

Development of an International Patient Summary Readiness Score for OECD countries

Jannis Vollmer, M.Sc.

UMIT TIROL – Private University of Health Sciences and Technology, Hall in Tirol, Austria

Background: The International Patient Summary (IPS) enables the standardized, cross-border exchange of health data. Several existing frameworks, such as the WHO Global Digital Health Monitor (GDHM) and the HIMSS Digital Health Indicator (DHI), focus on the maturity of digital health ecosystems in general. This study develops an IPS Readiness Score based on indicators that specifically focuses on national readiness for IPS implementation and use.

Objective: The study aims to develop and validate an indicator-based IPS Readiness Score to evaluate the technical, semantic and organizational prerequisites for the implementation of the OECD's National IPS.

Methods: The study followed an exploratory-descriptive, multi-phase approach. First, a set of indicators was developed based on literature, ISO standards, implementation guidelines and existing readiness models. The first version of the score was then validated by three experts. The resulting feedback was incorporated into a qualitative revision. Finally, the IPS Readiness Score was applied to Germany and Austria to test its practicality.

Results: The IPS Readiness Score comprises nine indicators across three dimensions: technical, semantic and organizational. Each indicator is rated on a scale from 0 to 2 and weighted according to its relevance in Tiers 1 and 2. Application of the score showed that Austria has significantly higher technical prerequisites (79.17%) than Germany (29.14%). However, Germany performs better in the semantic dimension (50% versus 16.5%), primarily due to the temporary unavailability of allergy data in Austria. Overall, Austria achieved an IPS Readiness of 60.37%, while Germany scored 45.15%.

Discussion: The study shows that semantic and organisational barriers often outweigh technical ones. Despite the transparent structure of the IPS Readiness Score, it incorporates subjective influences from expert opinions, a factor that should be investigated further in the future. Nevertheless, the combined literature and interview approach provides a valuable tool for analysing the key barriers to IPS implementation.

Conclusion: The IPS Readiness Score addresses a research gap by translating interoperability concepts into measurable and reproducible indicators. Future work should extend the evaluation to all OECD countries and, if necessary, improve the score further by involving more experts. The score could be used as a decision-making tool to help SDOs and healthcare organisations implement measures that promote cross-border interoperability.

Please reach out to mail.jannis.vollmer@gmail.com for questions, enquiries and feedback or find me on LinkedIn: <https://www.linkedin.com/in/jannis-vollmer>