:2015, organizations solely responsible for the funding, payment, or reimbursement of healthcare provision are not healthcare providers; for the purpose of this International</p>

				Standard they are considered as healthcare third parties.
International Patient Summary Data Set	IPS Data Set  IPS Dataset	Minimal, non-exhaustive set of data elements required for the international patient summary.	ISO/FDIS 27269, 3.8.3.3	<p>Note 1: ‘Minimal’ and ‘Non-exhaustive’ criteria are derived from the eHN Guideline for the patient summary.</p> <p>Note 2: ‘Minimal’ reflects the ideas of ‘summary’ and the need to be concise, but also alludes to the existence of a core set of data elements that all health care professionals can use; it is intended to be a speciality agnostic and condition independent set. It does not imply that all the items in the data set will be used in every summary. It is also possible to refine the extract from a record such that the content of the summary is more relevant to a particular condition (e.g. asthma) but no asthma-specific elements will be specified in this standard. The IPS Document or IPS can be extended by non-IPS standard condition-specific data.</p> <p>Note 3 to entry: ‘Non-exhaustive’ recognizes that the ideal data set is not closed, and is likely to be extended, not just in terms of requirement evolution, but also pragmatically in instances of use. However, such data are outside the scope of this current standard until review.</p>



				Note 4 to entry: The initial focus of use for IPS is unscheduled care but the IPS can also be used within scheduled care scenarios; scheduled care or planned care, would probably have access to the full EHR and provide a more extensive set of data but would also include the IPS Data Set elements.
Mobile Health	mHealth	mHealth includes the use of mobile communication devices in health and well-being services covering various technological solutions, which support self-management and measure vital signs such as heart rate, blood glucose level, blood pressure, body temperature and brain activity. WHO defines mHealth as “medical and public health practice supported by devices, such as mobile phones, patient monitoring devices, personal digital assistants, and other wireless devices.	<a href="#">WHO</a>	
Patient Summary	PS, health summary record	Health record extract comprising a standardized collection of clinical and contextual information (retrospective, concurrent, prospective) that provides a snapshot in time of a subject of care’s health information and healthcare.	ISO/FDIS 27269, 3.8.1.1	Note 1: The eHN Guideline definition is: A Patient Summary is an identifiable “dataset of essential and understandable health information” [that is made available] “at the point of care to deliver safe patient care during unscheduled care [and planned care] with its maximal impact in the unscheduled care”;

				[defined at a high level as:] “the minimum set of information needed to assure Health Care Coordination and the continuity of care”.
Point of Care	PoC	Location where direct healthcare activities are performed.	ISO 13940:2015, 7.2.9.1	
Refined eHealth European interoperability framework	ReEIF	The refined eHealth European interoperability framework (ReEIF) was adopted by the eHealth Network in November 2015. It represents a common refined framework for managing interoperability and standardisation challenges in the eHealth domain in Europe, offering a framework of terms and methodologies for reaching a common language, and a common starting point for the analysis of problems and the description of eHealth solutions throughout Europe.	<a href="#">eHealth network</a>	
Telehealth		Telehealth is a subset of eHealth and refers to the delivery of healthcare at a distance – according to Greek language, prefix “tele” means “far” or “at distance”, as explained by Varnosafaderani. It comprehends the delivery of healthcare services by all healthcare professionals, where distance is a critical factor, through the use of ICT to provide clinical and non-	1) <a href="#">Varnosafaderani, Siamak R. 2013. The Impact of Ultra-Fast Broadband on Telehealth in New Zealand.</a> 2) <a href="#">Oh, H.; Rizo, C.; Enkin, M.; &amp; Jadad, A. 2005. What Is eHealth (3): A Systematic Review of</a>	

		<p>clinical services - preventative, promotive and curative healthcare services, research and evaluation, health administration services and continuing education of healthcare providers.</p> <p>Telehealth is a newer and broader term referring to remote healthcare, including services provided using telemedicine, as well as interaction with automated systems or information resources.</p>	<p><a href="#">Published Definitions. Journal of Medical Internet Research, 7(1), e1.</a></p> <p>3) <a href="#">European Commission. Chain of Trust. 2013. Understanding patients' and health professionals' perspective on telehealth and building confidence and acceptance.</a></p> <p>4) <a href="#">US Department of Health and Human Services.</a></p>	
Telemedicine		<p>Telemedicine is a subset of telehealth, as concluded by Sood et al. in a 2007 study after analyzing 104 peer-reviewed definitions of telemedicine. Although some authors inadequately use it to describe the delivery of healthcare services at a distance only by physicians, telemedicine is distinguished from telehealth in the sense that the former focuses on the curative scope of the healthcare services by all healthcare professionals, excluding therefore the</p>	<p>Source: 1) Dyk, Liezl van. 2014. A Review of Telehealth Service Implementation Frameworks. International Journal of Environmental Research and Public Health. 11, 1279-1298; 2) Sood, S.; Mbarika, V.; Jugoo, S.; Dookhy, R.; Doarn, C.R.; Prakash, N. 2007. What</p>	

		preventive and promotive aspects of healthcare as remote training, administrative and educational services. According to Bashshur, Telemedicine involves the use of modern information technology, especially two-way interactive audio/video communications, computers and telemetry to deliver health services to remote patients and to facilitate information exchange between primary care physicians and specialists at some distance from each other (Bashshur, et al., 1997).	is telemedicine? A collection of 104 peer-reviewed perspectives and theoretical underpinnings. Telemed. e-Health 2007, 13, 573–590	
Unscheduled Care	unanticipated care, unplanned care	Healthcare service for an unexpected demand for care.	ISO/FDIS 27269	Note 1: In this scenario, the assistance needed can be emergency or non-emergency.  Note 2: The International Patient Summary is presumed to be the information needed to quickly help advise, diagnose, and/or treat the person requiring assistance.

## X-eHealth Acronyms List

The following list presents relevant acronyms in the X-eHealth project.

Acronym	Term
<b>ATC</b>	Anatomical Therapeutic Chemical Code
<b>CBeHIS</b>	Cross Border eHealth Information Services
<b>CDA</b>	Clinical Document Architecture
<b>CEF</b>	Connecting Europe Facility
<b>CEN</b>	Comité Européen de Normalization (European Committee for Standardization, a federation of 34 national standards bodies that are also ISO member bodies)
<b>CEN IPS</b>	CEN International Patient Summary
<b>CEN/TC 251</b>	CEN Technical Committee 251 Health Informatics
<b>CIA</b>	Confidentiality, Integrity and Accountability
<b>CT</b>	Clinical Terminologies
<b>DICOM</b>	Digital Imaging and Communication in Medecine
<b>DSI</b>	Digital Service Infrastructure
<b>eDispensation</b>	Electronic Dispensation
<b>EEHRxF</b>	<a href="#">European Electronic Health Record Exchange Format</a>
<b>eEIF</b>	eHealth European Interoperability Framework
<b>EHDS</b>	<a href="#">European Health Data Space</a>
<b>eHDSI / eHealth DSI</b>	eHealth Digital Service Infrastructure
<b>eHealth</b>	<a href="#">Electronic Health</a>
<b>eHN</b>	eHealth Network
<b>EHR</b>	Electronic Health Record
<b>EHRxF</b>	<a href="#">Electronic Health Record Exchange Format</a>
<b>eID</b>	<a href="#">Electronic Identification</a>
<b>EIF</b>	European Interoperability Framework
<b>EN</b>	European Standard
<b>eP /ePrescription</b>	Electronic Prescription
<b>epSOS</b>	Smart Open Services for European Patients
<b>e-SENS</b>	Electronic Simple European Networked Services
<b>EU</b>	European Union
<b>EURO-CAS</b>	Conformity Assessment Scheme for Europe
<b>EVS Client</b>	External Validator Service Client
<b>EXPAND</b>	Expanding Health Data Interoperability Services
<b>FAQs</b>	Frequently Asked Questions
<b>FHIR</b>	Fast Healthcare Interoperability Resources
<b>FHIR IG</b>	FHIR Implementation Guide

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<b>FSH</b>	FHIR SHortland files
<b>GDPR</b>	General Data Protection Regulation
<b>GP</b>	General Practitioner
<b>H2020</b>	Horizon 2020 Programme
<b>HL7</b>	Health Level 7
<b>HL7 CDA</b>	HL7 Clinical Document Architecture
<b>HL7 FHIR</b>	HL7 Fast Healthcare Interoperability Resources
<b>HL7 IPS</b>	HL7 International Patient Summary
<b>ICT</b>	Information and communications technology
<b>IHE</b>	Integrating the Healthcare Enterprise
<b>IHE PCC</b>	IHE Patient Care Coordination
<b>IHE XDS</b>	IHE Cross-Enterprise Document Sharing
<b>IHE XDS-I</b>	IHE Cross-Enterprise Document Sharing for Imaging
<b>IHE XCA</b>	IHE Cross Community Access
<b>IHE XCA-I</b>	IHE Cross Community Access for Imaging
<b>IHE XDR</b>	IHE Cross-Enterprise Document Reliable Interchange
<b>IHE XDR-I</b>	IHE Cross-Enterprise Document Reliable Interchange for Imaging
<b>IHE MHD</b>	IHE Mobile access to Health Documents
<b>IHE XDM</b>	IHE Cross-Enterprise Document Media Interchange
<b>IHTSDO</b>	International Health Terminology Standards Development Organisation
<b>IPI</b>	International Projects and Interoperability
<b>IPS</b>	International Patient Summary
<b>ISMS</b>	Information Security Management System
<b>ISO</b>	International Organization for Standardization
<b>IT</b>	Information Technology
<b>ITIL</b>	Information Technology Infrastructure Library
<b>JIC</b>	Joint Initiative Council
<b>JIC PSSS</b>	JIC Patient Summary Standards Set
<b>JSON</b>	JavaScript Object Notation
<b>KPI's</b>	Key Performance Indicators
<b>LOINC</b>	Logical Observation Identifiers Names and Codes
<b>LSP</b>	Large Scale Pilot
<b>mHealth</b>	<a href="#">Mobile Health</a>
<b>MTC</b>	Master Translation/Transcodification Catalogue
<b>MVC</b>	Model-View-Controller
<b>NCP</b>	National Contact Point
<b>NCPeH</b>	National Contact Point for eHealth

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<b>NHS</b>	National Health Service
<b>OASIS TALM</b>	OASIS Test Assertion Markup Language
<b>OSI</b>	Operations, Security and Infrastructure
<b>PHIRI</b>	Population Health Information Research Infrastructure Project
<b>PS</b>	Patient Summary
<b>ReEIF</b>	<a href="#">Refined eHealth EIF</a>
<b>SNOMED CT</b>	Systematized Nomenclature of Medicine Clinical Terms
<b>SOA</b>	Service-Oriented Architecture
<b>SUT</b>	System Under Test
<b>TEHDAS</b>	Joint Action Towards the European Health Data Space
<b>TEN-T</b>	Trans-European Transport Network
<b>TEN-T EA</b>	Trans-European Transport Network Executive Agency
<b>UML</b>	Unified Modeling Language
<b>WP</b>	Work Package
<b>XML</b>	EXtensible Markup Language

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## Catalogue

We recommend to consult the following glossaries for supplementary reading:



CEF eHDSI glossary established and maintained by the European Commission. Available under <https://ec.europa.eu/cefdigital/wiki/display/EHOPERATIONS/eHDSI+Glossary>



The Joint Initiative for Global Standards Harmonization Health Informatics Document Registry and Glossary developed by the Collaborative Research for Effective Diagnostics (CRED) and Global eHealth Collaborative (GeHCO) is available under <http://www.skmtglossary.org/> (registration necessary).



The ISO online browsing platform provides access to the most up to date content in ISO standards, graphical symbols, codes or terms and definitions and is available under <https://www.iso.org/obp/ui#home>.



Contsys provides a comprehensive list of concepts related to the continuity of care by Oughtibridge Ltd. under <https://contsys.org/index>.



The EU funded DigitalHealthEurope project has developed a glossary which is available under <https://digitalhealtheuropa.eu/glossary/>.



The UNICOM project team is developing a meta-glossary based on the [OpenMedicine](#) project tool.

The following criteria were defined by the project team for including a glossary in the X-eHealth glossaries catalogue:

- The glossary provides concepts/abbreviations commonly encountered in eHealth
- The glossary is publicly available in an online accessible format
- Concepts and the glossary itself are available in English language
- It is preferably clear how the glossary was developed
- EU scope