

## eCH-0241 – CH Core: Base for FHIR in Switzerland

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## Summary

This eCH standard references the standard [CH Core \(R4\) \(v3.0.0: STU 3\) based on FHIR R4](#).

CH Core is a national implementation guide for the use of Fast Healthcare Interoperable Resource (FHIR<sup>®</sup>) in Switzerland.

- The guide provides guidance on essential resources for identifiers, code systems, value sets and naming systems in Switzerland, specifically in relation to the Swiss [Electronic Patient Record \(EPR\)](#).
- The guide defines extensions that are necessary for local use in Switzerland.
- The guide covers the requirements for [eCH-0010 postal address](#) and [eCH-0011 personal data](#).
- The guide defines data elements from [HL7.ch CDA-CH V2.1 \(2020\) document standard](#) in FHIR CH Core profiles.
- The guide incorporates Federal Statistics Office (BFS) variables for medical statistics. See [BFS](#) (available in German, French, and Italian).

This eCH standard complements [eCH-0089](#), which has the same goal but which uses HL7 Clinical Document Architecture (CDA) instead of FHIR.

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# 1 Introduction

This eCH standard references the standard [CH Core \(R4\) \(v3.0.0: STU 3\) based on FHIR R4](#).

## 1.1 Status

Approved: This document was approved by the Experts' Committee. It has normative power for the defined field of application in the determined scope of application.

## 1.2 Scope of application

This implementation guide is provided to support the use of FHIR in Switzerland.

This guide is a working specification. We anticipate that it will be implemented and tested by FHIR system producers whose feedback will help improve its content. With this standard for trial use, we are looking for feedback on whether the following goals have been met:

- The guide provides guidance on essential resources for identifiers, code systems, value sets and naming systems in Switzerland, specifically in relation to the Swiss [Electronic Patient Record \(EPR\)](#).
- The guide defines extensions that are necessary for local use in Switzerland.
- The guide covers the requirements for [eCH-0010 postal address](#) and [eCH-0011 personal data](#).
- The guide defines data elements from [HL7.ch CDA-CH V2.1 \(2020\) document standard](#) in FHIR CH Core profiles.
- The guide incorporates Federal Statistics Office (BFS) variables for medical statistics. See [BFS](#) (available in German, French, and Italian).

## 1.3 Relationship between CH Core and the Swiss EPR

The Annexes to the Swiss [Electronic Patient Record](#) (EPR) law specify the technical and semantic requirements for interoperability.

### 1.3.1 Metadata (Annex 3 and Annex 9)

Metadata relating to the Swiss EPR is defined in Annexes 3 and 9 by the [Ministry of Health](#). [eHealth Suisse](#) maintains the value sets with additional provided translations in ART-DECOR in the [CH-EPR](#) project. All code systems and value sets from the [CH-EPR](#) project are exported to the FHIR implementation guide, CH EPR Term, which forms the basis for CH Core.

### 1.3.2 Exchange formats (Annex 4)

There is currently one exchange format defined in [Annex 4](#) for the exchange of vaccination and immunization information in Switzerland. This exchange format is based on this CH Core implementation guide.

### 1.3.3 XDS (Annex 5, Amendment 1)

Requirements for IHE XDS are given in Annex 5. The [CH Core DocumentReference Profile EPR](#) defines how metadata used in the EPR is to be mapped to XDS Metadata. Please note that the IHE MHD profile, which includes the document reference resource, is not yet specified in the Annexes.

### 1.3.4 CH ATC Profile (Annex 5, Amendment 2.2)

The CH ATC profile defines the requirements for a patient's audit trail. CH ATC is also a FHIR implementation guide based on FHIR R4. There is currently no relationship between CH ATC and CH Core.

## 1.4 Status

HL7 Switzerland has followed an STU ballot process among its members for the STU3 Version of CH Core, as follows:

06.07.2022: Publication of CH Core STU3 2.1.0;

08.08.2022: Start of voting procedure.

29.09.2022: End of voting procedure.

30.09.2022: Publication of interim result

02.12.2022: Start of objection period

16.12.2022: End of objection period

22.12.2022: Publication.

Ballot results: For – 20; Against – 0; Abstentions – 0.

18 comments were resolved during the ballot period. There were no further comments in the objection period.

Since the vote to adopt STU3 Version of CH Core was more than 80%, it was accepted and published on 21.12.2022 according to the [ballot rules](#).

***Proposal:*** The document was submitted to the Experts' Committee for approval on 01.01.2023, however, it is normatively not valid yet.

*Approved:* This document was approved by the Experts' Committee. It has normative power for the defined field of application in the determined scope of application.

*Replaced:* The document has been replaced by a new current version. It may still be used, although the new version is recommended.

*Cancelled:* The document was cancelled by eCH. It may no longer be used.

## 2 Scope

This document presents Swiss use concepts defined via FHIR processable artefacts.

### 2.1 Home of the implementation guide

The URL for the HL7 CH Core (R4) FHIR profiles for Switzerland is: <http://fhir.ch/ig/ch-core/index.html>

### 2.2 Profiles

- [Profiles](#): useful constraints of essential FHIR resources and data types for Swiss use. The URL for the Profiles section is: <http://fhir.ch/ig/ch-core/profiles.html>

### 2.3 Extension

- [Extensions](#): FHIR extensions that are added for local use, covering necessary Swiss concepts. The URL of the Extensions section is: <http://fhir.ch/ig/ch-core/extensions.html>

### 2.4 Terminologies

- [Terminologies](#): defined or referenced code systems and value sets for Switzerland. The URL of the Terminologies section is: <http://fhir.ch/ig/ch-core/terminology.html>

### 3 Safety considerations

This implementation guide defines data elements, resources, formats, and methods for exchanging healthcare data between different participants in the healthcare process. As such, clinical safety is a key concern. Additional guidance regarding safety for the specification's many and various implementations is available at:

<https://www.hl7.org/FHIR/safety.html>.

Although the present specification does give users the opportunity to observe data protection and data security regulations, its use does not guarantee compliance with these regulations. Effective compliance must be ensured by appropriate measures during implementation projects and in daily operations. The corresponding implementation measures are explained in the standard.

In addition, the present specification can only influence compliance with the security regulations in the technical area of standardisation. It cannot influence organisational and contractual matters.



## 4 Disclaimer/Reference to third-party rights

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## Annex A: References and bibliography

The following URLs were last visited on 30.11.2022.

Because online information can be regularly updated, no guarantee for future availability can be given.

EPDG	<p><a href="#">SR 816.11 Bundesgesetz über das elektronische Patientendossier</a>  <a href="https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitsstrategien/strategie-ehealth/gesetzgebung-elektronisches-patientendossier/SR%20816.11.pdf.download.pdf/SR%20816.11_DE.pdf">https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitsstrategien/strategie-ehealth/gesetzgebung-elektronisches-patientendossier/SR%20816.11.pdf.download.pdf/SR%20816.11_DE.pdf</a></p>
EPDV	<p><a href="#">SR 816.111 Verordnung über das elektronische Patientendossier</a>  <a href="https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitsstrategien/strategie-ehealth/gesetzgebung-elektronisches-patientendossier/gesetze/SR%20816.111.pdf.download.pdf/SR%20816.111.pdf">https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitsstrategien/strategie-ehealth/gesetzgebung-elektronisches-patientendossier/gesetze/SR%20816.111.pdf.download.pdf/SR%20816.111.pdf</a></p>
EPDV-EDI	<p><a href="#">SR 816.111.1 Verordnung des EDI über das elektronische Patientendossier</a>  <a href="https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitsstrategien/strategie-ehealth/gesetzgebung-elektronisches-patientendossier/gesetze/SR%20816.111.1.pdf.download.pdf/SR%20816.111.1_DE.pdf">https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitsstrategien/strategie-ehealth/gesetzgebung-elektronisches-patientendossier/gesetze/SR%20816.111.1.pdf.download.pdf/SR%20816.111.1_DE.pdf</a></p>
[DSG]	<p>Bundesgesetz vom 19. Juni 1992 über den Datenschutz (DSG)  <a href="http://www.admin.ch/ch/d/sr/2/235.1.de.pdf">http://www.admin.ch/ch/d/sr/2/235.1.de.pdf</a></p>
[Strategie Gesundheit 2030]	<p>Gesundheitspolitische Strategie des Bundesrats 2020–2030, 6. 12. 2019  <a href="https://www.bag.admin.ch/bag/de/home/strategie-und-politik/gesundheit-2030/gesundheitspolitische-strategie-2030.html">https://www.bag.admin.ch/bag/de/home/strategie-und-politik/gesundheit-2030/gesundheitspolitische-strategie-2030.html</a></p>
[Strategie eHealth Schweiz 2.0]	<p>Strategie „eHealth Schweiz 2.0“ 14. 12. 2018  <a href="https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitspolitik/ehealth-ch/181214_Strategie-eHealth-Suisse-2.0_d.pdf.download.pdf/181214_Strategie-eHealth-Suisse-2.0_d.pdf">https://www.bag.admin.ch/dam/bag/de/dokumente/nat-gesundheitspolitik/ehealth-ch/181214_Strategie-eHealth-Suisse-2.0_d.pdf.download.pdf/181214_Strategie-eHealth-Suisse-2.0_d.pdf</a></p>
[FHIR R4]	<p>FHIR Release 4 (Technical Correction #1) (v4.0.1) generated on Fri, Nov 1, 2019 09:37+1100. ©© HL7.org 2011+.  <a href="http://www.hl7.org/fhir">www.hl7.org/fhir</a></p>

## Annex B: Cooperation and verification

HL7 User Group Switzerland	Administrative Office	<a href="mailto:info@hl7.ch">info@hl7.ch</a>
HL7 User Group Switzerland	Technical Committee	<a href="mailto:oliver.egger@ahdis.ch">oliver.egger@ahdis.ch</a>
HL7 User Group Switzerland	President of the Board	<a href="mailto:roeland@arpage.ch">roeland@arpage.ch</a>
eCH, Expert Group eHealth	Group Leader	<a href="mailto:felix.fischer@borsconsulting.ch">felix.fischer@borsconsulting.ch</a>

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## Annex C: Abbreviations and glossary

<a href="#">BFS</a>	Bundesamt für Statistik (Federal Statistics Office)
<a href="#">CH EPR Term</a>	FHIR Implementation Guide for metadata specified in the Annexes of the Swiss EPR FDHA Ordinance on electronic patient records in Switzerland
<a href="#">eCH</a>	Association for the Promotion of eGovernment in Switzerland
EPR	Electronic Patient Record
FHIR	Fast Healthcare Implementation Resource
HL7	Health Level 7
STU	Standard for Trial Use

## Annex D: Changes to previous versions

All changes are documented under

<http://fhir.ch/ig/ch-core/changelog.html>

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