Sharing with standards

8th Swiss EPR Projectathon

September 2024, Bern

Final Report

(Photograph: Raphaël Schaller)

Summary

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Introduction

The EPR has been introduced in Switzerland: all EPR-providers are certified and active, anyone in Switzerland can open their EPR online and most hospitals are connected to it. Further technical developments (exchange formats) and the extension of the national coverage, with the connection to the EPR of as many healthcare institutions as possible, are underway. Provider of IT systems for healthcare institutions (primary systems) can declare the degree of technical integration of the EPR in their software on the website of eHealth Suisse.

EPR Projectathon

The 8th edition of the EPR Projectathon took place from 16th to 20th September 2024 in the Eventforum of Bern. This year, the EPR Projectathon focused on the eMedication and eVaccination exchange formats, the CH-ELM standard for laboratories, as well as the radiographic imaging (PACS). Participants were also encouraged to test the compatibility between their (primary) systems and the EPR. The underlying objective of those tests are to support the ongoing rollout of the EPR in Switzerland and improve the maturity of the corresponding eHealth services.

In addition, the EPR Projectathon pursued the following objectives:

- Identifying potential issues in the test tools and the test plans;
- Identifying potential issues in the basic EPR specifications;
- Strengthening the IHE implementation guidelines and HL7 standards;
- Communicating about the EPR and the technical testing done at the Projectathon with external publics;
- Networking and sharing knowledge and experience with other companies and experts

Testing for laboratories: FOPH CH ELM Projectathon

The Communicable Diseases Division of the Federal Office of Public Health (FOPH) is developing a FHIR API and a FHIR exchange format (CH ELM) to enable laboratories to notify electronically the FOPH on communicable diseases. The CH ELM exchange format is based on the CH Lab Report from eHealth Suisse. The Communicable Diseases Division FOPH and eHealth Suisse gave all interested parties the opportunity to test the aforementioned CH ELM transaction at the EPR Projectathon 2024 from Tuesday to Thursday. During the event, technicians and developers from laboratories and laboratory information system manufacturers could test the CH ELM format, as well as exchange with and get feedbacks from FOPH specialists on practical implementation problems linked to the CH ELM project.

Test organisation

General overview

Event organisation: The event was organised by the Federal Office of Public Health (FOPH), eHealth Suisse and IHE Suisse, with the support from the Federal Office of Information Technology, Systems and Telecommunication (FOITT) and the Central Compensation Office (CCO)

Testing venue: The testing took place at the Eventforum Bern.

Date: The event started on Monday 16th September at 8AM, and finished on Friday 20th September at noon. Opening hours were from 8AM to 6PM. Testing took place from 9AM to 5PM.

Preparation: Information about the event was regularly updated on the website www.epr-projectathon.ch and posted in the Projectathon Google group. eHealth Suisse and Kereval held three webinars regarding the registration process and pre-Projectathon tests in June and July 2024. The pre-Projectathon test phase lasted from 9th July to the 6th September 2024.

Tools: All legally based EPR profiles and specs, including profiles for the eMedication and mHealth use cases, were available for testing. eVaccination and eMedication were again the focus of this year's edition. The profiles were respectively included in the EPR ordinances in December 2022 and June 2023. A vaccination module is also available since November 2023. The tests were driven and reported in the Swiss EPR reference environment, which is an instance of the IHE Gazelle toolbox (https://ehealthsuisse.ihe-europe.net/gazelle).

Virtual Machine: All the tools used during the event were gathered in the aforementioned reference environment (https://ehealthsuisse.ihe-europe.net).

Monitors: A team of twelve EPR monitors (EPR specifications experts) assisted vendors (testers) and verified the test cases. Nearly all of them had served before at one or more IHE European Connectathon or EPR Projectathon. eHealth Suisse appointed Oliver Egger as responsible for the recruitment, management and leadership of the monitors team.

Monitors team at the EPR Projectathon 2024
(Photograph: Raphaël Schaller)

Network: Swisscom Broadcast managed the network, as a subcontractor of eHealth Suisse.

Fees: The participation fee was 350 Swiss francs per person. It included the testing, the social event, as well as food and beverages. There were no additional fees per company or system.

Side events: The "Social Event" took place at the Kornauskeller on Thursday 19th September. From Monday to Friday, outside of testing hours, participants were invited to attend presentations and workshops about eHealth, interoperability and the technical development of the EPR.

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Communication: During the event, external guests could participate in a guided tour of the EPR Projectathon led by IHE Suisse. eHealth Suisse, IHE Catalyst and several participating vendors and monitors tweeted about the EPR Projectathon. Photographs of the event are published on the official website and on the LinkedIn account of eHealth Suisse.

SER Group
34 873 abonnés
2 sem. •

Diese Woche sind unsere #Healthcare-Experten Benjamin Christen und Thomas Ineichen auf dem achten #SwissEPDProjectathon vertreten. 🔥

Wir konnten erneut aufzeigen, dass wir nicht nur die grundlegenden #IHE-Transaktionen unterstützen, sondern auch die spezifischen Anforderungen des Schweizerischen Elektronischen Patientendossiers (#EPD) vollumfänglich erfüllen. Im Fokus stehen dabei
✅ die patientenzentrierte #Zugriffskontrolle
✅ eine lückenlose #Protokollierung
✅ und die Einhaltung semantischer #Standards.

Bereits in den ersten 3 Tagen haben wir alle Anforderungen erfolgreich getestet und freuen uns über die herausragenden Ergebnisse. 😍

#digitalisierung #gesundheitswesen #ecm #patientendossier

Afficher la traduction

Vous et 38 autres personnes — 4 republications

synedra IT GmbH
1 222 abonnés
2 sem. •

🚀 EPD-Projectathon: Ready für die nächste Stufe?
Der EPD-Projectathon in Bern, vergleichbar mit dem IHE-Europe Connectathon, bietet uns diese Woche die perfekte Chance, das synedra HCM im Bereich des ... plus

Afficher la traduction

avec Timo Sternat et 1 autre personne

Vous et 48 autres personnes — 1 commentaire • 5 republications

Healthcare | La Poste Suisse
1447 abonnés
3 sem. • Modifié •

Heute, 16. September, startet die achte Ausgabe des #EPD-Projectathon von eHealth Suisse! 🚀 Natürlich ist ein Team der La Poste Suisse auch dieses Jahr wieder mit grossem Engagement dabei. 🎉 Mit von der Partie ist Pedro dos Santos. Er ... plus

Afficher la traduction

«Eine einmalige Gelegenheit» - neue Austauschformate und Schnittstellen am EPD-Projectathon | Die Post
digital-solutions.post.ch

Vous et 38 autres personnes — 3 republications

IHE Catalyst
1 264 abonnés
2 sem. •

During the CHEPR Projectathon testing week, Alexander Berler gave an outstanding keynote on European and Global TRENDS on implementing digital transformation of healthcare information exchange.

He stressed the importance of the full gambit of the Continuum and the part played by #IHE in facilitating #interoperability testing for vendors of all sizes across a number of healthcare Domains, especially in the context of the European Health Data Space Regulation.

IHE International, IHE Suisse, IHE-Europe, IHE USA, Healthcare | La Poste Suisse, Centrale de compensation CdC

Afficher la traduction

avec Oliver Egger et 29 autres personnes

Vous et 59 autres personnes — 4 republications

Selection of LinkedIn Posts about the EPR Projectathon 2024

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Participating organisations

Thirteen organisations from Switzerland and Germany participated as vendors with about 40 employees. One organisation partook specifically to the testing for laboratories. Most of the companies previously attended at least once an EPR Projectathon. In comparison with previous instances of the EPR Projectathon in Bern, the participation was lower, which allowed for a more intensive testing and curated follow-up from the monitors and technical staff. However, it also impacted the number of group and interoperability testing.

- ABILIS SA
- AD Swiss
- ahdis AG
- Aseno
- Association CARA
- Hôpitaux universitaires de Genève
- Hôpitaux universitaires de Genève – Direction des systèmes d'information

- Post CH Kommunikation AG / Digital Health
- SER Interact Digital AG
- Sopra Steria
- Synedra Schweiz AG
- The i-engineers AG
- ZLM Zentrum für Labormedizin

Number of organisations and staff

	Number of organisations	Number of participants	Monitors and staff	Countries
2024	13	39	12+7	2
2023	12	39	11 + 11	3
2022	20	57	11 + 8	3
2021	19	67	14 + 8	3
2020	16	51	15 + 8	2
2019	18	82	17 + 8	3
2018	23	88	17 + 9	3
2017	16	79	13 + 8	3

Additionally, the CCO and the FOITT were available for support respectively as editor of patient identifier number and responsible for central index services, such as the community portal index.

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List of systems

Nineteen systems were registered at the EPR Projectathon 2024. The systems represent a variety of professional healthcare portals, exchange formats modules and governmental services.

Organization	System keyword	Components concerned
ABILIS SA	HP-PORTAL_ABILIS_BERN2024	Abilis Bern 2024
AD Swiss	Community_AD Swiss_BACKEND HP-PORTAL_AD Swiss_GFPP	AD Swiss EPD Gemeinschaft GFPP
AHDIS	TOOL_ahdis_mag	mag
ARSENO	PAT-PORTAL_ASENO_Cloud_Doctor	Cloud_Doctor (v1.1)
BAG-MT	GVT-SERVICES_BAG-MT_ELM	ELM
BIT	GVT-SERVICES_BIT_BERN_2024	EPD ZAD - Government Services - Bern 2024 (1.0.41-1)
CARA	Community_CARA_PMP_2024 HP-PORTAL_CARA__PMP	PMP_2024 (2024) PMP-PORTAL (1.0)
DOXIS	HP-PORTAL_DOXIS_2024	DOXIS_2024 (14)
EPR-ID provider	GVT-SERVICES_EPR-ID provider_2024	GVT-SERVICES-EPR-ID provider_2024 (3.2.08)
HUG	TOOL_HUG_CaraGateway	CaraGateway (1)
HUG-DSI	PAT-PORTAL_HUG-DSI_SwissMeds	SwissMeds (1.0)
Impfmodul eHealth Suisse	2ND_SYSTEM_Impfmodul eHS_vaccinationModule	Vaccination Module (1.6.1)
Post	Community_Post_EPD_2024 2ND_SYSTEM_Post_PEHP	POST_EPD_2024 (VA60A) Post PEHP
Synedra	2ND_SYSTEM_synedra_24	synedra_AIM_Herakles_24 (Herakles 24.0)
TIE	Community_TIE_24	health_engine (243)
ZLM	2ND_SYSTEM_ZLM_INLAB	Inlab (2024.6.4)

Participating systems, Projectathon 2024

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Tests performed

Overall view

101 tests were executed, with 73 verified. Most tested profiles were:

- CH:XUA
- CH:EMED
- ATNA

- CH:HPD
- XDS b
- CH:CT

- CH:XDS I b
- CMPD

	Test instances	Partially verified	Verified	Started	Failed
Group tests	13	1	12	0	0
Peer-to-peer-tests	61	2	38	20	1
No-peer-tests	27	1	23	3	0
Total	101	4	73	23	1

Executed tests at EPR Projectathon 2024

Peer-to-peer tests

Peer-to-peer tests involve two testing partners.

	Test Instances	Started	Partially verified	Verified	Failed
CH:ATNA	7	2	0	5	0
CH-EMED	6	4	0	2	0
CH:HPD	7	3	1	2	1
CH:MHD	1	1	0	0	0
CH:XDS-I.b	1	1	0	0	0
CH:PDQV3	4	0	0	4	0
CH:PIXV3	5	0	0	5	0
XDS-b	9	3	0	6	0
SVS	1	1	0	0	0
CH:XUA	11	3	0	8	0
CMPD	7	1	1	5	0
XDS-I.b	2	1	0	1	0
Total	61	20	2	38	1

Executed peer-to-peer tests at the EPR Projectathon 2024

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Group tests

Out of all verified tests, twelve were group tests, in which several test partners are involved. Group testing allows for the simulation of realistic and complex scenarios, such as the retrieval of a document by a healthcare professional.

	Test Instances	Started	Verified	Partially verified
eMedication-Create_Update_Card	3	0	2	1
HP_gets_document_Patient1of3	1	0	1	0
HP_access_images_Patient_In_RC	2	0	2	0
HPProvidesDocumentForPatient	1	0	1	0
HPProvideVaccination2ndDose	1	0	1	0
Patient_access_images_in_RC	2	0	2	0
TCU_Provide_DICOM_study	2	0	2	0
TCU_Provide_Document_for_patient	1	0	1	0
Total	**13**	**0**	**12**	**1**

Executed group tests at EPR Projectathon 2024

Parallel events

Conferences and workshops

Vendors and monitors had the opportunity to attend free of charge eight presentations and two workshops. This year's program included:

- Shared Medication Plan, Daniel Vazquez Rivera, HUG
- Cross Community Access with FHIR API, Oliver Egger, ahdis AG & Martin Smock, eHealth Suisse
- How to read a FHIR implementation guide & the benefits for software developers, Michaela Ziegler, ahdis AG
- EPR Masterplan: the next major EPR developments, Beat Gurtner, eHealth Suisse
- European and Global trends on implementing digital transformation of healthcare information exchange, Alexander Berler, IHE Catalyst
- HUSKY - Quo vadis?, Pedro dos Santos, IHE Suisse and Post
- Collaboration on standardization, Adrian Schmid, IHE Suisse & Federas Beratung AG
- Shared Care Plan, Claude Muller, CARA
- New proxy, new test management in Gazelle, Amandine de Baets, Kereval

Guided Tours

Every year, interested parties could register for a guided tour of the EPR Projectathon, in order to gain a better insight into the technical aspect of profiles development. IHE Suisse led three tours on Wednesday and Thursday afternoon.

Other results

Reported issues

As an outcome of the testing performed during the EPR Projectathon, 32 Jira issues were reported.

	2024	2023	2022	2021	2020	2019
Spec issues	1	1	2	1	5	4
Test case issues	11	12	0	4	20	17
Tool issues	14	19	1	6	15	12
Total	32	32	3	11	40	33

Maturity levels

The maturity level of EPR profiles, metadata and exchange formats did not increase in 2024. Tests mainly focused on already developed exchange formats and profiles.

Overview of the maturity levels of EPR profiles

Quality survey

This year, nine institutions gave feedbacks on their overall experience. They shared their general satisfaction about the organisation of the event, the communication, the location, the food and beverages, and the quality of the technical infrastructure, the monitors' expertise and the conferences.

Suggestions for improvement included:

- Offering an introduction webinar or session for newcomers one week before the event
- Differentiating test plans per types of systems
- Proposing a training for Gazelle, especially for specific features
- Adapting the proxy in Gazelle
- Revising the group testing requirements
- Increasing the number of test partners or reducing the number of required test instances
- Shortening the event from five to three days

Testing outcome

The main results of the EPR Projectathon 2024 are:

- **Radiological imaging:** Tests were focused on the upload and retrieval of radiological imaging data unto an EPR platform, as well as the retrieval of one another's data. As only one of the EPR platform allows the upload of radiological imaging, cross-community couldn't be tested.
- **eVaccination:** Vendors successfully uploaded and retrieved vaccination documents on an EPR platform.
- **eMedication:** The focus was primarily on testing prescriptions and medication plans, as well as the peer-to-peer testing of the Shared Medication Plan project from CARA.
- **EPR transactions:** Vendors successfully tested the EPR transactions and norms, such as the patient's access control, the history protocol, IHE profiles and semantic standards.

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Conclusion

The organisers consider that the 2024 edition of the EPR Projectathon reached some important goals, such as the quality of the testing, the involvement of the participants and the smooth running of the event. According to the survey and the feedback received onsite, the participants seemed overall very satisfied with the organisation.

As such, the EPR Projectathon remains an important event in the continuous testing for eHealth interoperability in Switzerland. Year after year, the concept of a shared testing venue is confirmed by the small but efficient community created by the vendors.

However, the low number of participating organisations limited the number of tests, particularly for group testing and interoperability checks. eHealth Suisse, IHE Suisse and the FOPH will evaluate various measure to attract more vendors such as:

- broadening the number and types of testable profiles
- adding standardisation testing for DigiSanté's projects
- shortening the event
- increasing communication efforts

The Projectathon series will be continued to further enhance interoperability around the EPR system and support the technical development of the FOPH program DigiSanté.

Until the next EPR Projectathon and in preparation to it, organizations can test their systems online in the EPR reference environment on Gazelle. Communications about new testing profiles and the EPR Projectathon are published in the EPR Projectathon Google Group. Vendors can also post their questions on that chat. For people wanting to join, please contact the group managers.

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