

# Digital Acquisition of Patient Reported Outcome Measures (PROMs) in Elderly Patients – A Special Challenge?

Annabell Müller, Selina Bilger, Florian Rüter, Alexander Kappes, Christoph A. Meier  
University Hospital Basel Switzerland

## Introduction

With the aim of establishing VBHC at the University Hospital Basel, Switzerland, we started implementing ICHOM-Standard Sets in 2017 to measure Patient Reported Outcomes (PROMs). Besides serving as quality measure, the PROMs data are also used in the doctor-patient consultation for individual adaptation of the treatment path and shared decision-making. In order to achieve these goals, it is important to assure a high inclusion rate and the capture of complete data. This includes especially elderly patients, where the measurement of the value of a procedure for the patient is particularly important, since the balance between risks and benefits is particularly difficult to assess in this patient population. However, few data exist regarding the acceptance of the digital capture of PROMs by elderly patients.

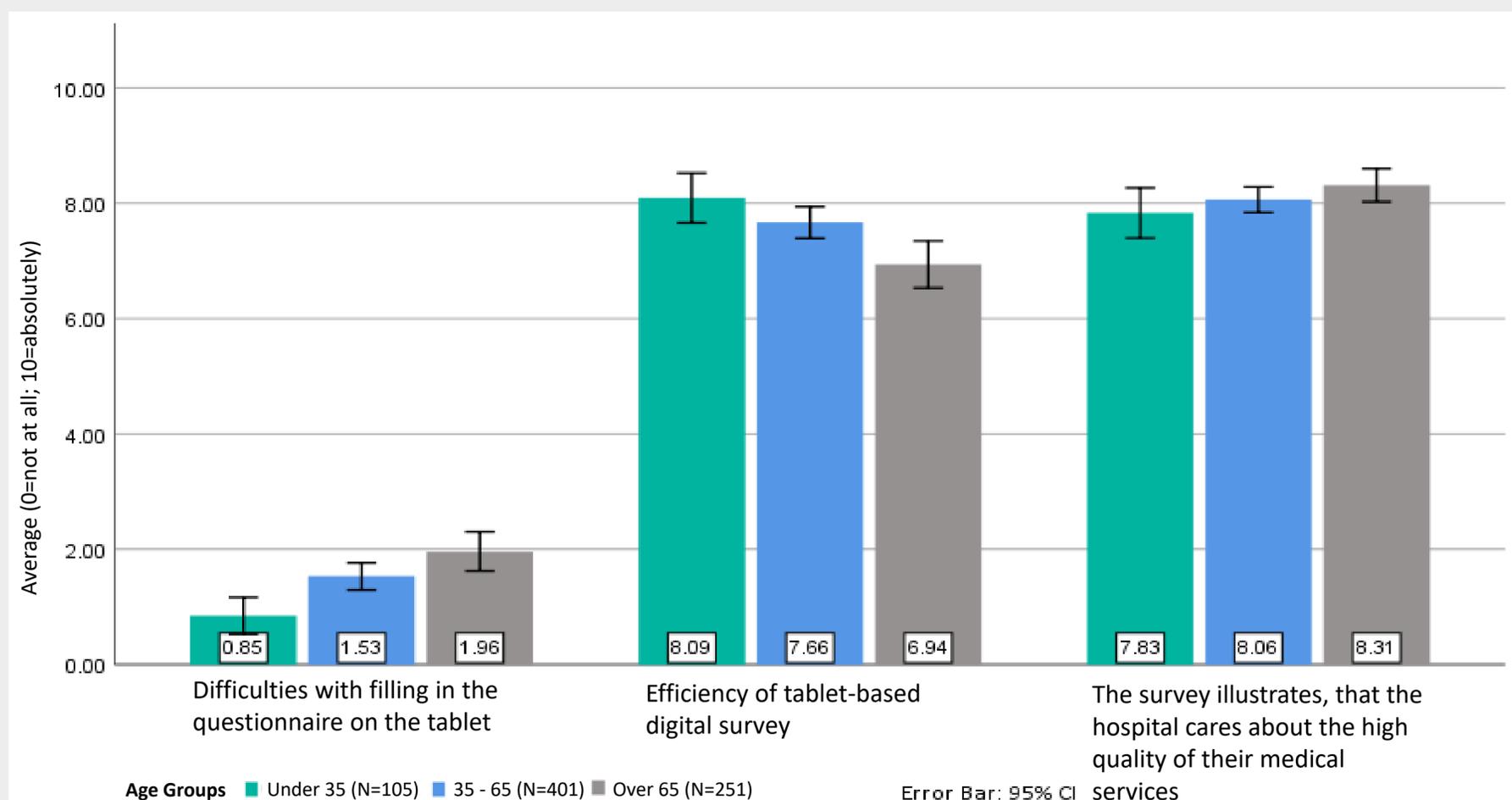
## Aim:

In order to optimize efficacy as well as to allow immediate data sharing within the treatment team, we decided to measure PROs exclusively digitally. In order to avoid a selection bias and to give all patients the opportunity to discuss their PROMs with their clinicians, it is important, that the digital survey is easy to handle for all patients, including the elderly. Therefore, we conducted a standardized survey to assess the feasibility and acceptability of electronically captured PROMs in patients of various age groups.

## Method

- 757 Patients in four different ICHOM pathways
  - Breast Cancer
  - Depression&Anxiety
  - Coronary Artery Disease
  - Hip Osteoarthritis
- of all ages were asked:
  - if they would prefer a paper based survey
  - how difficult it was to fill in in the questionnaire on a tablet
  - how they rate the efficiency of a tablet-based digital survey, and
  - if the survey illustrates that the hospital cares about the high quality of their medical services.
- Answer scales ranged from 0 (not at all) to 10 (absolutely)
- Results were stratified into three age groups :
  - under 35 years (n=105)
  - 35-64 years (N=401)
  - over 65 years (N=251)

Evaluation patient feedback (N=757)



## Results

In the cohort of the under 35 year old patients 92% would not prefer a paper-based survey, 84% of the 35-65 year old patients and still 75% of the over 65-aged patients would not prefer a paper-based survey. These results confirm a certain decrease in the popularity of digital surveys with increasing age. At the same time, it could also be shown that older patients have no problems filling out a tablet-based survey (mean 1.96; CI 1.61-2.30 for the question 2) and they regard a digital survey as efficient (mean 6.94; CI 6.52-7.34 for the question 3). Furthermore, the evaluation shows that measuring PROs gives elderly patients the feeling that the quality of the medical performance is important for the hospital (mean 8.31; CI 8.02-8.59 for the question 4). However must be considered, that there`s a selection bias in patients who didn`t participate in the evaluation due to difficulties with the digital data collection.

## Conclusion

- ✓ Results show that a completely digital data acquisition is no barrier for elderly patients
- ✓ The majority of patients prefers the digital survey to the paper-based survey, regardless of age

➔ **Concerns that elderly patients cannot cope with the digital collection of PROMs are not justified based on our study.**

