

Translation and Cultural Adaptation Manual for Seattle Quality of Life Group Instruments

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1.0 General Information

1.1 QUALITY OF LIFE INSTRUMENTS AND CULTURAL ADAPTATION

As with other instruments, a Patient-Reported Outcome instrument, commonly referred to as quality of life is composed of instructions, items and corresponding response categories or response choices, scoring methods, and methods of interpretation. The translation and cultural adaptation of a quality of life instrument is the first step of a process called cultural adaptation which comprises two phases:

1. translation and cultural adaptation;
2. a psychometric validation

Ideally both phases are involved in cultural adaptation. This brief manual covers only the first phase of the translation and cultural adaptation. Suggested references are provided in the References section to assist investigators interested in carrying out a psychometric validation of the culturally adapted version of the instrument.

1.2 TRANSLATION AND CULTURAL ADAPTATION

The translation and cultural adaptation of a questionnaire is not a literal translation of the original instrument, but the production of a translation that is conceptually equivalent to the original and culturally acceptable in the country in which the translation will be used.

In order to work towards the establishment of one recognised translation of an instrument in a given language the following points should be followed:

- The translation methodology should be respected and the different phases of the process summarised in a report;
- The translated version of a questionnaire - obtained in collaboration with its developer - should be recognised as the official version in the country concerned.
- The translated version should be subjected to cognitive interviewing to assure respondent understanding of the items; and
- The translated version should be tested for both cross-sectional and longitudinal measurement properties.

As per translation agreement with the developers of the questionnaire, the translation and cultural adaptation should consist of at least 3 steps:

- Forward translations, (includes the production of a "reconciled" version)
- Backward translation,
- Confirmation by development team.

Cognitive debriefing is also desirable to determine conceptual equivalence, but not required. Processes for cognitive debriefing are included in section 2.5 of this manual.

The questionnaire should always be considered as a whole (e.g. the wording of the response choices may influence the translation of the items, and vice-versa). Instructions are also part of the questionnaire.

1.3 PSYCHOMETRIC VALIDATION

This manual is not meant as a resource for psychometric validation of the instrument, but be aware that this type of validation is necessary for complete cultural adaptation. The Scientific Advisory Committee of the Medical Outcomes Trust uses eight criteria in reviewing the psychometric adequacy of research instruments (<http://www.outcomes-trust.org/monitor/nov98/8.html>):

- 1) Conceptual and Measurement Model,
- 2) Reliability,
- 3) Validity,
- 4) Responsiveness,
- 5) Interpretability,
- 6) Respondent and Administrative Burden,
- 7) Alternative Forms, and
- 8) Cultural and Language Adaptations.

Although it is rarely possible to evaluate all of these criteria in any single study, the goal is to address as many as possible, especially measurement model, reliability, and validity.

2.0 The Translation and Cultural Adaptation Process

2.1 AIM OF TRANSLATION AND CULTURAL ADAPTATION

The aim of a translation and cultural adaptation of a quality of life questionnaire is the production of a version in a language other than the language of the original questionnaire which is **conceptually** equivalent to the original.

Some important definitions and concepts for the translation and cultural adaptation process are outlined below:

Definitions:

Quality of Life

- Defined as individuals' perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards, and concerns.

Conceptual equivalence of constructs and items

- Achieved when the constructs (theoretical notion being measured) exist, are relevant and are acceptable in all cultures. The items should also represent the definition of the constructs. Example: functional status, pain.

Semantic equivalence

- Obtained when items mean the same thing to people from different groups and in the target and source language. Example: unbearable pain on a 0-10 rating scale.

Operational equivalence

- Ensures that standardized methods of survey administration are appropriate for the target culture. Example: self-administration.

Source language

- Original language in which the questionnaire was developed.

Target language

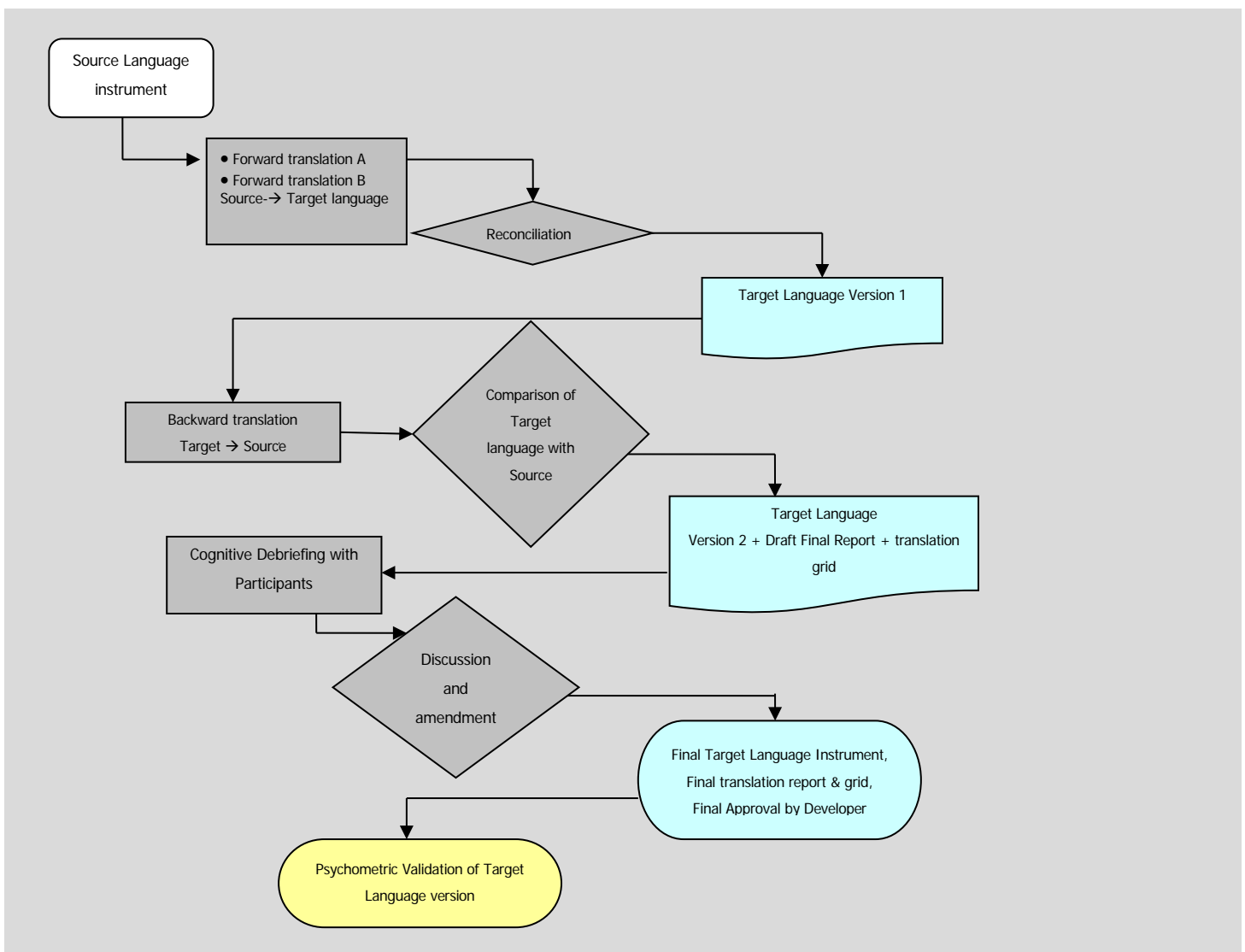
- Language into which the questionnaire is translated.

2.2 THE TRANSLATION AND CULTURAL ADAPTATION ALGORITHM

The following individuals will be called upon to assist in the adaptation of the source instrument and validation in the target language:

- Project manager, oversees translation process
- Consultant 1, forward translation 1, forward translation reconciliation process
- Consultant 2, forward translation 2, forward translation reconciliation process
- Consultant 3, backward translation

After the recruitment of bilingual consultants in each country concerned, and having explained the concepts of a translation and cultural adaptation in detail, a quality of life instrument is then ideally translated according to the following algorithm:



2.3 Phase 1: Forward translation

2.3.1 DEFINITION

The forward translation can be summed up as the first passage from the source language to the target language.

2.3.2 PERSONNEL

It requires:

- The recruitment of two local native **target language** speakers, bilingual fluency in both written and spoken in **source language**, and knowledgeable in concepts of quality of life;
- The involvement of the local project manager.

2.3.3 METHODOLOGY

1. *Production of 2 forward versions*: each of the translators will produce an independent forward translation of the original source instruments' instructions, items and response choices.
2. *Production of a pooled version, Version 1*: both translators and the local project manager must discuss the translations and agree on a reconciled version. The aim should be the production of a conceptually equivalent translation of the original questionnaire and the language used should be colloquial and easy to understand.

In the case of interpretation problems of the original questionnaire the author can be contacted and according to his explanation of the particular problem the first version in the target language might be modified, leading to the production of a second intermediary forward version.

2.4 Phase 2: Backward translation

2.4.1 DEFINITION

It is the translation of the first version of the target translation of the questionnaire back into the source language.

2.4.2 MEANS

It requires the recruitment of a local professional translator, **native speaker of the source language**, with knowledge of both the written and spoken forms of the source language, and bilingual in target language.

2.4.3 METHODOLOGY

1. *Production of the backward translation version of the source language:* the translator will translate the reconciled version of the target language questionnaire produced in phase 1 back into the source language. S/he should have no access to the original source version of the questionnaire.
2. *Comparison of the backward version with the original source version:*
 - o Done by the local project manager during a meeting with the "back" translator in order to detect any misunderstandings, mistranslations or inaccuracies in the intermediary forward version of the questionnaire.
 - o Will result in changes to the first version, giving rise to the second version.

*Remark: Phase 3 should **not** be launched before the developers comments are received and integrated in the process.*

2.4.4 Results of Phase 2

1. Production of a **draft report and translation grid in English** on the issues which were discussed item-by-item and how the final decisions were made (including English equivalents of items and Target language expressions discussed—See template in Appendix A).
2. Sending of the complete translation grid and draft report to the team for review.
3. Review of the development teams' comments by the local project manager and update the translation, if needed.

Location of Item (page, item identifier) and original English (source language)	Forward Translation 1	Forward Translation 2	Reconciled Forward Translation	Back ward Translation of Forward Translation	Reconciled forward Translation of Item Final Version	Back Translat ion of Final version	Reason for Change & SeaQol Reviewer comments	Sign off by SeaQol group
Title (1)								
Item...1-?								

2.5 Phase 3: Cognitive Debriefing

2.5.1 AIM

To cognitively debrief the translated target language questionnaire on participants in the target language country to determine whether it is acceptable, understood, and whether the language used is simple and appropriate.

2.5.2 METHODOLOGY

The second version of the questionnaire (obtained after phase 2) should be cognitively debriefed on a panel of a minimum of 10 participants (e.g. 5 with a chronic condition and 5 without). *The participants should all be native speakers of the target language.*

1. The comprehension test should be performed through face-to-face cognitive debriefing interviews during which the interviewer should inquire whether the patient-research participant had any difficulty in understanding the questionnaire and check the patient's interpretation of all items. In case of any problem, the interviewer may propose or test alternatives of translations (if this problem had been anticipated), or ask the person to propose alternatives.
2. A report on the interviews should be produced in English: it should outline the number of subjects interviewed, their age, the time it took to complete the questionnaire, the difficulties encountered, the solutions suggested and retained and how the third version of the questionnaire was produced (see template for report in Appendix B).

2.5.3 RESULTS OF PHASE 3

Production of the final version of the questionnaire should be proofread to be considered as final, and a final report submitted to the instrument developers.

3.0 Practical details

A translation and cultural adaptation process is much more time-consuming than a single straightforward translation. Sufficient time should be planned at each step for the production of the translations, meetings with the translators, interviews with participants, discussions and production of reports. From our experience you should allow for each step of a translation and cultural adaptation process the following timeframe as a minimum:

- Forward translation step: 2 weeks
- Backward translation step: 2 weeks
- Testing on patients: 2 weeks
- Proofreading and finalisation: 2 weeks

Problems arising from the translation process fall into four categories. Types of Translation Difficulties that can occur are:

- **Cultural difficulties:** include the proper or improper usage of certain words, phrases based on the culture of a given society, as well as the specifics of the society itself such as the education system, health care system, societal or religious taboos, etc.
- **Conceptual / Semantic Difficulties:** are those that arise in conveying the meaning of a statement in a foreign language.
- **Idiomatic Difficulties:** correspond to the use of certain phrases, or the means of conveying ideas that are unique to a particular region, country, or society.
- **Grammatical difficulties:** include difficulties linked for instance to the grammar of a given language.

Producing a high quality translation is labour intensive and time consuming. The people involved in the translation process are critical in determining a questionnaires performance in a new country or culture. The standardized guidelines and centralized review procedures suggested here can improve the quality of the translations and the efficiency with which those translations are produced. To ensure credibility of the investigators of target language translation process we request that you specifically describe the process used through the use of a report.

Deadline for the final translation report is within 3 months of signing on translation user agreement. The final report and translation spread sheet should be submitted to the attention of the SeaQol Instrument Coordinator at seaqol@uw.edu or at the address below, who will forward on to the instrument developer(s) for review.

SeaQol Instrument Coordinator
Seattle Quality of Life Group
University of Washington
Box 359455
Seattle, WA 98195-9455

IMPORTANT:

In accordance with the developers of the instrument and in order to keep track of your work, you are kindly requested to:

- Complete the user's agreement for the instrument and return them to the Seattle Quality of Life Group.

NB: This should be done before any instrument materials will be released to you and before your translation and research work can begin.

- Provide the Seattle Quality of Life Group with a copy of the final version of the questionnaire in your language (both paper and electronic versions) as well as a copy of the final report (paper and electronic) you produced in English for outlining the translation and cultural adaptation process.
- Please note that your work will be considered for research and evaluation purposes only. Under no circumstances can you use it for commercial or international studies, or dispatch it to any third party for commercial or other use.
- Donald L. Patrick, Ph.D., and the University of Washington hold the Copyright of the original and all translations of the instrument.

Appendix A
Translation Grid Example

Instrument Location	Item	Forward Translation 1	Forward Translation 2	Reconciled Forward Translation 1	Back Translation (English)	Notes on back translation	Final Reconciled Forward Translation	Reason for Change	Back Translation of Final version (<i>English</i>)	Sign off by SeaQol
page 1, cover page	Title of Instrument									
page 1, cover page	Introduction of instrument									
page 1, cover page	This survey asks for your views about your health and ...									
page 1, cover page	Thank you for completing these questions!									

Appendix B.

FINAL REPORTING TEMPLATE (Project Manager to fill out)

Overview of Translation Process

1. Project Manager Name: _____
2. Title/Position/Affiliation: _____
3. Overview of translation process: _____

PHASE 1: Forward Translation

Forward translator #1: _____
Title/Position/Affiliation: _____
Knowledge of Source language: _____
Knowledge of Target language: _____
Date Completed: _____
Forward translator #2: _____
Title/Position/Affiliation: _____
Knowledge of Source language: _____
Knowledge of Target language: _____
Date Completed: _____
Translation issues in Phase 1: _____

PHASE 2: Back Translation

Backward translator #1: _____
Title/Position/Affiliation: _____
Knowledge of Source language: _____
Knowledge of Target language: _____
Date Completed: _____
Translation issues in Phase 2: _____

PHASE 3: Cognitive Debriefing

Cognitive debriefing interview conducted: _____
Title/Position/Affiliation: _____
Date Completed: _____
Mean Age: _____ Mean Time to complete: _____
Translation issues in Phase 3: _____

Solutions: _____

Date Final draft of instrument completed: _____
Date final draft sent to SeaQol team: _____

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