



Advancing Primary Care for Type 2 Diabetes Management: Stakeholder Perspectives on Digital Quality Monitoring in Switzerland

Odile-Florence Giger¹, Lola Ackermann², Marinja Principe², Simon Meier¹, Elgar Fleisch^{1,5}, Susanna Gallani⁶, Michael Brändle³, Tobias Kowatsch^{2,4,5}, Mia Jovanova^{2,5}

¹ Institute of Technology Management, University of St.Gallen; ² School of Medicine, University of St.Gallen; ³ Department of Internal Medicine, HOCH Health Ostschweiz; ⁴ Institute for Implementation Science in Health Care, University of Zurich; ⁵ Centre for Digital Health Interventions, Department of Management, Technology and Economics, ETH Zürich, Switzerland ; ⁶ Accounting and Management Unit, Harvard Business School, Harvard University, Boston, MA, USA

0. Background

GPs manage most type 2 diabetes (T2D) cases worldwide but face increasing workload pressures and limited infrastructure(1). To support consistent, guideline-based care, the Swiss Society of Endocrinology and Diabetology (SSED) developed a quality monitoring tool known as the SSED score.(2) Although this score shows promise for improving health outcomes, the score is currently mostly available in paper format and creates additional administrative burden for GPs.

1. Research Question

How can digital quality monitoring tools like the SGED score be effectively implemented in primary care to support Type 2 Diabetes (T2D) management in Switzerland?

- RO1: Identify the current challenges in T2D management in primary care in Switzerland.
- RO2: Examine limitations of existing T2D quality assessment scores (e.g., SSED score)
- RO3: Develop actionable strategies to promote the adoption of T2D quality assessment scores (e.g., SSED score), addressing technical, organizational, and incentive-related factors.

2. Methods

38 semi-structured interviews with key stakeholders in Swiss T2D care:

- 12 general practitioners and diabetologists, 12 patients, 5 health insurers, 9 healthcare application providers

Analysis followed **thematic analysis** guided by the **COREQ** framework.(3,4)

3. Preliminary results

RO1: Main challenges include **high time pressure, fragmented care, and lack of personalized support**.

RO2: Key barriers to score adoption were poor integration with existing systems, low usability for complex cases, and **misaligned incentives** and limited relevance to multimorbidity

RO3: Suggested facilitators included **embedding tools into workflows**, enabling **task shifting for physicians**, integrating **patient-centered features** and improving **data sharing**.

4. Discussion

Switzerland's fragmented and unstructured healthcare data remains a major barrier to interoperability and limits the effectiveness of digital tools such as the SSED score. Scaling the score in primary care requires seamless data integration, intuitive workflows, and patient-facing features that reduce workload and support better decision-making. Effective adoption will likely rely on task-shifting to trained medical assistants, expanded pharmacy-based monitoring, and greater patient engagement through self-tracking and data sharing. Ultimately, success depends on interoperable IT systems, coordinated incentives, and evidence that these redesigned pathways improve outcomes and efficiency.

Sources

1. ÄrzteZeitung. Hausarztpraxis ist bei Diabetes Anlaufstation Nummer eins. 2020 Mar 25; Available from: <https://www.aerztezeitung.de/Politik/Hausarztpraxis-ist-bei-Diabetes-Anlaufstation-Nummer-eins-408419.html> [accessed Nov 5, 2024]
2. Bovet, P., Hirsiger, Emery, De Bernardini, Rossier, Trebeljahr, Hagon, 2011. Impact and cost of a 2-week community-based screening and awareness program for diabetes and cardiovascular risk factors in a Swiss canton. DMSO 213. <https://doi.org/10.2147/DMSO.S20649>
3. Whiting LS. Semi-structured interviews: guidance for novice researchers. Nursing Standard 2008 Feb 13;22(23):35–40. doi: 10.7748/ns2008.02.22.23.35.c6420
4. Myers MD, Newman M. The qualitative interview in IS research: Examining the craft. Information and Organization 2007;17(1):2–26. doi: 10.1016/j.infoandorg.2006.11.001