

## Patient Reported Outcome Measures (PROMs) -How do different countries use PROMs? What digital solutions exist?

## Background and research topic

Health economics researchers as well as clinicians and health policy makers are interested in the medical outcome quality of treatments, surgeons, and hospitals (among others). In this context, it is crucial to define carefully how medical outcome quality should be measured. In the past, outcome quality was mainly measured with so-called routine data, i.e., data routinely collected by hospitals, for instance, with the aim to receive payment for provided services. Commonly used clinical quality indicators are for instance mortality (inpatient vs. 30-day vs. 90-day), 1-year readmission or surgical complications (e.g., wound infection, anastomotic leak). However, recent research on medical outcome quality recommends patient-reported outcome measures (PROMs) as relevant indicators of medical quality for a variety of procedures. This quality indicators are not calculated using routine data but data is collected directly from patients by asking health-related questions about the quality of life of patients. Advantages of PROMs are that they are more intuitive and more relevant for patients than clinical outcome measures (e.g., remaining high level of pain (PROM) vs. 90-day mortality).

A number of countries, including Switzerland, aim to measure, report, and reward outcome quality. Still, no overview and international comparison exists how different countries specifically use PROMs in their effort to increase quality transparency and quality of care. Furthermore, there are a variety of companies, usually start-ups, providing digital solutions for hospitals for collecting and analyzing PROM data.

## Methods and research goal

Firstly, literature review on PROMs and PROM usage for different countries (e.g. Switzerland, Germany, UK, Netherlands, Denmark, Sweden, Italy, etc.) should be conducted. Secondly, to identify innovative digital solutions, internet desk research is needed. Finally, findings need to be comprised in meaningful tables and figures to compare and evaluate different approaches by country and digital solution. In addition, expert interviews with start-ups might be needed to validate and to complement findings from desk research and literature review. The goal of this research is to provide a comprehensive overview of how PROMs are used in different countries including the application of digital solutions and to evaluate what approach might be best for reaching the goals of clinicians and health policy makers.

If you are interested in and/or have questions about the above-mentioned topic and you would like to write your bachelor or master thesis with our chair, we look forward to hearing from you (please contact <a href="David.Kuklinski@unisg.ch">David.Kuklinski@unisg.ch</a> and <a href="Justus.Vogel@unisg.ch">Justus.Vogel@unisg.ch</a>). You can also propose your own research topic, and we will be happy to advise you. We can generally supervise all students of medicine (Joint Medical Master), business administration, economics, and international affairs.

We look forward to receiving your exposé with a proposal for a concrete research question, methodology and approach!