

## Peer Review Report

# Review Report on Overview of available functioning data in Switzerland: supporting the use of functioning as a health indicator alongside mortality and morbidity

Original Article, Int J Public Health

Reviewer: Reviewer 2

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

Thank you for the opportunity to review this manuscript. It examines the extent to which different items from the brief Model Disability Survey (MDS) are already covered by "official" Swiss surveys. After an extensive search, the authors identify four surveys that fit the inclusion criteria, the Swiss health survey, SHARE, Swiss Household Panel, and the Lausanne Cohort. The study finds that several ICF items could potentially be derived from official surveys, but further harmonization / adaptation would be needed.

#### **Q 2** Please highlight the limitations and strengths.

Overall, this is a well written manuscript (with room for shortening) and well conducted analysis. The general approach of study/survey selection seems sound. However, I have some more fundamental questions regarding the rationale for this mapping exercise (see Q3)-

#### **Q 3** Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

I have some question marks regarding the general rationale and motivation of the mapping exercise. As I understand, the brief MDS has been established as somewhat of a Gold standard for measuring health functioning. This questionnaire also includes questions about comorbidities and health status, which seems really important. Hence, I have two questions.

1) What is the purpose of trying to "mimick" the MDS using data items that are collected in different contexts and for different purposes? It is unrealistic to ask for further harmonization of ICF-relevant data items from at least three surveys (SHARE, SHP, SHS) because they use standardized and internationally harmonized survey questions for international comparability in their respective area.

2) While mortality and morbidity are meaningful and well- interpretable epidemiological population measures, the proposed ICF indicators are much harder to interpret on a population level (eg. as median or averaged scores). In my understanding, ICF scores reflect a combination of health characteristics and environmental/societal factors. It is therefore most meaningful in persons who have a chronic diseases or impairments. A population average will be strongly influenced by the prevalence of persons with such chronic conditions and impairments in the sample, which are not measured by some surveys (SHARE, HABA) or generally unknown in the population (hindering "standardization" by population characteristics).

Therefore, wouldn't it be easier and preferable to just implement the brief MDS, rather than creating proxy measures from existing data? The latter approach may also negatively affect comparability of ICF measures across different countries, because the underlying study base is likely not homogenous (for instance, the Lausanne Cohort is a local study).

Also, the results presentation could be improved by adding a flowchart of the selection and mapping process (see below) and by including more quantitative information (n, %) on successfully linked items, resp. clearer descriptions of what items are still missing when compared to the brief MDS.

Minor comments:

the introduction is rather long, I recommend to drop non-essential sections (e.g. para 2)

A flow chart would help to visualize the selection process (screening, exclusion, inclusion, ) including numbers of reviewed studies/datasets at each step

Lines 135, 200, the authors mention a previous linkage of ICF items with Swiss Surveys, but a reference seems to be missing. What were the results of this linkage?

This statement also contradicts line 313 in the discussion claiming that the present manuscript was the first attempt.

Line 174: I was a bit surprised that Sapaldia was not considered as a potential data source? Why was this important study not included or considered?

Line 390 / Conclusions: How could a biobank in Switzerland (<https://doi.org/10.3389/phrs.2022.1605660>) contribute to a better understanding of ICF?

#### PLEASE COMMENT

##### **Q 4** Is the title appropriate, concise, attractive?

The title is catchy - a bit too catchy? The manuscript does not really compare or discuss health functioning vis à vis the established measures of morbidity and mortality.

##### **Q 5** Are the keywords appropriate?

yes

##### **Q 6** Is the English language of sufficient quality?

yes, but some sections have potential for shortening, especially the introduction

##### **Q 7** Is the quality of the figures and tables satisfactory?

Yes.

##### **Q 8** Does the reference list cover the relevant literature adequately and in an unbiased manner?

as far as I can tell: yes

#### QUALITY ASSESSMENT

**Q 9** Originality

**Q 10** Rigor

**Q 11** Significance to the field

**Q 12** Interest to a general audience

**Q 13** Quality of the writing

**Q 14** Overall scientific quality of the study

**REVISION LEVEL**

**Q 15** Please make a recommendation based on your comments:

Major revisions.