Translation Guidelines for the AHRQ Surveys on Patient Safety Culture™ (SOPS®)

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Purpose and Use of This Document

This document addresses the growing need expressed by survey users to translate the Agency for Healthcare Research and Quality (AHRQ) Surveys on Patient Safety Culture™ (SOPS®) surveys from English into a variety of languages. It provides users of SOPS surveys with a set of guidelines for translating SOPS surveys to ensure the consistency and quality of translated materials. Only translations released by AHRQ are considered official translations of the SOPS surveys.

The guidelines presented here are based on the TRAPD translation process—Translate, Review, Adjudicate, Pretest, and Documentation.[1] This translation approach involves using at least two independent translators to each produce a forward translation and then having the two forward translations reviewed against each other by a separate bilingual reviewer and project staff. The translations are then compared with the original English survey to adjudicate or resolve any differences. The advantages of this approach, compared with a simple translation/back-translation approach, include:

- Increased ability to identify and resolve translation errors (i.e., errors in syntax, grammar, or meaning),
- Increased ability to identify issues related to variations in terms or expressions used by subgroups of people in the target language,
- Increased ability to produce a translation that uses language that is more easily understood by a wide variety of speakers of the target language, and
- Increased ability to identify and resolve problems with the readability level of the translation.

[1] Harkness JA. Questionnaire translation. In Harkness JA, Van de Vijver FJR, Mohler PPH, eds. Cross-Cultural Survey Methods. Hoboken, NJ: Wiley; 2002.

Official AHRQ Translations

The only official AHRQ translations of the SOPS surveys and supplemental item sets are the Spanish translations released by AHRQ. These translations are indicated by use of the trademark symbols "SOPS®" and "Surveys on Patient Safety Culture.™"

Spanish translations for all five core SOPS surveys (i.e., Hospital, Medical Office, Nursing Home, Community Pharmacy, and Ambulatory Surgery Center) and the supplemental item sets have been developed by AHRQ following the translation process described in this document. The Spanish translations on the AHRQ SOPS website were designed for U.S. Spanish-speaking respondents regardless of country of origin.

A number of translations into other languages has been developed by international users. They are not official AHRQ translations. While AHRQ has not reviewed the accuracy of these translations, we can connect you with other users who have translated the survey; e-mail SafetyCultureSurveys@westat.com (subject line: International Translations) and indicate the language you are interested in.

Translation Process Steps

To translate a SOPS survey into a language other than English or Spanish, we recommend that you use the following translation process steps.

Step 1: Obtain Permission To Translate the Survey

- Email SafetyCultureSurveys@westat.com to request AHRQ's permission to translate and use the surveys internationally.

Step 2: Produce Two Independent Translations

- **Obtain the most recent English-language version of the SOPS survey you wish to translate** (available at https://www.ahrq.gov/sops/surveys).
- **Identify two bilingual translators and a bilingual translation reviewer.** Translators should have training on translating surveys and should be translating from the English version of the survey into their strongest or "first" language. The bilingual reviewer often also serves as the adjudicator (although an additional adjudicator can be used) and needs translation experience, as well as an understanding of questionnaire design principles and the subject matter for the survey. The bilingual reviewer/adjudicator works with the translators and project team to reconcile differences between the translations and make final decisions about the translation.
- **Provide the bilingual translators and reviewer with background information on the translation task:**
    - Mode of survey administration,
    - Target reading level (6th to 8th grade),
    - Region(s) of the country where the survey will be fielded, and
    - Type of language they should use ("broadcast" or standard language vs. subgroup or region-specific language).

What's "Broadcast" Language?

To meet the needs of a broad range of speakers, strive to use "broadcast" or standard language typically used in broadcast journalism. Use language that has a basic vocabulary, grammar, and syntax that cannot be attributed to a single region/country and is understood by most speakers in the target language. However, if a survey translation is going to be used in a particular country or region, it may be acceptable to use a translation appropriate for that particular country or region, provided that you maintain equivalence with the English version of the survey.

- **Provide the bilingual translators and reviewer with another SOPS survey that has been translated into the target language, if available.** That way, the translators can check for and continue to use standardized translations for survey wording or response options and other elements common across the SOPS surveys, such as translating "medicines" into Spanish as "medicinas," rather than "medicamentos." You may also want to provide them the link to the Frequently Asked Questions on the SOPS website (https://www.ahrq.gov/sops/about/faq.html), which offer information on the principles underlying the design and content of SOPS surveys.
- **Obtain two independent translations in the target language.** Once the translators and reviewer have all the information listed above, they can perform independent translations**.** Remember to also translate survey instructions and response options.

Step 3: Bilingual Reviewer Conducts a Review of the Translations

- **Produce a master table** (see Appendix A for an example) that includes the following information:
  - The original English version of the survey, including all instructions and all items,
  - Translation 1,
  - Translation 2,
  - A column for the bilingual reviewer to insert a third version of the translation of each survey item, as needed, and
  - A column for comments explaining the rationale for the preferred wording or comments on any issues that should be addressed or considered.

  We recommend using each row in the table for a single set of instructions or a single survey item with the corresponding response options.
- Have a bilingual reviewer use the master table to indicate which translation version should be used for each survey item or whether producing a third, reconciled version that draws from the two translations presents a possible better alternative than either translation. The reconciled translation wording should be entered into the master table along with any comments or explanation about why the specific wording was preferred.

Step 4: Reconcile the Translations by Committee Consensus

- **Have the two translators, the bilingual reviewer, and project team meet as a committee (the "translation committee").** The translation committee will review the findings of the bilingual review, discuss any issues or problems identified by the reviewer, and decide what will be included in the reconciled translation. The choice of final wording to be used should be arrived at by agreement of the translation committee.

- **Have the bilingual reviewer lead the translation committee meeting.** The reviewer should also document decisions and translation wording in the master table.
- **Document any concerns that the team cannot resolve**. Contact the SOPS User Network to request additional guidance such as any questions about the specific intent of a survey item, word, phrase, or response option.

Step 5: Produce a Pretest Version of the Translated Survey

- Once the translation committee has completed their review and has come to a consensus on the wording for the instructions, each item, and response options, produce a version of the translation that is ready for pretesting.

Step 6: Pretest the Translation

- Pretest the draft translation with target population members (i.e., hospital, medical office, nursing home, community pharmacy, or ambulatory surgery center providers and staff). The pretest goal is to find out whether the translation is conceptually relevant, given that it was translated from a survey developed for the American healthcare system. Users from English speaking countries other than the U.S. might also need to adapt the survey to fit their specific healthcare systems. The pretest should also determine whether the wording of the items capture the intended meaning in the English version. In addition, the pretest will help determine if the items and instructions are easy for respondents to understand and answer. For the pretest, we recommend conducting cognitive interviews with providers and staff whose primary language is the target language. If time and resources are too limited to conduct cognitive interviews, consider conducting a focus group with the same types of providers and staff. Document any findings from the pretest that indicate the need for any wording changes. For information on conducting cognitive interviews, refer to Appendix B. For information on conducting a focus group, refer to Appendix C.

Step 7: Conduct Review and Signoff of the Final Translation

- The translation team should meet again to discuss the pretest findings (from either the cognitive interviews or the focus group) and reach consensus on any revisions of the translation. Once the translation team reaches agreement, the final version of the translation is prepared and formatted.

Step 8 (Optional): Conduct a Pilot Test and Psychometric Analyses

- This step is optional because of its cost and time requirements. If Step 8 is conducted, the translation team will be able to assess the reliability and validity of its translation.
- Conduct a pilot test of the survey with a selected group of hospitals, nursing homes, medical offices, community pharmacies, or ambulatory surgery centers. The group can be a purposive sample but should still be broadly representative of major characteristics of the targeted healthcare setting.
- Analyze response distributions and conduct psychometric analyses of the collected data.
- Compare results with the results from the English version.

Step 9: (Optional) Provide AHRQ With Your Contact Information and Language of Your Translated SOPS Survey

- If your project team would like the AHRQ SOPS User Network to be able to share your information with other interested users, you may email SafetyCultureSurveys@westat.com. Please provide AHRQ with your contact information, the SOPS survey translated, and the language of translation and indicate whether AHRQ may share your contact information if other users want to ask about your translation.

If you have any questions or comments about these guidelines, contact AHRQ's SOPS User Network via e-mail at SafetyCultureSurveys@westat.com or by phone at 1-888-324-9749.

APPENDIX A: SAMPLE MASTER TABLE

#	English Hospital Survey 2.0	Spanish Translation 1	Spanish Translation 2	Reconciled Version	Comments
1.	There is a problem with disrespectful behavior by those working in this unit	Hay problemas con el comportamiento irrespetuoso de quienes trabajan en esta unidad	Hay un problema de falta de respeto por parte de las personas que trabajan en esta unidad	Hay problemas con el comportamiento irrespetuoso de quienes trabajan en esta unidad	
2.	In this unit, there is a lack of support for staff involved in patient safety errors	En esta unidad, no hay apoyo para el personal involucrado en los errores de seguridad del paciente	En esta unidad, hay falta de apoyo para el personal implicado en errores relacionados con la seguridad de los pacientes	En esta unidad, falta apoyo para el personal involucrado en los errores de seguridad del paciente.	During pretesting, check that respondents are interpreting “involucrado” correctly.
3.	During busy times, staff in this unit help each other	Durante las horas de más trabajo, el personal en esta unidad se ayuda mutuamente	Cuando hay mucho trabajo, el personal en esta unidad se ayuda mutuamente	Cuando hay mucho trabajo, el personal en esta unidad se ayuda mutuamente	Choosing Cuando as it aligns better with the English version (When there is much work).
Response Options	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree Does not apply /Don’t know	Muy en desacuerdo En desacuerdo Ni de acuardo ni en desacuerdo Deacuerdo Muy de acuerdo No aplica o no sabe	Muy en desacuerdo En desacuerdo Ni de acuardo ni en desacuerdo Deacuerdo Muy de acuerdo No aplica o no sabe	Muy en desacuerdo En desacuerdo Ni de acuardo ni en desacuerdo Deacuerdo Muy de acuerdo No aplica o no sabe	

APPENDIX B

Option 1 for Pretesting: How To Conduct Cognitive Interviewing

Cognitive interviewing is a widely used technique to evaluate how people understand, mentally process, and respond to survey questions, instructions, and other formats. Cognitive testing involves using an indepth, semistructured interview to gather insight into the sources of potential misinterpretation Cognitive interviewing focuses on examining four stages of the question-answer process[2]:

- Comprehension—how survey respondents interpret and understand the item,
- Retrieval—how respondents search for information relevant to responding to the item,
- Judgment—how respondents evaluate and integrate information retrieved to generate a response, and
- Responding—how respondents convert the internal response to one that is appropriate for the situation and understood by others. For translations of the AHRQ patient safety culture surveys, interviewers should also focus on whether the translation conveys the same intended meaning in the target language as in the English version and uses wording that is culturally appropriate and familiar to the target population.

Cognitive Interviewing Methods

Cognitive interviews may be conducted in person or by telephone or video. There may be a preference to conduct them by telephone or video to reach a broader geographical area for respondents. Regardless of whether interviews are in person or by telephone or video, there are two types of methods for eliciting feedback from respondents when conducting cognitive interviews. The first method, concurrent probing, entails presenting a respondent with a survey item, allowing the person to answer, and then probing for the basis of the response or the interpretation of the question. A second method, retrospective probing, consists of providing the respondent with the full set of survey items, allowing the person to answer all items, and retrospectively probing each item for the basis of the response or the interpretation of the question. This section describes each of these methods.

Concurrent probing. A typical interview using concurrent probing is conducted as follows:

- Interviewers train respondents to “think aloud” while they complete each survey item. As respondents answer each question, they talk aloud about what they think the questions are asking and how they chose their answers.
- Interviewers listen and observe (if in person or by video).
- At designated points in the survey (e.g., at the end of each survey section), the interviewers:
  - Ask open-ended questions to find out if anything in the survey is confusing, misinterpreted, or difficult to understand and answer.
  - Probe on specific words or phrases that may have a different meaning in the respondent’s culture or be unfamiliar to the respondent.

[2] Tourangeau R. Cognitive sciences and survey methods. In: Jabine T, Straf M, Tanu J, et al., eds. Cognitive Aspects of Survey Methodology: Building a Bridge Between Disciplines. Washington, DC: National Academy Press; 1984. p. 73-100.

Retrospective probing. A typical interview using retrospective probing is conducted as follows:

- Respondents complete the translated survey items prior to their interviews. They are asked to mark any words or items they found confusing or difficult to answer. If possible, respondents should return a copy of their completed surveys before their interviews for the interviewers to review.
- Interviewers probe about each of the survey questions and responses, asking respondents to think about what the questions are asking and how they chose their answers.
- Interviewers listen and observe (if in person or by video).
- At designated points in the survey (e.g., at the end of each survey section), the interviewers:
    - Ask open-ended questions to find out if anything in the survey is confusing, misinterpreted, or difficult to understand and answer.
    - Probe on specific words or phrases that may have a different meaning in the respondent's culture or be unfamiliar to the respondent.

Cognitive Interview Administration

Administering a cognitive interview involves the activities outlined below.

Activity 1. Obtain Needed Permissions and Approval From Human Subjects Review Boards

Activity 2. Select Your Cognitive Interviewing Team and Method of Interviewing

- Identify and recruit several bilingual (preferably experienced) cognitive interviewers.
- Decide whether the interviews will be conducted in person or via the telephone or video. If the interviews are conducted in person, arrange for appropriate space for conducting the interviews.

Activity 3. Develop Training Materials and Train Interviewers

- Collect existing training materials, including:
    - General information about the survey.
    - A copy of the translation.
- Develop the following additional interview materials:
    - An **Interviewer Guide,** written in the target language, that contains the open-ended probes and more specific probes mentioned earlier:
      Examples: In your own words, what is this question asking? How did you choose your answer to this question?
      Interviewers will also ask unscripted probes as needed during the interview.
    - A participant consent form in the target language. The form clearly but briefly states the purpose of the interview, the participant's role, and how the results will be used. If you decide to audio-record the interview for analytic purposes, review applicable laws regarding such recordings and inform the respondent as appropriate.

- Basic training materials on cognitive interviewing techniques and appropriate types of probes.
- A copy of the pretest translation version.

- Conduct training on the interview materials. Include interviewer practice in administering the Interviewer Guide and using unscripted neutral probes.

Activity 4. Recruit Participants and Schedule Interviews

- Recruit providers and staff whose primary language is the target language. Try to recruit a mix of job titles and both men and women. Also, try to recruit providers and staff who work different shifts (day, evening, night, weekend), where applicable.
- Allow sufficient time for recruiting—reaching providers and staff and scheduling an interview can be difficult. Some interviews may need to occur before or after work hours, during lunchtime, or on weekends.
- Send confirmation emails to recruited participants (also send the survey to telephone interview participants to complete before the interview). If the interviews occur more than a week after the confirmation email is sent, remind the recruited participants 1 to 2 days before their scheduled interviews.
- It may be necessary or appropriate to pay incentives to interview participants.
- The number of participants to recruit may increase as you start the interviews. Experience has shown that cognitive interviewing is most effective when results are analyzed and changes made during successive rounds of interviews (Willis, 1999,[3] has a comprehensive discussion of cognitive interviewing).

Activity 5. Conduct Interviews, Analyze Findings, and Recommend Changes

- Conduct the interviews. Monitor early interviews to determine if any interviewer retraining is necessary.
- Have the interviewers develop an interview summary for each of their interviews.
- Members of the translation team should analyze and discuss the findings after each round of interviews to determine whether to change the translation or the Interviewer Guide before conducting more interviews. You may want to designate a team member to analyze the interview summaries from a round and prepare a report for discussion with other team members. If you are conducting only one round of interviews, analyze early findings to make decisions about changes to the translation or Interviewer Guide before completing the round.
- After all interview rounds have been completed, the team reviews all the findings, with emphasis on those from the last round of interviews. During the meeting, the team discusses key findings and translation issues and possible ways to resolve those issues.
- Team members develop recommendations for changes to the translation, with explanations for the recommended changes. The team should also note any disagreements with changes or issues with the translation.

[3] Willis GB. Cognitive Interviewing: A "How To" Guide. Meeting of the American Statistical Association. Short Course. 1999. https://www.hkr.se/contentassets/9ed7b1b3997e4bf4baa8d4eceed5cd87/gordonwillis.pdf.

APPENDIX C

Option 2 for Pretesting: How To Conduct a Focus Group

We recommend cognitive interviews for pretesting the translation. However, if you have limited time or resources, consider conducting a focus group (Agans, et al., 2006,[4] discuss their experiences in conducting a focus group during the survey translation process).

Conducting Focus Group

Focus groups involve the activities outlined below.

Activity 1. Obtain Needed Permissions and Approval From Human Subjects Review Boards

Activity 2: Select Your Focus Group Team

- Designate a focus group coordinator to handle logistics and oversee recruiting.
- Select a moderator to conduct the focus group, preferably using a professional moderator who is fluent in the target language, or a bilingual member of the translation team, such as the reviewer. Krueger and Casey[5] provide some guidance on focus group moderation.
- Assign a project team member to take notes during the focus group.

Activity 3: Prepare for the Focus Group

The focus group coordinator needs to:

- Select a convenient time and facility. Typically, the facility will include a large conference table that seats 8 to 12 people. Alternatively, you can conduct the focus group virtually through online meeting software.
- Audio-record the session with the consent of the participants.
- Supervise and assist with preparation of materials for conducting the focus group:
    - If a professional moderator is selected who does not know about the project, discuss all survey background information and current task documentation with them, including translation issues and concerns.
    - Develop a **Focus Group Guide** in the target language for the moderator to use during the focus group. Questions should be designed to promote group interaction and a conversation, specifically about the translation and possible problems in understanding, interpreting, or answering the questions. Also, questions should be asked to assess whether

4 Agans RP, Deeb-Sossa N, Kalsbeek, WD. Mexican immigrants and the use of cognitive assessment techniques in questionnaire development. Hisp J Behav Sci 2006 28(2):209-30.

5 Krueger RA, Casey, MA. Focus Groups: A Practical Guide for Applied Research. 4th ed. Thousand Oaks, CA: Sage; 2008.

participants are properly interpreting the questions given the intended meaning of the English version.

- Develop a participant consent form in the target language. The form clearly but briefly states the purpose of the interview, the participant's role, and how the results will be used. The form should also ask for permission to audio-record the focus group session. Participants give their consent by reading and signing the form.
- Recruit providers and staff (hospital, medical office, nursing home, community pharmacy, and ambulatory surgery center staff) whose primary language is the target language. Inform providers and staff that the focus group session will be audio-recorded to capture an accurate record of participants' comments. Try to recruit providers and staff with a mix of job titles and a mix of shift schedules (if applicable). Because participants may not show up after agreeing to do so, recruit two or three more participants than you need.
- Incentives are usually paid to focus group participants at the session.
- Schedule the focus group, send confirmation emails to recruited participants, and remind the recruited participants 1 to 2 days before the focus group.

Activity 4: Conduct the Focus Group, Analyze the Findings, and Develop Recommendations for Changes

- The moderator conducts the focus group, and the notetaker records participants' comments.
- Obtain a transcript of the audio-recording.
- Team members analyze participant comments and document key findings, such as participant problems understanding questionnaire items, words, instructions, or response options.
- Team members develop recommendations for changes to the translation, with explanations for the recommended changes. The team should also note any disagreements with proposed changes or issues with the translation.