

## Translation and cross-cultural adaptation of the SPICT™ (Supportive and Palliative Care Indicators Tool)

This guidance summarises the three main, evidence-based approaches that can be used for the translation and cross-cultural adaptation of the SPICT™ into different languages and for diverse healthcare systems internationally. A multi-disciplinary team approach and clear process recording are essential. Select the method which best fits your circumstances and resources. All methods incorporate 7 structured steps in 3 phases:-

<b>Phase I</b>	<b>Step 1:</b> Translation	<b>Step 2:</b> Expert review	
<b>Phase II</b>	<b>Step 3:</b> Back-translation/ revision	<b>Step 4:</b> Pre-testing (e.g. standardized case vignettes, or examples from small clinical practice tests)	
<b>Phase III</b>	<b>Step 5:</b> Final version	<b>Step 6:</b> Process appraisal and documentation	<b>Step 7:</b> Implementation and review

	WHO Method	Beaton Method	TRAPD Method
<b>Step 1</b>	<p style="text-align: center;"><b>Forward translation</b></p> <ul style="list-style-type: none"> <li>One translator, preferably a health professional, familiar with terminology of the area covered by the instrument.</li> <li>Translator should be knowledgeable about English-speaking health culture but his/her mother tongue should be the primary language of the target setting.</li> <li>Translators should always aim at the conceptual equivalent of a word or phrase, not a word-for-word translation; that is not a literal translation. They should consider the definition of the original term and translate it in the most relevant way.</li> <li>Translators should strive to be simple, clear and concise in formulating a question. Fewer words are better. Long sentences with many clauses should be avoided.</li> <li>The target language should aim for the primary audience. Translators should decide if they are addressing professional audiences such as health professionals or other staff groups, or public audiences such</li> </ul>	<p style="text-align: center;"><b>Initial translation</b></p> <ul style="list-style-type: none"> <li>At least two forward translations are made of the instrument from the original language (source language) to the target language.</li> <li>Bilingual translators whose mother tongue is the target language produce the two translations independently. Translations into the mother tongue, or first language, more accurately reflect the nuances of the language.</li> <li>The two translators should have different profiles, or backgrounds.</li> <li>The translations are compared and discrepancies that may reflect more ambiguous wording in the original or discrepancies in the translation process noted. Poorer wording choices are identified and resolved in a discussion between the translators.</li> </ul>	<p style="text-align: center;"><b>Translation</b></p> <ul style="list-style-type: none"> <li>The team of translators can be thought of as a group with different talents and functions, bringing together the mix of skills and discipline expertise needed to produce an optimal version where translation skill alone is not sufficient.</li> <li>Team translation counteracts the subjective nature of translation.</li> <li>Team translation can achieve systematic, intersubjective agreement as required in standard methodology. In addition, while providing a combined approach which is qualitatively superior, it is not a more expensive or more complicated procedure.</li> <li>The team should bring together the mix of skills and disciplinary expertise needed to decide on optimal versions. Collectively, members of this team must supply knowledge of the topic, of tool design and of the intended setting or field of use.</li> <li>The team is also required to have the cultural and linguistic knowledge needed to translate</li> </ul>

	<p>as patients, families and communities.</p> <ul style="list-style-type: none"> <li>• Translators should avoid the use of any jargon or abbreviations.</li> <li>• Translators should respect equality and diversity including gender and age applicability and avoid any terms that might be considered offensive or culturally inappropriate to the target population.</li> </ul>		<p>appropriately and effectively into the required varieties of the target language.</p> <ul style="list-style-type: none"> <li>• Translators produce translation material and attend review meetings. Either each translator produces a first, independent translation of the source document (double or full/parallel translation) or each translator gets parts of the source document to translate (split translation).</li> <li>• If possible, have each translator produce a full (parallel) translation; if that is not possible, aim to create overlap in the split translation sections each translator produces.</li> <li>• Translation involves understanding of meaning of the source text and conveying this in the target language with the means of the target language. Identify elements of the source document that would benefit from the use of translation annotations and invite specific groups/ countries to point out in advance where they would like annotations.</li> <li>• Document each step used as a quality assurance and monitoring tool.</li> </ul>
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<b>Step 2</b>	<p style="text-align: center;"><b>Expert panel</b></p> <ul style="list-style-type: none"> <li>• A bilingual (in English and the target language) expert panel should be convened by a designated editor-in-chief.</li> <li>• Objectives: to identify and resolve the inadequate expressions/concepts of the translation, as well as any discrepancies between the forward translation and any existing or comparable previous versions of the document or its content.</li> <li>• The expert panel may question some</li> </ul>	<p style="text-align: center;"><b>Synthesis of the translations</b></p> <ul style="list-style-type: none"> <li>• The two translators and a recording observer meet to synthesise the results of the translations.</li> <li>• Working from the original document as well as the first translator's (T1) and the second translator's (T2) versions, a synthesis of these translations is conducted (producing one common translation T-1+2), with a written report carefully documenting the synthesis</li> </ul>	<p style="text-align: center;"><b>Review</b></p> <ul style="list-style-type: none"> <li>• The double translations or sections of the split translation are now refined.</li> <li>• A team-based approach to translation aims to include the translators in the review process. Since they are already familiar with the translation challenges in the texts, they make the review more efficient.</li> <li>• Split translation arrangements can capitalize on the advantages of having more than one translator in the review discussion but avoid</li> </ul>
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	<p>words or expressions and suggest alternatives.</p> <ul style="list-style-type: none"> <li>• Experts should be given any materials that can help them to be consistent with previous translations.</li> <li>• In general, the panel should include the original translator, experts in health, as well as experts with experience in instrument development and translation.</li> <li>• The result of this process will produce a complete translated version of the document, instrument or tool.</li> </ul>	<p>process, each of the issues addressed, and how they were resolved.</p> <ul style="list-style-type: none"> <li>• It is important that a genuine consensus is reached that is not dominated by the views of any participant. The T-1+2 version of the document, instrument or tool is used for the next stage of the translation process.</li> </ul>	<p>the cost of full or double translations.</p> <ul style="list-style-type: none"> <li>• Having more than one translator work on the initial translation(s) and be part of the review team enhances discussion of alternatives in the review procedure and helps reduce idiosyncratic or unintended preferences.</li> <li>• An expert reviewer is responsible for chairing the discussion. They are already familiar with the topic, relevant context and languages.</li> <li>• The first or initial translation is only the first step in a team approach. Experience shows that many translations proposed in first drafts will be changed during review</li> <li>• The aim is to finalize a version for adjudication.</li> </ul>
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<p><b>Step 3</b></p>	<p><b>Back-translation</b></p>	<p><b>Back translation Expert committee review</b></p>	<p><b>Adjudication</b></p>
	<ul style="list-style-type: none"> <li>• Using the same approach as that outlined in the first step, the document will then be translated back to English by an independent translator, whose mother tongue is English and who has no prior knowledge of the document.</li> <li>• Back-translation will be limited to selected items that will be identified in two ways: <ul style="list-style-type: none"> <li>- Terms / concepts that are key to the instrument or those that are suspected to be particularly sensitive to translation problems across cultures.</li> <li>- Items that are added as participating countries identify words or phrases that are problematic or missing.</li> </ul> </li> <li>• As in the initial translation, emphasis in the back-translation should be on conceptual</li> </ul>	<p><b>Back translation</b></p> <ul style="list-style-type: none"> <li>• Working from the T-1+2 version of the document and totally blind to the original version, a translator then translates the document back into the original language.</li> <li>• This is a process of validity checking to make sure that the translated version is reflecting the same item content as the original versions. This step often magnifies unclear wording in the translations.</li> <li>• However, agreement between the back translation and the original source version does not guarantee a satisfactory forward translation, because it could be incorrect; it simply assures a consistent translation.</li> <li>• Back translation is only one type of validity check, highlighting gross inconsistencies or</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment of the translation before pretesting can identify certain types of errors that are difficult to detect through pretesting alone, and increase the quality and accuracy of the instrument for evaluation in the pretest</li> <li>• An ‘adjudicator’ must sign-off the final version for pretesting.</li> <li>• This step highlights the importance and the significance of high quality translation procedures in the project.</li> <li>• If the adjudicator has all the skills needed (strong language ability in the source language and target language, knowledge of the topic area, implementation and research design issues), they should participate in the Step 2 review session, if possible.</li> <li>• If the adjudicator does not have specialist or</li> </ul>

and cultural equivalence and not linguistic equivalence.

- Discrepancies should be discussed with the editor-in-chief and further work (forward translations, discussion by the bilingual expert panel) should be iterated as many times as needed until a satisfactory version for testing is reached.

conceptual errors in the translation.

- Once again, two of these back translations are considered a minimum. The back translations (BT1 and BT2) are produced by two persons with the source language (English) as their mother tongue.
- If the target audience of an instrument or tool is the public not professionals, the two translators should be from a non-medical background.

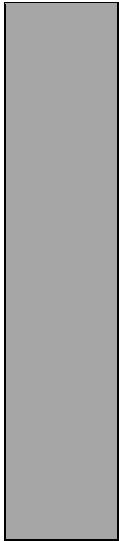
#### **Expert committee review**

- The committee comprises topic experts, methodologists, health professionals, language professionals, and the translators (forward and back translators).
- There is close contact with the original developers of the instrument or tool.
- The source document, all the translations and the processes documented to reach this step are fully reviewed. The committee's own review is fully recorded.
- Equivalence is reviewed in four domains:
  - Semantic: words mean the same thing.
  - Idiomatic: colloquialisms, or idioms, are difficult to translate.
  - Experiential: items capture experiences of daily life or routine health practices.
  - Conceptual: words can have different conceptual meaning between cultures.
- Consensus is reached on a high quality, final translation for pre-testing.

relevant expertise, they will consult other experts to check that all the procedures have been followed, that appropriate people were involved, and that documentation was kept, according to procedural requirements.

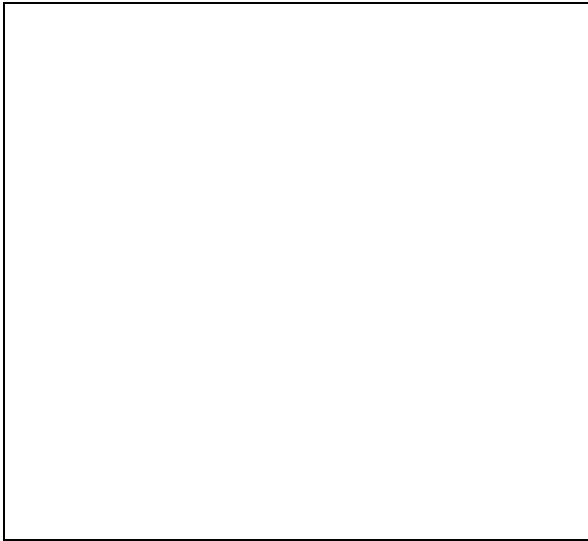
- To assess the quality of review outputs, for example, the adjudicator can ask to have a list of all the perceived challenges and request to have concrete examples of these explained.
- If the expertise of the adjudicator lies somewhere between these extremes, consider having him or her review the translation with the senior reviewer on the basis of the review meeting documentation.

Step 4	<b>Pre-testing and cognitive interviewing</b>	<b>Pretest</b>	<b>Pretest</b>
	<ul style="list-style-type: none"> <li>• It is necessary to pre-test the instrument on the target population using the methodologies outlined below.</li> <li>• Pre-test respondents should include individuals who are representative of those who will be using or completing the instrument or tool.</li> <li>• Pre-test respondents should number 10 minimum for each section. They should be widely sampled to represent the target population who will use or complete the instrument – e.g. males and females from all age groups; different professional backgrounds; diverse socioeconomic groups.</li> <li>• Pre-test respondents should be given the instrument and be systematically debriefed. This debriefing should explore what they thought the questions or statements were asking, whether they could repeat these in their own words, what came to their mind when they heard or read a particular phrase or term. It should also ask them to explain how they choose their answers. These questions should be repeated for each item.</li> <li>• The answers to these questions should be compared to the respondent’s actual responses to the instrument.</li> <li>• Respondents should also be asked about any word they did not understand as well as any word or expression that they found unacceptable or offensive.</li> <li>• Finally, when alternative words or expressions exist for one item or</li> </ul>	<ul style="list-style-type: none"> <li>• The final stage of the adaptation process is pretesting of the translated instrument in subjects or patients from the target setting.</li> <li>• Ideally, 30 to 40 persons should be tested.</li> <li>• Each subject completes the questionnaire (or uses the tool) and is interviewed to find out what they thought was meant by each item and their chosen responses in an applied situation.</li> <li>• The distribution of responses is examined to look for a high proportion of missing items or items that were difficult to use.</li> </ul>	<ul style="list-style-type: none"> <li>• Pretesting is to check the viability of the translation and to inform its refinement in preparation for final implementation and testing in the target setting or study.</li> <li>• All instruments should be pretested before use. The best possible version achievable by the team development process should be chosen for pretesting.</li> <li>• No matter how good the team translation, review, adjudication and any assessment steps are, pretesting is likely to find weaknesses in design and/or translation.</li> <li>• Review, revise, and re-adjudicate the translation on the basis of pretesting results</li> <li>• Select the team required to develop revisions. This will depend on the nature and number of problems emerging from the pretest and on whether solutions are presented along with the problems.</li> <li>• If a one- or two-person team is chosen that does not include one of the translators, share any changes (tracked or highlighted) with a translator for final commentary, explaining the purpose of the revision.</li> <li>• Review the documentation from the pretest, considering comments for each question or element concerned.</li> <li>• Ensure that changes made in one section are also made, where necessary, in other places.</li> <li>• Edit the version revised after pretesting in terms of its own accuracy (consistency, spelling, grammar, etc.). Target language competence is required for this.</li> <li>• Compare the revised version resulting from</li> </ul>



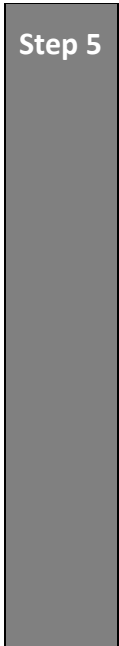
expression, the pre-test respondent should be asked to choose which of the alternatives conforms better to their usual language.

- This information is best accomplished by in-depth personal interviews although the use of a focus group may be an alternative. It is very important that these interviews and focus groups be conducted by an experienced interviewer.
- A written report of the pre-testing exercise, together with selected information regarding the participating individuals should also be provided.



the pretest against the source document, checking for any omissions, instructions, order of items or responses etc.

- Present the final version for final adjudication. The adjudication procedures for this are as before. Project specifics will determine in part who is involved in the final adjudication.



**Final version**

- The final version of the instrument in the target language should be the result of all the iterations described above.
- It is important that a serial number and date identifier be given to each version.

**Final version**

- Additional testing to check for the retention of the psychometric properties of a source questionnaire is highly recommended. This can address, for example, internal consistency, construct validity, reliability, and item response patterns that are critical for validating a successful cross-cultural adaptation.
- The adapted version has to demonstrate the measurement properties needed for its intended application.
- It is possible to include some of these tests into the pretesting process (Step 4) although they often need larger sample sizes.

**Target instrument**

- Survey translations are part of target language instrument development.
- When these translations are produced for larger comparative projects, careful planning for implementing the translated instrument will help produce translations across multiple setting which comply with project requirements
- Writing items and overall content that can be understood by the target population requires not only taking into account the usual target language characteristics but also involves considering the demography and other relevant characteristics of all target groups.

**Step 6**

**Documentation**

All the cultural adaptation procedures should be traceable through the appropriate documentation. These include, as a minimum:

- initial forward translation
- a summary of recommendations by the expert panel;
- the back-translation
- a summary of problems found during the pre-testing of the instrument, any modifications proposed and adopted
- the final version

It is also necessary to describe the samples used in this process (i.e. the composition of the expert panel and the pre-test respondent samples). For the latter, the number of individuals as well as their basic characteristics should be described, as appropriate

**Submission and appraisal of all written reports by developers/ committee**

- The final stage in the adaptation process is submission of all the reports and documents to the developer of the instrument or the committee monitoring the translated version. They need to be able to verify that the recommended steps were followed and fully documented.

**Documentation**

- Documentation of each step is used as a quality assurance and monitoring tool.
- Each stage of the team translation process builds on the previous steps and uses the documentation required for the last step to inform the next.
- In addition, each phase of translation engages the appropriate personnel for that particular activity and provides them with relevant tools and resources.
- These tools (e.g. documentation templates) increase process efficiency and make it easier to monitor outputs.
- For example, translators producing the first, independent translations ('T' in the TRAPD model) are required to keep notes about any queries they have on their translations or the source text. These notes are considered along with the translation output during the next review stage in which reviewers work together with the translators.

**Step 7: Multidisciplinary steering group review after 1 year for final refinement by current users**

<b>Reference</b>	World Health Organisation. Process of translation and adaptation of instruments.	Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. <i>Spine</i> . 2000; 25(24):3186 –3191	Mohler P, Dorer B, de Jong J, Hu M. Translation: Overview. Guidelines for Best Practice in Cross-Cultural Surveys. 2016. Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan.
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<b>Web link</b>	<a href="http://www.who.int/substance_abuse/research_tools/translation/en/">http://www.who.int/substance_abuse/research_tools/translation/en/</a>	<a href="https://www.ncbi.nlm.nih.gov/pubmed/11124735">https://www.ncbi.nlm.nih.gov/pubmed/11124735</a>	<a href="http://ccsg.isr.umich.edu/index.php/chapters/translation-chapter/translation-overview">http://ccsg.isr.umich.edu/index.php/chapters/translation-chapter/translation-overview</a>
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<b>Published papers</b>	<ul style="list-style-type: none"> <li>Alonso Fachado A, Sansó Martínez N, Martín Roselló M, et al. Spanish adaptation and validation of the supportive &amp; palliative care indicators tool – SPICT-ES™. <i>Rev Saude Publica</i>; 52. Epub ahead of print 2018. DOI: 10.11606/S1518-8787.2018052000398.</li> <li>Afshar K, Feichtner A, Boyd K, et al. Systematic development and adjustment of the German version of the Supportive and Palliative Care Indicators Tool (SPICT-DE). <i>BMC Palliat Care</i> 2018; 17: 27. DOI: 10.1186/s12904-018-0283-7</li> </ul>
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<b>“Translating the SPICT” (Inaugural SPICT International Conference 2018)</b>	<p><a href="http://www.spict.org.uk/inaugural-spict-conference-2018-presentations/">http://www.spict.org.uk/inaugural-spict-conference-2018-presentations/</a></p> <ul style="list-style-type: none"> <li>Kambiz Afshar. Development &amp; adjustment of SPICT-DE (German version) Retrieved February 22<sup>nd</sup>, 2018 from: <a href="http://www.spict.org.uk/wp-content/uploads/2018/02/Afshar-SPICT-DE.pdf">http://www.spict.org.uk/wp-content/uploads/2018/02/Afshar-SPICT-DE.pdf</a></li> <li>Lotta Pham, Maria Arnby. Translating and validating SPICT in Swedish. Retrieved February 22<sup>nd</sup>, 2018 from: <a href="http://www.spict.org.uk/wp-content/uploads/2018/02/Pham-Swedish-Translation-Lomond.pdf">http://www.spict.org.uk/wp-content/uploads/2018/02/Pham-Swedish-Translation-Lomond.pdf</a></li> <li>Sébastien Moine. Good practice guidance for translation of healthcare tools. Retrieved February 22<sup>nd</sup>, 2018 from: <a href="http://www.spict.org.uk/wp-content/uploads/2018/02/S-Moine-Translating-SPICT.pdf">http://www.spict.org.uk/wp-content/uploads/2018/02/S-Moine-Translating-SPICT.pdf</a></li> </ul>
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