

Patient-Reported Outcome Measures (PROMS) in Primary Healthcare

Findings from a Case Study in Switzerland

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Background PROMS can improve patient-centeredness, quality of care, and the relationship between patients and healthcare providers. Yet, there is virtually no routine use of PROMS in primary care in Switzerland. The objectives of this pilot study were:

- (1) to understand facilitators of and barriers to the administration of PROMS questionnaires in primary care in Switzerland and
- (2) to develop a data analytics framework informing physicians about aggregate and individual PROMs of their patients.

Results A total of 134 patients participated in the pilot. The technical implementation was largely unproblematic.

The main technological challenge was an occasional lag between data submission and their availability on the general practitioner’s dashboard.

- Patients appreciated discussions of survey results during consultations. According to the doctors, the pre-consultation assessment of the quality of life from the patient's perspective facilitated communication and relationship building.
- They emphasized the importance of explaining the aim and potential benefits of the survey to patients to increase participation and the integration of the data collection into routine consultation processes.
- One-click export of a patient's results as a PDF was considered a useful addition.
- Dashboards should be designed not only for the doctor but also for other health professionals, such as medical practice assistants.
- The option of inviting patients to complete the questionnaire *before* their practice visit (in addition or instead of doing so in the waiting room) should be evaluated.
- The consent form was considered too long.
- Doctors should be alerted automatically when a patient had submitted a survey to avoid overlooking it in the busy clinical routine.

Methods Based on a literature review, we chose the Veterans RAND 12-item survey (VR-12) for the assessment of self-reported global health in primary care. One advantage is, that this questionnaire is free to use, and it is very similar to the SF-12 Questionnaire.

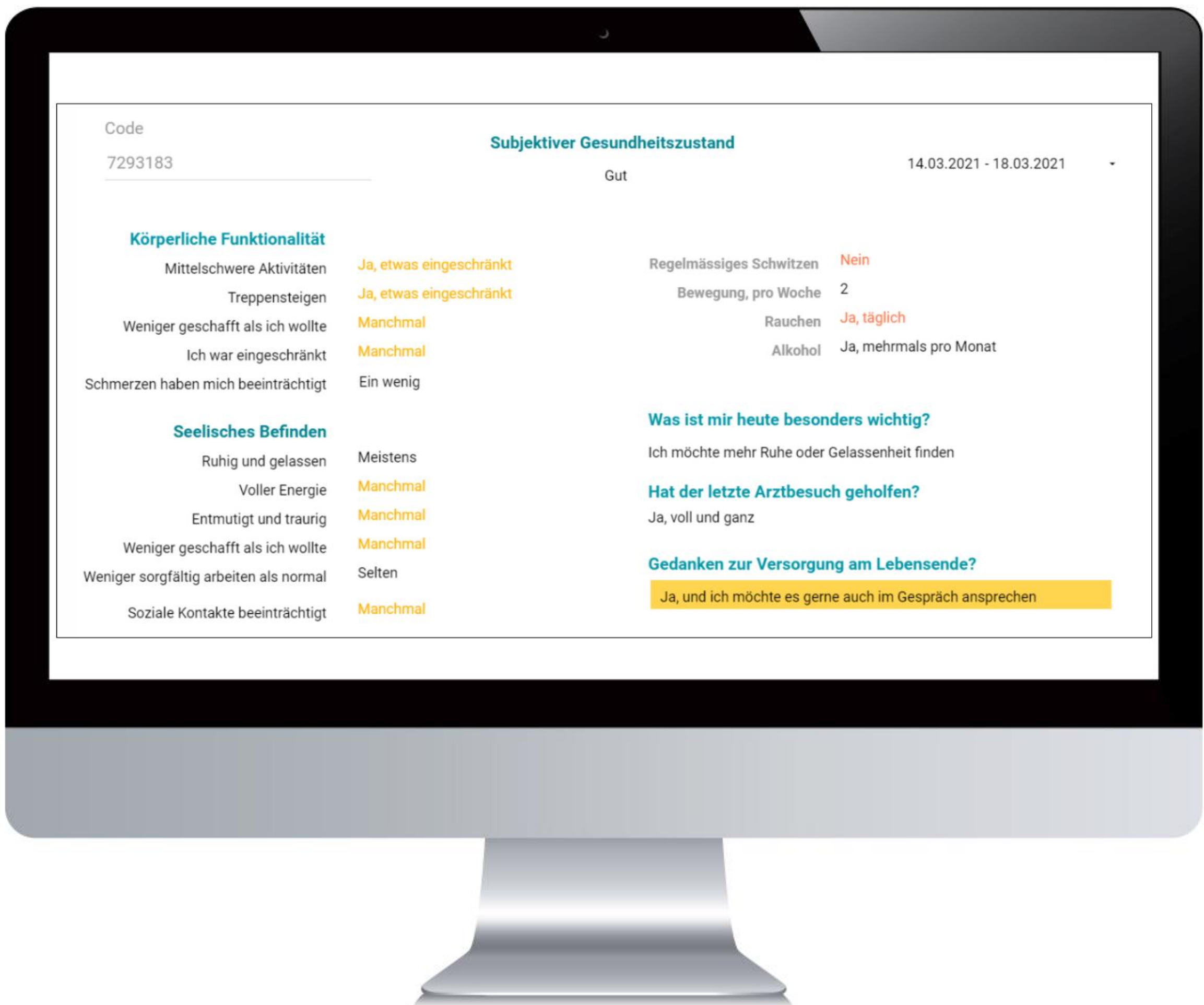
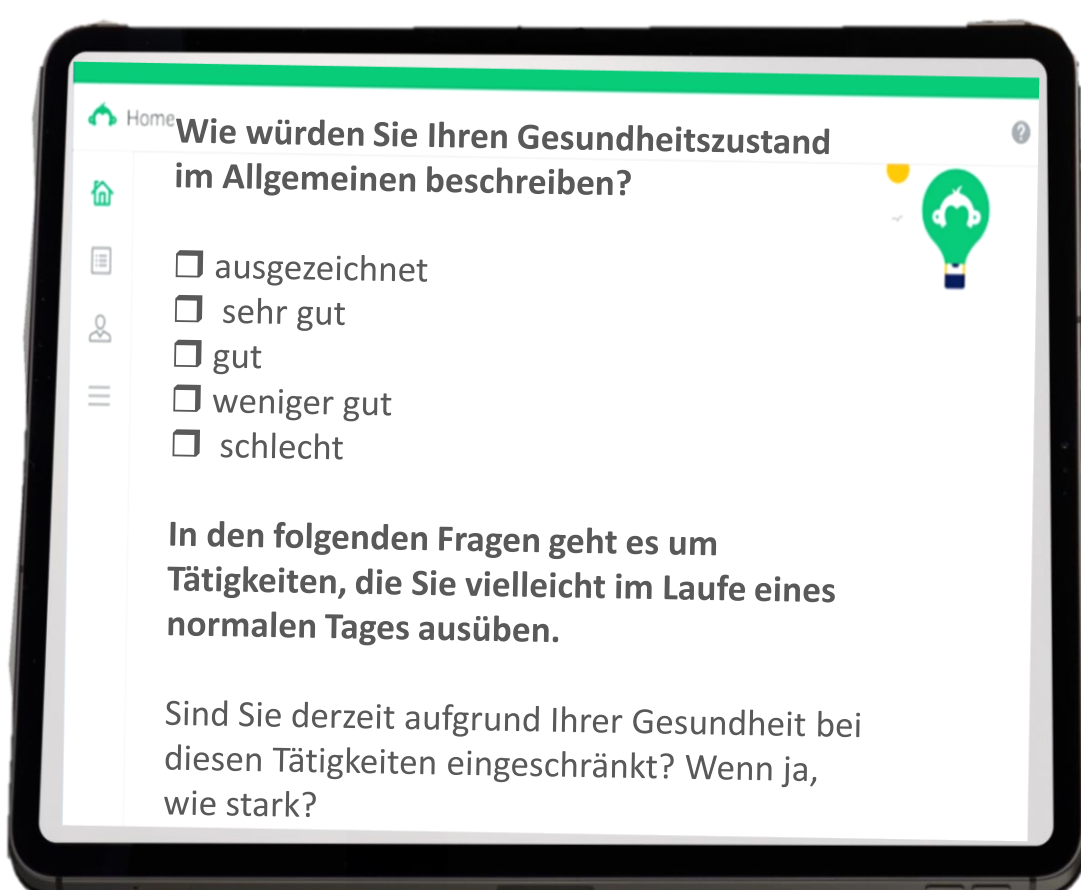
Patients completed the questionnaire in the waiting areas of practices on a tablet computer in two family practices in Bern and Luzern. Off-the-shelf low-cost survey software and an analytics platform were used (see below). Confidentiality and an anonymous cloud-based storage of data were ascertained by generating random identification numbers on-site, which were stored in the patient record.

Doctors could access patient responses immediately after completion and use them during consultations.

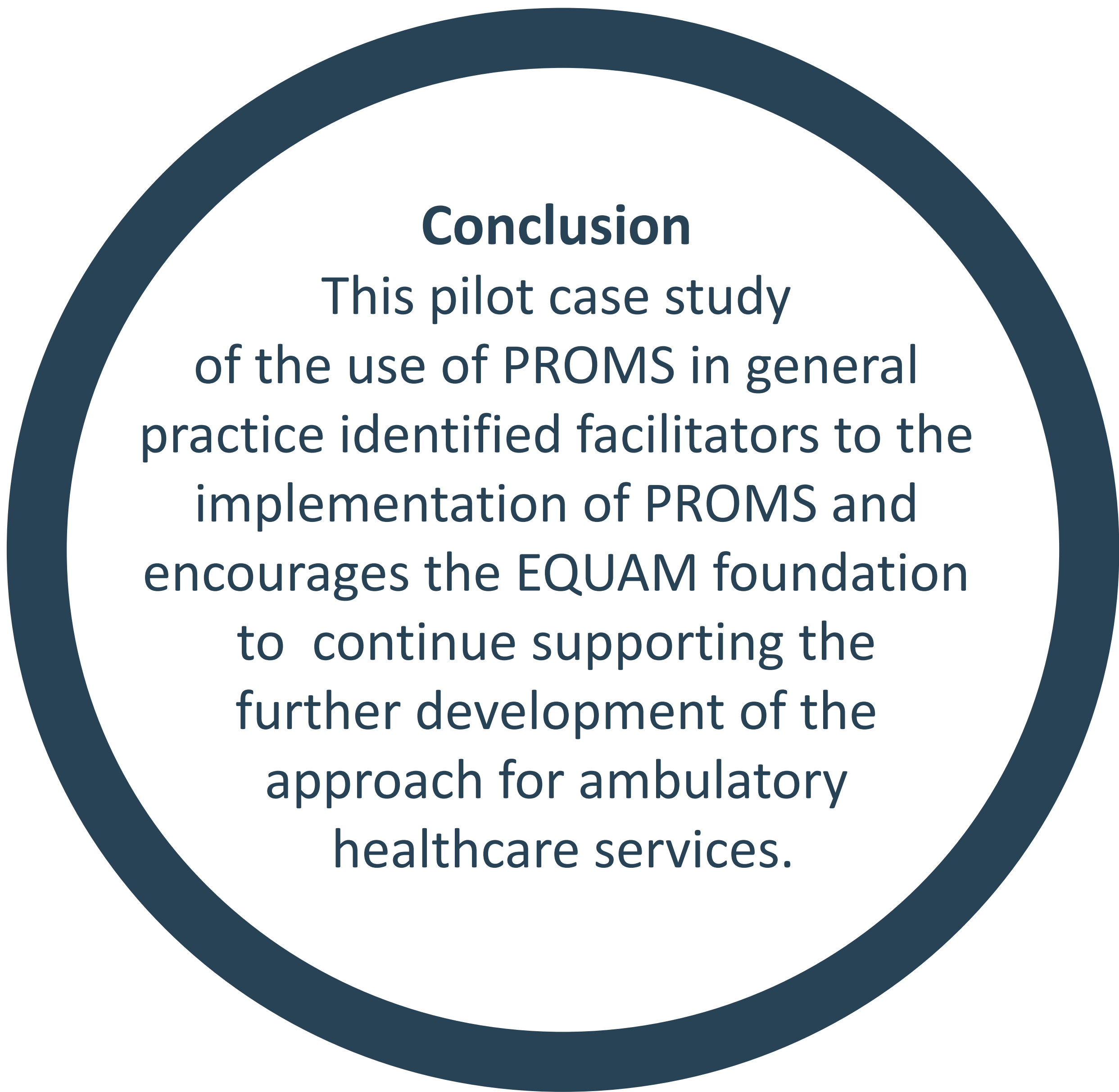
Technical feasibility, cost, and operational challenges were captured and documented in semi-structured debriefing sessions following an interview guideline with the practice teams. Example data analysis and visualization concepts for PROMS in primary healthcare were developed and made available to policymakers.

Low-cost tools used The questionnaire was set up with **Survey Monkey** (on a subscription). It was answered by patients in the waiting room on **android-based** tablets, using the Survey Monkey App. A QR code and a link were provided for patients who wanted to answer the questionnaire on their own cell phones.

The EQUAM Foundation provided the participating GP practices with tablets and a **mobile, battery-operated hotspot** with unlimited internet for the waiting room. This made it possible for the anonymized responses to be sent to **Google BigQuery**, using a free version of the no-code integration application **Integromat**. Google Data Studio was used to visualize the responses on a simple dashboard with conditional formatting (see example below left).



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Conclusion

This pilot case study of the use of PROMS in general practice identified facilitators to the implementation of PROMS and encourages the EQUAM foundation to continue supporting the further development of the approach for ambulatory healthcare services.

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