SwissRDL - Medical Registries and Data Linkage

Mittelstrasse 43 3012 Bern +41 31 684 59 66 www.swissrdl.unibe.ch



Web services

Benefits of web services for the clinics

A web service for medical registers is an electronic connection between a clinic's servers and the servers at SwissRDL. This allows data from the hospital information system (HIS) or another internal hospital data collection, such as a data warehouse, to be transferred to a medical register.

Importing data into a register via web services offers several concrete advantages:

- Increased efficiency: Automating data exchange according to the "once-only" principle saves time and resources for quality management personnel. This allows staff to focus on other tasks, such as implementing improvement measures in patient care or managing increased administrative tasks elsewhere.
- 2. **Improved data quality:** Automated data exchange reduces transmission errors by eliminating the need to manually transfer information from the original data source to the registry. This leads to a significant improvement in data quality.
- 3. **Real-time updates:** The web interface allows data to be transferred in real-time between the HIS and the medical registry. This enables timely updating of patient information, diagnoses, interventions, treatment plans and other relevant data.
- 4. **Security and data protection:** The web interface is protected by secure protocols (HTTPS), which ensures the security and data protection of sensitive medical data. Access rights can be controlled by authentication and authorization mechanism.

Technical implementation

For the automatic transmission of data from a clinic information system to the registry system, SwissRDL offers a web service that is implemented with REST (Representational State Transfer) API. In order for data to be entered directly into the register, it must correspond exactly to the specifications of SwissRDL: answer categories, options, question type (single versus multiple choice...), value ranges, rules (conditional questions or answers), etc. must be identical.

The connection to the SwissRDL service is set up via a secure HTTPS connection with SSL/TLS and can be made using any common programming language. Knowledge of the HTTP protocol, the REST specification, general server communication, and knowledge of JSON are required for development.

Supporting services from SwissRDL

SwissRDL supports you in the implementation of web services with the following services:

- Kick-off meeting to analyze needs and plan implementation
- Delivery of technical documentation
- Setting up a test environment
- Support during implementation (you connect the HIS to the web interface)
- Testing and review of the connection according to jointly defined use cases
- Go live.

The detailed procedure and more detailed information on the services of SwissRDL can be found in our flyer.

The SwissRDL team would be pleased to support you in this digitization project with its technical knowhow.