



Extended EHR@EU Data Space for Primary Use - Xt-EHR

Proposal number: 101128085

**D7.3 Discharge reports: Implementation guides
on EEHRxF, functional and technical
requirements and specifications for EHR
systems**

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Executive Summary

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ABBREVIATIONS

API	Application Programming Interface
DR	Discharge Report
EHR	Electronic Health Record
EEHRxF	European Electronic Health Record Exchange Format
eHN	eHealth Network

TERMS AND DEFINITIONS

TERM	DEFINITION	REFERENCE
European Health Record Exchange Format (EEHRxF)	The standardized format for exchanging electronic health records across the EU. It is a “a set of technical specifications, targeted at ensuring the interoperability of electronic health record systems used on the Union market”.	1
Discharge Report (DR)	Electronic health data related to a healthcare encounter or episode of care and including essential information about admission, treatment and discharge of a natural person.	EHDS regulation annex I
Hospital Discharge Report (HDR)	Electronic health data related to a healthcare encounter or episode of care and including essential information about admission, treatment and discharge of a natural person.	eHealth Network Guideline on the electronic exchange of health data under Cross-Border Directive 2011/24/EU Hospital Discharge Report Release 1.1, November 2024
Interoperability	The ability of different information systems, devices, or applications to connect and communicate in a coordinated manner, within and across organizational boundaries, to access, exchange, and cooperatively use data amongst stakeholders.	
Structured Content Model	A machine-readable format that enables parsing and semantic comprehension of individual data elements within a message.	
Unstructured Content Model	A machine-readable format that enables the display of message contents without structured parsing.	
Data Element	A named part of a message designed to convey a specific set of facts.	
Data Type	The particular kind of values a data element can take, such as text, number, or code.	

¹ [EEHRxF concept note 2023-12-08.docx](#)

Cardinality	Defines how many times an element must/may appear in a message. It is represented as minimum and maximum instance counts, e.g., 0-to-n or 1-to-1.	N.A
Repeatability	The possibility of including more than one instance of a data element in a message.	N.A
Cross-Border Context	DR use to facilitate healthcare for patients receiving treatment in one EU country and continuing care in another.	N.A
Integrating the Healthcare Enterprise Cross-Enterprise Document Sharing (IHE XDS)	A standard profile for secure document sharing across healthcare systems.	
EHR systems	Any system whereby the software, or a combination of the hardware and the software of that system, allows personal electronic health data that belong to the priority categories of personal electronic health data established under this Regulation to be stored, intermediated, exported, imported, converted, edited or viewed, and intended by the manufacturer to be used by healthcare providers when providing patient care or by patients when accessing their electronic health data	EHDS, Article 2 (k)

I. AIM OF THIS DOCUMENT

The aim of this document is to establish the requirements and specifications for Electronic Health Record (EHR) systems to support the creation, exchange, and interoperability of the European Electronic Health Record Exchange Format (EEHRxF) in the scope of **Discharge Reports (DRs)** across the European Union. This work supports the development of implementing acts under the European Health Data Space (EHDS) Regulation, which seeks to improve healthcare quality, ensure patient safety, and enable the seamless and secure exchange of health data across healthcare providers and borders. The document also contributes to ensuring patients' access to and control over their health information.

Importantly, this document is not normative. Rather, it provides a preparatory and foundational contribution to the implementation of the EHDS by consolidating relevant specifications, technical requirements, and guidelines related to the interoperable exchange of Discharge Reports.

Therefore, this work aims to:

- **Analyse existing guidelines:** for the exchange of Discharge Reports, in order to identify existing building blocks, such as those developed by the eHealth Network and the eHMSEG Semantic Task Force.
- **Define representative use cases:** to inform the structure and priorities of the implementation guides for both national and cross-border care scenarios.
- **Specify business and functional requirements:** that are essential for EHR systems to generate, exchange, and process Discharge Reports in a secure, interoperable, and clinically meaningful manner.
- **Establish semantic specifications:** including the identification and use of preferred code systems and value sets aligned with international and EU standards (e.g. SNOMED CT, LOINC, ICD-10).
- **Define data models:** that support the structured and consistent exchange of Discharge Report data across different Member States and healthcare settings.
- **Ensure interoperability:** by promoting the standardisation of formats, metadata, and processes used for Discharge Reports in alignment with the EEHRxF.
- **Enhance continuity of care:** by facilitating the timely and accurate transmission of discharge information to support safe and coordinated patient care, especially in cross-border contexts.
- **Support the goals of the EHDS:** by contributing to data quality, technical infrastructure readiness, and legal-regulatory coherence.
- **Reduce administrative burden:** by streamlining documentation workflows for healthcare providers through clear, harmonised specifications for Discharge Reports.

II. SCOPE AND INTERDEPENDENCIES

II.1. Scope

The scope of this deliverable includes defining specifications for the **Discharge Report (DR)** domain, as one of the **priority categories of personal electronic health data for primary use** under **Article 14** of the **European Health Data Space (EHDS) Regulation (EU) 2025/327**. This includes the definition of technical and semantic requirements, and the specification of the **European Electronic Health Record Exchange Format (EEHRxF)** for the interoperable generation, transmission, storage, and reuse of Discharge Reports.

Discharge Reports are structured clinical documents that summarise a patient's episode of care and provide essential information for continuity of treatment and follow-up. They may be generated in a wide variety of clinical contexts, such as discharges from inpatient care, outpatient visits, emergency departments, or following surgical procedures. This deliverable defines how such reports should be structured, coded, and exchanged between healthcare providers and systems – both **within Member States** and in **cross-border care** settings.

For this purpose, the deliverable aligns with key provisions of the EHDS Regulation:

- **Article 14:** Identification of DRs as a priority category.
- **Article 15:** Requirements for EEHRxF implementation.
- **Article 36** and **Annex II:** Common specifications, especially on interoperability, performance, and security requirements for EHR systems.

The scope includes:

- **National/regional scenarios:** All types of discharges from one healthcare provider to another within a Member State, including hospital-to-GP, hospital-to-hospital, or inpatient-to-outpatient transitions.
- **Cross-border scenarios:** Exchange of DRs between healthcare providers in different Member States, enabling safe follow-up care after treatment abroad, such as those exchanged through MyHealth@EU.

Out of scope:

- Informal referrals not constituting a formal discharge event.
- Discharge documentation lacking the minimum data requirements set out by the eHealth Network and EEHRxF.
- **Secondary use:** Providing a foundation for the anonymised or pseudonymised reuse of DR data in research, quality assurance, public health analytics, or innovation, in compliance with Articles 45–57 of the EHDS Regulation.

II.2. Interdependencies

This task is closely interlinked with other Work Packages (WPs) of the Xt-EHR Joint Action, particularly where shared technical, semantic, and legal frameworks are being defined to ensure coherence across priority data categories. These interdependencies include:

- **WP4 – Sustainability, governance and assessment, and WP5 – General requirements for EHRs and system interfaces:** These WPs define overarching technical, organisational, and regulatory requirements for all priority categories, including DRs.
- **WP6 – ePrescriptions and Patient Summaries, and WP7 – New services for EHR systems towards EHDS:** Alignment with these WPs is essential, especially in harmonising actors, workflows, and data structure for continuity of care across domains.
- **WP8 – Certification and Labelling Framework:** The specifications developed in this deliverable feed into the development of the conformity assessment scheme for EHR systems under Chapter III and Annex II of the EHDS Regulation.
- **WP9 – Telemedicine under MyHealth@EU:** Specifications for the teleconsultation report must be aligned with those for the Discharge Report to ensure consistency and interoperability in shared care scenarios.

The management of interdependencies is ensured through the Leadership Council monthly meetings, as well as within and cross WP meetings to ensure alignment.

This deliverable also builds upon the **eHealth Network (eHN) Hospital Discharge Report Guidelines, MyHealth@EU specifications**, and inputs from the **eHMSEG Semantic Task Force**, incorporating international standards (e.g. HL7 FHIR) and value sets aligned with EU policy. Other EU initiatives contributing to the EEHRxF, including the X-eHealth were also considered in the formulation of this document to ensure forward compatibility and convergence with wider EHDS implementation.

III. INTENDED USE

The intended use of this document is to guide the development, implementation, and deployment of EHR systems capable of generating, sharing, and processing discharge reports in a standardized format within and across EU Member States. This document is aimed at EHR system developers, healthcare providers, policymakers, and other stakeholders involved in health data management and exchange. By adhering to the proposed specifications outlined in this document, stakeholders can ensure that these results and reports are interoperable, secure, and useful for enhancing patient care and facilitating healthcare across the EU.

1. INTRODUCTION

The Xt-EHR Joint Action (JA) aligns with the European Commission's (EC) commitment to a "Europe fit for the digital age" and advances the objectives of the EU4Health Programme by enhancing health systems. This initiative aims to develop requirements, guidelines, specifications, and implementation guides to prepare the implementation of the European Health Data Space (EHDS) regulation, in the context of the primary use of electronic health data. This initiative will foster the interoperability and exchange of electronic health data across the European Union (EU), supporting the use of this data in healthcare (primary use). It also aims to create a uniform legal and technical regime for the development and use of electronic health record (EHR) systems, promoting a strong and resilient European Health Union and fostering citizens access and control over their own health data.

The use of discharge reports is essential in healthcare for accurate diagnosis and treatment, as well as continuity of care. Many EU Member States have electronic systems in place to support the secure exchange and access to these reports, improving the quality of care and efficiency of medical decision-making. Additionally, electronic access to discharge reports are increasingly needed to provide patients and healthcare professionals with timely information, even when the patient is in a Member State other than their country of affiliation, through the cross-border services of MyHealth@EU.

Work Package WP7 – *New services for EHR systems towards EHDS* focuses on the technical and functional requirements for three critical domains: i) discharge reports, ii) medical test results (including laboratory and other diagnostic-related reports), and iii) medical imaging studies and related imaging reports. For this purpose, WP7 will bring together experts from Member States with the aim of:

- Developing requirements to support the elaboration of the implementing acts under EHDS that establish the requirements and specifications for EEHRxF for medical images and reports, medical test results (including laboratory and other diagnostic-related reports), and discharge reports.
- Developing implementation guides for implementing acts defining common specifications for EHR systems to process the defined data sets.
- Analysing common specifications among these services to ensure alignment and coherence.

Within WP7, Task 7.3 focuses specifically on defining the requirements for the interoperable and secure exchange of discharge reports. Building upon the foundations laid by the [X-eHealth project](#) and the [eHealth Network \(eHN\) guidelines](#) and in collaboration with the eHN and eHDSI communities and SDOs, Task 7.3 will follow as a principle reusing existing building blocks to build a comprehensive set of technical requirements to support articles 14², 15³, 36⁴, and Annex II, with the aim of facilitating the exchange of discharge reports through the EEHRxF.

² Priority categories of personal electronic health data for primary use

³ European electronic health record exchange format

⁴ Conformity of the harmonised software components of EHR systems

Relevant terminologies and standards will be described in detail in D7.3, which will be based on widely adopted international standards such as HL7, FHIR, and others as identified necessary and in full alignment with the eHN guideline on discharge reports.

2. METHODOLOGY

The development of this deliverable followed a structured and iterative methodology designed to ensure robustness, alignment with existing legal and technical frameworks, and practical applicability for stakeholders across the EU. The process combined literature review, standards analysis, stakeholder engagement, and cross-work package coordination, enabling both depth and relevance in addressing Discharge Report (DR) interoperability within the context of the European Health Data Space (EHDS).

2.1. Review of Existing Frameworks, Guidelines, and Standards

An extensive desk review was conducted to consolidate existing knowledge and specifications relevant to Discharge Reports and Electronic Health Record (EHR) system interoperability. This included a critical assessment of:

- **eHealth Network (eHN) Guidelines**, particularly provisions on Hospital Discharge Reports developed under the framework of the Cross-Border Healthcare Directive 2011/24/EU;
- **MyHealth@EU specifications**, with emphasis on document exchange, coding, translation fallback mechanisms, and cross-border infrastructure;
- **HL7 CDA and FHIR standards**, as the primary syntactic and semantic frameworks for structuring, encoding, and exchanging DRs;
- **eHMSEG Semantic Task Force updates**, notably the Core Dataset definition, bilingual fallback recommendations, and use of eHDSIExceptionalValue sets.

2.2. Gap Analysis

A comparative analysis was performed to identify gaps between existing guidance and real-world implementation of DRs across Member States. The analysis focused on:

- **Inconsistent definitions and scope of DR elements;**
- **Uneven adoption of standardised coding systems**, such as SNOMED CT for procedures and ICD-10 for diagnoses;
- **Interoperability challenges**, including insufficient support for machine-readability, multilingual display, or structured metadata;
- **Lack of alignment with EHDS obligations**, especially with regard to Articles 14, 15, and 36 and Annex II of the EHDS Regulation.

2.3. Stakeholder Consultation

Targeted consultations were held with key stakeholder groups through workshops, interviews, and public review processes. These engagements ensured that the requirements and specifications were:

- **Clinically grounded:** with input from hospitals and clinical professionals on workflow integration and patient safety;
- **Technically feasible:** based on feedback from EHR system manufacturers;
- **Patient-centric and compliant:** incorporating views from policymakers and representatives of patient organisations to reflect usability, legal safeguards, and ethical considerations.

2.4. Cross-Work Package Collaboration

This deliverable was developed in close coordination with related Xt-EHR work packages, ensuring consistency and reuse of common building blocks:

- **WP4:** to align with sustainability models and national governance structures;
- **WP5:** to integrate horizontal technical and functional requirements for EHR systems and interfaces;
- **WP6:** to harmonise data flow and interoperability principles with the ePrescription and Patient Summary domains;
- **WP7:** to harmonise data flow and interoperability principles with the medical test results (including laboratory and other diagnostic-related reports), and medical imaging studies and related imaging reports
- **WP8:** to support certification and labelling frameworks, particularly through shared criteria for EHR system conformity;
- **WP9:** to ensure compatibility with emerging specifications for teleconsultation reports under MyHealth@EU.

Outputs from prior EU-funded projects such as **X-eHealth** were also reused and adapted where relevant.

2.5. Regulatory Alignment

All components of this deliverable were designed to support the implementation of the EHDS Regulation, with particularly emphasis on the following articles:

- **Article 14:** on priority categories of personal electronic health data for primary use;
- **Article 15:** on the establishment and operationalisation of the European Electronic Health Record Exchange Format (EEHRxF);
- **Article 36 and Annex II:** specifying common requirements for performance, interoperability, security, and logging in EHR systems;
- **Articles 3, 4, 7, 10, 11, 12, and 13:** on patient rights, health professional access to services, the right to data portability for natural persons, obligations of Member States regarding DR accessibility and governance, and the registration of personal electronic health data.

212 It is important to note that additional EHDS articles, though not explicitly mentioned in this
213 document, are also being considered and addressed within the context of other transversal WPs in
214 the Xt-EHR."

215 3. ANALYSIS OF EXISTING GUIDELINES, SPECIFICATIONS AND STANDARDS

216 This chapter provides a review of the key guidelines, standards, and frameworks related to
217 Discharge Reports (DRs) and the interoperability of Electronic Health Record (EHR) systems. By
218 analysing these existing resources, we aim to identify the gaps and challenges that need to be
219 addressed to align with the objectives of the European Health Data Space (EHDS). The findings from
220 this analysis form the foundation for the requirements, specifications, and implementation
221 strategies presented in this document.

222 3.1. eHealth Network Guidelines

223 The eHealth Network (eHN) guidelines serve as a cornerstone for enabling the secure and
224 standardized electronic exchange of health data across the European Union (EU). Developed under
225 the framework of the Cross-Border Directive 2011/24/EU⁵, these guidelines emphasize the
226 importance of facilitating continuity of care and supporting patient mobility within the EU.

227 The eHN guidelines provide a clear definition of Discharge Reports, their intended use, and their
228 role in ensuring that healthcare providers have access to essential patient information following a
229 hospital stay. They underscore the significance of data protection, recommending strict
230 compliance with the General Data Protection Regulation (GDPR)⁶ to guarantee patient privacy and
231 confidentiality. Reliable mechanisms for identifying, authenticating, and authorizing healthcare
232 providers and patients are also highlighted as critical elements for secure data exchange. From an
233 organizational perspective, the guidelines stress the importance of enabling the integration of
234 Discharge Reports into national and regional health systems to ensure seamless accessibility and
235 usability. Additionally, they address the need for robust quality standards and validation processes
236 to ensure that Discharge Reports are accurate, complete, and consistent across systems.

237 The eHN guidelines also focus on the semantic integrity of Discharge Reports. They advocate for
238 the use of standardized coding systems, such as ICD-10 for diagnoses and SNOMED CT for clinical
239 procedures, to ensure uniform interpretation of clinical content. On a technical level, the guidelines
240 recommend using internationally recognized formats such as HL7 FHIR to structure and exchange
241 Discharge Reports while maintaining the security and integrity of the data.

242 MyHealth@EU initially focused on the implementation of Hospital Discharge Reports (HDR) as
243 defined the eHN guideline. HDR can be considered as a subset of the broader category of Discharge
244 report (R). Table 1 provides a comparison between the definition outlined in eHN and the wider
245 scope established by the EHDS regulation.

246 **Table 1. Comparison of Scope, Purpose, Content, Use Cases, Regulatory Context, and Legal Status Between Hospital**
247 **Discharge Reports and General Discharge Reports.**

⁵ <https://eur-lex.europa.eu/eli/dir/2011/24/oj/eng>

⁶ <https://eur-lex.europa.eu/eli/reg/2016/679/oj/eng>

	Hospital Discharge Report (HDR)	Discharge Report (DR)
Scope	Applied to inpatient care across various hospital settings. These reports are typically created at the end of an inpatient stay in a hospital setting where the patient has been admitted for acute care.	Broader scope, including discharge from various healthcare settings, such as inpatient and outpatient visits, rehabilitation centres, or long-term care facilities.
Purpose	Summarizes a patient's hospital stay, focusing on diagnosis, treatment and outcomes to be exchanged through MyHealth@EU.	Summarizes a patient's episode care to ensure continuity of care in the EU (both national and cross-border scenarios are applicable)
Content	Defines a core dataset encompassing patient identification, admission details, diagnostic summary, treatment course, medication, and follow-up care.	Similar to HDR, it defines a core dataset encompassing patient identification, admission details, diagnostic summary, treatment course, medication, and follow-up care. It includes additional contexts, such as outpatient visits, rehabilitation centres or long-term care facilities.
Use Cases	Supports both emergency and planned cross-border scenarios.	Aims to enhance data sharing across health services, empowering citizens with greater access to and control over their health data across the EU.
Regulatory Context	Guideline on Hospital Discharge Report (Release 1.1, November 2024). Cross-border care under Directive 2011/24/EU.	European Health Data Space Regulation (EU) 2025/327
Legal status	Voluntary The guidelines are non-binding and serve as a reference for national implementation in the scope of MyHealth@EU.	Binding The implementing acts will define the requirements for the exchange of DR.

Therefore, the foundational steps taken for the implementation of HDR can be reused for general DR. Additionally, the way HDR data elements were defined offers significant flexibility, allowing them to be applied to contexts beyond hospital care, making them a valuable resource for the objectives of this deliverable. The preliminary analysis indicates that most fields are suitable for various scenarios. In some scenarios, DR may require less detailed information than a HDR and may not provide an extensive overview of the entire treatment or clinical course. Instead, they are likely to focus primarily on the reason for discharge and the immediate next steps.

As a result, it has been decided to leverage the existing building blocks, adapting the data elements for additional contexts. Furthermore, to accommodate new use cases, the defined elements for the EEHRxF may require flexibility to support the exchange of health data across different scenarios.

3.2. MyHealth@EU Specifications

The MyHealth@EU initiative provides additional specifications to enable the cross-border exchange of health data within the EU. This initiative is critical for supporting the EHDS goals, particularly in ensuring that patients traveling between Member States can access high-quality healthcare without disruption.

Within the MyHealth@EU framework, Discharge Reports are treated as part of a broader ecosystem that includes Patient Summaries and ePrescriptions. The specifications focus on defining harmonized datasets and coding systems to ensure consistency in the content and format of exchanged health data. For instance, the initiative highlights the use of **HL7 FHIR resources** as technical enablers for structuring and transmitting Discharge Reports.

The MyHealth@EU specifications also outline the infrastructure requirements for secure and reliable data exchange. By leveraging interoperability profiles such as **IHE XDS**, the initiative ensures that healthcare providers in different Member States can access, share, and retrieve Discharge Reports efficiently and securely. The emphasis on integration with national eHealth services further supports the goal of creating a unified digital health ecosystem across Europe.

Additional Guidance from the eHMSEG Semantic Task Force

Recent updates to the *eHN Hospital Discharge Report Guidelines (release 1.0, November 2023)*, and subsequent discussions in the eHMSEG Semantic Task Force, provide further detail on the semantic and coding requirements for HDR. These points include:

1. Machine-Readable + Human-Readable Requirements

Each HDR section must include not only coded data but also a human-readable narrative, ensuring that clinicians can interpret information if a receiving system cannot parse the codes.

2. Bilingual / English Fallback

If translation to the patient's or treating country's language is unavailable, the guidelines recommend providing a fallback in English for all coded concepts to ensure clarity in cross-border scenarios.

3. Fallback (Exceptional) Codes

A key recommendation is to use the *eHDS/ExceptionalValue* set (with codes like "OTH," "UNC," and "UNK") whenever a national concept cannot be mapped to the EU-preferred value sets:

- a. **OTH (Other):** A code exists nationally but cannot be mapped; display the local concept in English.
- b. **UNC (Unencoded):** No national code exists, so only textual info in local language is provided.
- c. **UNK (Unknown):** The information truly is not known.

4. Core vs. Extended Dataset

The guidelines differentiate a *Core Dataset* (minimum mandatory data elements) from additional or extended elements that may be context specific. Implementers must at least capture the *Core Dataset* to align with EU-wide HDR interoperability objectives.

3.3. X-eHealth Hospital Discharge Reports functional specification

The X-eHealth hospital discharge report functional specification ("X-eHealth Deliverable D5.5 – Hospital Discharge Reports guideline and functional specifications") provides a detailed overview of the functional and semantic aspects of Hospital Discharge Reports in the EU. It outlines common features relevant to the digitalisation of discharge documentation and identifies generic use cases across Member States. The document includes descriptions of data structures, semantic elements and logical models, and references existing standards applicable to the EHR domain for discharge documentation.

While this document offers a valuable reference for implementers, it does not fully capture the complexity of various discharge scenarios (e.g., in outpatient care) which are particularly relevant for the EHDS Regulation.

Furthermore, the X-eHealth specification provides limited guidance on the harmonisation of terminologies across systems. To enable meaningful access and reuse – especially for secondary use under the EHDS – further work is needed to ensure alignment between national coding systems and the EU-wide semantic frameworks (e.g., SNOMED CT, ICD-10, ATC).

As EHR systems become the mandatory source for both primary and secondary use of discharge data, precise mappings and consistency of data representation will be critical. Therefore, while the X-eHealth D5.5 deliverable provides a foundational basis, this document (D7.3) expands upon it to incorporate updated requirements, new technical profiles, and alignment with the HL7 FHIR Implementation Guide developed under the Xt-EHR project, in accordance with the EHDS Regulation.

3.4. European Health Data Space (EHDS) Regulation (EU) 2025/327

On 11 February 2025, the European Parliament and the Council adopted **Regulation (EU) 2025/327** on the European Health Data Space (EHDS). This landmark legislation aims to enhance patient

access to and control over their own electronic health data, foster data interoperability, and enable secure cross-border sharing of health information. The EHDS Regulation provides a robust legal basis for both the **primary use** of electronic health data – supporting continuity of care across Member States – and the **secondary use** of such data, including research, innovation, policy development, public health emergency response, and official statistics.

This document acknowledges the EHDS framework and specifically aligns Discharge Report (DR) requirements with:

- **Article 15**, mandating the development of the European Electronic Health Record Exchange Format (EEHRxF);
- **Article 36**, outlining general requirements for EHR systems in terms of interoperability and security;
- Other provisions ensuring that patients have immediate electronic access to personal health data while respecting confidentiality, data minimization, and the right to mask sensitive information if national law allows.

The **EHDS Regulation** introduces a common legal and technical framework for sharing personal electronic health data within the Union. Key elements influencing Discharge Reports include:

1. Primary vs. Secondary Use

- a. Primary use covers direct patient care, guaranteeing that natural persons can easily access and share their DRs with authorized providers (Recital (9), Article 6).
- b. Secondary use addresses how aggregated or pseudonymized Discharge Report data may be leveraged for research, innovation, policymaking, and other societal benefits (Recitals (52)–(55)).

2. Cross-Border Infrastructure: MyHealth@EU

- a. The EHDS mandates that Member States connect to MyHealth@EU for cross-border health data exchange (Recitals (33)–(34), Article 11), ensuring DRs can be transmitted securely whenever patients receive treatment abroad.

3. Conformity Assessment of EHR Systems

- a. Under Chapter III of the Regulation, EHR systems – including those generating or handling Discharge Reports – may be subject to a self-certification scheme if they process “priority categories of electronic health data” (Recitals (36)–(40)).

4. Patient Rights and Access Control

- a. The Regulation reinforces the immediate, free-of-charge, machine-readable access to DRs for patients (Articles 3-4), plus restricting of access to particularly sensitive data elements for health professionals (Recitals (17)–(18), Article 8, Article 10).

5. Rights and obligations of Health Professionals

- a. The regulation enforces obligation of healthcare providers and professionals to record and update the DR (articles 11-12)
- b. Healthcare providers and professionals are obliged to register the DR

6. Obligations of Member States

- a. Member states shall establish electronic access services for patients to access the DR (Article 4)

- b. Member states shall establish health professional access services enabling access to the DR (Article 12)

3.5. HL7 FHIR Standards

HL7 standards play a crucial role in supporting the exchange of Discharge Reports through structured and interoperable formats. Two key standards, **FHIR (Fast Healthcare Interoperability Resources)** and **CDA (Clinical Document Architecture)**, have emerged as foundational tools for enabling real-time data sharing and document-based exchange.

HL7 FHIR offers a widely accepted modular approach to health data exchange. It allows Discharge Reports to be represented using specific FHIR resources. This modularity ensures that Discharge Reports can be easily integrated into diverse EHR systems while supporting real-time access through **RESTful APIs**. By defining FHIR profiles for Discharge Reports, consistency and semantic integrity can be maintained across different implementations.

3.6. OpenEHR

OpenEHR is focused on clinical data modelling and long-term management of clinical data repositories. The scope of OpenEHR is focused more on the EHR content and not so to the technical aspects of interoperability such as APIs and communication protocols. Regarding technical aspects of EHR exchange, OpenEHR can be integrated with different standards, including HL7 FHIR or IHE XDS. OpenEHR information models are based on archetypes and templates. Standards are focused document sharing and provide respective standards on metadata.

3.7. Gap Analysis

The implementation of Discharge Reports (DRs) within the European Health Data Space (EHDS) must accommodate both national workflows and cross-border interoperability. While existing deliverables – particularly the X-eHealth D5.5 guideline – offer a robust starting point, several critical gaps persist across technical, semantic, and legal dimensions. These affect both domestic and international data exchange.

1. Dataset Completeness and Structure

At the national level, many healthcare providers operate with tailored DR templates that vary by region or institution, resulting in inconsistent coverage of essential data elements. Cross-border exchange magnifies this issue, as the lack of a harmonised dataset can lead to incomplete or misinterpreted clinical information. Common challenges include missing follow-up instructions, imprecise discharge diagnosis structuring, or unclear clinical timelines. A unified core dataset aligned with EEHRxF is needed to ensure consistent interpretation across Member States.

2. Semantic Interoperability

National DRs frequently rely on country-specific terminologies and coding systems, some of which are not mapped to SNOMED CT or ICD-10. This impedes semantic alignment, particularly in cross-border use cases where healthcare professionals must interpret foreign DRs accurately. There is limited guidance on handling local code systems and no clear EU-level mechanism for mapping or translating codes at runtime.

3. Technical Specifications and Format Diversity

National implementations often differ in their technical architecture – some using HL7 CDA, others FHIR, and many with hybrid approaches. Cross-border interoperability demands strict alignment in how documents are structured and exchanged. Current standards like FHIR and CDA are robust but inconsistently applied, with missing or contradictory details on cardinality, data types, and required fields. This leads to fragile integrations and potential data loss during exchange.

4. Data Validation and Quality Assurance

Many national systems lack embedded validation mechanisms to check the completeness and correctness of DRs before transmission or storage. In cross-border settings, this exposes recipient systems to poor data quality, which can compromise clinical safety. Common omissions include incomplete timestamps, misclassified diagnoses, or missing discharge summaries. There is also a need for standard validation tooling that applies equally across countries.

5. Code System Cross-Mapping

Both nationally and internationally, one of the most pressing gaps is the absence of practical guidance on how to map national/local code systems to the recommended EU value sets. Without robust cross-mapping solutions, cross-border use cases and secondary use of DR data – especially

when aggregated from multiple sources – is compromised in terms of quality, comparability, and analytical utility.

6. Legal and Regulatory Harmonisation

National-level implementations vary in how they manage patient consent, identity verification, and audit logging. For cross-border exchange, this leads to legal uncertainty and variable compliance with GDPR and EHDS provisions. Many DR systems do not yet support advanced logging or access controls as required under Article 31 of the EHDS, and secure patient identification (e.g. via eIDAS) is not uniformly supported across borders.

4. IMPLEMENTATION GUIDES

This deliverable is developed in alignment with the **European Health Data Space (EHDS) Regulation**, which provides the legal and technical foundation for interoperable health data exchange across the EU. In accordance with **Article 15 - European electronic health record exchange format** of the EHDS Regulation, Task 7.3 focuses on the development of implementation guides for **Discharge Reports (DRs)** as part of the harmonised categories of electronic health data outlined in **Article 14(1)(f) - Priority categories of personal electronic health data for primary use - discharge reports**.

The implementation guides developed under this task will contribute directly to the advancement of the **European Electronic Health Record Exchange Format (EEHRxF)**. They are designed to support both national and cross-border use of Discharge Reports by specifying how EHR systems should structure, process, and exchange this document type in a way that ensures **interoperability, security, semantic alignment, and legal compliance**.

These guides will serve as a practical reference for implementers and system manufacturers preparing for the adoption of **implementing acts** defining common specifications for EHR systems under the EHDS. Particular attention is given to ensuring consistency with HL7 FHIR-based exchange models, the integration of terminologies such as SNOMED CT and ICD-10.

The implementation guides will cover:

- **Logical and technical data models** for Discharge Reports;
- **Interoperability requirements** across national and EU contexts;
- **FHIR profiles and APIs** supporting real-time data access;

This work package ensures that the implementation guides for Discharge Reports are fully compatible with the broader EEHRxF framework, and complements the work done in T7.1 (Medical test results, including laboratory and other diagnostic results and related reports) and T7.2 (Medical imaging studies and related imaging reports), thereby supporting a coherent and scalable model for electronic health information exchange in Europe. This work also aligned with work package 6 responsible for the Patient Summary, ePrescription and eDispensation domains.

4.1. Business And Functional Specifications

4.1.1 Business requirements for EHR systems

The lifecycle of **Discharge Reports (DR)** comprises multiple interrelated steps, involving various actors responsible for creating, exchanging, storing, and using these clinical documents. The primary business activities include the **generation, transmission or sharing, storage, retrieval,** and **use** of DRs. Each activity corresponds to distinct use cases within healthcare delivery, particularly relevant in cross-border as well as national contexts.

Generation of the Discharge Report:

The originating healthcare provider or institution creates the discharge document at the end of a patient's hospital or healthcare episode. The discharge document must be structured according to predefined standards and semantic rules, ensuring it includes all mandatory clinical and administrative information necessary for subsequent care.

Transmission or Sharing of the Discharge Report:

Once generated, the DR may be sent electronically to:

- Another healthcare provider (e.g., a general practitioner or specialist), who will continue the patient's care;
- A national or regional repository, maintaining patient-centric records accessible to authorised healthcare providers;
- A cross-border infrastructure, such as the MyHealth@EU network, facilitating continuity of care across Member States.

These transmissions must comply with standardised messaging protocols (such as HL7 FHIR documents), ensuring secure, interoperable, and traceable communication channels.

Storage and Maintenance:

Upon receipt, the DR may be securely stored by the recipient's EHR system or in centralised national repositories. This storage should include proper indexing with essential metadata (patient identity, date of discharge, originating facility, clinical summary codes) for efficient retrieval. Compliance with data protection regulations, audit logging, and access control requirements as defined by EHDS Regulation (Articles 31–33) must be ensured.

Retrieval and Use:

Authorised healthcare providers must be able to efficiently search, retrieve, and access stored DRs, using clear identifiers such as patient identity, healthcare encounter information, and relevant metadata. This supports immediate clinical decisions, continuity of care, and the preparation of follow-up actions. Retrieval mechanisms must adhere to access rules, auditing requirements, and relevant national and EU data protection standards (GDPR, EHDS).

These business activities and their associated use cases can be summarised as follows:

- **Actor 1 – Originating System:**

- Creation of structured, clinically validated Discharge Reports.
- Transmission of reports using standardised, secure communication methods (FHIR APIs).
- **Actor 2 – Receiving and Repository Systems:**
 - Secure storage, indexing, and maintenance of received DRs.
 - Application of metadata standards to support efficient retrieval.
- **Actor 3 – Consuming Systems:**
 - Secure retrieval and viewing of DRs for clinical use.
 - Integration of retrieved information into local clinical workflows and patient care planning.

4.1.2 Common Actors

This chapter describes actors involved in discharge report workflows. Actors represent abstract roles performed either by **business actors** (healthcare roles) or **technical actors** (systems and applications). This actor model follows the approach outlined by relevant Integrating the Healthcare Enterprise (IHE) profiles⁷ such as **Cross-Enterprise Document Sharing (XDS)** and **Patient Care Coordination (PCC)**.

4.1.3 Business Actors

Discharge Report Creator

An actor responsible for generating and finalising the Discharge Report (DR) following a patient care episode. Typically, this role corresponds to hospital-based or clinic-based information systems, which assemble structured clinical and administrative data into a DR. This actor maps to the technical actors: **Document Source**.

Discharge Report Repository

An actor responsible for storing Discharge Reports, maintaining them securely, and facilitating their access and retrieval by healthcare providers or patients. This repository can be local, regional, and national, supporting national and transnational cases (such as MyHealth@EU). The DR Repository publishes metadata and responds to retrieval requests from report consumers. It aligns with technical actors: **Document Source**, **Document Repository**, and **Document Registry**.

Discharge Report Consumer

The final user of the discharge report, typically representing clinical or patient-facing applications. This actor retrieves, views, and processes DR information for clinical follow-up, continuity of care, or patient self-management purposes. It maps directly to the technical actor: **Document Consumer**.

4.1.4 Technical Actors

Document Source

⁷ <https://www.ihe.net/resources/profiles/>

The Document Source creates and submits structured Discharge Reports. It sends these documents and associated metadata to the Document Repository for storage and indexing, enabling future retrieval by authorised healthcare providers, patients and/or their legal representatives.

Document Repository

The Document Repository securely stores DR. It maintains document persistence, assigns unique identifiers, and facilitates secure retrieval by Document Consumers. It registers stored documents with a Document Registry, ensuring their visibility within document-sharing infrastructures.

Document Registry

The Document Registry maintains metadata about each stored Discharge Report. This includes indexing information, patient identifiers, clinical coding data, and document locations (links to repositories). It handles queries from Document Consumers and enforces data access policies according to applicable regulations.

Document Consumer

The Document Consumer queries Document Registries based on patient identifiers, clinical criteria, or document attributes, retrieving the desired Discharge Reports from repositories. Typical implementations include healthcare provider EHR applications, cross-border health data portals, or patient health record applications.

4.1.5 General Requirements

This section outlines general requirements that apply to EHR systems involved in the generation, transmission, storage, and use of discharge reports. These requirements align with the EHDS Regulation, in particular Annex II and Chapter III, and ensure that interoperability, data quality, and safety objectives are met.

- Technical solutions for managing **Discharge Reports (DRs)** shall comply fully with **Chapter III** and **Annex II** of the EHDS Regulation (EU 2025/327). Annex II provides essential requirements for harmonised software components of EHR systems, especially concerning interoperability, data security, logging, and functional capabilities. WP5 and WP8 will describe the requirements common to all priority categories.
- In the context of discharge reports, it is essential to recognise that clinical information included in DRs must be structured consistently to ensure accurate interpretation across healthcare settings. Information must always be clearly associated with standardised clinical terminologies, including proper coding of diagnoses (e.g., ICD-10), procedures (e.g., SNOMED CT), medications, and follow-up instructions. Results from different sources or care episodes should be clearly differentiated, linked appropriately to the care context, and displayed in a structured manner that avoids misinterpretation or clinical ambiguity.

562 4.1.6 Generating of Discharge Reports

563 4.1.6.1 Use Case Description

564 **Table 2. Generate a discharge report use case description**

Title	Generate a Discharge Report (DR)
Purpose	This use case describes how healthcare providers generate structured electronic Discharge Reports upon completion of a patient's healthcare episode.
Relevance	Discharge Reports provide essential clinical information that ensures continuity of care, supports informed clinical decision-making, and reduces the risk of errors associated with manual data transcription. Structured electronic DRs facilitate timely, accurate, and reliable transfer of patient information to subsequent healthcare providers.
Domain	Hospital care (inpatient), outpatient visits, rehabilitation centres, or long-term care facilities, emergency care.
Situation	- Cross-border
	- National/Regional
	- Inter-organisational
	- Citizens at home and on the move
Context	This use case applies to any healthcare setting where structured Discharge Reports are generated, including hospitals, emergency departments, and outpatient facilities. DRs should include clearly structured data (demographics, diagnoses, procedures, medications, follow-up instructions). Quality management and validation processes are crucial for ensuring the accuracy, completeness, and clinical utility of discharge documentation. Standardised and structured DRs also support secondary data use for research, public health analysis, and policy-making.
Information	Discharge Reports, structured clinical summaries (including diagnoses, procedures, medications, follow-up care).
Participants	Discharge Report Creator (Clinical Information System, EHR), Document Source.
Preconditions	The healthcare encounter or episode of care has been completed, and clinical and administrative information has been validated and structured appropriately according to defined interoperability standards.
Functional Process Flow	1. The healthcare provider finalises clinical and administrative documentation at the conclusion of the patient's care episode.
	2. The EHR system (Discharge Report Creator) compiles and validates structured data into a Discharge Report (DR).
	3. Internal validation, quality checks, and clinical approval are performed.
	4. The validated DR is electronically signed and securely transmitted to intended recipients or repositories.
	5. The receiving system securely stores, indexes, and ensures DR accessibility for authorised retrieval.

Title	Generate a Discharge Report (DR)
	Different workflow variations may exist, reflecting clinical urgency, care setting, or specific organisational processes.

4.1.6.2 Sending / Providing a DR

Table 3. Sending/Providing a DR use case description

Title	Sending/Providing a Discharge Report (DR)
Purpose	This use case describes how healthcare providers securely send or share a completed electronic Discharge Report (DR) with intended recipients, such as other healthcare professionals, general practitioners, or patient-accessible repositories.
Relevance	Secure and timely transmission of DRs ensures efficient communication between healthcare providers, supports continuity of care, reduces clinical risk, and enhances patient safety.
Domain	Hospital care (inpatient/outpatient), Emergency care
Situation	- Cross-border
	- National/Regional
	- Inter-organisational
Context	The use case covers the secure electronic transmission or sharing of DRs using standardised data exchange protocols (e.g., HL7 FHIR) and infrastructures (e.g., national health networks, MyHealth@EU).
Information	Structured Discharge Reports, clinical summaries
Participants	Discharge Report Creator (EHR, Clinical Information System), Document Source, Document Repository
Preconditions	The Discharge Report has been finalised, clinically validated, electronically signed, and prepared according to interoperability standards.
Functional Process Flow	1. The Discharge Report Creator (Document Source) securely sends the DR using standard protocols (FHIR APIs or CDA documents).
	2. The recipient system (e.g., Document Repository, healthcare provider) securely receives and acknowledges the DR.
	3. Receipt confirmation and audit logging are performed, ensuring compliance with regulatory requirements.

4.1.6.3 Storing of the DR

Table 4. Storing of the DR use case description

Title	Storing of the Discharge Report (DR)
Purpose	This use case describes secure and structured storage of electronic Discharge Reports in local, regional, or national repositories, enabling future access and use.

Title	Storing of the Discharge Report (DR)
Relevance	Proper storage of DRs supports ongoing patient care, facilitates clinical decision-making, ensures regulatory compliance, and enables secondary data uses.
Domain	Hospital care (inpatient/outpatient), Emergency care
Situation	- National/Regional
	- Cross-border (MyHealth@EU)
	- Inter-organisational
Context	Securely storing Discharge Reports involves structured indexing, metadata tagging (e.g., patient identifiers, clinical codes, timestamps), robust access control, and data protection compliant with GDPR and EHDS requirements.
Information	Structured Discharge Reports, indexed clinical documents
Participants	Document Repository, Document Registry
Preconditions	Discharge Report has been received by the repository; DR is validated, indexed, and tagged with metadata according to applicable standards.
Functional Process Flow	1. Received DR is validated, indexed, and securely stored by the Document Repository.
	2. Metadata is registered with the Document Registry for efficient retrieval and access control.
	3. Regular backups, security checks, and compliance audits are performed.

4.1.6.4 Searching and retrieving the DR

Table 5. Searching and retrieving the DR use case description

Title	Searching and Retrieving the Discharge Report (DR)
Purpose	This use case describes how authorised users (healthcare providers, patients, or authorised representatives) search, retrieve, and access electronic Discharge Reports stored in repositories.
Relevance	Efficient retrieval of DRs ensures rapid clinical decision-making, effective follow-up care, patient empowerment through direct access, and supports transparency in healthcare provision.
Domain	Hospital care (inpatient), outpatient visits, rehabilitation centres, or long-term care facilities, emergency care.
Situation	- Cross-border
	- National/Regional
	- Inter-organisational
	- Citizens at home or on the move
Context	Authorised users must securely query document registries and retrieve Discharge Reports using patient identifiers, clinical criteria, or timestamps. The process ensures compliance with GDPR, EHDS requirements, and patient consent rules.
Information	Structured Discharge Reports, clinical summaries, metadata
Participants	Document Consumer (healthcare provider applications, patient portal), Document Registry, Document Repository

Title	Searching and Retrieving the Discharge Report (DR)
Preconditions	Discharge Reports are securely stored, indexed, and available in the repository; proper user authorisation and authentication are in place.
Functional Process Flow	1. The Document Consumer initiates a query to the Document Registry using search criteria (patient ID, date, clinical conditions).
	2. The Document Registry identifies relevant DR metadata and returns results.
	3. The Document Consumer securely retrieves selected DR(s) from the Document Repository.
	4. Audit logging and access tracking are performed in compliance with security regulations. 5. Display to User: The retrieved Discharge Report is rendered in a viewer compliant with EEHRxF specifications, allowing the recipient to view structured clinical data in a readable and semantically accurate format.

4.1.6.5 Viewing the DR

Table 6. Viewing the DR use case description

Title	Viewing or Displaying the Discharge Report (DR)
Purpose	This use case describes how authorised recipients — including healthcare professionals and patients — access and view structured Discharge Reports within a compliant interface (e.g. EHR system, national portal, patient-accessible service). The focus is on human-readable presentation while preserving the structure and metadata of the EEHRxF document.
Relevance	Viewing the DR is essential for clinical usability, enabling follow-up care, patient empowerment, and ensuring data transparency. This step also validates that the EEHRxF is correctly implemented from the user experience perspective. It supports EHDS principles of accessibility, portability, and understandability of personal electronic health data.
Domain	Hospital care (inpatient), outpatient visits, rehabilitation centres, or long-term care facilities, emergency care.
Situation	- Cross-border
	- National/Regional
	- Inter-organisational
Context	Authorised users interact with clinical applications, EHRs, national viewers, or patient portals to display the DR. These systems must support structured presentation of the DR content, potentially using rendering logic from FHIR resources, ensuring clarity and correctness.
Information	Structured Discharge Reports in a human-readable format, including clinical summaries, coded and narrative sections, metadata, timestamps.
Participants	Document Consumer (healthcare provider applications, patient portal), Document Registry, Document Repository, User (Healthcare Professional or Patient).

Preconditions	<p>The DR is already retrieved or accessible from the repository.</p> <p>The viewing system supports rendering of FHIR-based or CDA-based discharge reports.</p> <p>User is authenticated and authorised.</p>
Functional Process Flow	1. The user initiates a request to view the DR from their EHR system or portal.
	2. The Document Consumer retrieves and parses the DR (in FHIR format).
	3. The system renders a human-readable presentation using appropriate stylesheets or embedded narratives.
	4. User reviews the discharge information (e.g. diagnoses, treatments, medications, follow-up plan).
	5. (Optional) User downloads or prints the DR; system logs access for audit purposes.

575

576 4.1.7 Standard Discharge Report Workflow

577 After completing the patient care episode, including all required clinical validation and quality
578 assurance procedures, the healthcare provider generates a structured Discharge Report, marks it
579 as **"final"**, and sends it to designate recipients or repositories. The final DR may also be stored in a
580 local or regional EHR repository.

581 All clinical elements within the DR (diagnoses, procedures, medications, instructions) must be
582 verified and marked as "final" or explicitly indicated if cancelled.

583 4.1.8 Preliminary (Partial) Discharge Report Workflow

584 In specific cases, the DR may be released before finalisation, for instance, when certain clinical
585 results, procedures, or documentation details are pending, yet urgent preliminary information must
586 be communicated promptly to the next healthcare provider.

587 In this scenario, the DR status is set to **"preliminary"** or **"partial"**, indicating the incomplete or
588 unverified nature of some included clinical data.

589 4.1.9 Amended Discharge Report Workflow

590 If a finalised DR requires modification after initial release – such as updates to clinical information,
591 corrections of errors, or additional follow-up instructions – the status must be updated accordingly.
592 Depending on the specific modifications, the DR is marked as **"amended"**, **"corrected"**, or
593 **"appended"**.

594 4.1.10 Cancelled Discharge Report Workflow

595 Under circumstances where a DR cannot be generated (e.g., patient left against medical advice,
596 administrative errors, system failure), the DR should be explicitly marked as **"cancelled"**, with a
597 clear statement detailing the reasons.

4.1.11 Entered-in-error Discharge Report Workflow

If a DR was mistakenly generated or released, the report status must be updated to **"entered-in-error"**. This indicates that the entire DR is invalid and should not be used for clinical decision-making. If real-world clinical activities have already occurred based on the erroneous report, the status should instead be set to **"cancelled"**.

4.1.12 Discharge Report Statuses

Discharge Reports may exist in several distinct states throughout their lifecycle. Implementing systems must handle these states carefully, ensuring appropriate management and communication of report updates or retractions.

Table 7. Discharge Reports Statuses

State	Description
Registered	Report creation initiated; no content available yet.
Partial	Preliminary or incomplete report; some clinical data are missing or awaiting verification.
Preliminary	Early results or clinical information verified; finalisation pending additional content or verification.
Final	Report complete and clinically verified by an authorised person.
Amended	Subsequent modifications made to report after finalisation (clinical updates, instructions added).
Corrected	Errors identified and corrected after finalisation.
Appended	Additional clinical information appended post-finalisation; existing verified content unchanged.
Cancelled	Report unavailable due to incomplete care episode or administrative/process error.
Entered-in-error	Entire report invalidated due to erroneous creation; should not have existed.

4.1.13 Clinical Data Statuses within DR

Individual clinical data elements within a DR (diagnoses, procedures, medications) may also have their own lifecycle statuses, independent yet linked to the overall report status.

Table 8. Clinical Data Statuses within Discharge Reports

State	Description
Pending	Clinical data identified but result or verification not yet available.
Preliminary	Initial or interim clinical data; incomplete or pending further validation.
Final	Clinical data verified and finalised.

State	Description
Amended	Clinical data modified post-finalisation (updates or corrections).
Corrected	Clinical data corrected due to errors discovered post-finalisation.
Cancelled	Clinical data unavailable due to incomplete measurement, procedure or documentation.
Entered-in-error	Clinical data invalidated entirely; should not have existed.

4.1.14 Consistency Rules between Report and Clinical Data Statuses

The following table outlines consistency rules for linking DR status with the status of individual clinical data elements:

Table 9. Consistency Rules between Report and Clinical Data Statuses

Report Status	Report Status Description	Clinical Data Status Consistency Rules
Registered	Report initiated; no content yet.	ALL clinical data status: registered or cancelled.
Partial	Preliminary, incomplete DR.	SOME data: preliminary, final, or cancelled; others pending verification.
Preliminary	Early verified content; awaiting completion.	SOME data finalised or preliminary; ALL verified or explicitly cancelled.
Final	Fully complete and verified DR.	ALL clinical data elements final and verified; SOME explicitly cancelled.
Amended	Modifications post-finalisation.	SOME clinical data amended, corrected, or entered-in-error.
Corrected	Error corrections after finalisation.	SOME clinical data corrected or entered-in-error.
Appended	Additional information added; existing data unchanged.	ALL original clinical data final and verified; additional appended content.
Cancelled	Report cancelled due to incomplete clinical event.	ALL clinical data elements cancelled.
Entered-in-error	Entire report withdrawn as invalid.	ALL clinical data marked as entered-in-error.

4.1.15 Functional Requirements

The following minimal functional requirements apply to all EHR systems managing Discharge Reports:

• Subject of Care Identification

- Discharge Reports (DR) SHALL clearly identify the patient using standardised patient identifiers consistent with EHDS and national regulations.

- 626 • **Structured and Coded Content**
- 627 ○ DR SHALL be structured according to defined dataset specifications (EHDS Annex II).
- 628 ○ Clinical elements (diagnoses, procedures, medications) SHALL use standard coding
- 629 systems (e.g., ICD-10, SNOMED CT, ATC).
- 630 ○ Human-readable format MUST be provided alongside structured and coded data to
- 631 facilitate interpretation during the transition period until full structured interoperability is
- 632 established.

633 • **Workflow and Status Management**

- 634 ○ Systems generating DR SHALL comply with defined workflows and status transitions
- 635 (final, preliminary, amended, cancelled, entered-in-error), ensuring proper lifecycle
- 636 management.

637 • **Data Quality and Integrity**

- 638 ○ Systems SHALL ensure the clinical accuracy, completeness, and integrity of DR data.
- 639 ○ All changes to DR post-finalisation MUST be logged, version-controlled, and clearly
- 640 distinguishable.

641 4.1.16 Conformity Requirements

642 The following minimal conformity requirements apply to all EHR systems managing Discharge

643 Reports:

644 • **Compliance with EHDS Regulation**

- 645 ○ Systems SHALL conform to minimal data-level obligations specified in EHDS Regulation
- 646 (Articles 14, 15, 36, and Annex II).

647 • **Logging and Security**

- 648 ○ Systems SHALL implement robust logging mechanisms capturing access,
- 649 modifications, and data transmission activities in line with EHDS Regulation (Annex II,
- 650 Article 3.2).
- 651 ○ Systems SHALL ensure secure access control and data transmission, complying with
- 652 GDPR and EHDS Annex II.

653 4.2 Semantic Specifications (Code Systems and Values)

654 4.2.1 Standards and Compliance:

655 Semantic interoperability for Discharge Reports (DR) is essential for clinical clarity, effective

656 healthcare delivery, and safe patient management. This chapter outlines the semantic

specifications, leveraging prior foundational work such as the **X-eHealth Hospital Discharge Reports Guideline and Functional Specifications (D5.5)**, and aligns closely with existing standards such as **HL7 FHIR** which is widely adopted for health information exchange.

Semantic interoperability of DR must fully comply with the European Health Data Space (EHDS) Regulation (EU 2025/327), specifically addressing the secure and seamless exchange of structured clinical data across Member States.

Moreover, DR consist of data elements that are transversal across different domains. As such, all domains were analysed to foster harmonization, with the goal of ensuring consistency in how identical data elements are coded for the health data exchange, as defined in the EEHRxF.

4.2.2 Discharge Report Data Model (Composition and Observations):

The discharge report data model consists primarily of structured clinical information represented through the HL7 FHIR **Composition** resource, containing detailed sections of clinical relevance. Individual clinical findings, diagnoses, procedures, and medication details are represented using specialised FHIR **Observation**, **Condition**, **Procedure**, and **MedicationStatement** resources.

Key Elements of the DR Model:

- **Patient Identification:** Uniquely identifies the patient subject using standard identifiers (e.g., eIDAS-compatible patient identifiers).
- **Clinical Entries:**
 - Diagnoses and clinical findings, coded primarily using ICD-10 and SNOMED CT.
 - Procedures performed, coded using SNOMED CT.
 - Medications prescribed or recommended, coded for example using ATC classification.
- **Dates and Timestamps:** Clearly documented episode dates, discharge dates, and timestamps for each clinical entry.
- **Narrative Sections:** Structured narrative (textual) summaries accompanying the coded clinical information to enhance human readability and interpretation.
- **Observation Relationships:** Clearly defined relationships linking clinical observations (e.g., complications triggered by a procedure), adhering to standard FHIR relationships such as "triggeredBy" or "hasMember."

4.2.3 Preferred Code Systems:

The following internationally recognised terminologies and code systems have been selected for semantic representation in Discharge Reports:

4.2.4 ICD-10 (International Classification of Diseases, 10th Revision):

- Primary system for diagnosis coding, ensuring consistent identification of diseases, symptoms, and clinical findings across healthcare settings.
- Maintained by WHO, widely adopted and translated into multiple EU languages.

4.2.4.1 SNOMED CT (Systematized Nomenclature of Medicine Clinical Terms):

- Comprehensive clinical terminology providing a detailed and structured representation of clinical findings, procedures, medications, and body structures.
- Complements ICD-10 by offering detailed semantic expressivity, particularly for procedures and clinical observations.

4.2.4.2 ATC Classification (Anatomical Therapeutic Chemical):

- International standard for classifying active ingredients of medications, ensuring consistent and unambiguous medication reporting in DRs.

4.2.4.3 UCUM (Unified Code for Units of Measure):

- Standard for representing units of measurement within clinical observations (e.g., dosages, physiological measurements), supporting accurate clinical interpretation and computational comparability.

4.2.4.4 HL7 Terminology:

- Internal HL7-defined terminologies utilised within FHIR profiles for administrative and status elements, ensuring consistent semantic interpretation and interoperability across different EHR systems.

4.2.4.5 LOINC (Logical Observation Identifiers Names and Codes)

- Standard for identifying laboratory and clinical observations, often used for test results, measurement procedures, and panels.
- Supports harmonisation of laboratory data and observational content in discharge documentation.

4.2.4.6 EDQM (European Directorate for the Quality of Medicines)

- Provides terminology for pharmaceutical dose forms and routes of administration.
- Recommended to ensure accurate representation of dispensed or administered medications.

4.2.4.7 UCUM (Unified Code for Units of Measure)

- A coding system for unambiguous expression of units in medical measurements (e.g. mg/L, bpm).
- Enhances accuracy and machine-readability in numerical data elements (e.g. lab values, vitals).

4.2.4.8 SPOR SMS (Substance, Product, Organisation and Referential Management Service – Substance Management System)

- EU-level reference for consistent identification of substances used in medicinal products.
- Supports alignment with EMA pharmacovigilance and ePrescription requirements.

4.2.4.9 Orphacode

- Standard coding system for rare diseases developed by Orphanet.
- Supports accurate identification of rare conditions, often underrepresented in ICD-10.

4.2.4.10 European Medical Devices Nomenclature (EMDN)

- Nomenclature system for classification of medical devices, relevant when devices are mentioned in discharge reports (e.g. implanted devices).
- Enables alignment with EU regulations on medical devices and traceability.

4.2.4.11 NPU (Nomenclature for Properties and Units):

- Standard for structured laboratory results, particularly in Nordic countries.
- May be used in parallel or mapped to LOINC to enhance regional interoperability.

4.2.5 Value Sets for Discharge Reports:

The selection and management of permissible values (value sets) for structured data elements within DR is guided by prior European-level interoperability initiatives, notably **X-eHealth** and **MyHealth@EU** specifications.

The EHDS implementation act mandates specifications that facilitate both cross-border and national/local implementations. This introduces complexity, as value sets must accommodate varying scopes, healthcare practices, and multilingual settings. To address this complexity, value sets in DR combine:

- **Pre-coordinated coding** (simple data models using singular codes representing complex concepts, e.g., ICD-10 codes for diagnoses)
- **Post-coordinated coding** (complex data models combining multiple codes to express detailed clinical attributes, e.g., SNOMED CT compositional grammar for detailed procedures or clinical findings).

Value sets for DR are maintained centrally, with ongoing maintenance essential for regulatory compliance, clinical accuracy, and semantic interoperability.

4.2.6 Long-term Maintenance of Value Sets and Interoperability Assets:

All semantic specifications, including code systems and value sets, require continuous maintenance and evolution over time to remain clinically relevant and compliant with regulatory changes. This maintenance demands sustained engagement from clinical experts and authoritative standards bodies.

Currently, such maintenance is partially provided by volunteer-driven groups, standards bodies, and expert communities including:

- WHO Collaborating Centres (ICD-10 maintenance)
- SNOMED International (SNOMED CT management and governance)

- HL7 Europe (HL7 standards, FHIR profiles, terminology management)
- European Medicines Agency and WHO Collaborating Centre for Drug Statistics Methodology (ATC coding)

To ensure sustainable and authoritative semantic maintenance, dedicated European-level initiatives or organisations with sufficient resources and clinical expertise may need to be established or strengthened. Collaboration with these entities will ensure long-term compliance, interoperability, and clinical validity of discharge-related semantic resources. As mentioned, maintaining the EEHRxf will require a robust management process for code systems and standards, with clear version control and analysis. This management process will involve defined roles and responsibilities for overseeing updates, a systematic review process to evaluate changes, and a validation mechanism to ensure the quality of the updates. Additionally, if multiple code systems are in use, it will be crucial to ensure proper mapping between national and international code systems to guarantee compatibility with the EU single market. A detailed mapping strategy, ideally supported by automated tools, will help align the systems and address potential discrepancies. Regular monitoring will ensure that national code systems stay synchronized with international standards over time. Achieving convergence on agreed-upon code systems and standards will be essential for promoting interoperability across the EU. A well-defined roadmap, with clear phases, timelines, and stakeholder engagement, will help guide the adoption of these standards. This roadmap will also include communication and training resources to ensure stakeholders can navigate the changes and understand the EU's long-term vision for healthcare interoperability.

4.3 Technical Specifications

4.3.1 Standards and Profiles for Exchange of Electronic Health Data

4.3.1.1 Architectural Considerations

The technical specifications detailed in this section are tailored explicitly for Discharge Reports (DR) within Electronic Health Record (EHR) systems, focusing on interoperability across EU Member States. These specifications define data capture, storage, and transmission formats compatible with existing EHR systems and enable integration with emerging digital healthcare technologies.

4.3.1.2 Integration with Existing Health Services

Technical solutions developed for DR shall be integrated effectively with related healthcare services, particularly Patient Summaries, to offer a comprehensive and unified view of patient healthcare data across multiple points of care.

Close coordination and compatibility with national health IT infrastructures, MyHealth@EU cross-border services, and EU-wide initiatives such as eHMSEG will ensure that DR are accessible and transferable, enabling seamless patient mobility between healthcare providers in different EU countries.

797 4.3.2 Data Exchange Protocols
 798 4.3.2.1 Protocol Standards

799 For Discharge Reports, the following exchange protocols and standards shall be adopted:

- 800 • **HL7 FHIR R4** – recommended as the primary interoperability standard, facilitating real-time
 801 access and exchange of structured DR data.
- 802 • **IHE XDS.b (Cross-Enterprise Document Sharing)** – endorsed for document registry and
 803 repository interactions, enabling secure, indexed, and federated data exchanges.

804 4.3.2.2 Transport Layer Security

805 Secure data transmission shall strictly adhere to:

- 806 • **Transport Layer Security (TLS) v1.2 or higher** – ensuring encrypted data communication
 807 between systems.
- 808 • **Virtual Private Networks (VPN)** – recommended for additional network-level security when
 809 applicable or mandated by specific healthcare environments.

810 4.3.3 Data Format and Structure

811 4.3.3.1 Data Models

812 Discharge Reports shall follow standardized and interoperable data models as explicitly outlined
 813 in the Xt-EHR Logical Information Models: [Xt-EHR FHIR IG for Discharge Reports](#)⁸:

814 The FHIR Implementation Guide (IG) defines the **Composition** resource as the main structure for
 815 Discharge Reports, consisting of:

Composition	The overarching container encapsulating all clinical content of the Discharge Report, including metadata about author, patient, encounter, and sections.
Patient	Detailed patient demographic and identification data.
Encounter	Information about the hospital stay or clinical episode, including admission, discharge, and care periods.
Condition	Structured clinical diagnoses and conditions observed during hospitalization.
Procedure	Clinical procedures performed during hospitalization.
MedicationStatement and MedicationRequest	Structured details of medications administered during hospital stay and medications recommended upon discharge.

⁸ Please note that HL7 Europe ballot for Hospital Discharge Report FHIR IG (R4) takes place **June 15 to August 31, 2025**. This will likely impact the logical model shown in the document.

Observation	Clinical measurements, assessments, and other observations relevant to the patient's care episode.
AllergyIntolerance	Documented allergies or adverse reactions relevant to patient care.
CarePlan	Clinical plans detailing follow-up actions or treatments after discharge. Clinical plans detailing follow-up actions or treatments after discharge.

Detailed profiles and structure definitions of these resources ensure consistency and semantic interoperability across EU implementations.

4.3.3.2 File Formats

Discharge Report data shall be exchanged using standardized formats:

- **JSON** – primary format for real-time data exchange via FHIR APIs.
- **XML** – alternative acceptable format, particularly for CDA document-centric exchanges.

4.3.4 Interoperability Requirements

4.3.4.1 EHR Integration

DR interoperability shall support seamless integration with various EHR systems by ensuring compliance with established FHIR profiles defined in the Xt-EHR IG, facilitating consistent data interpretation across different vendors and national infrastructures.

4.3.4.2 API Specifications

Systems exchanging DR data must implement and comply with standardized API specifications:

- FHIR RESTful APIs for real-time data retrieval, updating, and querying DR resources, aligned with HL7 FHIR R4 specifications outlined in the Xt-EHR IG.
- Document-based API interactions using CDA documents, where applicable, supporting existing document-centric workflows.

4.3.5 Authentication and Authorization

4.3.5.1 Identity Management

Authentication and authorization mechanisms shall be consistent with EU-level identity management frameworks, explicitly incorporating:

- **OAuth2.0** – for secure delegation of user authorization and access.
- **SAML 2.0** – recommended for federated identity management across institutional and cross-border environments, ensuring identity trustworthiness and interoperability.

4.3.5.2 Access Controls

Role-based Access Control (RBAC) mechanisms shall be enforced to ensure strict control over access and modifications of Discharge Report data, as mandated by EHDS regulation. RBAC implementations must clearly define roles, permissions, and audit logging for each access event.

4.4 Data Models

Data models described here provide a formal, computable representation of the DR dataset. These deliverable employs both conceptual and logical data models, each serving different purposes:

- **Conceptual Model** – captures the overarching clinical concepts and interactions within the discharge domain, supporting high-level understanding among clinical stakeholders.
- **Logical Model** – defines detailed and structured data elements, their relationships, and constraints necessary for technical implementers and software developers.

The logical data models for DR, precisely specified in the Xt-EHR FHIR IG, include:

- **Composition (Discharge Report Profile)**
Clearly defines sections such as discharge diagnosis, performed procedures, discharge medications, recommendations, and follow-up plans.
- **Patient Profile**
Detailed specification of patient demographic and identity data.
- **Encounter Profile**
Structured representation of admission, discharge dates, locations, and providers involved.
- **Condition Profile**
Specification of clinical diagnoses, coded primarily with ICD-10 and SNOMED CT.
- **Procedure Profile**
Detailed coding of performed clinical procedures using SNOMED CT.
- **MedicationStatement and MedicationRequest Profiles**
Structured details of administered and recommended medications, coded using ATC, among other as aligned with PS and eP/eD.
- **Observation Profile**
Representation of clinical observations, measurements, and assessments with clear linkage to specific encounters and patient context.
- **AllergyIntolerance Profile**
Detailed representation of documented allergies and adverse reactions.
- **CarePlan Profile**
Structured plans for ongoing patient care post-discharge, including follow-up actions and recommendations.

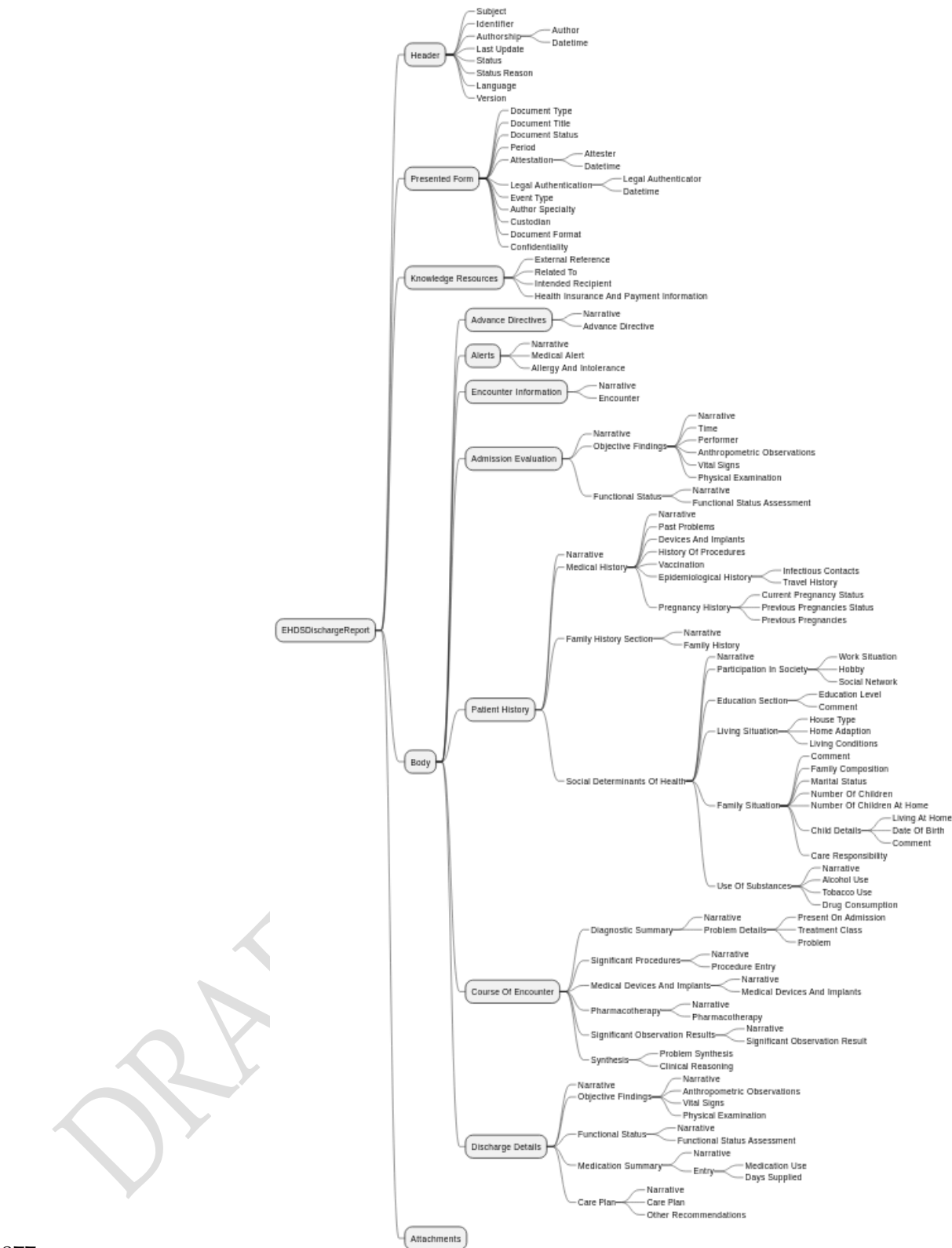
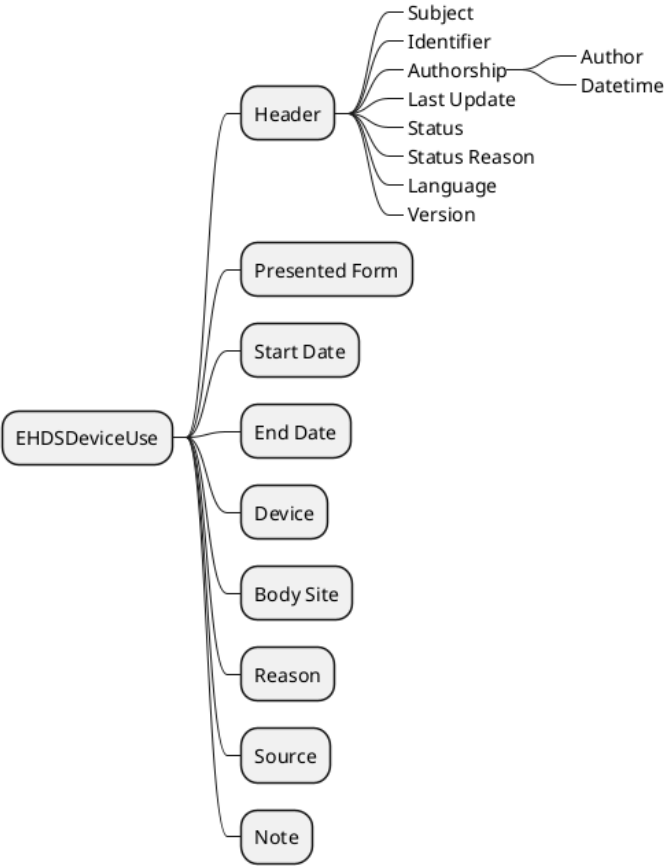
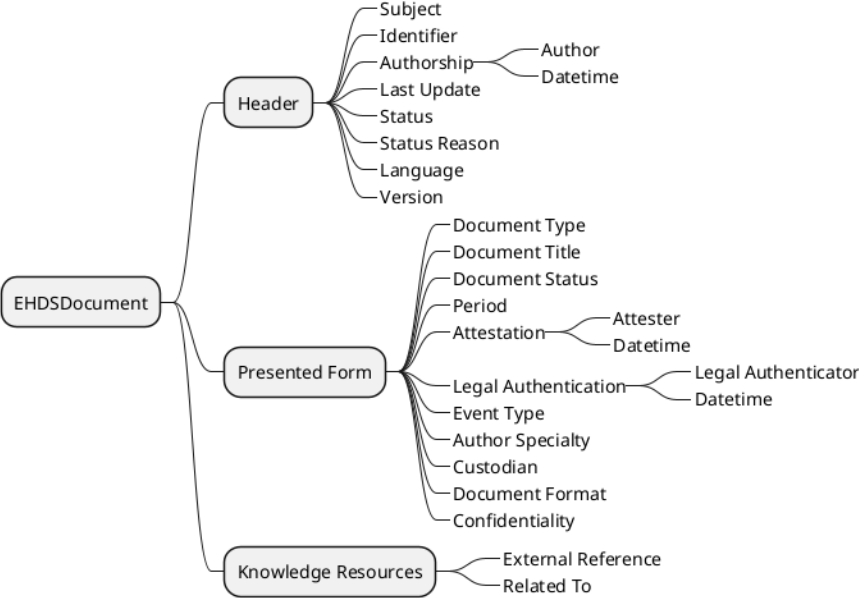


Figure 1 Discharge Report Conceptual Model – General Elements.

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882
883 **Figure 2 Discharge Report Conceptual Model – EHDSDeviceUse.**



884
885 **Figure 3 Discharge Report Conceptual Model – EHDSDocument.**

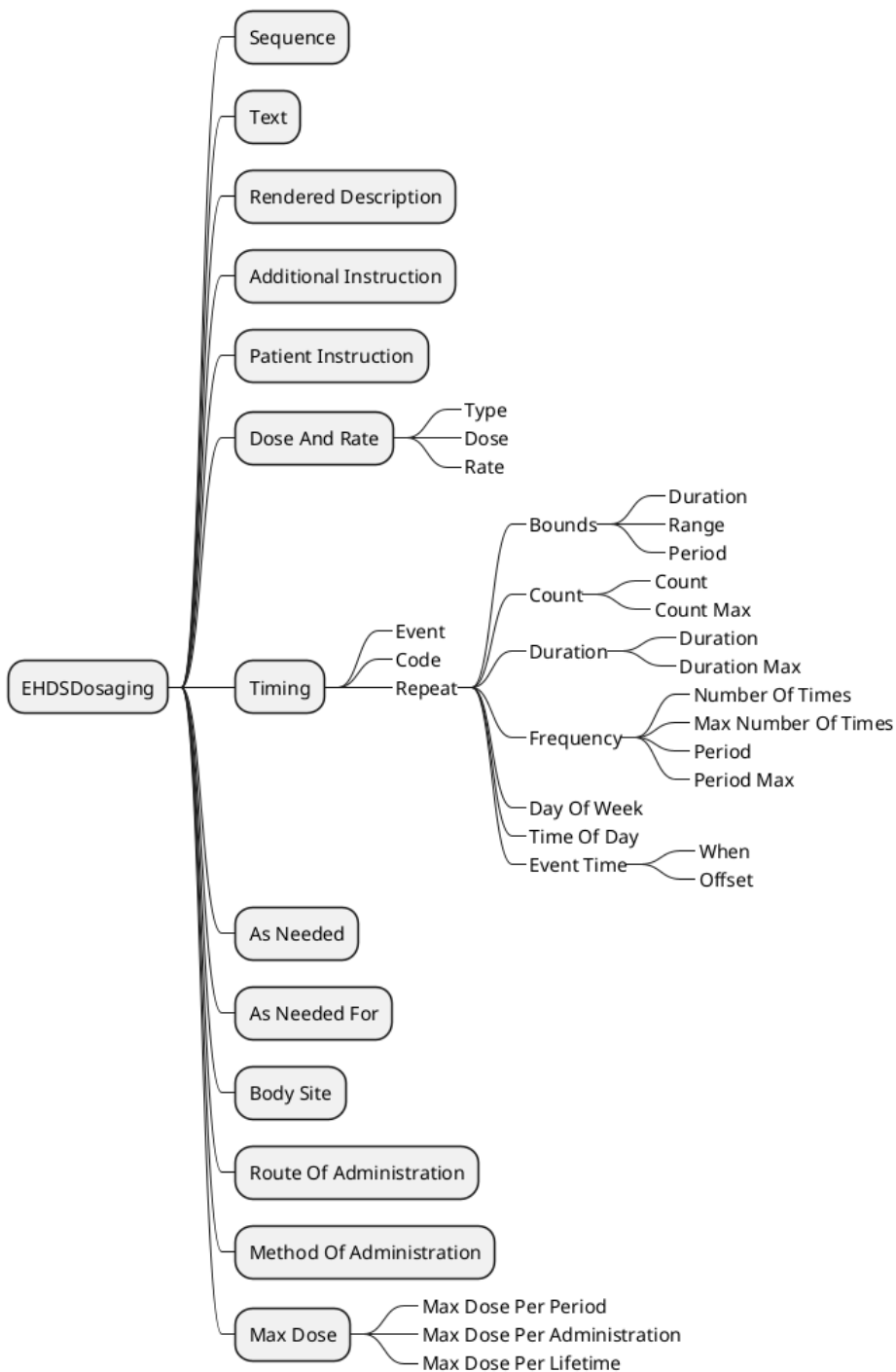


Figure 4 Discharge Report Conceptual Model – EHDSDosaging.

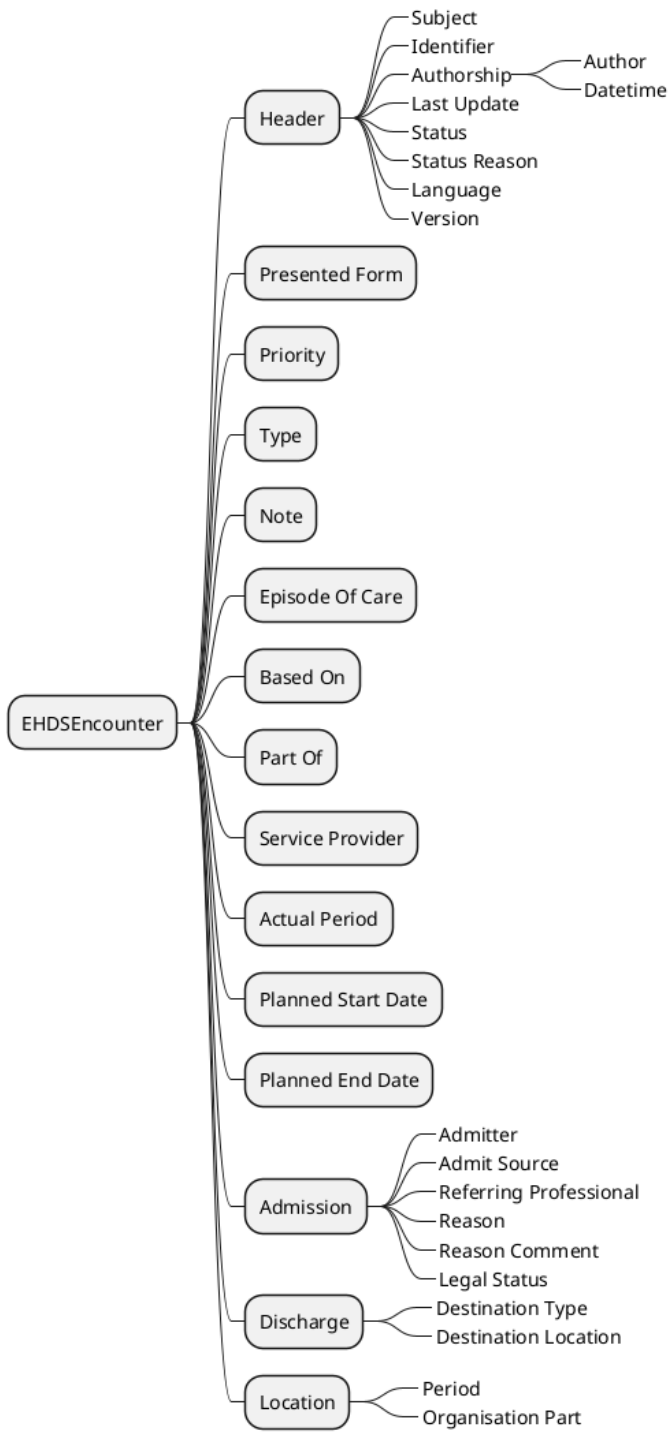


Figure 5 Discharge Report Conceptual Model – EHDSEncounter.

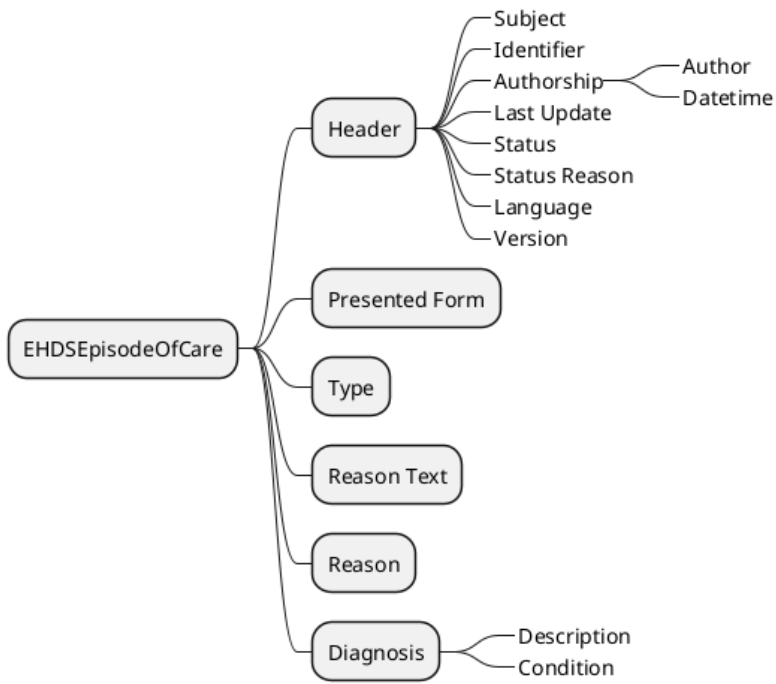


Figure 6 Discharge Report Conceptual Model – EHDSEpisodeOfCare.

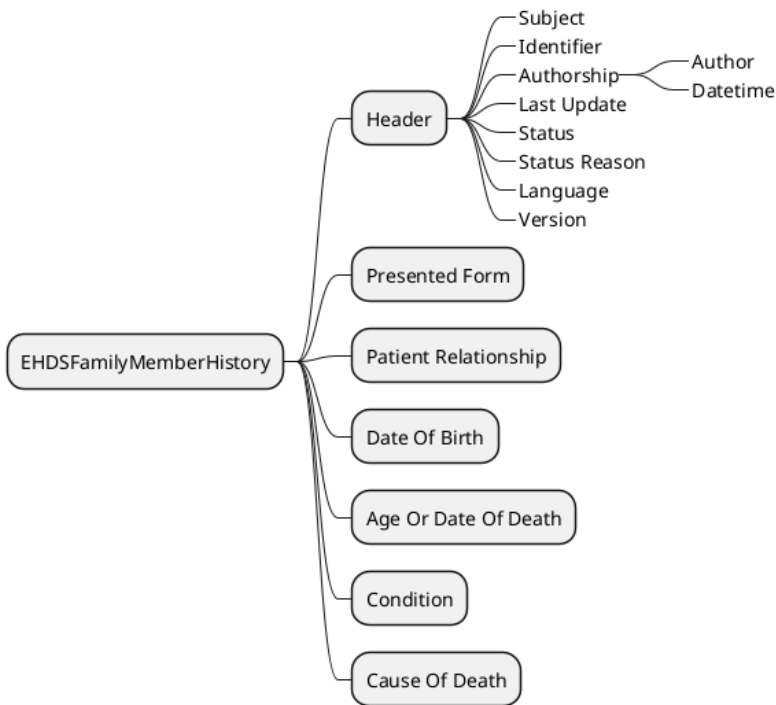


Figure 7 Discharge Report Conceptual Model – EHDSFamilyMemberHistory.

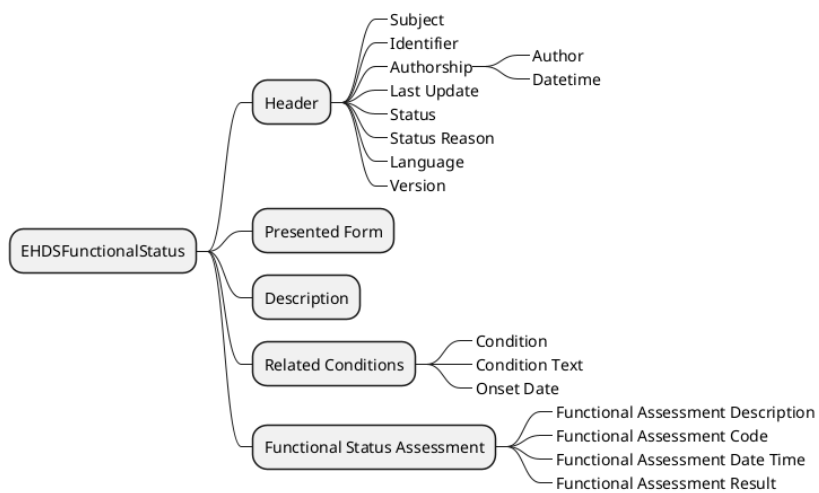


Figure 8 Discharge Report Conceptual Model – EHDSFunctionalStatus.

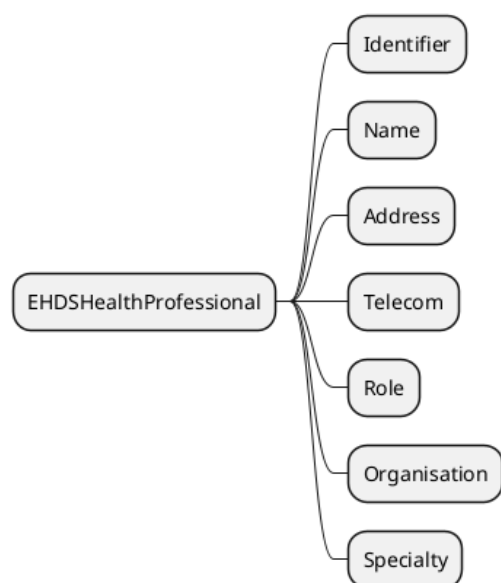


Figure 9 Discharge Report Conceptual Model – EHDSHealthProfessional.

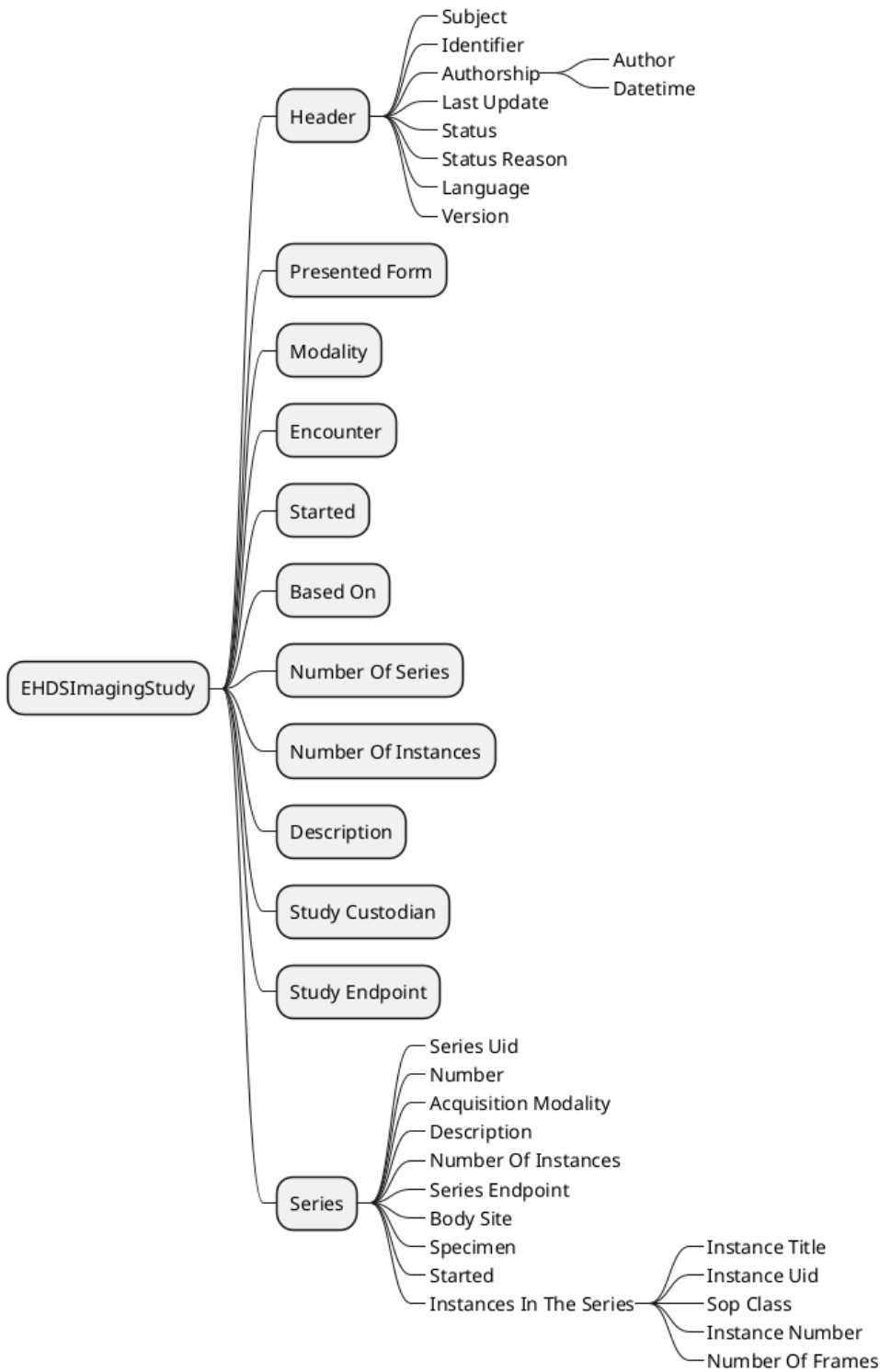


Figure 10 Discharge Report Conceptual Model – EHDSImagingStudy.

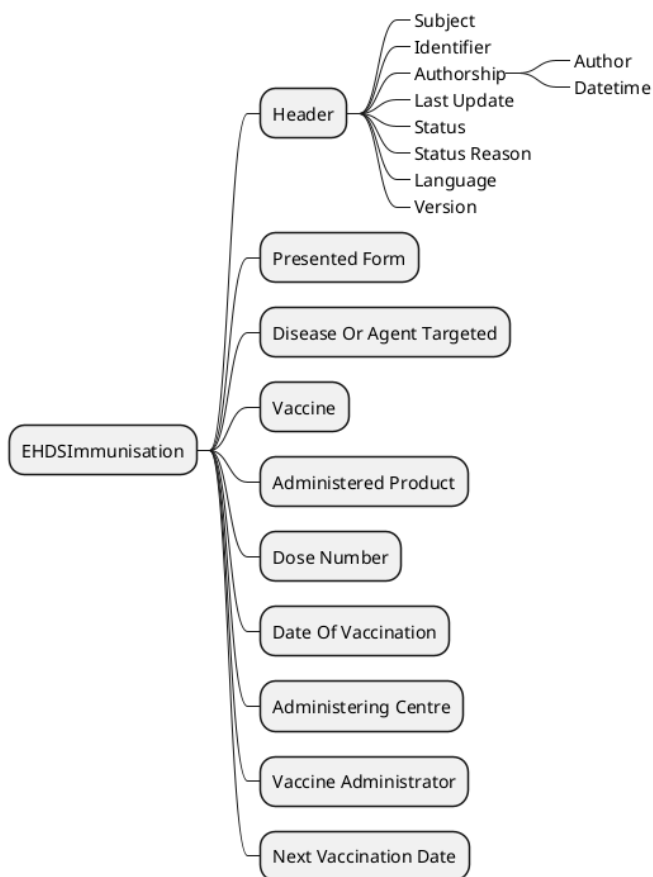


Figure 11 Discharge Report Conceptual Model – EHDSImmunisation.

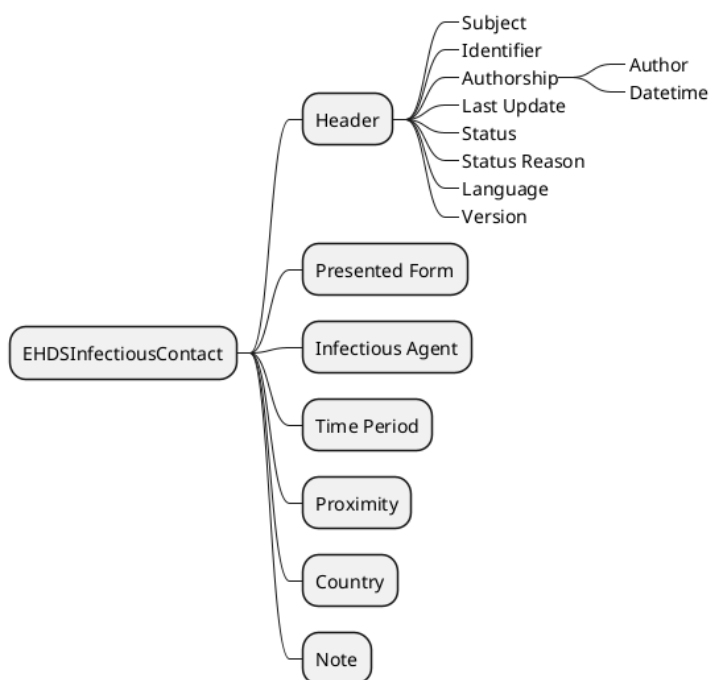


Figure 12 Discharge Report Conceptual Model – EHDSInfectiousContact.

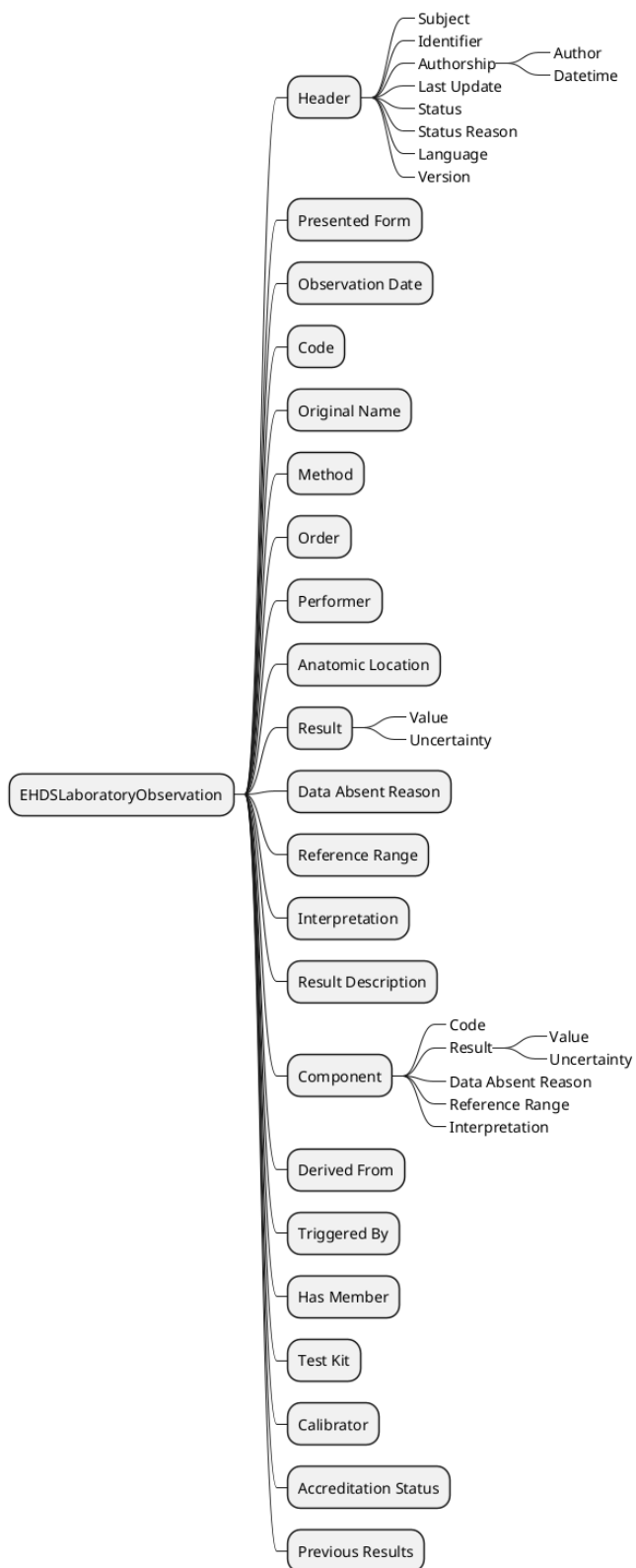


Figure 13 Discharge Report Conceptual Model – EHD Laboratory Observation.

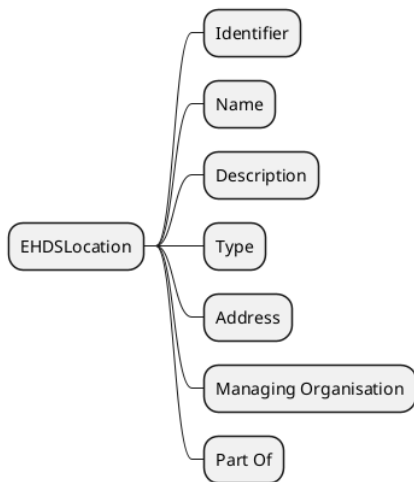


Figure 14 Discharge Report Conceptual Model – EHDSLocation.

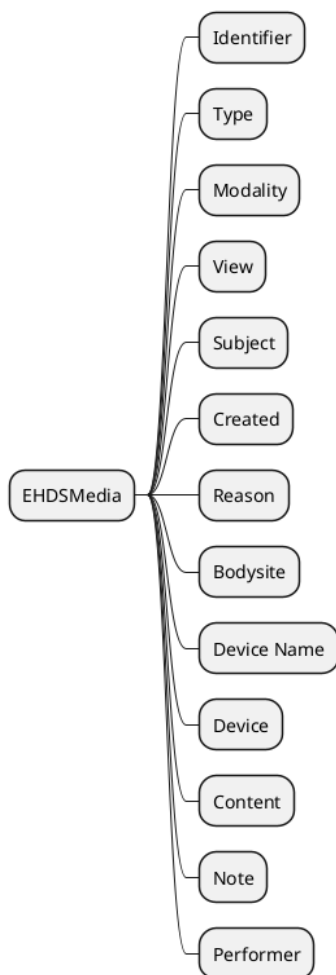


Figure 15 Discharge Report Conceptual Model – EHDSMedia.

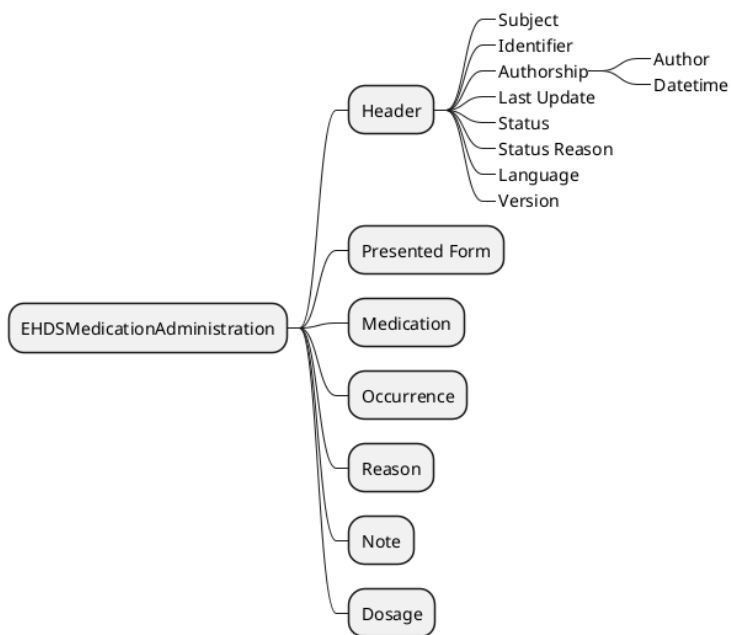


Figure 16 Discharge Report Conceptual Model – EHDSMedicationAdministration.

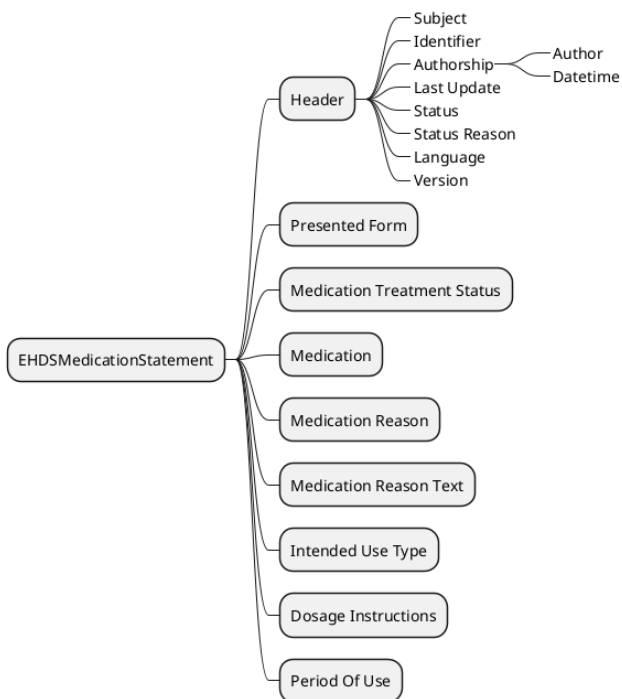


Figure 17 Discharge Report Conceptual Model – EHDSMedicationStatement.

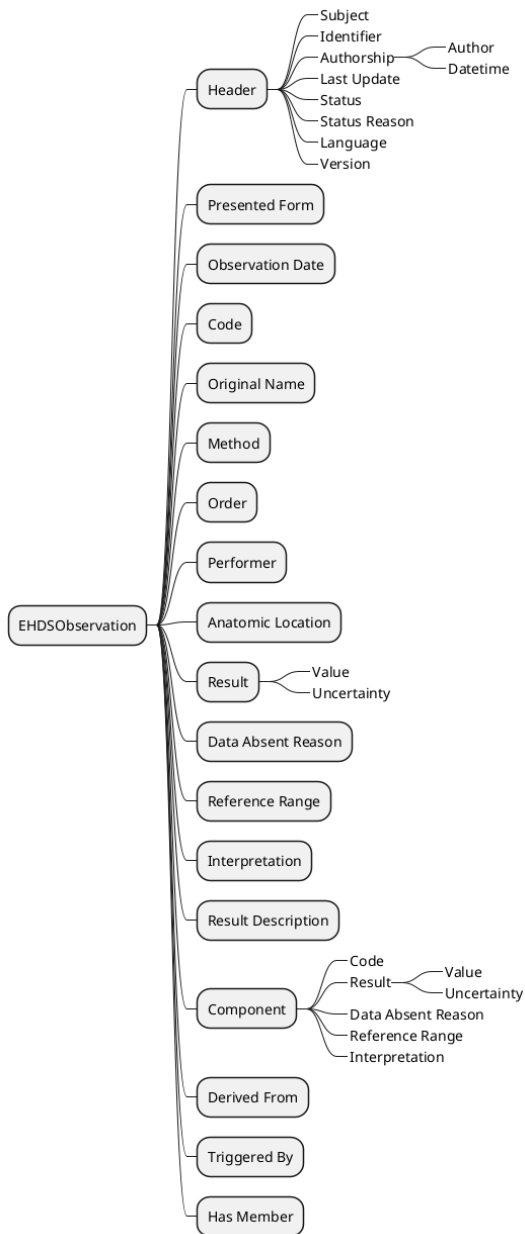


Figure 18 Discharge Report Conceptual Model – EHDSObservation.

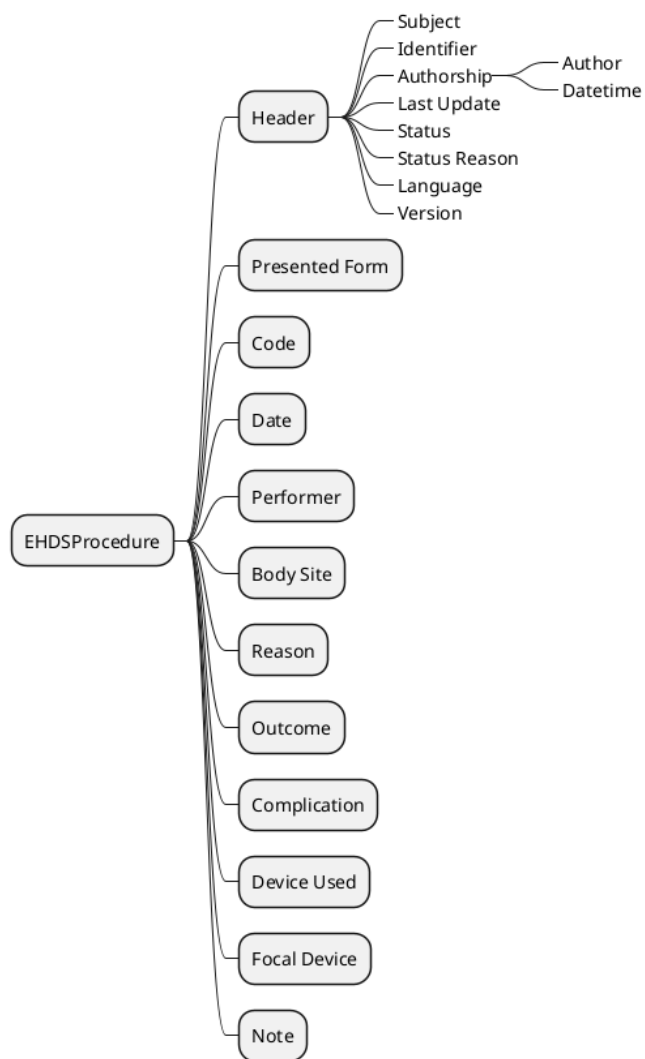


Figure 19 Discharge Report Conceptual Model – EHDSPcedure.

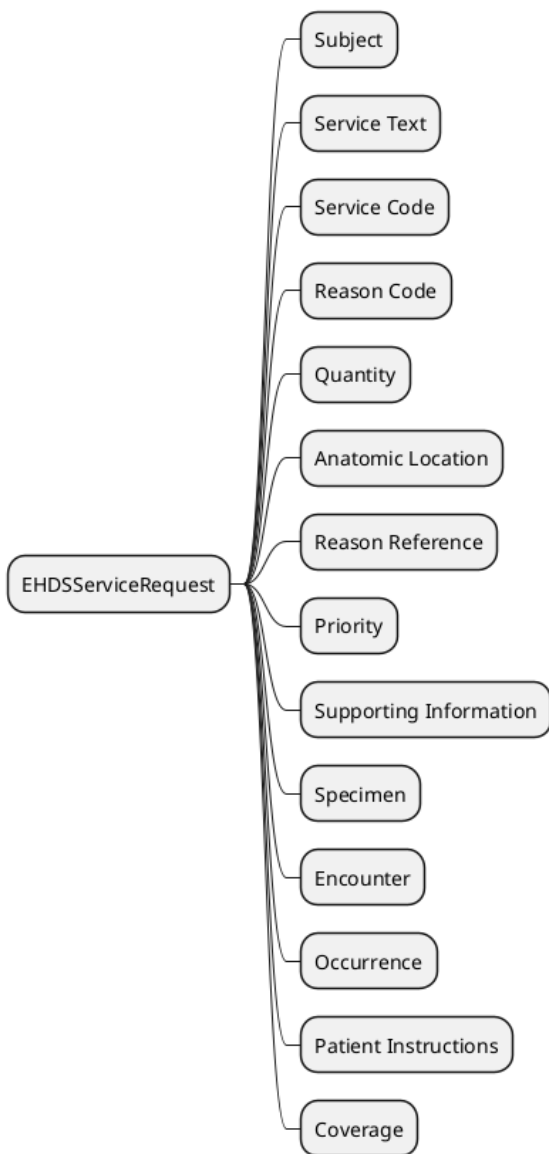


Figure 20 Discharge Report Conceptual Model – EHDSServiceRequest.

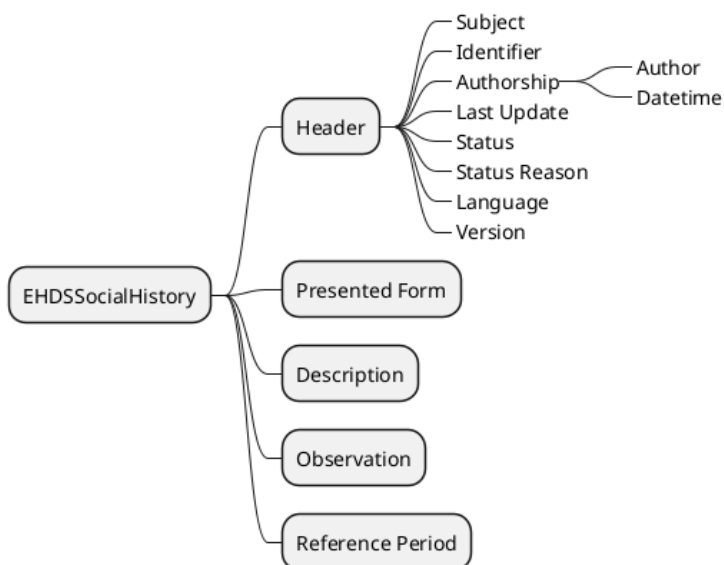


Figure 21 Discharge Report Conceptual Model – EHDSSocialHistory.

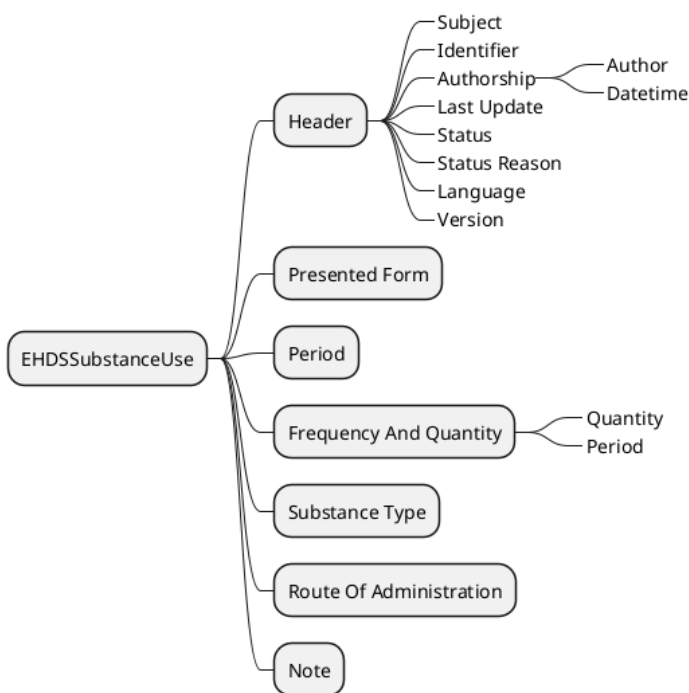


Figure 22 Discharge Report Conceptual Model – EHDSSubstanceUse.

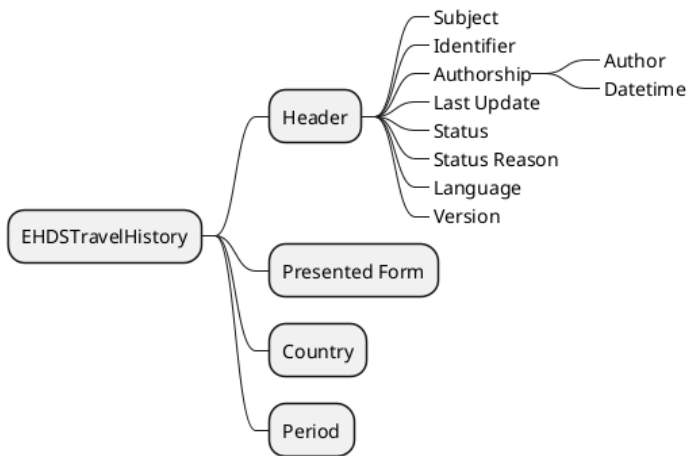


Figure 23 Discharge Report Conceptual Model – EHDSTravelHistory.

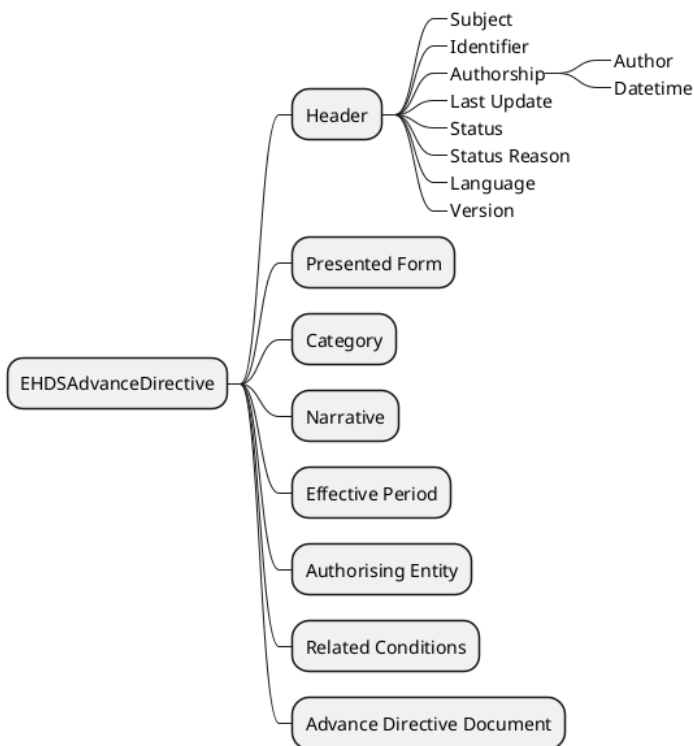


Figure 24 Discharge Report Conceptual Model – EHDSAAdvanceDirective.

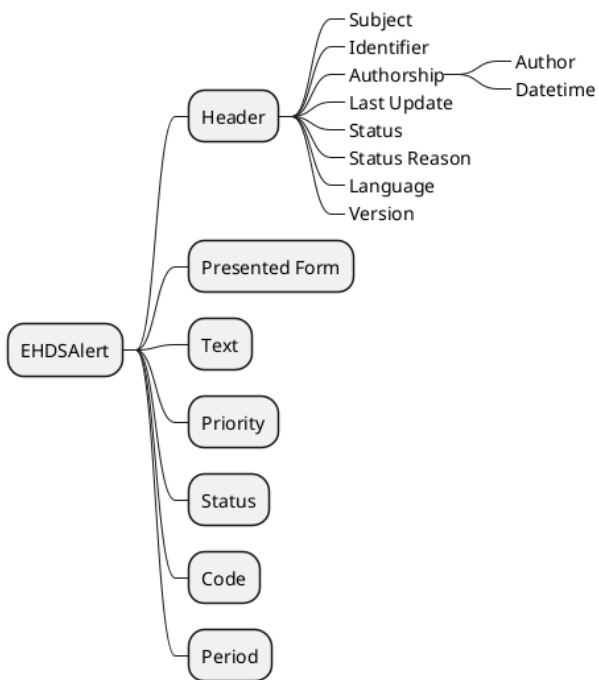


Figure 25 Discharge Report Conceptual Model – EHDSAlert.

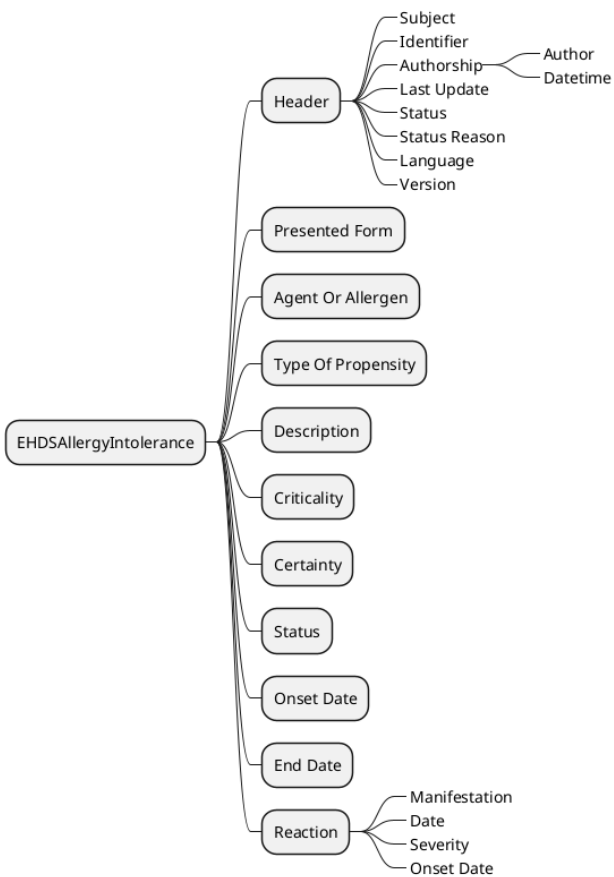


Figure 26 Discharge Report Conceptual Model – EHDSAllergyIntolerance.

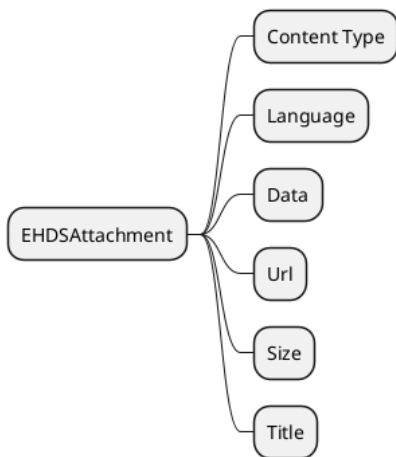


Figure 27 Discharge Report Conceptual Model – EHDSAttachment.

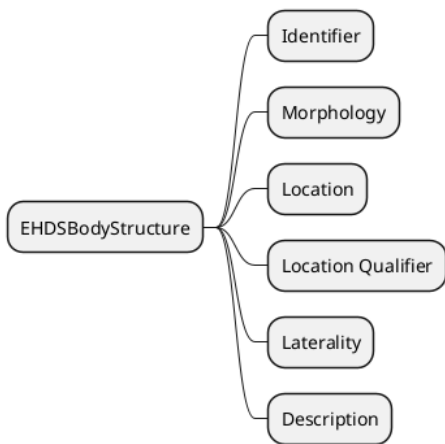
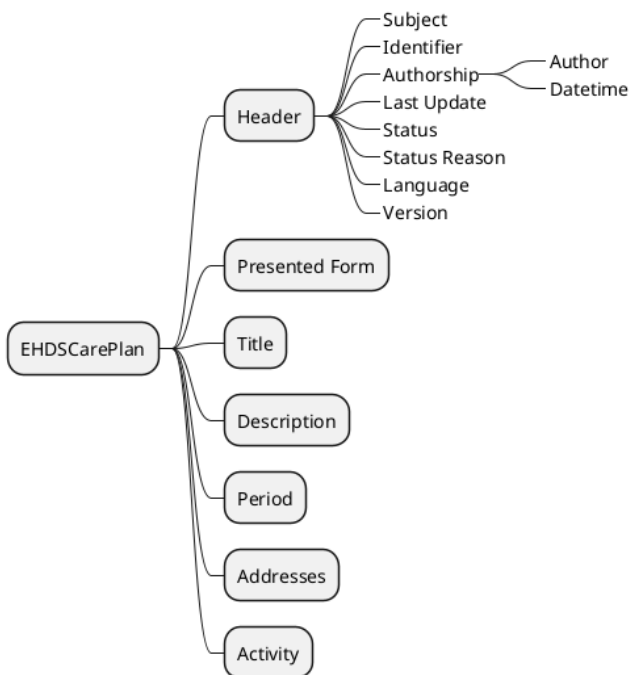
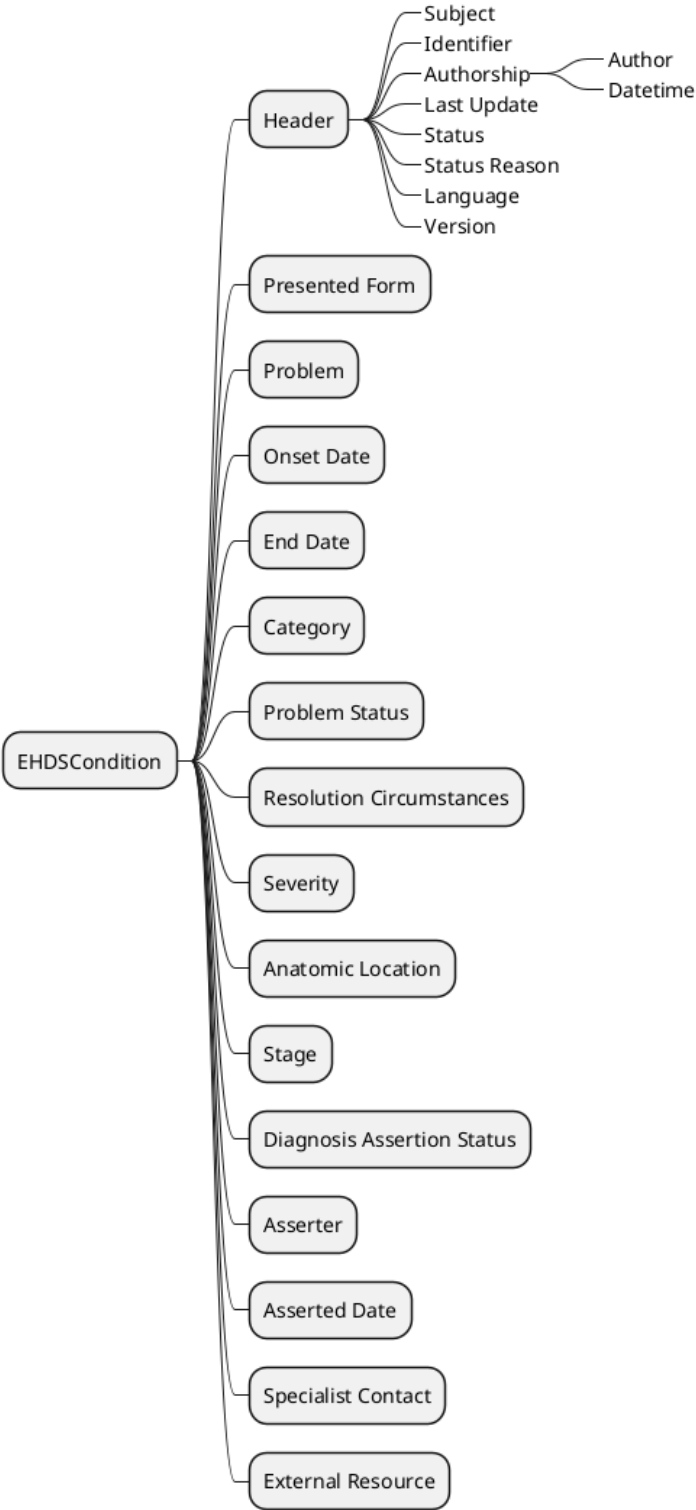


Figure 28 Discharge Report Conceptual Model – EHDSBodyStructure.



941 **Figure 29 Discharge Report Conceptual Model – EHDSCarePlan.**



942
943 **Figure 30 Discharge Report Conceptual Model – EHDSCCondition.**

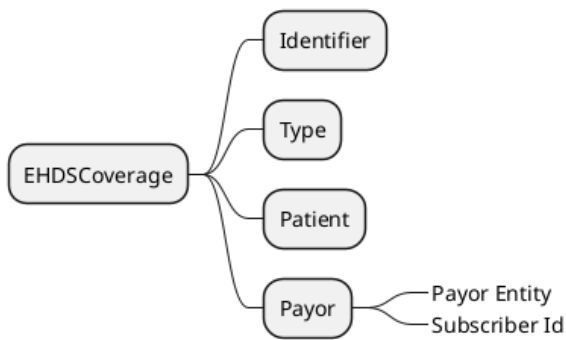


Figure 31 Discharge Report Conceptual Model – EHDSCoverage.

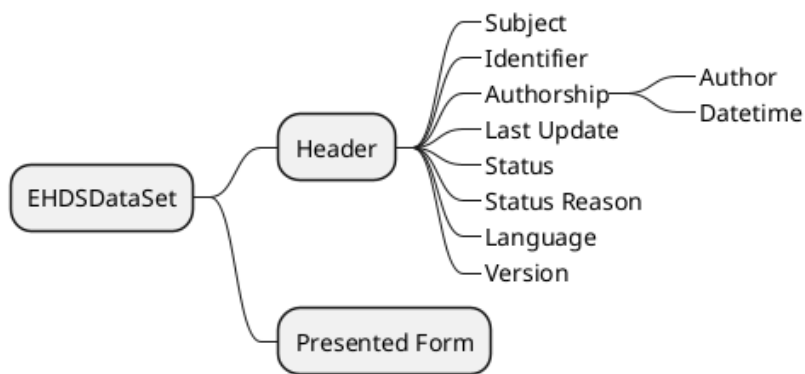


Figure 32 Discharge Report Conceptual Model – EHDSDataSet.

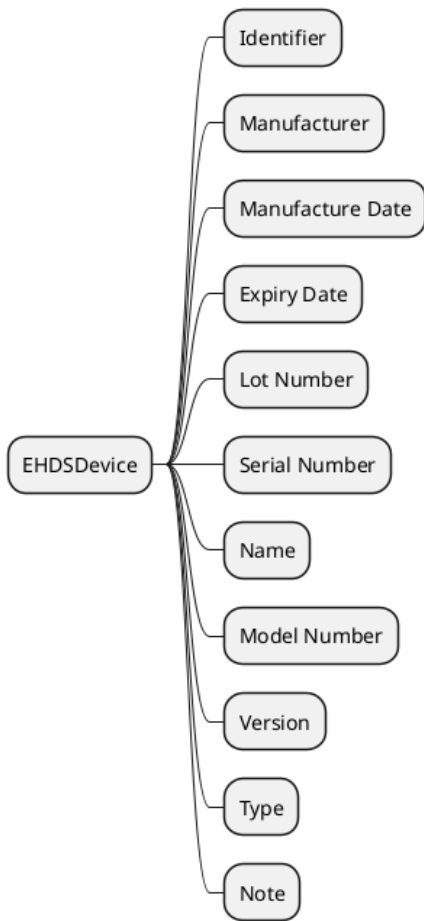


Figure 33 Discharge Report Conceptual Model – EHDSDDevice.

4.4.2 Logical Data Model

Detail logical data model has been created and published in the form of FHIR Implementation Guide (IG) and could be inspected online on the following address: <https://build.fhir.org/ig/Xt-EHR/xt-ehr-common/useCaseHospitalDischargeReport.html>.

965 4.4.3 Logical Data Model - Datasets

966 **Data model:**

967 The Discharge Report data set represents a structured collection of business requirements related
 968 to inpatient and outpatient discharge documentation. This data set has been developed leveraging
 969 existing resources, particularly the Xt-EHR HL7 FHIR Implementation Guide (IG) for Hospital
 970 Discharge Reports. The data set provides a refined and detailed representation of each data
 971 element, specifying clear information regarding cardinality, data types, and recommended coding
 972 systems.

973 The adopted modelling approach ensures a normalized data set. Each complex data element is
 974 separately defined in reusable partial models, thereby avoiding redundancy seen in the earlier eHN
 975 Guidelines. This method greatly enhances consistency, simplifies maintenance efforts, and
 976 promotes reusability of data models across various healthcare documentation use cases,
 977 extending well beyond the domain of discharge reports.

978 The Discharge Report data set is detailed through tabular representations outlining the document's
 979 structure and components. The data types used are described in a series of tables below and the
 980 columns in the detailed description tables are as follows:

- 981 • **No.:** defines the internal numbering system used in this report to indicate the relationships
 982 between data elements (e.g., 1.1 is subset of 1), where:
- 983 ○ A: refers to Header-related data elements
 - 984 ○ B: refers to Body-related data elements
 - 985 ○ C: refers to common data elements between domains
- 986 • **Cardinality:** Specifies the required presence and permitted occurrences of each data element.
- 987 • **Data Element:** The explicit name and hierarchical path within the logical model.
- 988 • **Description:** Clarification and contextual explanation of each data element's purpose and use.
- 989 • **Data Type:** Defines the format and nature of the data element values.
- 990 • **Preferred Code System:** Recommended standard terminologies or classification systems to
 991 ensure semantic interoperability.

992 **Table 10 Data types to used in the data set specification.**

Logical data types	Description	Standard
Backbone Element	Represents a class (a complex data type)	
DateTime	A date, date-time or partial date (e.g. just year or year + month) as used in human communication.	ISO 8601-1:2019
Date	A date, or partial date (e.g. just year or year + month) as used in human communication.	ISO 8601-1:2019
Time	A time during the day, in the format hh:mm:ss. There is no date specified.	ISO 8601-1:2019
Timestamp	Instant in time. This is intended for when precisely observed times are required (typically system logs	ISO 8601-1:2019

Logical data types	Description	Standard
	etc.), and not human-reported times. ISO-8601 pattern for UTC, "yyyy-MM-ddTHH:mm:ss'Z'"	
Coded	Reference to a terminology or just text.	
Identifier	A string, typically numeric or alphanumeric, that is associated with a single object or entity within a given system. Identifier should have unique value within a given system.	
Human name	A name of a human with text, parts and usage information.	ISO TS 22220
String	A sequence of characters.	
url	A Uniform Resource Locator.	
Numeric	A data type representing any number.	
Integer	A data type representing a signed integer number.	
Decimal	Rational numbers that have a decimal representation.	
Binary	A stream of bytes, base64 encoded.	
Text	A human-readable narrative that may be, between others, used to represent the content of the resource to a human.	
Quantity	A measured amount (or an amount that can potentially be measured).	
Logical	Logical true or false statement representation.	
Period	A time period defined by a start and end date/time.	
Codedonly	Reference to a terminology.	
Reference	A reference from one resource to another.	
Ratio	A relationship between two Quantity values expressed as a numerator and a denominator.	
Codeable Reference	This datatype allows for either a reference or a concept (expressed by class), or both.	
Resource	<p>A resource is an entity that:</p> <ul style="list-style-type: none"> • has a known identity by which it can be addressed • identifies itself as one of the types of resource defined in this specification • contains a set of structured data items as described by the definition of the resource type • has an identified version that changes if the contents of the resource change 	

994 4.4.4 Discharge Report Data Model

995 **Table 11. Discharge Report Data Model**

No.	Cardinality	Data element	Description	Data type
A	1..1	Discharge Report	DischargeReport	Backbone Element
A.1	1..1	Discharge Report Header	Discharge Report Header Data Elements	Discharge Report Header
A.2	0..1	Discharge Report Body	Discharge Report Body Data Elements	Discharge Report Body

996

997 4.4.5 Discharge Report Header

998 **Table 12. Discharge Report Header**

No.	Cardinality	Data element	Description	Data type	Preferred Code System	Model type
A.1	1..1	Report header	Report header data elements	Backbone Element		-
A.1.1	1..1	Subject	Patient/subject information	Patient		Common
A.1.2	0..*	Related person	Patient/subject guardian and related person information	Related person		Administrative
A.1.3	0..*	Preferred Health Professional	Preferred health professional (HP) – This section can be repeated and linked to any specific information in the document, for example a link between a rare disease problem and the rare disease specialist responsible for the care of the individual patient (this section).	Health professional, Organization		Administrative
A.1.4	0..*	Health insurance and payment information	Health insurance information (Health insurance information is not always required, however, in some jurisdictions, the insurance number is also	Coverage		Administrative

No.	Cardinality	Data element	Description	Data type	Preferred Code System	Model type
			used as the patient identifier. It is necessary not just for identification but also forms access to funding for care).			
A.1.5	0..*	Intended recipient	Information recipient (intended recipient or recipients of the report, additional recipients might be identified by the ordering party, e.g. GP, other specialist), if applicable.	Reference (Patient, Related person, Health professional, Organization, Device)		Administrative
A.1.6	1..*	Authorship	Information about author or authors of the document.	Backbone Element		Common
A.1.6.1	1..1	Author	Author by whom the document was/were authored. Multiple authors could be provided.	Health professional		
A.1.6.2	1..1	DateTime	Date and time of the last modification of the document by its Author.	dateTime		
A.1.7	0..*	Attestation	Document attestation details	Backbone Element		Common
A.1.7.1	1..1	Attester	Attester who validated the document. Multiple attesters could be provided.	Health professional		
A.1.7.2	1..1	DateTime	Date and time of the approval of the document by Attester.	dateTime		
A.1.8	0..1	Legal authentication	Document legal authentication	Backbone Element		Common
A.1.8.1	1..1	Legal authenticator	The person taking responsibility for the medical content of the document	Health professional		
A.1.8.2	1..1	DateTime	Date and time when the document was authorized.	dateTime		
A.1.9	1..1	Document metadata	Data relevant to document type and its content for administrative and searching purposes.	Backbone Element		
A.1.9.1	1..1	Document ID	Unique identifier of the document	Identifier		

No.	Cardinality	Data element	Description	Data type	Preferred Code System	Model type
A.1.9.2	1..1	Document type	Identifies the type of document at hand, e.g. Hospital discharge report.	Coded	LOINC	
A.1.9.3	1..1	Document status	The status of the document/report. E.g., preliminary, final.	Coded	hl7:CompositionStatus, hl7:DiagnosticReportStatus	
A.1.9.4	0..1	Period	Documented period service. Typically used for searching purposes.	Period		
A.1.9.5	1..1	Report date and time	Date and time of the report creation.	dateTime	ISO 8601	
A.1.9.6	1..1	Document title	Document title, such as "Hospital discharge report", "Laboratory Result Report" etc..	string		
A.1.9.7	0..*	Event type	Categorization of an "event" covered by the document (e.g. laboratory study types, imaging study types including modality, etc.). Selection of event types depends on the use case and agreement between data sharing parties. This meta-data element serves primarily for searching and filtering purposes.	Coded	LOINC, SNOMED CT, dicom-cid-33-Modality	
A.1.9.8	0..*	Specialty	Additional details about where the content was created (e.g. clinical specialty)	Coded	SNOMED CT	
A.1.9.9	1..1	Report custodian	Organisation that is in charge of maintaining the report [this element will include organisation ID, name, address etc., as other elements describing organisations].	Organization		
A.1.9.10	0..1	Document format	An identifier of the document constraints, encoding,	Coded	HL7 Document	

No.	Cardinality	Data element	Description	Data type	Preferred Code System	Model type
			structure, and template that the document conforms to beyond the base format indicated in the mimeType.		Format Codes	
A.1.9.1.1	0..1	Confidentiality	Level of confidentiality of the document. Implicit value is normal.	Coded	hl7:Confidentiality	
A.1.9.1.2	0..1	Language	Language in which the document is written. Language is expressed by the IETF language tag.	Coded	BCP 47	
A.1.9.1.3	0..1	Version	Version of the document	string		

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1000 4.4.6 Discharge Report Body

EHDSAddress									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
A	EHDSAddress	EHDS Address	Address model	EHDS refined base model for Address structure		0..*			
A.1	.use	Use	Purpose of the address	Purpose of the address	CodeableConcept	0..1	HL7 Address Use	preferred	

A.2	.type	Type	Distinguishes between physical addresses (those you can visit) and mailing addresses (e.g. PO Boxes and care-of addresses). Most addresses are both.	Distinguishes between physical addresses (those you can visit) and mailing addresses (e.g. PO Boxes and care-of addresses). Most addresses are both.	CodeableConcept	0.1	HL7 AddressType	preferred	
A.3	.text	Text	Text representation of the address	Text representation of the address	string	0.1			
A.4	.street	Street	Name of the street	Name of the street	string	0.1			
A.5	.houseNumber	House Number	House number	House number	string	0.1			
A.6	.postBox	Post Box	Post box	Post box	string	0.1			
A.7	.city	City	City	City	string	0.1			
A.8	.postalCode	Postal Code	Postal code	Postal code	string	0.1			
A.9	.country	Country	Country name and country code	Country name and country code	CodeableConcept	0.1	ISO 3166-1 alpha-2	preferred	

EHDSAdvanceDirective									
Co de	Path	Elem ent	Short	Definition	Datatyp e	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts
A	EHDSAdva nceDirectiv e	EHD S Adva nce Direc tive	Advance directive model	Healthcare directives concerning life or after life wishes of the patient		0..*			
A.1	.header	Head er	Common header for all patient-related data	Common header for all patient-related data	Base	1..1			
A.1.1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1..1			
A.1.2	..identifier	Ident ifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
A.1.3	..authorshi p	Auth orshi p	Authorship	Resource authoring details	Base	1..*			
A.1.3.1	...author	Auth or	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHe althProf essional , EHDSOr ganisati on, EHDSDe vice	1..1			

A.1 .3. 2	...datetime	Date time	Date and time of authoring/iss uing	Date and time of the issuing the document/re source by its author.	dateTim e	1. .1			
A.1 .4	..lastUpdat e	Last Upda te	Date and time of the last update to the resource	Date and time of the last update to the document/in formation	dateTim e	0. .1			
A.1 .5	..status	Statu s	Status of the resource	Status of the resource	Codeabl eConce pt	1. .1			
A.1 .6	..statusRea son	Statu s Reas on	Reason for the current status of the resource.	Reason for the current status of the resource.	Codeabl eConce pt, string	0. .1			
A.1 .7	..language	Lang uage	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	Codeabl eConce pt	0. .1	BCP 47	preferred	
A.1 .8	..version	Versi on	Version	Business version of the resource.	string	0. .1			

A.2	.presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDS Attachment	0.*			
A.3	.category	Category	Categories of Directives related to decisions prior and after death	Categories of Directives related to decisions prior and after death	Codeable Concept	0.*	SNO MED CT	preferred	ISO IPS
A.4	.narrative	Narrative	Textual description of the directive	Textual description of the directive	string	0.1			eH N PS and HD R Guidelines, My Health @EU, ISO IPS
A.5	.effectivePeriod	Effective Period	Time period during which the directive is effective	Time period during which the directive is effective	Period	0.1			eH N HD R Guideline,

									ISO IPS
A.6	.authorising Entity	Auth orising Entit y	Person or organisation that authorizes the directive	Person or organisation that authorizes the directive	EHDSPa tient, EHDSHe althProf essional , EHDSRe latedPer son, EHDSOr ganisati on	0. .1			ISO IPS
A.7	.relatedCon ditions	Relat ed Con ditio ns	The problem or disorder to which the living will applies. Multiple fields could be provided.	The problem or disorder to which the living will applies. Multiple fields could be provided.	Codeabl eConce pt	0. .*	ICD- 10, SNO MED CT, Orp hac ode	preferred	ISO IPS
A.8	.advancedDirec tiveDocu ment	Advan ce Direc tive Docu ment	Scanned source document with the living will and the patient's signature, such as a PDF.	Scanned source document with the living will and the patient's signature, such as a PDF.	EHDSAtt achment	0. .1			eH N HD R Gui deli ne, ISO IPS
EHDSAlert									
Co de	Path	Elem ent	Short	Definition	Datatyp e	C ar di n	Pref erre d Cod	Binding Strength	Req uire me nts

						ality	e System		
B	EHDSAlert	EHD S Alert	Alert model	Alert flag		0. .*			
B.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1. .1			
B.1 .1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1. .1			
B.1 .2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0. .*			
B.1 .3	..authorship	Authorship	Authorship	Resource authoring details	Base	1. .*			
B.1 .3. 1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSProfessional, EHDSOrganization, EHDSDevice	1. .1			
B.1 .3. 2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1. .1			

B.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
B.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
B.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
B.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
B.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
B.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			

B.3	.text	Text	Text	<p>A human-readable narrative that contains a summary of the flag and can be used to represent the content of the resource to a human. The narrative need not encode all the structured data, but is required to contain sufficient detail to make it "clinically safe" for a human to just read the narrative. Example 1: intolerance to aspirin due to gastrointestinal bleeding. Example 2: intolerance to captopril because of cough (the patient is not allergic but can't tolerate it because of</p>	string	0.1				
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				<p>persistent cough)Example 3: the patient has a rare disease that requires special treatmentExample 4: Airway Alert / Difficult IntubationExample 5: Diagnoses such as malignant hyperthermia, porphyria, and bleeding disorders; special treatments like anticoagulants or immunosuppressants; implanted devices.Example 6: transplanted organs illustrate other information that has to be taken into account in a healthcare contact.Example 7: participation in a clinical trial that has to be taken</p>					
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				into account in a healthcare contact.					
B.4	.priority	Priori ty	Priority	A code that identifies the priority of the alert.	Codeabl eConce pt	0. .*	hl7: Flag - prior ity- cod e	preferred	

B.5	.status	Status	Status	Current status of the flag, Indicates whether this flag is active and needs to be displayed to a user, or whether it is no longer needed or was entered in error.	CodeableConcept	0.1	hl7: Flag - status	preferred	
B.6	.code	Code	Code	A coded or textual representation of the flag.	CodeableConcept	1.1	SNOMEDCT	preferred	
B.7	.period	Period	Period	Time period when flag is active. The period of time from the activation of the flag to inactivation of the flag. If the flag is active, the end of the period should be unspecified.	Period	0.1			
EHDSAAllergyIntolerance									
Code	Path	Element	Short	Definition	Datatype	Cardi	Preferred	Binding Strength	Require

						n ali ty	Cod e Syst em		me nts
C	EHDSAllergyIntolerance	EHDS Allergy Intolerance	Allergy intolerance model	EHDS refined base model for allergy/intolerance		0. .*			
C.1	.header	Header	Common header for all patient- related data	Common header for all patient- related data	Base	1. .1			
C.1 .1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1. .1			
C.1 .2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0. .*			
C.1 .3	..authorship	Authorship	Authorship	Resource authoring details	Base	1. .*			
C.1 .3. 1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHSDDevice	1. .1			

C.1.3.2	...datetime	Date time	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			
C.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
C.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
C.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
C.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
C.1.8	..version	Version	Version	Business version of the resource.	string	0.1			

C.2	.presented Form	Pres ente d Form	A narrative easy-to-read representati on of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representati on of the full data set, e.g. PDF-version of a document	EHDSAtt achment	0. .*			
C.3	.agentOrAllergen	Agen t Or Allergen	A specific allergen or other agent/substa nce (drug, food, chemical agent, etc.) to which the patient has an adverse reaction propensity.	A specific allergen or other agent/substa nce (drug, food, chemical agent, etc.) to which the patient has an adverse reaction propensity.	Codeabl eConce pt	1. .1	1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .24 eHD SIA ctiv eIngr edi ent (ATC , use d in MH @EU); 1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .61 eHD SISu	preferred	eH N PS Gui deli ne, My Hea lth @EU, ISO IPS

							bsta nce (EM A SMS , use d in MH @E U); 1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .19 eHD SIAll erge nNo Dru g (SCT , use d in MH @E U); ICD- 11 Aller gens		
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C.4	.typeOfPropensity	Type Of Propensity	This element describes whether this condition refers to an allergy, non-allergy intolerance, or unknown class of intolerance (not known to be allergy or intolerance)	This element describes whether this condition refers to an allergy, non-allergy intolerance, or unknown class of intolerance (not known to be allergy or intolerance)	CodeableConcept	0.1	1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .18 eHD SIAd vers eEvent type (SCT , used in MH @EU); http://hl7.org/fhir/ValueSet/allergy-intolerance-type (HL7 , required in HL7 FHIR)	preferred	eH N PS Guideline, My Health @EU
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C.5	.description	Description	Textual description of the allergy or intolerance	Textual description of the allergy or intolerance	string	0.1			eH N PS Guideline, ISO IPS
C.6	.criticality	Criticality	Estimate of the potential clinical harm, or seriousness, of a reaction to an identified substance.	Estimate of the potential clinical harm, or seriousness, of a reaction to an identified substance.	Codeable concept	0.1	1.3.6.1.4.1.125.59.1.1.10.1.3.1.42.57.eHD.SICriticality (HL7), used in MH@EU; http://hl7.org/fhir/ValueSet/allergy-intolerance-criticality (HL7	preferred	eH N PS Guideline, My Health@EU, ISO IPS

							, required in HL7 FHIR)		
C.7	.certainty	Cert ainty	Assertion about the certainty associated with a propensity, or potential risk, of a reaction to the identified substance. Diagnostic and /or clinical evidence of condition	Assertion about the certainty associated with a propensity, or potential risk, of a reaction to the identified substance. Diagnostic and /or clinical evidence of condition	Codeabl eConce pt	0. .1	1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .58 eHD SIAAll ergy Cert aint y (HL7 , use d in MH @E U) ; http: //hl7 .org/ fhir/	preferred	eH N PS Gui deli ne, My Hea lth @E U, ISO IPS

							ValueSet /allergyintolerance-verification (HL7, required in HL7 FHIR)		
C.8	.status	Status	Current status of the allergy or intolerance, for example, whether it is active, in remission, resolved, etc.	Current status of the allergy or intolerance, for example, whether it is active, in remission, resolved, etc.	CodeableConcept	0.1	1.3.6.1.4.1.125.59.1.10.1.3.1.42.59.eHDSIAAllergyStatus (HL7, used in MH@EU); http://hl7.org/fhir/	preferred	eH N PS Guideline, My Health@EU, ISO IPS

							ValueSet /allergy intolerance-clinical (HL7, required in HL7 FHIR)	
C.9	.onsetDate	Onset Date	When allergy or intolerance was identified	When allergy or intolerance was identified	dateTime	0.1		My Health @EU, ISO IPS
C.10	.endDate	End Date	Date of resolution of the allergy (e.g. when the clinician deemed there is no longer any need to track the underlying condition)	Date of resolution of the allergy (e.g. when the clinician deemed there is no longer any need to track the underlying condition)	dateTime	0.1		eHNP Guidelines, My Health @EU, ISO IPS

C.1 1	.reaction	Reac tion	Adverse Reaction Events linked to exposure to substance.	Adverse Reaction Events linked to exposure to substance.	Base	0. .*		ISO IPS (exp licit), imp licitl y in eH N PS Gui deli ne, MH @E U
C.1 1.1	..manifesta tion	Mani festa tion	Description of the clinical manifestatio n of the allergic reaction. Example: anaphylactic shock, angioedema. (the clinical manifestatio n also gives information about the severity of the observed reaction).	Description of the clinical manifestatio n of the allergic reaction. Example: anaphylactic shock, angioedema. (the clinical manifestatio n also gives information about the severity of the observed reaction).	Codeabl eConce pt	0. .*	1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .5 eHD SIII ness and Diso rder (ICD -10, alter nati ve in MH @E U); 1.3. 6.1. 4.1. preferred	The ele me nt is pre sen t in eH N PS GL, My Hea lth @E U spe cific atio ns and ISO IPS. Ele me nt

						125 59.1 1.10 .1.3. 1.42 .11 eHD SIRe acti onAl lerg y (SCT , alter nati ve in MH @E U); ICD- 11 MM S		na me and des crip tion is tak en fro m eH N PS GL. Car din ality in My Hea lth @E U for this ele me nt, use d her e, is one ma nife stat ion per sev erit y and ons et,
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									while the cardinality in FHIR IG allows multiple manifestations per severity and onset.
C.1 1.2	..date	Date	Date and of time allergy manifestation	Date and of time allergy manifestation	dateTime	0. .1			

C.1 1.3	..severity	Severity	Severity of the clinical manifestation of the allergic reaction.	Severity of the clinical manifestation of the allergic reaction.	Codeable Concept	0.1	1.3.6.1.4.1.12559.11.10.1.3.1.42.13eHDSISeverity (SCT), used in MH@EU); http://hl7.org/fhir/ValueSet/reaction-event-severity (HL7, Required in HL7 FHIR)	preferred	The element is present in eH NPS GL, My Health@EU specifications and ISO IPS. Element name and description is taken from eH NPS GL.
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C.1 1.4	..onsetDate	Onset Date	Date of the observation of the reaction	Date of the observation of the reaction	dateTime	0. .1			The element is present in eH N PS GL. Element name and description is taken from eH N PS GL.
EHDSAttachment									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements

D	EHDSAttachment	EHDS Attachment	Attachment model	EHDS refined base model for This type is for containing or referencing attachments - additional data content defined in other formats. The most common use of this type is to include images or reports in some report format such as PDF. However, it can be used for any data that has a MIME type.		0..*			
D.1	.contentType	Content Type	Mime type of the content, with charset etc.	Mime type of the content, with charset etc.	CodeableConcept	0..1	BCP-13	preferred	
D.2	.language	Language	Human language of the content	Human language of the content	CodeableConcept	0..1	BCP 47	preferred	

D.3	.data	Data	The actual data of the attachment - a sequence of bytes, base64 encoded.	The actual data of the attachment - a sequence of bytes, base64 encoded.	base64Binary	0.1			
D.4	.url	Url	A location where the data can be accessed.	A location where the data can be accessed.	uri	0.1			
D.5	.size	Size	The number of bytes of data that make up this attachment (before base64 encoding).	The number of bytes of data that make up this attachment (before base64 encoding).	integer64	0.1			
D.6	.title	Title	A label or set of text to display in place of the data.	A label or set of text to display in place of the data.	string	0.1			
EHDSBodyStructure									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
E	EHDSBodyStructure	EHDS Body Structure	Body structure model	EHDS refined base model for Body structure		0.*			

E.1	.identifier	Identifier	Identifier for this instance of the anatomical structure.	Identifier for this instance of the anatomical structure.	Identifier	0..*			
E.2	.morphology	Morphology	The kind of structure being represented by the body structure at BodyStructure.location. This can define both normal and abnormal morphologies.	The kind of structure being represented by the body structure at BodyStructure.location. This can define both normal and abnormal morphologies.	CodeableConcept	0..1	SNO MED CT	preferred	
E.3	.location	Location	Body site	Body site	CodeableConcept	0..1	SNO MED CT	preferred	
E.4	.locationQualifier	Location Qualifier	Additional qualifier of the body structure (e.g. upper, lower, left side).	Additional qualifier of the body structure (e.g. upper, lower, left side).	CodeableConcept	0..*	SNO MED CT	preferred	
E.5	.laterality	Laterality	Body structure laterality (e.g. left, right).	Body structure laterality (e.g. left, right).	CodeableConcept	0..1	SNO MED CT	preferred	
E.6	.description	Description	Textual description	Textual description	string	0..1			

			of the body structure	of the body structure					
EHDSCarePlan									
Co de	Path	Elem ent	Short	Definition	Datatype	C ar di n al i ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts
F	EHDSCare Plan	EHD S Care Plan	Care plan model	EHDS simplified model for care plan. The model includes very minimal information and is not designed to cover the full functionality of care plans.		0..*			
F.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1..1			
F.1.1	..subject	Subject	The patient whose intended care is described by the plan.	Patient/subject information	EHDSPatient	1..1			

F.1.2	..identifier	Identifier	Identifier for the care plan	Business identifier for the object	Identifier	0..*			
F.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
F.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1..1			
F.1.3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1..1			
F.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0..1			
F.1.5	..status	Status	Indicates whether the plan is currently being acted upon, represents future intentions or is now a historical record.	Status of the resource	CodeableConcept	1..1	HL7 Request status	preferred	

F.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
F.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
F.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
F.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
F.3	..title	Title	Human-friendly name for the care plan	Human-friendly name for the care plan	string	0.1			
F.4	..description	Description	A description of the scope and nature of the plan.	A description of the scope and nature of the plan.	string	0.1			

F.5	.period	Period	Indicates when the plan did (or is intended to) come into effect and end.	Indicates when the plan did (or is intended to) come into effect and end.	Period	0. .1			
F.6	.addresses	Addresses	Conditions/problems/concerns/diagnoses/etc. whose management and/or mitigation are handled by this plan.	Conditions/problems/concerns/diagnoses/etc. whose management and/or mitigation are handled by this plan.	Codeable Concept	0. .*	ICD-10, SNO MED CT, Orpha code	preferred	
F.7	.activity	Activity	The details of the proposed activity represented in a specific resource.	The details of the proposed activity represented in a specific resource.	string	0. .1			
EHDSCondition									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements

G	EHDSCondition	EHD S Con ditio n	Condition model	EHDS refined base model for a clinical condition, problem, diagnosis, or other event, situation, issue, or clinical concept that has risen to a level of concern.		0. .*			
G.1	.header	Head er	Common header for all patient- related data	Common header for all patient- related data	Base	1. .1			
G.1 .1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			
G.1 .2	..identifier	Ident ifier	Business identifier for the object	Business identifier for the object	Identifier	0. .*			
G.1 .3	..authorshi p	Auth orshi p	Authorship	Resource authoring details	Base	1. .*			
G.1 .3. 1	...author	Auth or	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSh ealthProf essional , EHDSOr ganisati on, EHDSDe vice	1. .1			

G.1.3.2	...datetime	Date time	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			
G.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
G.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
G.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
G.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
G.1.8	..version	Version	Version	Business version of the resource.	string	0.1			

G.2	.presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*		
G.3	.problem	Problem	Code identifying the condition, problem or diagnosis	Code identifying the condition, problem or diagnosis	CodeableConcept	1.1	ICD-10, SNOMED CT, ICD-O, Orpha code if rare disease is diagnosed	preferred eH N Guideline HDR (v1.1): A.2.6.1.2; PS (v3.4) A.2.2.2.1, A.2.3.1.1
G.4	.onsetDate	Onset Date	Onset date of a problem/condition	Onset date of a problem/condition	dateTime	0.1		eH N Guideline HDR (v1.1): A.2.6.1.

								3; PS (v3.4) A.2.2.2, A.2.3.1.2
G.5	.endDate	End Date	The date or estimated date that the condition resolved or went into remission	The date or estimated date that the condition resolved or went into remission	dateTime	0.1		eH N Guideline HDR (v1.1): A.2.6.1.4; PS (v3.4) A.2.2.2.3
G.6	.category	Category	Category or categories of the problem (e.g. POA - present on admission, HAC - hospital acquired condition, and other categorisations).	Category or categories of the problem (e.g. POA - present on admission, HAC - hospital acquired condition, and other categorisations).	CodeableConcept	0.*		eH N Guideline HDR (v1.1): A.2.6.1.5

G.7	.problemStatus	Problem Status	Status of the condition/problem (active, resolved, inactive, ...)	Status of the condition/problem (active, resolved, inactive, ...)	CodeableConcept	0.1	HL7 Condition Clinical Status Codes	preferred	eH N Guideline HD R (v1.1): A.2.6.1.7; PS (v3.4) A.2.2.2.1
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G.8	.resolution Circumstances	Resolution Circumstances	Describes the reason for which the status of the problem changed from current to inactive (e.g. surgical procedure, medical treatment, etc.).	This field includes free text if the resolution circumstances are not already included in other fields such as surgical procedure, medical device, etc., e.g. hepatic cystectomy (this will be the resolution circumstances for the problem “hepatic cyst” and will be included in surgical procedures).	string	0. .*			eH N Guideline HDR (v1.1): A.2.6.1.8; PS (v3.4) A.2.2.2.4
G.9	.severity	Severity	A subjective assessment of the severity of the condition as evaluated by the clinician.	A subjective assessment of the severity of the condition as evaluated by the clinician.	Codeable Concept	0. .1	HL7 Condition/Diagnosis Severity; SNOMEDCT	preferred	eH N Guideline HDR (v1.1): A.2.6.1.9

G.10	.anatomicLocation	Anatomic Location	The anatomical location including laterality where this condition manifests itself.	The anatomical location including laterality where this condition manifests itself.	EHDSBodyStructure	0.*			eH N Guideline HDR (v1.1): A.2.6.1.2
G.11	.stage	Stage	Stage/grade usually assessed formally using a specific staging/grading system. Multiple assessment systems could be used.	Stage/grade usually assessed formally using a specific staging/grading system. Multiple assessment systems could be used.	CodeableConcept	0.*	e.g. TNM, ICD-O-3, Bi-Rads, Li-Rads, ...	preferred	eH N Guideline HDR (v1.1): A.2.6.1.10
G.12	.diagnosisAssertionStatus	Diagnosis Assertion Status	Assertion about the certainty associated with a diagnosis. Diagnostic and/or clinical evidence of condition.	Assertion about the certainty associated with a diagnosis. Diagnostic and/or clinical evidence of condition.	CodeableConcept	0.1	HL7 Condition Verification Status	preferred	eH N Guideline PS (v3.4) A.2.3.1.3
G.13	.asserter	Asserter	The asserter of the condition	The asserter of the condition	EHDSHealthProfessional	0.1			

G.1 4	.assertedDate	Asserted Date	Date and time of the diagnosis assertion	Date and time of the diagnosis assertion	dateTime	0.1			
G.1 5	.specialistContact	Specialist Contact	Health Professional who may be specifically related to the problem, as a preferred contact.	Health Professional who may be specifically related to the problem, as a preferred contact.	EHDHealthProfessional	0.*			ISO IPS, My Health @E U
G.1 6	.externalResource	External Resource	External Resource which may be specifically related to the problem, for example a link between a rare disease problem and the corresponding guidelines.	External Resource which may be specifically related to the problem, for example a link between a rare disease problem and the corresponding guidelines.	uri	0.*			My Health @E U

EHDSCoverage

Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
H	EHDSCoverage	EHD S	Coverage model	EHDS refined base model for Coverage		0.*			

		Cove rage							
H.1	.identifier	Ident ifier	Business Identifier for the coverage	Business Identifier for the coverage	Identifier	0. .*			
H.2	.type	Type	Type of coverage: social program, medical plan, accident coverage (workers compensatio n, auto), group health or payment by an individual or organisation.	Type of coverage: social program, medical plan, accident coverage (workers compensatio n, auto), group health or payment by an individual or organisation.	Codeabl eConce pt	0. .1	hl7: cov erag e- self pay, hl7: v3- Act Cov erag eTyp eCo de	preferred	
H.3	.patient	Patie nt	Patient who benefits from the insurance coverage when products and/or services are provided.	Patient who benefits from the insurance coverage when products and/or services are provided.	EHDSPa tient	1. .1			

H.4	.payor	Payor	Payor including both insurance and non-insurance agreements, such as patient-pay agreements.	Payor including both insurance and non-insurance agreements, such as patient-pay agreements.	Base	1.*			
H.4.1	..payorEntity	Payor Entity	Payor entity	Payor entity	EHDS Organization, EHDS Patient	1.1			
H.4.2	..subscriberId	Subscriber Id	Number or code under which the insured person is registered at the insurance provider.	Number or code under which the insured person is registered at the insurance provider.	Identifier	0.1			
EHDS Current Pregnancy									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
I	EHDS Current Pregnancy	EHDS Current Pregnancy	Current pregnancy status model	Current pregnancy status		0.*			

I.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
I.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1.1			
I.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0.*			
I.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1.*			
I.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDHealthProfessional, EHDSOrganization, EHDSDevice	1.1			
I.1.3.2	...datetime	Datetime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	datetime	1.1			
I.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	datetime	0.1			
I.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			

I.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
I.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
I.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
I.2	.presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
I.3	.narrative	Narrative	Textual description of current pregnancy status	Narrative description describing the status of the current pregnancy.	string	0.1			eH N PS Guideline, ISO IPS

I.4	.currentPregnancyStatus	Current Pregnancy Status	Current pregnancy status	Current state of the pregnancy at the date the observation was made, e.g. pregnant, not pregnant, unknown.	CodeableConcept	1.1	SNOMEDCT	preferred	eHNP Guidelines, ISO IPS
I.5	.dateOfStatus	Date Of Status	Date status of	Effective date of the current pregnancy status.	dateTime	0.1			eHNP Guidelines, ISO IPS
I.6	.expectedDateOfDelivery	Expected Date Of Delivery	Expected date of delivery	Date in which the woman is due to give birth. Year, day and month are required.	date	0.1			eHNP Guidelines, ISO IPS
EHDSDataSet									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements

I	EHDSDataset	EHDSDataset	DataSet model	Common elements (including header) for all documents and their independently functioning parts, e.g FHIR resources.		0..*			
I.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1..1			
I.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1..1			
I.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
I.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
I.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSEalthProfessional, EHDSOrganisation, EHDSDevice	1..1			

I.1.3.2	...datetime	Date time	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			
I.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
I.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
I.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
I.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
I.1.8	..version	Version	Version	Business version of the resource.	string	0.1			

I.2	.presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
EHDSDevice									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
J	EHDSDevice	EHDS Device	Device model	EHDS refined base model for Device information		0.*			
J.1	.identifier	Identifier	Normalised identifier of the device instance, such as UDI according to REGULATION (EU) 2017/745. Multiple identifiers can be used.	Normalised identifier of the device instance, such as UDI according to REGULATION (EU) 2017/745. Multiple identifiers can be used.	Identifier	1.*			

J.2	.manufacturer	Manufacturer	Name of device manufacturer	Name of device manufacturer	string	0.1			
J.3	.manufactureDate	Manufacture Date	The date and time when the device was manufactured	The date and time when the device was manufactured	dateTime	0.1			
J.4	.expiryDate	Expiry Date	The date and time beyond which this device is no longer valid or should not be used (if applicable).	The date and time beyond which this device is no longer valid or should not be used (if applicable).	dateTime	0.1			
J.5	.lotNumber	Lot Number	Lot number of manufacture	Lot number of manufacture	string	0.1			
J.6	.serialNumber	Serial Number	Serial number assigned by the manufacturer	Serial number assigned by the manufacturer	string	0.1			
J.7	.name	Name	The name and name type of the device as known to the manufacturer and/or patient	The name and name type of the device as known to the manufacturer and/or patient	string	0.*			

J.8	.modelName	Model Number	The manufacturer's model number for the device	The manufacturer's model number for the device	string	0..1			
J.9	.version	Version	The actual design of the device or software version running on the device	The actual design of the device or software version running on the device	string	0..1			
J.10	.type	Type	Device type	Device type	CodeableConcept	0..*	SNOMED CT, EMDN	preferred	
J.11	.note	Note	Device notes and comments	Device notes and comments	string	0..*			
EHDSDeviceUse									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
K	EHDSDeviceUse	EHDS Device Use	Device model use	EHDS refined base model for device use information		0..*			

K.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
K.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1.1			
K.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0.*			
K.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1.*			
K.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDHealthProfessional, EHDSOrganization, EHDSDevice	1.1			
K.1.3.2	...datetime	Datetime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	datetime	1.1			
K.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	datetime	0.1			

K.1.5	..status	Status	Current status of the device usage.	Status of the resource	CodeableConcept	1.1	HL7 device-status	preferred	
K.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
K.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
K.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
K.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			

K.3	.startDate	Start Date	Date when the device was implantable to the patient or the external device was first in use.	Date when the device was implantable to the patient or the external device was first in use.	dateTime	0.1			eH N PS Guideline, ISO IPS.
K.4	.endDate	End Date	Date when the device was explanted from the patient or the external device was no longer in use.	Date when the device was explanted from the patient or the external device was no longer in use.	dateTime	0.1			eH N PS Guideline, ISO IPS.
K.5	.device	Device	The details of the device used.	The details of the device used.	CodeableConcept, EHDSDevice	1.1			eH N PS Guideline, ISO IPS.
K.6	.bodySite	Body Site	Anatomical location of the device. May include laterality.	Anatomical location of the device. May include laterality.	EHDSBodyStructure	0.1			eH N PS Guideline, ISO IPS.

K.7	.reason	Reason	Reason or justification for the use of the device.	Reason or justification for the use of the device.	Codeable Concept, EHDSCondition, EHDSObservation, EHDSProcedure	0.*			eH N PS Guideline, ISO IPS.
K.8	.source	Source	Who reported the device was being used by the patient.	Who reported the device was being used by the patient.	EHDSPatient, EHDSHealthProfessional, EHDSRelatedPerson	0.1			

K.9	.note	Note	Note about the device statement that were not represented at all or sufficiently in one of the attributes provided in a class. These may include for example a comment, an instruction, or a note associated with the statement.	Note about the device statement that were not represented at all or sufficiently in one of the attributes provided in a class. These may include for example a comment, an instruction, or a note associated with the statement.	string	0..*			
EHDSDischargeReport									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
L	EHDSDischargeReport	EHDS Discharge Report	Discharge Report model	EHDS refined base model for Discharge Report		0..*			

L.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
L.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
L.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
L.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
L.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
L.2.1	..documentType	Document Type	Document type	Identifies the type of document at hand, e.g. Discharge report.	CodeableConcept	1.1	LOINC	preferred	

L.2 .2	..document Title	Docu ment Title	Document title	Document title, such as Discharge Report, Laboratory Result Report, etc.	string	1. .1			
L.2 .3	..document Status	Docu ment Statu s	Document status	The status of the Discharge report. E.g., preliminary, final.	Codeabl eConce pt	1. .1	hl7: Co mpo sitio nSta tus	preferred	
L.2 .4	..period	Perio d	Period	Time of service that is being documented	Period	0. .1			
L.2 .5	..attestatio n	Attes tatio n	Attestation	Document attestation details	Base	0. .*			
L.2 .5. 1	...attester	Attes ter	Attester	Attester who validated the document. Multiple attesters could be provided.	EHDSh ealthProf essional	1. .1			
L.2 .5. 2	...datetime	Date time	DateTime	Date and time of the approval of the document by Attester.	dateTim e	1. .1			
L.2 .6	..legalAuth entication	Legal Auth entic ation	Legal authenticatio n	Document legal authenticatio n	Base	0. .1			

L.2 .6. 1	...legalAuth enticator	Legal Auth entic ator	Legal authenticato r	The person taking responsibilit y for the medical content of the document	EHDSh ealthProf essional	1. .1			
L.2 .6. 2	...datetime	Date time	DateTime	Date and time when the document was authorized.	dateTim e	1. .1			
L.2 .7	..eventType	Even t Type	Event type	Categorizatio n of the event covered by the document (e.g. laborato ry study types, imaging study types including modality, etc.). Selection of such tags or labels depends on the use case and agreement between data sharing parties. This meta-data element serves primarily for searching	Codeabl eConce pt	0. .*	LOI NC, SNO MED CT, dico m- cid- 33- Mod ality	preferred	

				and filtering purposes.					
L.2 .8	..authorSpecialty	Author or Specialty	Specialty	Additional details about where the content was created (e.g. clinical specialty)	CodeableConcept	0. .*	SNO MED CT	preferred	
L.2 .9	..custodian	Custodian	Document custodian	Organisation that is in charge of maintaining the document/report.	EHDS Organisation	1. .1			

L.2 .10	..document Format	Docu ment Form at	Document format	An identifier of the document constraints, encoding, structure, and template that the document conforms to beyond the base format indicated in the mimeType.	Codeabl eConce pt	0. .1	HL7 Doc ume nt For mat Cod es	preferred	
L.2 .11	..confidenti ality	Confi denti ality	Confidentiali ty	Level of confidentialit y of the document. Implicit value is normal.	Codeabl eConce pt	0. .1	hl7: Con fide ntial ity	preferred	
L.3	..knowledge Resources	Know ledge Reso urces	Related documents and information sources	Related documents and information sources	Base	0. .0			
L.3 .1	..externalR eference	Exter nal Refer ence	...	...	Related Artifact	0. .*			
L.3 .2	..relatedTo	Relat ed To	...	...		0. .*			

L.3.3	..intendedRecipient	Intended Recipient	Intended recipient	Information recipient (intended recipient or recipients of the report, additional recipients might be identified by the ordering party, e.g. GP, other specialist), if applicable	EHDSPatient, EHDSRelatedPerson, EHDSHealthProfessional, EHDSOrganisation, EHDSDevice	0.*			
L.3.4	..healthInsuranceAndPaymentInformation	Health Insurance And Payment Information	Health insurance and payment information	Health insurance and payment information	EHDSCoverage	0.*			
L.4	.body	Body	Structured body of the discharge report document	Structured body of the discharge report document	Base	0.1			

L.4 .1	...advanceD irectives	Adva nce Direc tives	Section: Advance Directives.	Provision for healthcare decisions if, in the future, a person is unable to make those decisions.	Base	0. .1		eH N Gui deli ne HD R (v1. 1): A.2. 2
L.4 .1. 1	...narrative	Narr ative	Narrative, potentially formatted, content of the section	Narrative, potentially formatted, content of the section	string	0. .1		
L.4 .1. 2	...advance Directive	Adva nce Direc tive	Provision for healthcare decisions if, in the future, a person is unable to make those decisions	Provision for healthcare decisions if, in the future, a person is unable to make those decisions	EHDSAd vanceDir ective	0. .*		
L.4 .2	...alerts	Alert s	Section: Alerts.	Information about substantial alerts or warnings that health professional s should be aware of.	Base	0. .1		eH N Gui deli ne HD R (v1. 1): A.2. 2

L.4 .2. 1	...narrative	Narrative	Narrative, potentially formatted, content of the section	Narrative, potentially formatted, content of the section	string	0. .1			
L.4 .2. 2	...medicalAlert	Medical Alert	Description of medical alerts in textual format: any clinical information that is imperative to know so that the life or health of the patient does not come under threat.	Description of medical alerts in textual format: any clinical information that is imperative to know so that the life or health of the patient does not come under threat.	EHDSAlert	0. .*			eH N Guideline HDR (v1.1): A.2.2.2
L.4 .2. 3	...allergyAndIntolerance	Allergy And Intolerance	Allergy and Intolerance. A record of allergies and intolerances (primarily to be used for new allergies or intolerances that occurred during the encounter).	Allergy and Intolerance. A record of allergies and intolerances (primarily to be used for new allergies or intolerances that occurred during the encounter).	EHDSAllergyIntolerance	0. .*			eH N Guideline HDR (v1.1): A.2.2.1

L.4 .3 1	..encounter Information	Enco unter Infor mati on	Section: Encounter information.	Section: Encounter information.	Base	1. .1		eH N Gui deli ne HD R (v1. 1): A.2. 2
L.4 .3. 1	...narrative	Narr ative	Narrative, potentially formatted, content of the section	Narrative, potentially formatted, content of the section	string	1. .1		
L.4 .3. 2	...encounte r	Enco unter	Encounter information	Encounter information	EHDSEn counter	0. .1		eH N Gui deli ne HD R (v1. 1): A.2. 3
L.4 .4	..admission Evaluation	Admi ssion Eval uatio n	Section: Admission evaluation	Admission evaluation section should be reported exceptionally only if it is relevant to ensure continuity of care.	Base	0. .1		eH N Gui deli ne HD R (v1. 1): A.2. 4

L.4 .4. 1	...narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative sub-section elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative sub-section elements should be provided.	string	0. .1		
L.4 .4. 2	...objective Findings	Objective Findings	Objective findings	Sub-section with objective findings.	Base	0. .1		eH N Gui deli ne HD R (v1. 1): A.2. 4.1

L.4 .4. 2.1	....narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative sub-section elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative sub-section elements should be provided.	string	0. .1		
L.4 .4. 2.2	....time	Time	Date and time of the admission evaluation examination	Date and time of the admission evaluation examination	dateTime	0. .1		eH N Guideline HDR (v1.1): A.2.4.1.1
L.4 .4. 2.3	....performer	Performer	Health professional(s) responsible for the admission evaluation examination.	Health professional(s) responsible for the admission evaluation examination.	EHDHealthProfessional	0. .*		

L.4 .4. 2.4	....anthropometric Observations	Anthropometric Observations	Anthropometric observations , such as body weight and height of the patient, BMI, circumference of head, waist, hip, limbs and skin fold thickness.	Anthropometric observations , such as body weight and height of the patient, BMI, circumference of head, waist, hip, limbs and skin fold thickness.	EHDS Observation	0. .*			eH N Guideline HDR (v1.1): A.2.4.1.2
L.4 .4. 2.5	....vital Signs	Vital Signs	Vital signs observations . Mandatory: pulse rate, respiratory rate, systolic and diastolic blood pressure with site information; optional: O2 saturation	Vital signs observations . Mandatory: pulse rate, respiratory rate, systolic and diastolic blood pressure with site information; optional: O2 saturation	EHDS Observation	0. .*			eH N Guideline HDR (v1.1): A.2.4.1.3

L.4 .4. 2.6physical Examination	Physical Examination	Physical examination	Physical examination is the process of evaluating objective anatomical findings. It is typically the first diagnostic measure performed after taking the patient's history, which allows an initial assessment of symptoms and is useful for determining the differential diagnoses and further steps. Physical examination can be performed through observation, palpation, percussion, and auscultation.	EHD SObservation	0. .*		eH N Guideline HDR (v1.1): A.2.4.1.4
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L.4 .4. 3	...functional Status	Functional Status	Section: Functional status	Functional status can be assessed in several different ways, usually with a focus on the person's abilities to perform basic activities of daily living (ADL), which include basic self-care such as bathing, feeding, and toileting and instrumental activities of daily living (IADL), which includes activities such as cooking, shopping, and managing one's own affairs. For details see: https://paciowg.github.io/functional-status-ig/	Base	0. .1			eH N Guideline HDR (v1.1): A.2.4.2
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L.4 .4. 3.1narrative	Narrative	Narrative, potentially formatted, content of the section	Narrative, potentially formatted, content of the section	string	0. .1			
L.4 .4. 3.2	....functionalStatusAssessment	Functional Status Assessment	An individual's ability to perform normal daily activities required to meet basic needs, fulfil usual roles and maintain health and well-being	An individual's ability to perform normal daily activities required to meet basic needs, fulfil usual roles and maintain health and well-being	EHDSFunctional Status	0. .*			
L.4 .4. 4	...patientHistory	Patient History	Section: Patient health history (anamnesis).	Section: Patient health history (anamnesis).	Base	0. .1			eH N Guideline HDR (v1.1): A.2.5

L.4 .4. 5	...narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1		
L.4 .4. 6	...medicalHistory	Medical History	Medical history subsection.	Medical history subsection.	Base	1. .1		eH N Guideline HDR (v1.1): A.2.5.1

L.4 .4. 6.1narrative	Narr ative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1			
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L.4 .4. 6.2pastProblems	Past Problems	Past problems	<p>A list of conditions of a patient that the patient suffered in the past or still suffers. Unlike diagnostic summary, medical history is not only a list of problems, but could contain broader description of the condition and its progress, details about treatment including medication and patient response to treatment. Past problem section (unlike the same section of the patient summary) should include only conditions that are important for continuity of care. This section, if provided,</p>	EHDSCo ndition	1. .*			<p>eH N Gui deli ne HD R (v1. 1): A.2. 5.1. 1</p>
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				complement s the diagnostic summary section of the discharge report.				
L.4 .4. 6.3devicesA ndImplants	Devi ces And Impl ants	Devices and Implants	Devices and implants in patient anamnesis. Negative statement must be explicitly stated.	EHDSD eviceUse	1. .*		eH N Gui deli ne HD R (v1. 1): A.2. 5.1. 2

L.4 .4. 6.4	....historyOf Procedures	Histo ry Of Proc edur es	History of procedures	Historical procedures performed on or for a patient, relevant for the current encounter.Ex amples include surgical procedures, diagnostic procedures, endoscopic procedures, biopsies, counselling, physiotherap y, personal support services, adult day care services, etc.	EHDSP rocedure	0. .*			eH N Gui deli ne HD R (v1. 1): A.2. 5.1. 3
L.4 .4. 6.5	....vaccinati on	Vacc inati on	Vaccination history of the patient.	Vaccination history of the patient.	EHDSIm munisati on	0. .*			eH N Gui deli ne HD R (v1. 1): A.2. 5.1. 4
L.4 .4. 6.6	....epidemio logicalHisto ry	Epid emio logic al	Epidemiologi cal history	Travel history and infectious contacts	Base	0. .1			eH N Gui deli ne

		Histo ry							HD R (v1. 1): A.2. 5.1. 5
L.4 .4. 6.6 .1	.....infectio usContacts	Infec tious Cont acts	Infectious contacts of the patient	Infectious contacts of the patient	EHDSInf ectious Contact	0. .*			eH N Gui deli ne HD R (v1. 1): A.2. 5.1. 5.1
L.4 .4. 6.6 .2	.....travelHi story	Trave l Histo ry	Travel history reported by the patient. Multiple records could be provided.	Travel history reported by the patient. Multiple records could be provided.	EHDSTra velHistor y	0. .*			eH N Gui deli ne HD R (v1. 1): A.2. 5.1. 5.2

L.4 .4. 6.7	....pregnan cyHistory	Preg nanc y Histo ry	Section: Pregnancy history	To present the current health state of the patient with respect to pregnancy and to provide chronologica l and outcome information about past pregnancies.	Base	0. .1			eH N Gui deli ne PS (v3. 4) A2. 6, ISO IPS
L.4 .4. 6.7 .1	.....currentP regnancySt atus	Curr ent Preg nanc y Statu s	Current pregnancy status	Current state of the pregnancy at the date the observation was made, e.g. pregnant , not pregnant, unknown.	EHDSCu rrentPre gnancy	0. .1			
L.4 .4. 6.7 .2	.....previous Pregnancie sStatus	Previ ous Preg nanc ies Statu s	Overall status of previous pregnancies	Overall status of previous pregnancies, including — Yes, previous pregnancies — No, previous pregnancies — Unknown	Codeabl eConce pt	0. .1			

L.4 .4. 6.7 .3	.....previous Pregnancies	Previous Pregnancies	History of previous pregnancies	Information about previous pregnancies, including outcomes and number of children/fetuses in each pregnancy.	EHDSPregnancy History	0. .*			
L.4 .4. 6.8	....familyHistorySection	Family History Section	Family history section	Relevant family history section.	Base	0. .1			eH N Gui deli ne HD R (v1. 1): A.2. 5.2
L.4 .4. 6.9	....narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1			

L.4 .4. 6.1 0	....familyHi story	Fami ly Histo ry	Family history	Information about serious illnesses in close blood relatives with known or suspected genetic potential or with possible impact on patient care.	EHDSFa milyMe mberHis tory	0. .*			
L.4 .4. 7	...socialDet erminantsO fHealth	Soci al Dete rmin ants Of Heal th	Social determinant s of health	Information about social determinant s of health.	Base	0. .1			eH N Gui deli ne HD R (v1. 1): A.2. 5.3

L.4 .4. 7.1	....narrative	Narrative	Sub-section narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1		
L.4 .4. 7.2	....participationInSociety	Participation In Society	Participation in society	Participation in society details.	Base	0. .1		eH N Guideline HDR (v1.1): A.2. 5.3. 1

L.4 .4. 7.2 .1	.....workSituation	Work Situation	Work situation	<p>Work Situation describes the extent to which and in what way the patient participates in the workforce. Work is meant in the broadest sense of the word: activities that contribute to the person themselves, their environment or society. This includes both paid and unpaid work.</p>	string	0. .1			
L.4 .4. 7.2 .2	.....hobby	Hobby	An activity the patient enjoys doing in their free time.	An activity the patient enjoys doing in their free time.	string	0. .1			
L.4 .4. 7.2 .3	.....socialNetwork	Social Network	Social network	A description of the patient's social network, such as family, neighbours and friends.	string	0. .1			

L.4 .4. 7.3	....educationSection	Educ ation Secti on	Education section	Information about patient education level.	Base	0. .1		eH N Gui deli ne HD R (v1. 1): A.2. 5.3. 2
L.4 .4. 7.3 .1	.....educati onLevel	Educ ation Level	Education level	Indication of the highest level of education achieved.	Codeabl eConce pt	0. .1	hl7: v3.E duc atio nLev el preferred	
L.4 .4. 7.3 .2	....comme nt	Com ment	If deemed relevant, a specification of the degree program can be provided by means of an explanation (e.g.: patient is in medical school).	If deemed relevant, a specification of the degree program can be provided by means of an explanation (e.g.: patient is in medical school).	string	0. .1		
L.4 .4. 7.4	....livingSitu ation	Livin g Situa tion	Living situation - household type and other related living situation information.	Living situation - household type and other related living situation information.	Base	0. .1		eH N Gui deli ne HD R (v1. 1): A.2.

									5.3.3
L.4 .4. 7.4 .1	.....houseType	House Type	Type of home the patient lives in.	Type of home the patient lives in.	Codeable Concept	0. .1	SNO MED CT	preferred	
L.4 .4. 7.4 .2	.....homeAdaption	Home Adaption	Home adaptations present in the home that have been made in the context of the illness or disability to make the functioning of the patient safer and more comfortable and to enable independent living. Multiple data elements could be provided.	Home adaptations present in the home that have been made in the context of the illness or disability to make the functioning of the patient safer and more comfortable and to enable independent living. Multiple data elements could be provided.	Codeable Concept	0. .*	SNO MED CT	preferred	

L.4 .4. 7.4 .3	.....livingCo nditions	Livin g Con ditio ns	Living conditions that affect the accessibility of the home or the stay in the home.	Living conditions that affect the accessibility of the home or the stay in the home.	Codeabl eConce pt	0. .*	SNO MED CT	preferred	
L.4 .4. 7.5	....familySit uation	Fami ly Situa tion	Family situation	Family situation	Base	0. .1			eH N Gui deli ne HD R (v1. 1): A.2. 5.3. 4
L.4 .4. 7.5 .1	.....comme nt	Com ment	Comment on the family situation.	Comment on the family situation.	string	0. .1			
L.4 .4. 7.5 .2	.....familyC omposition	Fami ly Com posit ion	Family composition	The family composition describes the patient's home situation and the form of cohabitation. A family can consist of one or more people.	Codeabl eConce pt	0. .1	SNO MED CT	preferred	

L.4 .4. 7.5 .3	.....maritalS tatus	Marit al Statu s	Person's marital status according to the terms and definition in the national civil code.	Person's marital status according to the terms and definition in the national civil code.	Codeabl eConce pt	0. .1	hl7: mari tal- stat us	preferred	
L.4 .4. 7.5 .4	.....number OfChildren	Num ber Of Child ren	Number of children	The number of children the patient has. Children in the context of this information model include step children, foster children, biological and adopted children.	Quantity	0. .1			
L.4 .4. 7.5 .5	.....number OfChildren AtHome	Num ber Of Child ren At Hom e	Number of children living at home with the patient.	Number of children living at home with the patient.	Quantity	0. .1			
L.4 .4. 7.5 .6	.....childDet ails	Child Detai ls	Child details (age, co- living status and comment).	Child details (age, co- living status and comment).	Base	0. .*			

L.4 .4. 7.5 .6. 1	.....livingAt Home	Living At Home	Living at home. An indication stating whether the child lives at home.	Living at home. An indication stating whether the child lives at home.	boolean	0. .1			
L.4 .4. 7.5 .6. 2	.....dateOf Birth	Date Of Birth	Child's date of birth.	Child's date of birth.	date	0. .1			
L.4 .4. 7.5 .6. 3	.....comme nt	Com ment	A comment on the child's family situation.	A comment on the child's family situation.	string	0. .1			
L.4 .4. 7.5 .7	.....careRes ponsibility	Care Res ponsi bility	Care responsibility. The activities the patient carries out to care for a dependent family member.	Care responsibility. The activities the patient carries out to care for a dependent family member.	Codeabl eConce pt	0. .*	SNO MED CT	preferred	
L.4 .4. 7.6	.....useOfSu bstances	Use Of Subs tanc es	Use of substances	Information about use and/or abuse of specific substances.	Base	0. .1			eH N Gui deli ne HD R (v1. 1): A.2. 5.4

L.4 .4. 7.6 .1	.....narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1		
L.4 .4. 7.6 .2	.....alcohol Use	Alcohol Use	Alcohol consumption by the patient. Multiple records on alcohol use could be provided.	Alcohol consumption by the patient. Multiple records on alcohol use could be provided.	EHDSSubstance Use	0. .*		eH N Guideline HDR (v1.1): A.2.5.4.1
L.4 .4. 7.6 .3	.....tobacco Use	Tobacco Use	Tobacco use	Represent smoking or tobacco habits. Multiple records on tobacco use could be provided.	EHDSSubstance Use	0. .*		eH N Guideline HDR (v1.1): A.2.5.4.2

L.4 .4. 7.6 .4	.....drugCon sumption	Drug Cons umpt ion	Consumptio n of drugs and other substances (in terms of abuse).	Consumptio n of drugs and other substances (in terms of abuse).	EHDSSu bstance Use	0. .*		eH N Gui deli ne HD R (v1. 1): A.2. 5.4. 3
L.4 .4. 7.7	....courseOf Encounter	Cour se Of Enco unter	Course of inpatient or outpatient encounter.	Course of inpatient or outpatient encounter.	Base	1. .1		eH N Gui deli ne HD R (v1. 1): A.2. 6

L.4 .4. 8	...diagnostic Summary	Diagnostic Summary	Diagnostic summary. All problems/diagnoses that affect care during the inpatient case or are important to be recorded to ensure continuity of care.	<p>The diagnostic summary differentiates , in accordance with the international recommendation, between problems treated during hospital stay and other (untreated) problems. Treated problems are problems that were the subject of diagnostics, therapy, nursing, or (continuous) monitoring during the hospitalisation. Furthermore problems could be divided into three categories: problems present on admission (POA), conditions acquired during</p>	Base	1. .1			eH N Guideline HDR (v1.1): A.2.6.1
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				<p>hospital stay (HAC) and problems that cannot be classified as being of any of the two (N/A). The diagnostic summary contains all conditions as they were recognised at the end of hospitalisation, after all examinations. This section contains concise, well specified, codeable, summary of problems. Problems are ordered by importance (main problems first) during hospital stay. Description of the problem might be completed with additional details in the medical history section</p>					
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				and/or in the Synthesis section.					
L.4 .4. 8.1narrative	Narr ative	Problem specification in narrative form.	Problem specification in narrative form.	string	0. .1			

L.4 .4. 8.2	....problem Details	Probl em Detail s	Problems that were treated or affected provisioning of care (diagnostics, therapy, nursing, monitoring) during the encounter. At least one problem should be marked as treated. Other problems are recorded only if they are important for continuity of care (after discharge).	Problems that were treated or affected provisioning of care (diagnostics, therapy, nursing, monitoring) during the encounter. At least one problem should be marked as treated. Other problems are recorded only if they are important for continuity of care (after discharge).	Base	0. .*			
L.4 .4. 8.2 .1	.....present OnAdmissi on	Pres ent On Admi ssion	Whether the condition was present on admission or acquired during encounter	Category of the problem allows flagging for conditions acquired during encounter.	Codeabl eConce pt	1. .1			
L.4 .4. 8.2 .2	.....treatme ntClass	Treat ment Clas s	Class of the problem (treated, other) in relation to the encounter.	Class of the problem (treated, other) in relation to the encounter.	Codeabl eConce pt	1. .1			

L.4 .4. 8.2 .3	.....problem	Problem em	Problem details include code that identifies problem, specification of the body structure, laterality, and other aspects of the problem.	Problem details include code that identifies problem, specification of the body structure, laterality, and other aspects of the problem.	EHDSCo ndition	1. .1			
L.4 .4. 8.3	....significa ntProcedur es	Signi fican t Proc edur es	Significant procedures section	Significant surgical and non-surgical procedures performed during encounter which are significant for continuity of care, e.g. surgeries and other instrumental interventions (endoscopic, intravascular) chemothera py, radiotherapy, purification methods (dialysis, hemoperfusi on), circulation support methods (counterpuls	Base	0. .1			eH N Gui deli ne HD R (v1. 1): A.2. 6.2

				<p>ation, etc.), administratio n of blood derivatives or others. This section does not include purely diagnostic procedures (MRI, CT, etc.). If no significant performance has been performed, this fact must be explicitly stated using the IPS Absent and Unknown Data.</p>					
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L.4 .4. 8.4narrative	Narr ative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1			
L.4 .4. 8.5	....procedur eEntry	Proc edur e Entry	Structured procedure entry.	Structured procedure entry.	EHDSP rocedure	0. .*			

L.4 .4. 9	...medicalD evicesAndI mplants	Medi cal Devi ces And Impl ants	Medical devices and implants section	Implants and used medical devices that affected or may affect the provision of health services (diagnosis and treatment). Also medical devices explanted, or its use was stopped during encounter. If the section is blank, the reason must be explicitly stated using the IPS Absent and Unknown Data coding system	Base	1. .1			eH N Gui deli ne HD R (v1. 1): A.2. 6.3
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L.4 .4. 9.1narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1			
L.4 .4. 9.2	....medical DevicesAnd Implants	Medical Devices And Implants	Medical devices and implants	Medical devices and implants	EHDSD deviceUse	1. .*			

L.4 .4. 10	...pharmacotherapy	Pharmacotherapy	Pharmacotherapy section	<p>Selected drug treatment during encounter. Medicinal products that were administered during encounter and whose administration has already been discontinued before discharge. Only products which are important for continuity of care (antibiotics other than completely routine, corticosteroids in high doses, etc.) will be listed. Products which administration will continue after discharge will be also recorded in the Medication summary</p>	Base	0. .1			eH N Guideline HDR (v1.1): A.2.6.5
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				<p>section.</p> <p>Medicinal products, the administration of which was started during encounter, but is also recommended after discharge, will be listed in the summary table in the recommendation section.</p>					
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L.4 .4. 10. 1narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1			
L.4 .4. 10. 2	....pharmacotherapy	Pharmacotherapy	Pharmacotherapy structured entry.	Pharmacotherapy structured entry.	EHDS Medication Statement	0. .*			

L.4 .4. 11	...significant Observation Results	Signi fican t Obse rvati on Resu lts	Significant Observation Results	Results of significant functional, diagnostic, and imaging examination s to ensure continuity of care, performed during encounter. Results of examination s ordered but not yet delivered should be presented separately from results already delivered.	Base	0. .1			eH N Gui deli ne HD R (v1. 1): A.2. 6.6
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L.4 .4. 11. 1narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative subsection elements should be provided.	string	0. .1			
L.4 .4. 11. 2	....significantObservationResult	Significant Observation Result	Significant Observation Result	Structured significant observation entry.	EHDSObservation, EHDSLaboratory Observation	0. .*			

L.4 .4. 12	...synthesis	Synt hesis	Synthesis	This section provides clinical synthesis (e.g. description of reasons and course of encounter) clustered by managed conditions, Clinical synthesis may include clinical reasoning (differential diagnostics, explanation of clinical context) in clinically complex conditions.	Base	1. .1			eH N Gui deli ne HD R (v1. 1): A.2. 6.7
L.4 .4. 12. 1	....problem Synthesis	Probl em Synt hesis	Summary description of the reason and course of hospitalisati on for a specific problem.	Summary description of the reason and course of hospitalisati on for a specific problem.	string	1. .*			

L.4 .4. 12. 2	....clinical Reasoning	Clinical Reasoning	Clinical reasoning	The clinical summary can be concluded with a clinical consideration (diff. diagnosis, explanation of context, etc.) for clinically complex conditions.	string	0. .1			
L.4 .4. 13	...discharge Details	Discharge Details	Discharge details	Structured information should be provided, however if not available, at least a section narrative should be present.	Base	1. .1			eH N Guideline HDR (v1.1): A.2.7

L.4 .4. 14	...narrative	Narrative	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative sub-section elements should be provided.	Narrative content of the section. This narrative shell containing either summary narrative description of all subsections, or similar narrative sub-section elements should be provided.	string	0. .1			
L.4 .4. 15	...objective Findings	Objective Findings	Objective findings	Sub-section with objective findings.	Base	0. .1			eH N Guideline HDR (v1.1): A.2.7.1
L.4 .4. 15. 1	....narrative	Narrative	Narrative content of the section.	Narrative content of the section.	string	0. .1			

L.4 .4. 15. 2	....anthropometricObservations	Anthropometric Observations	Anthropometric observations , such as body weight and height of the patient, BMI, circumference of head, waist, hip, limbs and skin fold thickness.	Anthropometric observations , such as body weight and height of the patient, BMI, circumference of head, waist, hip, limbs and skin fold thickness.	EHDSObservation	0. .*			eH N Guideline HDR (v1.1): A.2.7.1.3
L.4 .4. 15. 3	....vitalSigns	Vital Signs	Vital signs observations . Mandatory: pulse rate, respiratory rate, systolic and diastolic blood pressure with site information; optional: O2 saturation	Vital signs observations . Mandatory: pulse rate, respiratory rate, systolic and diastolic blood pressure with site information; optional: O2 saturation	EHDSObservation	0. .*			eH N Guideline HDR (v1.1): A.2.7.1.4

L.4 .4. 15. 4physical Examination	Physical Examination	Physical examination	Physical examination is the process of evaluating objective anatomical findings. It is typically the first diagnostic measure performed after taking the patient's history, which allows an initial assessment of symptoms and is useful for determining the differential diagnoses and further steps. Physical examination can be performed through observation, palpation, percussion, and auscultation.	EHDSOb servatio n	0. .*			eH N Gui deli ne HD R (v1. 1): A.2. 7.1. 5
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L.4 .4. 16	...functional Status	Functional Status	Section: Functional status	Functional status can be assessed in several different ways, usually with a focus on the person's abilities to perform basic activities of daily living (ADL), which include basic self-care such as bathing, feeding, and toileting and instrumental activities of daily living (IADL), which includes activities such as cooking, shopping, and managing one's own affairs. For details see: https://paciowg.github.io/functional-status-ig/	Base	0. .1			eH N Gui deli ne HD R (v1. 1): A.2. 7.2
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L.4 .4. 16. 1narrative	Narrative	Narrative, potentially formatted, content of the section	Narrative, potentially formatted, content of the section	string	0. .1			
L.4 .4. 16. 2	....functionalStatusAssessment	Functional Status Assessment	An individual's ability to perform normal daily activities required to meet basic needs, fulfil usual roles and maintain health and well-being	An individual's ability to perform normal daily activities required to meet basic needs, fulfil usual roles and maintain health and well-being	EHDSFunctional Status	0. .*			

L.4 .4. 17	...medicationSummary	Medication Summary	Medication summary. Summary information on the medication recommended for the period after discharge, indicating whether the medication is changed or newly started. Compared to previous practices, the overview is supplemented with medication that has been discontinued.	Medication summary. Summary information on the medication recommended for the period after discharge, indicating whether the medication is changed or newly started. Compared to previous practices, the overview is supplemented with medication that has been discontinued.	Base	0. .1			eH N Guideline HDR (v1.1): A.2.8.1
L.4 .4. 17. 1	....narrative	Narrative	Narrative content of the section.	Narrative content of the section.	string	0. .1			
L.4 .4. 17. 2	....entry	Entry	Structured medication entry	Structured medication entry	Base	0. .*			
L.4 .4. 17. 2.1	.....medicationUse	Medication Use	Details about medication and dosaging	Details about medication and dosaging	EHDS Medication Statement	1. .1			

L.4 .4. 17. 2.2	.....daysSupplied	Days Supplied	Number of days for which the patient was provided with the drug at the time of discharge	Supply is intended to either hand over the medicine or write out a prescription. A 0 value indicates that the patient has not been provided with the drug (e.g. if the patient has a sufficient supply of the drug)	Quantity	0. .1			
L.4 .4. 17. 3	....carePlan	Care Plan	Care plan and other recommendations after discharge.	Care plan and other recommendations after discharge section.	Base	0. .*			eH N Gui deli ne HD R (v1. 1): A.2. 8.3
L.4 .4. 17. 4	....narrative	Narrative	Narrative content of the section.	Narrative content of the section.	string	0. .1			

L.4 .4. 17. 5	....carePlan	Care Plan	Structured care plan after discharge. Multiple care plans could be provided.	Structured care plan after discharge. Multiple care plans could be provided.	EHDSCa rePlan	0. .*			
L.4 .4. 17. 6	....otherRec ommendati ons	Othe r Reco mme ndati ons	Other recommend ations (advice) after discharge. E.g., recommend ation to suggest hip replacement , reduce number of cigarettes, stop smoking, increase physical exercises, etc.	Other recommend ations (advice) after discharge. E.g., recommend ation to suggest hip replacement , reduce number of cigarettes, stop smoking, increase physical exercises, etc.	string	0. .1			
L.4 .4. 18	...attachme nts	Attac hme nts	Report attachments data elements	Report attachments data elements	EHDSAtt achment , EHDSMe dia	0. .*			
EHDSDocument									
Co de	Path	Elem ent	Short	Definition	Datatyp e	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts

M	EHDSDocument	EHD S Docu ment	Document model	EHDS refined base model for common document data elements, including the common header. Data relevant to document type and its content for administrativ e and searching purposes.		0. .*			
M. 1	.header	Head er	Document header elements	Common header for all patient- related data	Base	1. .1			
M. 1.1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			
M. 1.2	..identifier	Ident ifier	Document ID	Unique identifier of the document	Identifier	1. .*			
M. 1.3	..authorshi p	Auth orshi p	Authorship	Resource authoring details	Base	1. .*			

M. 1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealth Professional, EHDS Organisation, EHDS Device	1.1			
M. 1.3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			
M. 1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
M. 1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
M. 1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
M. 1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	

M. 1.8	..version	Version	Version	Business version of the resource.	string	0.1			
M. 2	..presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
M. 2.1	..document Type	Document Type	Document type	Identifies the type of document at hand, e.g. Discharge report.	CodeableConcept	1.1	LOINC	preferred	
M. 2.2	..document Title	Document Title	Document title	Document title, such as Discharge Report, Laboratory Result Report, etc.	string	1.1			
M. 2.3	..document Status	Document Status	Document status	The status of the Discharge report. E.g., preliminary, final.	CodeableConcept	1.1	hl7: CompositionStatus	preferred	
M. 2.4	..period	Period	Period	Time of service that is being documented	Period	0.1			

M. 2.5	..attestation	Attestation	Attestation	Document attestation details	Base	0.*			
M. 2.5.1	...attester	Attester	Attester	Attester who validated the document. Multiple attesters could be provided.	EHDSHealthProfessional	1.1			
M. 2.5.2	...datetime	DateTime	DateTime	Date and time of the approval of the document by Attester.	dateTime	1.1			
M. 2.6	..legalAuthentication	Legal Authentication	Legal authentication	Document legal authentication	Base	0.1			
M. 2.6.1	...legalAuthenticator	Legal Authenticator	Legal authenticator	The person taking responsibility for the medical content of the document	EHDSHealthProfessional	1.1			
M. 2.6.2	...datetime	DateTime	DateTime	Date and time when the document was authorized.	dateTime	1.1			

M. 2.7	..eventType	Event Type	Event type	<p>Categorization of the event covered by the document (e.g. laboratory study types, imaging study types including modality, etc.).</p> <p>Selection of such tags or labels depends on the use case and agreement between data sharing parties. This meta-data element serves primarily for searching and filtering purposes.</p>	Codeable Concept	0..*	LOINC, SNOMED CT, DICOM-33-Modality	preferred	
M. 2.8	..authorSpecialty	Author Specialty	Specialty	<p>Additional details about where the content was created (e.g. clinical specialty)</p>	Codeable Concept	0..*	SNOMED CT	preferred	

M. 2.9	..custodian	Custodian	Document custodian	Organisation that is in charge of maintaining the document/report.	EHDS Organisation	1.1			
M. 2.10	..document Format	Document Format	Document format	An identifier of the document constraints, encoding, structure, and template that the document conforms to beyond the base format indicated in the mimeType.	Codeable Concept	0.1	HL7 Document Format Codes	preferred	
M. 2.11	..confidentiality	Confidentiality	Confidentiality	Level of confidentiality of the document. Implicit value is normal.	Codeable Concept	0.1	hl7: Confidentiality	preferred	
M. 3	..knowledge Resources	Knowledge Resources	Related documents and information sources	Related documents and information sources	Base	0.*			
M. 3.1	..externalReference	External	...	...	Related Artifact	0.*			

		Refer ence							
M. 3.2	..relatedTo	Relat ed To	...	...		0. .*			
EHDSDosaging									
Co de	Path	Elem ent	Short	Definition	Datatyp e	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts
N	EHDSDosaging	EHD S Dosa ging	Dosaging model	Logical model for usage instructions for administering the requested product. Based on FHIR Dosage complex data type. When implemented , this model may be reduced significantly according to the specific use case.		0. .*			

N.1	.sequence	Sequence	Order of the dosage instruction, in case one treatment consists of several dosaging schemes	Order of the dosage instruction, in case one treatment consists of several dosaging schemes	integer	0. .1			
N.2	.text	Text	Free text usage/dosage instructions when structured dosage information is not fully provided	Free text usage/dosage instructions when structured dosage information is not fully provided	string	0. .1			
N.3	.renderedDescription	Rendered Description	Text representation rendered from all dosaging data elements with a value	Text representation rendered from all dosaging data elements with a value	string	0. .1			
N.4	.additionalInstruction	Additional Instruction	Coded instructions, e.g warnings to the patient, like 'may cause drowsiness' etc	Coded instructions, e.g warnings to the patient, like 'may cause drowsiness' etc	CodeableConcept	0. .*			
N.5	.patientInstruction	Patient Instruction	Patient oriented instructions as free text	Patient oriented instructions as free text	string	0. .1			

N.6	.doseAndRate	Dose And Rate	Amount of medication administered per one dose (= one timing)	Amount of medication administered per one dose (= one timing)	Base	0.*			
N.6.1	..type	Type	The kind of dose or rate specified (e.g calculated, ordered, etc).	The kind of dose or rate specified (e.g calculated, ordered, etc).	Codeable Concept	0.1			
N.6.2	..dose	Dose	Amount of medication per one dose. (1 tablet, 2-3 tablets, 20ml)	Amount of medication per one dose. (1 tablet, 2-3 tablets, 20ml)	Quantity, Range	0.1			
N.6.3	..rate	Rate	Time period during which one defined dose is administered (per 1 hour, per 5-10 minutes)	Time period during which one defined dose is administered (per 1 hour, per 5-10 minutes)	Ratio, Quantity, Range	0.1			
N.7	.timing	Timing	When medication should be administered (period, time of day, frequency, etc)	When medication should be administered (period, time of day, frequency, etc)	Base	0.1			

N.7 .1	..event	Event	Exact date and/or time of the administration	Exact date and/or time of the administration	dateTime	0. .*			
N.7 .2	..code	Code	Timing abbreviation (AM - morning, Q4H - once in every 4 hours, BID - twice a day, etc)	Timing abbreviation (AM - morning, Q4H - once in every 4 hours, BID - twice a day, etc)	CodeableConcept	0. .1			
N.7 .3	..repeat	Repeat	Repetition of the administration.	Repetition of the administration.	Base	0. .1			
N.7 .3.1	...bounds	Bounds	Time bounds for the treatment (current dosaging scheme). Only one of the following can exist.	Time bounds for the treatment (current dosaging scheme). Only one of the following can exist.	Base	0. .1			
N.7 .3.1.1	....duration	Duration	Number of time units, e.g 10 days	Number of time units, e.g 10 days	Quantity	0. .1			
N.7 .3.1.2	....range	Range	A range of numbers of time units, 5-10 days	A range of numbers of time units, 5-10 days	Range	0. .1			
N.7 .3.1.3	....period	Period	Start and end date, 05.08.2023 - 10.08.2023	Start and end date, 05.08.2023 - 10.08.2023	Period	0. .1			

N.7 .3. 2	...count	Count	Number of times to repeat, exact or range	Number of times to repeat, exact or range	Base	0. .1			
N.7 .3. 2.1	....count	Count	Number of times (e.g 'once', '10 times')	Number of times (e.g 'once', '10 times')	integer	0. .1			
N.7 .3. 2.2	....countMax	Count Max	Maximum number of times (e.g 'maximum 10 times')	Maximum number of times (e.g 'maximum 10 times')	integer	0. .1			
N.7 .3. 3	...duration	Duration	Duration of one administration, exact or range	Duration of one administration, exact or range	Base	0. .1			
N.7 .3. 3.1	....duration	Duration	Duration of administration (e.g '5 minutes', '1 hour')	Duration of administration (e.g '5 minutes', '1 hour')	Quantity	0. .1			
N.7 .3. 3.2	....durationMax	Duration Max	Maximum duration of administration (e.g 'maximum 1 hour')	Maximum duration of administration (e.g 'maximum 1 hour')	Quantity	0. .1			
N.7 .3. 4	...frequency	Frequency	Frequency of intake/administration (e.g 'three times a day')	Frequency of intake/administration (e.g 'three times a day')	Base	0. .1			

N.7 .3. 4.1	....number OfTimes	Num ber Of Time s	Number of times per period (e.g '3 times')	Number of times per period (e.g '3 times')	integer	0. .1			
N.7 .3. 4.2	....maxNum berOfTimes	Max Num ber Of Time s	Maximum number of times per period (e.g. 'maxim um 3 times')	Maximum number of times per period (e.g. 'maxim um 3 times')	integer	0. .1			
N.7 .3. 4.3	....period	Perio d	Duration to which the frequency applies (e.g '... / 1 day')	Duration to which the frequency applies (e.g '... / 1 day')	Quantity	0. .1			
N.7 .3. 4.4	....periodM ax	Perio d Max	Upper limit of the period (e.g ... / 4-6 hours)	Upper limit of the period (e.g ... / 4-6 hours)	Quantity	0. .1			
N.7 .3. 5	...dayOfWe ek	Day Of Wee k	The day of the week of administratio n, e.g Mon, Tue, etc	The day of the week of administratio n, e.g Mon, Tue, etc	Codeabl eConce pt	0. .*			
N.7 .3. 6	...timeOfDa y	Time Of Day	Time of day of administratio n (e.g '10:00')	Time of day of administratio n (e.g '10:00')	time	0. .*			
N.7 .3. 7	...eventTim e	Even t Time	An event the administratio n is bound to, e.g 'before meal', '30 min before meal'	An event the administratio n is bound to, e.g 'before meal', '30 min before meal'	Base	0. .*			

N.7 .3. 7.1	....when	When	Time period or event (‘before meal’, ‘immediately , ‘morning’)	Time period or event (‘before meal’, ‘immediately , ‘morning’)	Codeable Concept	0. .*			
N.7 .3. 7.2	....offset	Offset	minutes from event, before or after (?not sure how to show before/after with only positive integers)	minutes from event, before or after (?not sure how to show before/after with only positive integers)	integer	0. .1			
N.7 .3. 8	...asNeeded	As Needed	Take as needed	Take as needed	boolean	0. .1			
N.7 .4	..asNeeded For	As Needed For	Take as needed for the coded reason	Take as needed for the coded reason	Codeable Concept	0. .*			
N.8	.bodySite	Body Site	Body site of administration	Body site of administration	Codeable Concept	0. .1			
N.9	.routeOfAdministration	Route Of Administration	Route of administration	Route of administration	Codeable Concept	0. .1			
N.10	.methodOfAdministration	Method Of Administration	Method of administration	Method of administration	Codeable Concept	0. .1			

N.1 1	..maxDose	Max Dose	Maximum dose for the patient	Maximum dose for the patient	Base	0. .*			
N.1 1.1	..maxDose PerPeriod	Max Dose Per Period	Upper limit on medication per unit of time	Upper limit on medication per unit of time	Ratio	0. .*			
N.1 1.2	..maxDose PerAdminis tration	Max Dose Per Admini stration	Upper limit on medication per one administratio n	Upper limit on medication per one administratio n	Quantity	0. .1			
N.1 1.3	..maxDose PerLifetime	Max Dose Per Lifetime	Upper limit on medication per lifetime of the patient	Upper limit on medication per lifetime of the patient	Quantity	0. .1			
EHDSEncounter									
Co de	Path	Elem ent	Short	Definition	Datatype	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts
O	EHDSEncounter	EHD S Encounter	Encounter model	EHDS refined base model for Encounter		0. .*			
O. 1	..header	Header	Common header for all patient- related data	Common header for all patient- related data	Base	1. .1			

O. 1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1.1			
O. 1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0.*			
O. 1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1.*			
O. 1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSPersonal, EHDSOrganization, EHDSDevice	1.1			
O. 1.3.2	...datetime	Date time	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			
O. 1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
O. 1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
O. 1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			

O. 1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
O. 1.8	..version	Version	Version	Business version of the resource.	string	0.1			
O. 2	..presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDAttachment	0.*			
O. 3	..priority	Priority	Priority	Indicates the urgency of the encounter.	CodeableConcept	0.1	hl7: v3- xEncounter AdmissionUrgency	preferred	
O. 4	..type	Type	Encounter type	The type of the encounter whether inpatient or short stay encounter.	CodeableConcept	1.1	hl7v 3:ActEncounterCode	preferred	

O. 5	.note	Note	A narrative description of the encounter course.	A narrative description of the encounter course.	string	0.1			
O. 6	.episodeOf Care	Episode Of Care	Reference to the episode(s) of care that this encounter should be recorded against	Reference to the episode(s) of care that this encounter should be recorded against	EHDSEpisodeOfCare	0.*			
O. 7	.basedOn	Based On	Reference to the request that initiated this encounter	Reference to the request that initiated this encounter	EHDSCarePlan, EHDSServiceRequest	0.*			
O. 8	.partOf	Part Of	Reference to another encounter this encounter is part of	Reference to another encounter this encounter is part of	EHDSEncounter	0.1			
O. 9	.serviceProvider	Service Provider	The organisation (facility) responsible for this encounter	The organisation (facility) responsible for this encounter	EHDSOrganisation	0.1			
O. 10	.actualPeriod	Actual Period	The actual start and end time of the encounter	The actual start and end time of the encounter	Period	0.1			

O. 11	.plannedStartDate	Planned Start Date	The planned start date/time (or admission date) of the encounter	The planned start date/time (or admission date) of the encounter	dateTime	0.1			
O. 12	.plannedEndDate	Planned End Date	The planned end date/time (or discharge date) of the encounter	The planned end date/time (or discharge date) of the encounter	dateTime	0.1			
O. 13	.admission	Admission	Details about the admission to a healthcare service	Details about the admission to a healthcare service	Base	0.1			
O. 13. 1	..admitter	Admitter	Admitting healthcare professional	Admitting healthcare professional	EHDSHealthProfessional	0.1			
O. 13. 2	..admitSource	Admit Source	From where the patient was admitted (e.g. physician referral, transfer).	From where the patient was admitted (e.g. physician referral, transfer).	CodeableConcept	0.1	hl7: admit-source	preferred	
O. 13. 3	..referringProfessional	Referring Professional	Referring Healthcare Professional	Referring Healthcare Professional	EHDSHealthProfessional	0.1			

O. 13. 4	..reason	Reason	Reason(s) for admission, e.g. problem, procedure or finding.	Reason(s) for admission, e.g. problem, procedure or finding.	Codeable Concept, EHDSC condition, EHDSP procedure, EHDSo observation	0. .*			
O. 13. 5	..reasonComment	Reason Comment	Explanation of the reason for the encounter.	Explanation of the reason for the encounter.	string	0. .1			
O. 13. 6	..legalStatus	Legal Status	Legal status/situation at admission (indicates the basis on which the patient is staying in a healthcare organisation) .	Legal status can be either voluntary or involuntary, however the legal status is always determined by a court. A patient can also receive healthcare based on a forensic status. (voluntary, involuntary, admission by legal authority).	Codeable Concept	0. .1	SNO MED CT	preferred	

O. 14	.discharge	Discharge	Discharge details	Discharge details	Base	0.1			
O. 14.1	..destinationType	Destination Type	Type of location to which the patient will go after the encounter. E.g. home, hospital, nursing home, left against medical advice etc.	Type of location to which the patient will go after the encounter. E.g. home, hospital, nursing home, left against medical advice etc.	CodeableConcept	0.1	hl7. discharge-disposition	preferred	
O. 14.2	..destinationLocation	Destination Location	The location/organisation to which the patient will go after the encounter. Name, address and telecommunication contact.	The location/organisation to which the patient will go after the encounter. Name, address and telecommunication contact.	EHDSOrganisation, EHDSLocation	0.1			
O. 15	.location	Location	List of locations where the patient has been.	List of locations where the patient has been.	Base	0.*			

O.15.1	..period	Period	Time period during which the patient was present at the location	Time period during which the patient was present at the location	Period	0.1			
O.15.2	..organisationPart	Organisation Part	Organisation or organisation part (department) where the patient was present.	Organisation or organisation part (department) where the patient was present.	EHDS Organisation, EHDS Location	1.1			
EHDSEpisodeOfCare									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
P	EHDSEpisodeOfCare	EHDSEpisodeOfCare	Episode of care model	EHDS refined base model for Episode of care		0.*			
P.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
P.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1.1			

P.1 .2	..identifier	Identifier	Business identifiers assigned to this episode of care.	Business identifier for the object	Identifier	0. .*			
P.1 .3	..authorship	Authorship	Authorship	Resource authoring details	Base	1. .*			
P.1 .3. 1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1. .1			
P.1 .3. 2	...datetime	Date time	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1. .1			
P.1 .4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0. .1			
P.1 .5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1. .1			
P.1 .6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0. .1			

P.1 .7	..language	Lang uage	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	Codeabl eConce pt	0. .1	BCP 47	preferred	
P.1 .8	..version	Versi on	Version	Business version of the resource.	string	0. .1			
P.2	.presented Form	Pres ente d Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAtt achment	0. .*			
P.3	.type	Type	A classificatio n of the type of episode of care; e.g. specialis t referral, disease management .	A classificatio n of the type of episode of care; e.g. specialis t referral, disease management .	Codeabl eConce pt	0. .*			

P.4	.reasonText	Reason Text	Textual descriptions of the medical reasons that are expected to be addressed during the episode of care.	Textual descriptions of the medical reasons that are expected to be addressed during the episode of care.	string	0. .1			
P.5	.reason	Reason	Coded list of medical reasons that are expected to be addressed during the episode of care.	Coded list of medical reasons that are expected to be addressed during the episode of care.	CodeableConcept, EHDSCondition, EHDSProcedure, EHDSObservation	0. .*			
P.6	.diagnosis	Diagnosis	List of medical conditions that were addressed during the episode of care	List of medical conditions that were addressed during the episode of care	Base	0. .*			
P.6 .1	..description	Description	Textual description of the medical condition that was addressed during the episode of care	Textual description of the medical condition that was addressed during the episode of care	string	1. .1			

P.6.2	..condition	Condition	The medical condition that was addressed during the episode of care	The medical condition that was addressed during the episode of care	Codeable Concept, EHDSC condition	0.1			
EHDSFamilyMemberHistory									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
Q	EHDSFamilyMemberHistory	EHDS Family Member History	Family member history model	EHDS refined base model for family member history		0.*			
Q.1	..header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
Q.1.1	..subject	Subject	The person whose family member's medical history is described.	Patient/subject information	EHDSPatient	1.1			
Q.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0.*			

Q. 1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1.*			
Q. 1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1.1			
Q. 1.3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			
Q. 1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
Q. 1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
Q. 1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			

Q. 1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
Q. 1.8	..version	Version	Version	Business version of the resource.	string	0.1			
Q. 2	.presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
Q. 3	.patientRelationship	Patient Relationship	Patient relationship	The family relation between the related person and the patient.	CodeableConcept	0.1	hl7: v3-Role Code	preferred	
Q. 4	.dateOfBirth	Date Of Birth	Date of birth of the family member.	Date of birth of the family member.	date	0.1			
Q. 5	.ageOrDateOfDeath	Age Or Date Of Death	Age or date of the death of the family member.	Age or date of the death of the family member.	date, Quantity	0.1			

Q. 6	.condition	Condition	Medical problems this person suffers or suffered.	Medical problems this person suffers or suffered.	Codeable Concept	0.*	ICD-10, SNO MED CT, Orp hac ode if rare disease is diagnosed	preferred	
Q. 7	.causeOfDeath	Cause Of Death	Information about disease or condition that was the main cause of death.	Information about disease or condition that was the main cause of death.	Codeable Concept	0.1	ICD-10, SNO MED CT, Orp hac ode if rare disease is diagnosed	preferred	
EHDSFunctionalStatus									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements

R	EHDSFunctionalStatus	EHDS Functional Status	Functional status	EHDS refined base model for Functional status		0..*			
R.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1..1			
R.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1..1			
R.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
R.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
R.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1..1			
R.1.3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1..1			

R.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
R.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
R.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
R.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
R.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
R.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			

R.3	.description	Description	Narrative description of the functional status	Narrative description of the need for the patient to be continuously assessed by third parties; functional status may influence decisions about how to plan and administer treatments.	string	0.1			eH N HD R Guideline, My Health @EU, ISO IPS
R.4	.relatedConditions	Related Conditions	Conditions related to the functional status	Conditions related to the functional status	Base	0.*			eH N HD R Guideline, ISO IPS
R.4.1	..condition	Condition	Condition related to the functional status	Condition related to the functional status	CodeableConcept	0.1			
R.4.2	..conditionText	Condition Text	Textual description of the condition	Textual description of the condition	string	0.1			eH N HD R Guideline, ISO IPS

R.4.3	..onsetDate	Onset Date	Onset date of a condition	Onset date of a condition	dateTime	0.1			eH N HD R Guideline, ISO IPS
R.5	..functionalStatusAssessment	Functional Status Assessment	Functional assessment of the patient	Functional status assessment of the patient according to a specific assessment scheme.	Base	0.*			eH N HD R Guideline, ISO IPS
R.5.1	..functionalAssessmentDescription	Functional Assessment Description	Description of the functional assessment	Description of the functional assessment	string	0.1			eH N HD R Guideline, ISO IPS
R.5.2	..functionalAssessmentCode	Functional Assessment Code	Standardized code corresponding to the Functional assessment	Standardized code corresponding to the Functional assessment	CodeableConcept	0.1	ICF, SNO MED CT	preferred	eH N HD R Guideline, ISO IPS

R.5.3	..functionalAssessmentDateTime	Functional Assessment DateTime	Date and time of the functional assessment	Date and time of the functional assessment	dateTime	0.1			eH N HD R Gui deli ne, ISO IPS
R.5.4	..functionalAssessmentResult	Functional Assessment Result	Functional assessment result value	Functional assessment result value	string, Quantity, CodeableConcept	0.1	ICF, SNO MED CT	preferred	eH N HD R Gui deli ne, ISO IPS
EHDSHealthProfessional									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
S	EHDSHealthProfessional	EHDS Health Professional	Health professional model	EHDS refined base model for Health professional (HP)		0.*			

S.1	.identifier	Identifier	An identifier of the health professional that is unique within a defined scope. Example: National health professional ID. Multiple identifiers could be provided.	An identifier of the health professional that is unique within a defined scope. Example: National health professional ID. Multiple identifiers could be provided.	Identifier	0.*			
S.2	.name	Name	Name of the health professional that has been treating or taking responsibility for the patient.	Name of the health professional that has been treating or taking responsibility for the patient.	EHDShumanName	0.1			

S.3	.address	Address	<p>Mailing and office or home addresses. The addresses are always sequences of address parts (e.g. street address line, country, postcode, city) even if postal address formats may vary depending on the country. An address may or may not include a specific use code; if this attribute is not present it is assumed to be the default address useful for any purpose.</p>	<p>Mailing and office or home addresses. The addresses are always sequences of address parts (e.g. street address line, country, postcode, city) even if postal address formats may vary depending on the country. An address may or may not include a specific use code; if this attribute is not present it is assumed to be the default address useful for any purpose.</p>	EHDSAdress	0.1				
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S.4	.telecom	Telecom	Telecommunication contact information (addresses) associated with a person, such as phone number, email, or messaging service. Multiple telecommunication addresses might be provided.	Telecommunication contact information (addresses) associated with a person, such as phone number, email, or messaging service. Multiple telecommunication addresses might be provided.	EHDSTelecom	0.*			
S.5	.role	Role	Health professional role. Multiple roles could be provided.	Health professional role. Multiple roles could be provided.	CodeableConcept	0.*	ISO, SNO MED CT	preferred	
S.6	.organisation	Organisation	The organisation where this role is available	The organisation where this role is available	EHDSOrganisation	0.1			

S.7	.specialty	Specialty	The specialty of a practitioner that describes the functional role they are practicing at a given organisation	The specialty of a practitioner that describes the functional role they are practicing at a given organisation	Codeable Concept	0..*			
EHDSImagingStudy									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
T	EHDSImagingStudy	EHD S Imaging Study	Imaging study model	EHDS refined base model for Imaging study		0..*			
T.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1..1			
T.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1..1			

T.1 .2	..identifier	Identifier	Identifiers for the Imaging Study such as DICOM Study Instance UID. If one or more series elements are present in the ImagingStudy, then there shall be one DICOM Study UID identifier.	Business identifier for the object	Identifier	1. .*			eH N Guideline IMG (v1.1): B.1.1
T.1 .3	..authorship	Authorship	Authorship	Resource authoring details	Base	1. .*			
T.1 .3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1. .1			
T.1 .3.2	...datetime	Date time	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1. .1			

T.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
T.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
T.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
T.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
T.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
T.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			

T.3	.modality	Modality	All of the distinct values for series' modalities	All of the distinct values for series' modalities	CodeableConcept	0..*	DICOM CID 029	preferred	
T.4	.encounter	Encounter	Reference to the encounter with which this imaging study is associated	Reference to the encounter with which this imaging study is associated	EHDSEncounter	0..1			
T.5	.started	Started	Date and time the study started.	Date and time the study started.	dateTime	0..1			
T.6	.basedOn	Based On	References to the diagnostic requests that resulted in this imaging study being performed.	References to the diagnostic requests that resulted in this imaging study being performed.	EHDSServiceRequest	0..*			

T.7	.numberOfSeries	Number Of Series	<p>Number of Series in the Study. This value given may be larger than the number of series elements this Resource contains due to resource availability, security, or other factors. This element should be present if any series elements are present.</p>	<p>Number of Series in the Study. This value given may be larger than the number of series elements this Resource contains due to resource availability, security, or other factors. This element should be present if any series elements are present.</p>	integer	0..1			
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T.8	.numberOfInstances	Number Of Instances	<p>Number of Service-Object Pairs (SOP) Instances in Study. This value given may be larger than the number of instance elements this resource contains due to resource availability, security, or other factors. This element should be present if any instance elements are present.</p>	<p>Number of Service-Object Pairs (SOP) Instances in Study. This value given may be larger than the number of instance elements this resource contains due to resource availability, security, or other factors. This element should be present if any instance elements are present.</p>	integer	0.1			
T.9	.description	Description	<p>The Imaging Manager description of the study. Institution-generated description or classification of the Study (component) performed.</p>	<p>The Imaging Manager description of the study. Institution-generated description or classification of the Study (component) performed.</p>	string	0.1			eH N Guideline IMG (v1.1): B.1.2

T.1 0	.studyCustodian	Study Custodian	Organisation name, address, contact information.	Organisation name, address, contact information.	EHDSON	0.1			eH N Guideline IMG (v1.1): B.1.3
T.1 1	.studyEndpoint	Study Endpoint	Study endpoint describing the technical details of a location that can be connected to for the delivery/retrieval of information. Sufficient information is required to ensure that a connection can be made securely, and appropriate data transmitted as defined by the endpoint owner. These may be locally hosted services, regional services, or national service.	Study endpoint describing the technical details of a location that can be connected to for the delivery/retrieval of information. Sufficient information is required to ensure that a connection can be made securely, and appropriate data transmitted as defined by the endpoint owner. These may be locally hosted services, regional services, or national service.	EHDSEndpoint	0.1			

T.1 2	..series	Series	Series. Each study has one or more series of instances, but they may be absent when no series information needs to be conveyed	Series. Each study has one or more series of instances, but they may be absent when no series information needs to be conveyed	Base	0. .*			eH N Gui deli ne IMG (v1. 1): B.1. 4
T.1 2.1	..seriesUid	Series s Uid	DICOM Series Instance UID for the series	DICOM Series Instance UID for the series	Identifier	1. .1			eH N Gui deli ne IMG (v1. 1): B.1. 4.2
T.1 2.2	..number	Num ber	Numeric identifier of this series	Numeric identifier of this series	integer	0. .1			
T.1 2.3	..acquisitionModality	Acqu isition Mod ality	Acquisition modality - the modality used for this series	Acquisition modality - the modality used for this series	Codeabl eConce pt	1. .1	DIC OM CID 029	preferred	eH N Gui deli ne IMG (v1. 1): B.1. 4.3
T.1 2.4	..description	Desc ription	A short human readable summary of the series	A short human readable summary of the series	string	0. .1			eH N Gui deli ne

									IMG (v1.1): B.1.4.1
T.1 2.5	..numberOfInstances	Number Of Instances	Number of Series Related Instances	Number of Series Related Instances	integer	0.1			
T.1 2.6	..seriesEndpoint	Series Endpoint	Series endpoint describing the technical details of a location that can be connected to for the delivery/retrieval of information. Sufficient information is required to ensure that a connection can be made securely, and appropriate data transmitted as defined by the endpoint owner. These may be locally hosted services, regional services, or national service.	Series endpoint describing the technical details of a location that can be connected to for the delivery/retrieval of information. Sufficient information is required to ensure that a connection can be made securely, and appropriate data transmitted as defined by the endpoint owner. These may be locally hosted services, regional services, or national service.	EHDSEndpoint	0.1			eH N Guideline IMG (v1.1): B.1.4.6

T.1 2.7	..bodySite	Body Site	Body part (with laterality) examined	Body part (with laterality) examined	EHDSSo dyStruct ure	0. .1			
T.1 2.8	..specimen	Spec imen	Specimen imaged	Specimen imaged	EHDSSp ecimen	0. .*			
T.1 2.9	..started	Start ed	When the series started	When the series started	dateTim e	0. .1			
T.1 2.1 0	..instancesIn TheSeries	Insta nces In The Serie s	Each series has one or more instances, but they may be absent when no instance information needs to be conveyed	Each series has one or more instances, but they may be absent when no instance information needs to be conveyed	Base	0. .*			eH N Gui deli ne IMG (v1. 1): B.1. 4.7
T.1 2.1 0.1	...instanceTitle	Insta nce Title	Instance title that is the description of the instance.	Instance title that is the description of the instance.	string	0. .1			
T.1 2.1 0.2	...instance Uid	Insta nce Uid	DICOM SOP Instance UID	DICOM SOP Instance UID	Identifier	1. .1			eH N Gui deli ne IMG (v1. 1): B.1. 4.7. 1
T.1 2.1 0.3	...sopClass	Sop Clas s	SOP class - DICOM class type	SOP class - DICOM class type	uri	1. .1			DIC OM

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T.1 2.1 0.4	...instance Number	Insta nce Num ber	The number of this instance in the series	The number of this instance in the series	integer	0. .1			eH N Gui deli ne IMG (v1. 1): B.1. 4.7. 3
T.1 2.1 0.5	...numberO fFrames	Num ber Of Fram es	The number of frames in a multiframe instance	The number of frames in a multiframe instance	integer	0. .1			DIC OM KO S
EHDSImmunisation									
Co de	Path	Elem ent	Short	Definition	Datatyp e	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts
U	EHDSImmu nisation	EHD S Imm unis ation	Immunisatio n model	EHDS refined base model for Immunisatio n		0. .*			
U.1	.header	Head er	Common header for all patient- related data	Common header for all patient- related data	Base	1. .1			
U.1 .1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			

U.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
U.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
U.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganisation, EHDSDevice	1..1			
U.1.3.2	...datetime	Datetime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	datetime	1..1			
U.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	datetime	0..1			
U.1.5	..status	Status	Status of the resource	Indicates the current status of the immunisation event (completed, not-done).	CodeableConcept	1..1			

U.1 .6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0. .1			
U.1 .7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0. .1	BCP 47	preferred	
U.1 .8	..version	Version	Version	Business version of the resource.	string	0. .1			
U.2	.presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0. .*			
U.3	.diseaseOrAgentTargeted	Disease Or Agent Targeted	Disease or agent targeted	Disease or agent that the vaccination provides protection against.	CodeableConcept	0. .*	ICD-10, SNO MED CT	preferred	

U.4	.vaccine	Vaccine	Type of vaccine	Generic description of the vaccine/prophylaxis or its component(s).	Codeable Concept	1. .1	SNO MED CT, ATC	preferred	
U.5	.administeredProduct	Administered Product	Administered medicinal product	Administered medicinal product	EHDS Medication	0. .1			
U.6	.doseNumber	Dose Number	Number in a series of vaccinations / doses	Order in the vaccination course.	integer	0. .1			
U.7	.dateOfVaccination	Date Of Vaccination	Date of vaccination	The date and time when the vaccination was administered	date	1. .1			
U.8	.administeringCentre	Administering Centre	Administering centre	Name/code of administering centre or a health authority responsible for the vaccination event	EHDS Organisation	0. .*			

U.9	.vaccineAdministrator	Vaccine Administrator	Administrator of vaccine	Health professional responsible for administering the vaccine or prophylaxis	EHDSHealthProfessional	0.*			
U.10	.nextVaccinationDate	Next Vaccination Date	Next vaccination date	The date when the vaccination is planned to be given/repeated (e.g. next dose)	date	0.1			
EHDSInfectiousContact									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
V	EHDSInfectiousContact	EHDS Infectious Contact	Infectious contact model	EHDS refined base model for an infectious contact		0.*			
V.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
V.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1.1			

V.1 .2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
V.1 .3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
V.1 .3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1..1			
V.1 .3.2	...datetime	Datetime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	datetime	1..1			
V.1 .4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	datetime	0..1			
V.1 .5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1..1			
V.1 .6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0..1			

V.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
V.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
V.2	..presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
V.3	..infectious Agent	Infectious Agent	Information about a suspected infectious agent or agents the person was exposed to.	Information about a suspected infectious agent or agents the person was exposed to.	CodeableConcept	0.*	ICD-10, SNO MED CT	preferred	

V.4	.timePeriod	Time Period	A date and duration or date time interval of contact. Partial dates are allowed.	A date and duration or date time interval of contact. Partial dates are allowed.	dateTime, Period	0.1			
V.5	.proximity	Proximity	Proximity to the source/carrier of the infectious agent during exposure. Proximity could be expressed by text, code (direct, indirect) or value specifying distance from the infectious agent carrier.	Proximity to the source/carrier of the infectious agent during exposure. Proximity could be expressed by text, code (direct, indirect) or value specifying distance from the infectious agent carrier.	Codeable Concept, Quantity	0.1			
V.6	.country	Country	Country in which the person was potentially exposed to an infectious agent.	Country in which the person was potentially exposed to an infectious agent.	Codeable Concept	0.1	ISO 3166-1 alpha-2	preferred	

V.7	.note	Note	A textual note with additional information about infectious contact.	A textual note with additional information about infectious contact.	string	0.1			
EHDSLaboratoryObservation									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
W	EHDSLaboratoryObservation	EHDS Laboratory Observation	Laboratory observation model	EHDS refined base model for Observation performed by laboratory		0.*			
W.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
W.1.1	..subject	Subject	The patient, location, device, organisation, procedure or practitioner this observation is about	Patient/subject information	EHDSPatient	1.1			

W. 1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
W. 1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
W. 1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1..1			
W. 1.3.2	...datetime	Datetime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	datetime	1..1			
W. 1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	datetime	0..1			
W. 1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1..1	HL7 Observation status	preferred	
W. 1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0..1			

W. 1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
W. 1.8	..version	Version	Version	Business version of the resource.	string	0.1			
W. 2	.presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
W. 3	.observationDate	Observation Date	Clinically relevant time or time period for the observation	Clinically relevant time or time period for the observation	dateTime, Period	1.1			
W. 4	.code	Code	Observation code	Code representing the observation using the agreed code systems.	CodeableConcept	1.1	LOINC, NPU	preferred	

W. 5	.originalName	Original Name	Original (conventional) name of the observation	Original (conventional) name of the observation	string	0.1			
W. 6	.method	Method	Observation method	Observation method (measurement principle) to obtain the result.	CodeableConcept	0.1	SNO MED CT	preferred	
W. 7	.order	Order	Identifies order and order place this observation belongs to	Identifies order and order place this observation belongs to	EHDSServiceRequest	0.1			
W. 8	.performer	Performer	Performer	Performer	EHDSHealthProfessional	0.1			
W. 9	.anatomicLocation	Anatomic Location	Anatomic location and laterality where the observation was performed.	Anatomic location and laterality where the observation was performed.	EHDSBodyStructure	0.1			

W. 10	.result	Result	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Base	0.1			
W. 10.1	..value	Value	Observation result value according to the type of observation	Observation result value according to the type of observation	string, Quantity, Range, CodeableConcept	1.1	UCUM for units, SNOCT for coded results	preferred	
W. 10.2	..uncertainty	Uncertainty	Measurement uncertainty type and interval if needed.	Measurement uncertainty type and interval if needed.	Base	0.1			

W. 11	.dataAbsentReason	Data Absent Reason	Provides a reason why the expected value in the element Observation. value[x] is missing.	Provides a reason why the expected value in the element Observation. value[x] is missing.	CodeableConcept	0..1	HL7 Data absent reason	preferred	
W. 12	.referenceRange	Reference Range	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Base	0..*			
W. 13	.interpretation	Interpretation	Information about reference intervals and result interpretation.	Information about reference intervals and result interpretation.	CodeableConcept	0..*	SNOMED CT, HL7 Observation interpretation	preferred	
W. 14	.resultDescription	Result Description	Comments and narrative representation of the observation result and findings.	Comments and narrative representation of the observation result and findings.	string	0..1			

W. 15	..component	Component	Component in case the observation consists of multiple sub-observations (e.g. blood pressure).	Component in case the observation consists of multiple sub-observations (e.g. blood pressure).	Base	0..*		
W. 15.1	..code	Code	Code representing the observation using the agreed code systems.	Code representing the observation using the agreed code systems.	Codeable Concept	1.1	LOINC, NPU, SNO MED CT	preferred
W. 15.2	..result	Result	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Base	0..1		

W. 15.2.1	...value	Value	Observation result value according to the type of observation	Observation result value according to the type of observation	string, Quantity, Range, CodeableConcept	1.1			
W. 15.2.2	...uncertainty	Uncertainty	Measurement uncertainty type and interval if needed.	Measurement uncertainty type and interval if needed.	Base	0.1			
W. 15.3	..dataAbsentReason	Data Absent Reason	Provides a reason why the expected value in the element Observation.value[x] is missing.	Provides a reason why the expected value in the element Observation.value[x] is missing.	CodeableConcept	0.1	HL7 Data absent reason	preferred	
W. 15.4	..referenceRange	Reference Range	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Base	0.*			
W. 15.5	..interpretation	Interpretation	Information about reference intervals and result interpretation.	Information about reference intervals and result interpretation.	CodeableConcept	0.*	SNOMEDCT, HL7 Observation interpretation	preferred	

							atio n		
W. 16	.derivedFrom	Deriv ed From	Reference to the related resource from which the observation has been made. For example, a calculated anion gap or a fetal measurement based on an ultrasound image.	Reference to the related resource from which the observation has been made. For example, a calculated anion gap or a fetal measurement based on an ultrasound image.	EHDSo bservatio n, EHDSL aboratory Observa tion, EHDSL magingStu dy	0. .*			
W. 17	.triggeredBy	Trigg ered By	References to the observation(s) that triggered the performance of this observation.	References to the observation(s) that triggered the performance of this observation.	EHDSL aboratory Observa tion, EHDSL bservatio n	0. .*			

W. 18	.hasMember	Has Member	This observation is a group observation (e.g. a battery, a panel of tests, a set of vital sign measurements) that includes the target as a member of the group.	This observation is a group observation (e.g. a battery, a panel of tests, a set of vital sign measurements) that includes the target as a member of the group.	EHDSLaboratory Observation, EHDSObservation	0.*			
W. 19	.testKit	Test Kit	Test kit	Laboratory test kit used during measurement.	EHDSDevice	0.1			
W. 20	.calibrator	Calibrator	Calibrator	Information about which end-user calibrator the laboratory used for the measurement to indicate the metrological traceability chain.	Identifier	0.1			

W. 21	.accreditati onStatus	Accr edita tion Statu s	Accreditatio n status	Accreditatio n status of the laboratory for the particular observation.	Codeabl eConce pt	0. .1	Cod e syst em to be spe cifie d	preferred	
W. 22	.previousRe sults	Previ ous Resu lts	Previous results	Previous results of the same observation	EHDSL aboratory Observa tion	0. .*			
EHDSLocation									
Co de	Path	Elem ent	Short	Definition	Dataty pe	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts

X	EHDSLocation	EHD S Loca tion	Location model	EHDS refined base model for Details and position information for a place where services are provided and resources and participants may be stored, found, contained, or accommoda ted.		0. .*			
X.1	.identifier	Ident ifier	Identifier	Location identifier	Identifier	0. .*			
X.2	.name	Nam e	Name	Name of the location as used by humans	string	0. .1			
X.3	.description	Desc ription	Description	Additional details about the location that could be displayed as further information to identify the location beyond its name	string	0. .1			

X.4	.type	Type	Type	Type of function performed at the location	Codeable Concept	0..*	HL7 Service Delivery Location Role Type	preferred	
X.5	.address	Address	Address	Physical location address	EHDS Address	0..1			
X.6	.managing Organisation	Managing Organisation	Managing organisation	The organisation responsible for the provisioning and upkeep of the location	EHDS Organisation	0..1			
X.7	.partOf	Part Of	Part of	Another Location of which this Location is physically a part of	EHDS Organisation	0..1			
EHDSMedia									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements

Y	EHDSMedia	EHD S Medi a	Media model	EHDS refined base model for A photo, video, or audio recording acquired or used in healthcare.		0. .*			
Y.1	.identifier	Ident ifier	Identifier	Image identifier	Identifier	0. .*			
Y.2	.type	Type	Type	Classificatio n of media as image, video, audio recording or other media type	Codeabl eConce pt	0. .1	HL7 Med iaTy pe	preferred	
Y.3	.modality	Mod ality	Modality	The type of acquisition equipment/p rocess	Codeabl eConce pt	0. .1	HL7 Med iaM odal ity	preferred	
Y.4	.view	View	View	The name of the imaging view e.g. Lateral or Antero- posterior	Codeabl eConce pt	0. .1	HL7 Med iaCo llect ionV iew/ Proj ecti on	preferred	
Y.5	.subject	Subj ect	Subject	Who/What this Media is a record of	EHDSPa tient, EHDSSp ecimen	0. .1			

Y.6	.created	Created	Created	The date and time(s) at which the media was collected.	dateTime, Period	0.1			
Y.7	.reason	Reason	Reason	Describes why the event occurred in coded or textual form.	CodeableConcept	0.*	SNOMEDCT	preferred	
Y.8	.bodysite	Body site	BodySite	Observed body part, i.e. target site	CodeableConcept	0.1	SNOMEDCT	preferred	
Y.9	.deviceName	Device Name	Device name	The name of the device / manufacturer of the device that was used to make the recording.	string	0.1			
Y.10	.device	Device	Device	The device used to collect the media.	EHDSDevice	0.1			
Y.11	.content	Content	Content	The actual content of the media - inline or by direct reference to the media source file.	EHDSAttachment	1.1			

Y.1 2	.note	Note	Note	Comments made about the media by the performer, subject or other participants.	string	0. .*			
Y.1 3	.performer	Performer	Performer	Performer of the imaging acquisition process.	EHDSHealthProfessional, EHDSOrganization	0. .*			
EHDSMedicationAdministration									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
Z	EHDSMedicationAdministration	EHDS Medication Administration	Medication administration model	EHDS refined base model for a single medication administration		0. .*			
Z.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1. .1			
Z.1 .1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1. .1			

Z.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
Z.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
Z.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1..1			
Z.1.3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1..1			
Z.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0..1			
Z.1.5	..status	Status	Status of the administration (e.g. completed, not-done, on-hold, in-progress, unknown)	Status of the resource	CodeableConcept	1..1	HL7 MedicationAdministrationStatus Codes	preferred	

Z.1.6	..statusReason	Status Reason	Reason administration was not performed	Reason for the current status of the resource.	CodeableConcept, string	0.1	SNOMEDCT	preferred	
Z.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
Z.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
Z.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			
Z.3	..medication	Medication	Administered medication	Administered medication	EHDSMedication	1.1			

Z.4	.occurrence	Occurrence	Specific date/time or interval of time during which the administration took place (or did not take place)	Specific date/time or interval of time during which the administration took place (or did not take place)	dateTime, Period	1.1			
Z.5	.reason	Reason	Condition or observation that supports why the medication was administered	Condition or observation that supports why the medication was administered	CodeableConcept, EHDSCondition, EHDSObservation	0.*			
Z.6	.note	Note	Textual information about the administration	Textual information about the administration	string	0.1			
Z.7	.dosage	Dosage	Details of how medication was taken	Details of how medication was taken	EHDSDosage	0.1			

EHDSMedicationStatement

Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
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AA	EHDSEMedicationStatement	EHDSEMedicationStatement	Medication statement model	Statement about a single medication as part of a medication summary.		0..*			
AA.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
AA.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1.1			
AA.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
AA.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
AA.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSEHealthProfessional, EHDSEOrganisation, EHDSEDevice	1.1			
AA.1.3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			

AA.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
AA.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			
AA.1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
AA.1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
AA.1.8	..version	Version	Version	Business version of the resource.	string	0.1			
AA.2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			

AA.3	.medicationTreatmentStatus	Medication Treatment Status	The current status of the taking of medicine	The current status of the taking of medicine	CodeableConcept	0.1			My Health @EU
AA.4	.medication	Medication	Describes the medicinal product.	Describes the medicinal product.	EHDS Medication	1.1			eH N PS Guideline, ISO IPS, My Health @EU
AA.5	.medicationReason	Medication Reason	Coded reason for the use of the medication (typically diagnosis, or a procedure)	Coded reason for the use of the medication (typically diagnosis, or a procedure)	CodeableConcept	0.*			eH N PS Guideline, ISO IPS, My Health @EU
AA.6	.medicationReasonText	Medication Reason Text	Reason for the use of the medication (typically diagnosis, or a procedure) in free text.	Reason for the use of the medication (typically diagnosis, or a procedure) in free text.	string	0.1			eH N PS Guideline, ISO IPS, My

									Health@EU
AA.7	.intendedUseType	Intended Use Type	The type of intended use of the medication, e.g. prophylactic, therapeutic, diagnostic, anesthesia, etc.	The type of intended use of the medication, e.g. prophylactic, therapeutic, diagnostic, anesthesia, etc.	Codeable Concept	0.1			eHNP Guidelines, My Health@EU
AA.8	.dosageInstructions	Dosage Instructions	Details of how medication is/was taken or should be taken	Details of how medication is/was taken or should be taken. This includes the number of units per intake and frequency of intake over a specified duration of time. Example: 1 tablet every 24h, for 10 days .	EHDSDosing	1.*			eHNP Guidelines, ISO IPS, My Health@EU

AA.9	.periodOfUse	Period Of Use	Period when patient took, is taking or is expected to take the medication	Period when patient took, is taking or is expected to take the medication. This information may be expressed using start and end date times OR indicating the duration. The first is used to indicate a specified interval (e.g., from March 15th, 2017); the latter for indicating a 'floating' period (e.g., 2 weeks). In case of unbounded period (continuous therapy), the end element will be valued with an exceptional value.	Period	0.1			eH N PS Gui deli ne, ISO IPS, My Hea lth @E U
EHDSObservation									
Code	Path	Element	Short	Definition	Datatype	Cardin	Preferred Code	Binding Strength	Requirements

						ality	System		
AB	EHD SObservation	EHD S Obse rvati on	Observation model	EHDS refined base model for Observation information		0. .*			
AB. 1	.header	Head er	Common header for all patient- related data	Common header for all patient- related data	Base	1. .1			
AB. 1.1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			
AB. 1.2	..identifier	Ident ifier	Business identifier for the object	Business identifier for the object	Identifier	0. .*			
AB. 1.3	..authorshi p	Auth orshi p	Authorship	Resource authoring details	Base	1. .*			
AB. 1.3 .1	...author	Auth or	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSh ealthProf essional , EHDSOr ganisati on, EHDSDe vice	1. .1			
AB. 1.3 .2	...datetime	Date time	Date and time of authoring/iss uing	Date and time of the issuing the document/re source by its author.	dateTim e	1. .1			

AB. 1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
AB. 1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1	HL7 Observation status	preferred	
AB. 1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
AB. 1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
AB. 1.8	..version	Version	Version	Business version of the resource.	string	0.1			
AB. 2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0.*			

AB.3	.observationDate	Observation Date	Clinically relevant time or time period for the observation	Clinically relevant time or time period for the observation	dateTime, Period	1.1			
AB.4	.code	Code	Observation code	Code representing the observation using the agreed code systems.	CodeableConcept	1.1	LOINC, NPU, SNOMEDCT	preferred	
AB.5	.originalName	Original Name	Original (conventional) name of the observation	Original (conventional) name of the observation	string	0.1			
AB.6	.method	Method	Observation method	Observation method (measurement principle) to obtain the result.	CodeableConcept	0.1	SNOMEDCT	preferred	
AB.7	.order	Order	Identifies order and order placer this observation belongs to	Identifies order and order placer this observation belongs to	EHDSServiceRequest	0.1			
AB.8	.performer	Performer	Performer	Performer	EHDSHealthProfessional	0.1			

AB.9	.anatomicLocation	Anatomic Location	Anatomic location and laterality where the observation was performed.	Anatomic location and laterality where the observation was performed.	EHDSBodyStructure	0.1			
AB.10	.result	Result	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Base	0.1			
AB.10.1	.value	Value	Observation result value according to the type of observation	Observation result value according to the type of observation	string, Quantity, Range, CodeableConcept	1.1	UCUM for units, SNO-MEDCT for coded	preferred	

							results		
AB. 10. 2	..uncertainty	Uncertainty	Measurement uncertainty type and interval if needed.	Measurement uncertainty type and interval if needed.	Base	0. 1			
AB. 11	.dataAbsentReason	Data Absent Reason	Provides a reason why the expected value in the element Observation. value[x] is missing.	Provides a reason why the expected value in the element Observation. value[x] is missing.	CodeableConcept	0. 1	HL7 Data absent reason	preferred	
AB. 12	.referenceRange	Reference Range	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Base	0. *			
AB. 13	.interpretation	Interpretation	Information about reference intervals and result interpretation.	Information about reference intervals and result interpretation.	CodeableConcept	0. *	SNOMED CT, HL7 Observation interpretation	preferred	

							ation n		
AB. 14	.resultDesc ription	Resu lt Desc ription	Comments and narrative representati on of the observation result and findings.	Comments and narrative representati on of the observation result and findings.	string	0. .1			
AB. 15	.componen t	Com pone nt	Component in case the observation consists of multiple sub- observations (e.g. blood pressure).	Component in case the observation consists of multiple sub- observations (e.g. blood pressure).	Base	0. .*			
AB. 15. 1	..code	Code	Code representing the observation using the agreed code systems.	Code representing the observation using the agreed code systems.	Codeabl eConce pt	1. .1	LOI NC, NPU , SNO MED CT	preferred	

AB. 15. 2	...result	Result	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Result of the observation including text, numeric and coded results of the measurement and measurement uncertainty. Content of the observation result will vary according to the type of the observation.	Base	0.1			
AB. 15. 2.1	...value	Value	Observation result value according to the type of observation	Observation result value according to the type of observation	string, Quantity, Range, CodeableConcept	1.1			
AB. 15. 2.2	...uncertainty	Uncertainty	Measurement uncertainty type and interval if needed.	Measurement uncertainty type and interval if needed.	Base	0.1			

AB. 15. 3	..dataAbsentReason	Data Absent Reason	Provides a reason why the expected value in the element Observation. value[x] is missing.	Provides a reason why the expected value in the element Observation. value[x] is missing.	CodeableConcept	0.1	HL7 Data absent reason	preferred	
AB. 15. 4	..referenceRange	Reference Range	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Reference range, multiple reference ranges of different types could be provided. Provides guide for interpretation of result.	Base	0.*			
AB. 15. 5	..interpretation	Interpretation	Information about reference intervals and result interpretation.	Information about reference intervals and result interpretation.	CodeableConcept	0.*	SNOMED CT, HL7 Observation interpretation	preferred	

AB. 16	.derivedFrom	Derived From	Reference to the related resource from which the observation has been made. For example, a calculated anion gap or a fetal measurement based on an ultrasound image.	Reference to the related resource from which the observation has been made. For example, a calculated anion gap or a fetal measurement based on an ultrasound image.	EHDSObservation, EHDSLaboratory Observation, EHDSImagingStudy	0.*			
AB. 17	.triggeredBy	Triggered By	References to the observation(s) that triggered the performance of this observation.	References to the observation(s) that triggered the performance of this observation.	EHDSLaboratory Observation, EHDSObservation	0.*			

AB. 18	.hasMember	Has Member	This observation is a group observation (e.g. a battery, a panel of tests, a set of vital sign measurements) that includes the target as a member of the group.	This observation is a group observation (e.g. a battery, a panel of tests, a set of vital sign measurements) that includes the target as a member of the group.	EHDSLaboratory Observation, EHDSObservation	0.*			
EHDSOrganisation									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
AB	EHDSOrganisation	EHDS Organisation	Organisation model	EHDS refined base model for Health provider or any other type of organisation		0.*			
AB. 1	.identifier	Identifier	Identifier	Health provider organisation identifier	Identifier	0.*			
AB. 2	.type	Type	Type	Kind of organisation	CodeableConcept	0.*	HL7 organisation	preferred	

							_type		
AB.3	.name	Name	Name	Health provider organisation name	string	0.1			
AB.4	.address	Address	Address	Mailing and home or office addresses. The addresses are always sequences of address parts (e.g. street address line, country, postcode, city) even if postal address formats may vary depending on the country. An address may or may not include a specific use code; if this attribute is not present it is assumed to be the default address useful for any purpose.	EHDSAddress	0.*			

AB.5	.telecom	Telecom	Telecom	Telecommunication contact information (addresses) associated with a person, such as phone number, email, or messaging service. Multiple telecommunication addresses might be provided.	EHDSTelecom	0.*			
AB.6	.partOf	Part Of	Part of	The organisation of which this organisation forms a part	EHDSOrganisation	0.1			
EHDSPatient									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
AC	EHDSPatient	EHDSPatient	Patient model	EHDS refined base model for patient (subject of care) information		0.*			

AC .1	.personalIdentifier	Personal Identifier	An identifier of the patient that is unique within a defined scope (typically a national patient identifier, but it can also be a temporary identifier issued by the EHR).	An identifier of the patient that is unique within a defined scope (typically a national patient identifier, but it can also be a temporary identifier issued by the EHR).	Identifier	1. .*			
AC .2	.name	Name	Name associated with the patient/subject.	Name might consist of name parts, e.g. Given name or family name/surname, name prefix etc.	EHDSHumanName	0. .*			

AC .3	.dateOfBirth	Date Of Birth	Date of birth	The date of birth of the patient [ISO TS 22220]. As age of the patient might be important for correct interpretation of the test result values, complete date of birth should be provided.	dateTime	0. .1			
AC .4	.administrativeGender	Administrative Gender	Administrative gender	This field must contain a recognized valid value for “administrative gender”. If different, “physiological gender” should be communicated elsewhere.	CodeableConcept	0. .1	HL7 Administrative Gender	preferred	

AC .5	.address	Address	Mailing and home or office addresses.	The addresses are always sequences of address parts (e.g. street address line, country, postal code, city) even if postal address formats may vary depending on the country. An address may or may not include a specific use code; if this attribute is not present it is assumed to be the default address useful for any purpose.	EHDSAddress	0.*			
AC .6	.telecom	Telecom	Telecommunication contact information (addresses) associated to a person.	Telecommunication contact information (addresses) associated to a person.	EHDSTelecom	0.*			
AC .7	.maritalStatus	Marital	Marital (civil) status of a patient	Marital (civil) status of a patient	CodeableConcept	0.1	HL7 marital-	preferred	

		Statu s					stat us		
AC .8	.communicationLanguage	Com muni cation Lang uage	The language which can be used to communicate with the patient about his or her health.	The language which can be used to communicate with the patient about his or her health.	Codeabl eConce pt	0. .*	BCP 47	preferred	
EHDSPregnancyHistory									
Co de	Path	Elem ent	Short	Definition	Datatyp e	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts
AD	EHDSPregnancyHistory	EHD S Preg nanc y Histo ry	Pregnancy history model	Pregnancy history for one pregnancy		0. .*			
AD .1	.header	Head er	Common header for all patient-related data	Common header for all patient-related data	Base	1. .1			
AD .1. 1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			
AD .1. 2	..identifier	Ident ifier	Business identifier for the object	Business identifier for the object	Identifier	0. .*			

AD .1. 3	..authorship	Authorship	Authorship	Resource authoring details	Base	1. .*			
AD .1. 3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1. .1			
AD .1. 3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1. .1			
AD .1. 4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0. .1			
AD .1. 5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1. .1			
AD .1. 6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0. .1			

AD .1. 7	..language	Lang uage	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	Codeabl eConce pt	0. .1	BCP 47	preferred	
AD .1. 8	..version	Versi on	Version	Business version of the resource.	string	0. .1			
AD .2	.presented Form	Pres ente d Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAtt achment	0. .*			
AD .3	.narrative	Narr ative	Narrative, potentially formatted, content of the section	Narrative description describing the outcome of any previous pregnancies.	string	0. .1			eH N PS Gui deli ne, ISO IPS
AD .4	.outcomeD ate	Outc ome Date	Outcome date	Date referred to the previous pregnancies outcome.	dateTim e	0. .1			eH N PS Gui deli ne, ISO IPS

AD .5	.outcome	Outc ome	Outcome	Outcome of the previous pregnancy.	Codeabl eConce pt	0. .1	1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .62 eHD SIO utco me OfPr egn anc y (SN OM ED CT, use d in MH @E U); 1.3. 6.1. 4.1. 125 59.1 1.10 .1.3. 1.42 .63 eHD SIRa reDi seas e (Orp haC ode s,	preferred	eH N PS Gui deli ne, ISO IPS
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							used in MH @EU); ICD-11; SNO MED CT		
AD .6	.numberOfChildren	Number Of Children	Number of children/fetuses in this specific pregnancy	Number of children/fetuses in this specific pregnancy	integer	0.1			eH N PS Guideline, ISO IPS
EHDSProcedure									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements

AC	EHDSProcedure	EHD S Proce dur e	Procedure model	EHDS refined base model for an action that is or was performed on or for a patient		0. .*			
AC .1	.header	Head er	Common header for all patient- related data	Common header for all patient- related data	Base	1. .1			
AC .1. 1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			
AC .1. 2	..identifier	Ident ifier	Business identifier for the object	Business identifier for the object	Identifier	0. .*			
AC .1. 3	..authorshi p	Auth orshi p	Authorship	Resource authoring details	Base	1. .*			
AC .1. 3.1	...author	Auth or	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSh ealthProf essional , EHDSOr ganisati on, EHDSDe vice	1. .1			
AC .1. 3.2	...datetime	Date time	Date and time of authoring/iss uing	Date and time of the issuing the document/re source by its author.	dateTim e	1. .1			

AC .1. 4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0. .1			
AC .1. 5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1. .1			
AC .1. 6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0. .1			
AC .1. 7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0. .1	BCP 47	preferred	
AC .1. 8	..version	Version	Version	Business version of the resource.	string	0. .1			
AC .2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDSAttachment	0. .*			

AC .3	.code	Code	Code identifying the procedure	Code identifying the procedure	CodeableConcept	0.1	SNO MED CT	preferred	
AC .4	.date	Date	Date and time of the procedure or interval of its performance	Date and time of the procedure or interval of its performance	dateTime, Period	0.1			
AC .5	.performer	Performer	An actor who performed the procedure	An actor who performed the procedure	EHDSEHealthProfessional	0.*			
AC .6	.bodySite	Body Site	Procedure target body site. Details of where the procedure was performed. Laterality may be included as qualifier of the body site.	Procedure target body site. Details of where the procedure was performed. Laterality may be included as qualifier of the body site.	EHDSEBodyStructure	0.*			

AC .7	.reason	Reason	The reason why the procedure was performed. This may be a concept from a terminology or a reference to a specific instance that describes the reason.	The reason why the procedure was performed. This may be a concept from a terminology or a reference to a specific instance that describes the reason.	Codeable Concept, EHDSC condition, EHDS Observation, EHDS Procedure	0.*	SNOMED CT, ICD-10, Orphan code if rare disease is diagnosed	preferred	
AC .8	.outcome	Outcome	The outcome of the procedure - did it resolve the reasons for the procedure being performed?	The outcome of the procedure - did it resolve the reasons for the procedure being performed?	Codeable Concept	0.1	SNOMED CT	preferred	

AC .9	.complicati on	Com plica tion	Any complication s that occurred during the procedure, or in the immediate post- performance period. These are generally tracked separately from the procedure description, which will typically describe the procedure itself rather than any 'post procedure' issues.	Any complication s that occurred during the procedure, or in the immediate post- performance period. These are generally tracked separately from the procedure description, which will typically describe the procedure itself rather than any 'post procedure' issues.	Codeabl eConce pt	0. .*	ICD- 10, SNO MED CT, Orp hac ode if rare dise ase is diag nos ed	preferred	
AC .10	.deviceUse d	Devi ce Used	Device used to perform the procedure	Device used to perform the procedure	EHDSD evice	0. .*			

AC .11	.focalDevice	Focal Device	Device(s) that is/are implanted, removed, or otherwise manipulated (calibration, battery replacement , fitting a prosthesis, attaching a wound-vac, etc.) as a focal portion of the Procedure.	Device(s) that is/are implanted, removed, or otherwise manipulated (calibration, battery replacement , fitting a prosthesis, attaching a wound-vac, etc.) as a focal portion of the Procedure.	EHDSD evice	0. .*			
AC .12	.note	Note	Additional information about the procedure	Additional information about the procedure	string	0. .1			
EHDSServiceRequest									
Co de	Path	Elem ent	Short	Definition	Dataty pe	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts

AD	EHDSServiceRequest	EHD S Service Request	Service request model	EHDS refined base model for Specification of requested service or services		0. .*			
AD .1	.subject	Subj ect	Individual or Entity the service is ordered for	Individual or Entity the service is ordered for	EHDSPa tient, EHDSLo cation, EHDSDe vice	1. .1			
AD .2	.serviceText	Servi ce Text	Service text	Textual description of the requested service	string	0. .1			
AD .3	.serviceCo de	Servi ce Code	Service code	A code that identifies a particular service (i.e., procedure, diagnostic investigation, or panel of investigation s) that have been requested.	Codeabl eConce pt	0. .1	LOI NC, NPU , SNO MED CT	preferred	

AD .4	.reasonCode	Reason Code	Reason code	Health conditions affecting the health of the patient and are important to be known for a health professional during a health encounter. Clinical conditions of the subject relevant for the results interpretation.	CodeableConcept	0..*	ICD-10 (ICD-11 when available), SNO MED CT, Orpha code	preferred	
AD .5	.quantity	Quantity	Quantity	Amount of requested services of the same type	Quantity	0..1			
AD .6	.anatomicLocation	Anatomic Location	Anatomic location	Anatomic location and laterality where the procedure should be performed. This is the target site.	EHDSBodyStructure	0..*			

AD .7	.reasonRef erence	Reas on Refer ence	Reason reference	Indicates another resource that provides a justification for why this service is being requested.	EHDSo bservatio n, EHDSCo ndition, EHDSM edication	0. .*			
AD .8	.priority	Priori ty	Priority	Indicates how quickly the ServiceRequ est should be addressed with respect to other requests.	Codeabl eConce pt	0. .1	HL7 Req uest prior ity	preferred	
AD .9	.supporting Information	Supp ortin g Infor mati on	Supporting information	Health conditions relevant for the results interpretatio n, e.g. fasting status, sex for clinical use, etc.	EHDSo bservatio n, EHDSCo ndition, EHDSP rocedure, EHDSM edication Administ ration	0. .*			
AD .10	.specimen	Spec imen	Specimen	Specimens to be used by the laboratory procedure	EHDSSp ecimen	0. .*			

AD .11	.encounter	Encounter	Encounter	An encounter that provides additional information about the healthcare context in which this request is made.	EHDSEncounter	0. .1			
AD .12	.occurrence	Occurrence	Occurrence	When service should occur	dateTime, Period	0. .1			
AD .13	.patientInstructions	Patient Instructions	Patient instructions	Patient or consumer-oriented instructions	string	0. .1			
AD .14	.coverage	Coverage	Coverage	Insurance or medical plan or a payment agreement.	EHDSCoverage	0. .*			
EHDSSocialHistory									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
AE	EHDSSocialHistory	EHDSSocialHistory	Social history model	EHDS model for social history observations		0. .*			

AE.1	..header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			
AE.1.1	..subject	Subject	Subject	Patient/subject information	EHDSPatient	1.1			
AE.1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0.*			
AE.1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1.*			
AE.1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDHealthProfessional, EHDSOrganization, EHDSDevice	1.1			
AE.1.3.2	...datetime	Datetime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1.1			
AE.1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0.1			
AE.1.5	..status	Status	Status of the resource	Status of the resource	CodeableConcept	1.1			

AE. 1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0.1			
AE. 1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
AE. 1.8	..version	Version	Version	Business version of the resource.	string	0.1			
AE. 2	..presentedForm	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDAttachment	0.*			
AE. 3	..description	Description	Textual description of the social history.	Textual description of the social history.	string	0.1			eH N PS Guideline, My Health @EU, ISO IPS

AE.4	.observation	Observation	Social history observations related to health	Health related lifestyle factors or lifestyle observations and social determinants of health. Example: cigarette smoker, alcohol consumption	EHD SObservation	0.1			eH N PS Guideline, My Health @E U, ISO IPS
AE.5	.referencePeriod	Reference Period	Reference date range	Example: from 1974 to 2004	Period	0.1			eH N PS Guideline, My Health @E U, ISO IPS
EHDSSpecimen									
Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
AH	EHDSSpecimen	EHD S Specimen	Specimen model	EHDS refined base model for A sample to be used for Analysis		0.*			

AH .1	.identifier	Identifier	An identifier of the specimen which is unique within in a defined scope.	An identifier of the specimen which is unique within in a defined scope. Example: identifier assigned by ordering system, identifier assigned by laboratory etc. Multiple identifiers can be used.	Identifier	1. .*			
AH .2	.typeOfSpecies	Type Of Species	Biologic type of species for laboratory result reports bound to non-human subjects.	Biologic type of species for laboratory result reports bound to non-human subjects.	Codeable Concept	0. .1	SNO MED CT	preferred	
AH .3	.material	Material	Material that forms the specimen.	Material that forms the specimen.	Codeable Concept	0. .1	SNO MED CT	preferred	
AH .4	.collectionPeriod	Collection Period	The period or date and time of specimen collection.	The period or date and time of specimen collection.	Period	0. .1			

AH .5	.bodySite	Body Site	Anatomic location (body location, laterality) where the material is collected, e.g. Elbow, left	Anatomic location (body location, laterality) where the material is collected, e.g. Elbow, left	EHDSSBo dyStruct ure	0. .1			
AH .6	.morpholog y	Morp holog y	Morphologic al abnormalitie s of the anatomical location where the material is taken, for example wound, ulcer.	Morphologic al abnormalitie s of the anatomical location where the material is taken, for example wound, ulcer.	Codeabl eConce pt	0. .1	SNO MED CT	preferred	
AH .7	.sourceDev ice	Sour ce Devi ce	Source device in case the material is not collected directly from the patient but comes from a patient- related object, e.g. a catheter	Source device in case the material is not collected directly from the patient but comes from a patient- related object, e.g. a catheter	Codeabl eConce pt	0. .1	SNO MED CT, EMD N	preferred	
AH .8	.collection Procedure	Colle ction Proc edur e	The procedure that collects the specimen.	The procedure that collects the specimen.	EHDSP rocedure	0. .1			

AH .9	.collection Procedure Method	Colle ction Proc edur e Meth od	Collection procedure method	If relevant for the results, the method of obtaining the specimen.	Codeabl eConce pt	0. .1	SNO MED CT	preferred	
AH .10	.receivedD ate	Rece ived Date	Date and time that the material is handed over at the laboratory or specimen collection centre.	Date and time that the material is handed over at the laboratory or specimen collection centre.	dateTim e	0. .1			
AH .11	.subject	Subj ect	Subject	Where the specimen came from. This may be from patient(s), from a location (e.g., the source of an environmen tal sample), or a sampling of a substance, a biologically- derived product, or a device.	EHDSPa tient, EHDSPa tientAni mal, EHDSho pital, EHDSSu bstance	0. .1			

AH .12	..container	Container	The container holding the specimen.	The container holding the specimen.	Base	0. .*			
AH .12 .1	..specimen Quantity	Specimen Quantity	Specimen quantity	Quantity of specimen within container.	Quantity	0. .1			
AH .12 .2	..container Device	Container Device	Container device	The device resource for the the container holding the specimen.	EHDSD evice	1. .1			
EHDSSubstanceUse									
Co de	Path	Elem ent	Short	Definition	Dataty pe	C ar di n ali ty	Pref erre d Cod e Syst em	Binding Strength	Req uire me nts
AF	EHDSSub stanceUse	EHD S Sub stanc e Use	Substance use model	Statement about using a substance (such as tobacco, alcohol, drugs, etc).		0. .*			
AF. 1	..header	Head er	Common header for all patient- related data	Common header for all patient- related data	Base	1. .1			
AF. 1.1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			

AF. 1.2	..identifier	Identifier	Business identifier for the object	Business identifier for the object	Identifier	0..*			
AF. 1.3	..authorship	Authorship	Authorship	Resource authoring details	Base	1..*			
AF. 1.3.1	...author	Author	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSHealthProfessional, EHDSOrganization, EHDSDevice	1..1			
AF. 1.3.2	...datetime	DateTime	Date and time of authoring/issuing	Date and time of the issuing the document/resource by its author.	dateTime	1..1			
AF. 1.4	..lastUpdate	Last Update	Date and time of the last update to the resource	Date and time of the last update to the document/information	dateTime	0..1			
AF. 1.5	..status	Status	Status of the patient's alcohol use.	Status of the resource	CodeableConcept	1..1	SNOMEDCT	preferred	
AF. 1.6	..statusReason	Status Reason	Reason for the current status of the resource.	Reason for the current status of the resource.	CodeableConcept, string	0..1			

AF. 1.7	..language	Language	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	CodeableConcept	0.1	BCP 47	preferred	
AF. 1.8	..version	Version	Version	Business version of the resource.	string	0.1			
AF. 2	..presented Form	Presented Form	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	A narrative easy-to-read representation of the full data set, e.g. PDF-version of a document	EHDAttachment	0.*			
AF. 3	..period	Period	Time period for which this observation about substance use is applicable	Time period for which this observation about substance use is applicable	Period	0.1			
AF. 4	..frequency AndQuantity	Frequency And Quantity	The extent of the patient's alcohol use in units of alcohol per time period.	The extent of the patient's alcohol use in units of alcohol per time period.	Base	0.1			

AF. 4.1	..quantity	Quantity	Quantity (volume per time unit).	Quantity (volume per time unit).	Quantity	1.1			
AF. 4.2	..period	Period	Time period of alcohol use.	Time period of alcohol use.	Period	0.1			
AF. 5	.substance Type	Substance Type	Type of substance	Type of substance	Codeable Concept	0.1	SNO MED CT	preferred	
AF. 6	.routeOfAdministration	Route Of Administration	Route(s) of administration	Route(s) of administration	Codeable Concept	0.*	EDQM	preferred	
AF. 7	.note	Note	Textual comment.	Textual comment.	string	0.1			

EHDSTravelHistory

Code	Path	Element	Short	Definition	Datatype	Cardinality	Preferred Code System	Binding Strength	Requirements
AG	EHDSTravelHistory	EHDSTravelHistory	Travel history model	Relevant information about the patient's recent travel history, for one visit		0.*			
AG.1	.header	Header	Common header for all patient-related data	Common header for all patient-related data	Base	1.1			

AG .1. 1	..subject	Subj ect	Subject	Patient/subje ct information	EHDSPa tient	1. .1			
AG .1. 2	..identifier	Ident ifier	Business identifier for the object	Business identifier for the object	Identifier	0. .*			
AG .1. 3	..authorshi p	Auth orshi p	Authorship	Resource authoring details	Base	1. .*			
AG .1. 3.1	...author	Auth or	Author	Author(s) by whom the resource was/were authored. Multiple authors could be provided.	EHDSh ealthProf essional , EHDSOr ganisati on, EHDSDe vice	1. .1			
AG .1. 3.2	...datetime	Date time	Date and time of authoring/iss uing	Date and time of the issuing the document/re source by its author.	dateTim e	1. .1			
AG .1. 4	..lastUpdat e	Last Upda te	Date and time of the last update to the resource	Date and time of the last update to the document/in formation	dateTim e	0. .1			
AG .1. 5	..status	Statu s	Status of the resource	Status of the resource	Codeabl eConce pt	1. .1			
AG .1. 6	..statusRea son	Statu s Reas on	Reason for the current status of the resource.	Reason for the current status of the resource.	Codeabl eConce pt, string	0. .1			

AG .1. 7	..language	Lang uage	Language	Language in which the resource is written. Language is expressed by the IETF language tag.	Codeabl eConce pt	0. .1	BCP 47	preferred	
AG .1. 8	..version	Versi on	Version	Business version of the resource.	string	0. .1			
AG .2	.presented Form	Pres ente d Form	A narrative easy-to-read representati on of the full data set, e.g. PDF- version of a document	A narrative easy-to-read representati on of the full data set, e.g. PDF- version of a document	EHDSAtt achment	0. .*			
AG .3	.country	Cou ntry	Country visited	Country visited	Codeabl eConce pt	1. .1	ISO 316 6	preferred	eH N PS Gui deli ne
AG .4	.period	Perio d	Date of entry and departure	The period during which the patient visited the country	Period	0. .1			eH N PS Gui deli ne