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## A Transcription and Translation Protocol for Sensitive Cross-Cultural Team Research

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### Abstract

Assurance of transcript accuracy and quality in interview-based qualitative research is foundational for data accuracy and study validity. Based on our experience in a cross-cultural ethnographic study of women’s pelvic organ prolapse, we provide practical guidance to set up step-by-step interview transcription and translation protocols for team-based research on sensitive topics. Beginning with team decisions about level of detail in transcription, completeness, and accuracy, we operationalize the process of securing vendors to deliver the required quality of transcription and translation. We also share rubrics for assessing transcript quality and the team protocol for managing transcripts (assuring consistency of format, insertion of metadata, anonymization, and file labelling conventions) and procuring an acceptable initial translation of Spanish-language interviews. Accurate, complete, and systematically constructed transcripts in both source and target languages responds to the call for more transparency and reproducibility of scientific methods.

### Keywords

cross-cultural research; anthropology of health; research design methodology; postpartum care; protocol analysis; data management

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Maintaining quality in the transformation of an interview into a transcript ready for analysis establishes a foundation for rigor in the rest of the research process (Hennink & Weber, 2013; McLellan, MacQueen, & Neidig, 2003; Witcher, 2010). Analyzing a dataset riddled with errors is pointless at best, and may lead to spurious results. Evans-Pritchard (1951) suggested that “any anthropologist worth his salt” (p. 79) would minimize errors by eliminating the interpreter and learning the language himself (as quoted by Bradby, 2002, p. 842). In contemporary interdisciplinary qualitative research, assuring accurate representation

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of research participants requires more than learning the language: it takes purposeful collaborative processes of data management and transformation that involve team members with complementary expertise (Guest & MacQueen, 2008). Transcription is often a taken-for-granted process out-sourced to professional (or even amateur) transcriptionists and subsequently glossed-over in the methods sections of published studies, and understudied in qualitative inquiry (Davidson, 2009). We propose that the qualitative researcher “worth her salt” reflexively plans how to best transcribe the linguistic and metacommunicative nuances that matter.

Sharing transcription, translation, and data-management choices in a published methods section provides readers with necessary detail. This stock phrase often seen in published papers may be too brief: “Audiofiles were transcribed by a HIPAA-certified professional transcriptionist and non-English language interview data subsequently translated by a bilingual, bicultural research team member.” Knowing who transcribed and translated audiofiles and their basic qualifications falls short of explaining how the research team verified and managed the transcription process and products.

In the spirit of increasing transparency and rigor in interview-based qualitative research, the purpose of this article is to describe the team protocols we developed to verify professionally transcribed and translated interviews conducted in Spanish and English. We liberally borrowed from published team guidelines to build on best practices for transcription and translation (specifically, MacLean, Meyer, & Estable, 2004; McLellan et al., 2003). Starting with an overview of a sensitive, cross-cultural research study and a transcript example from that study, we show that transcription makes a difference in practical ways. Then we recommend a process for soliciting professional transcription and translation services, evaluating sample transcripts in a bidding process, and developing a protocol to manage team processes related to transcription and translation of interviews.

## **Background on a Sensitive Research Topic: Pelvic Organ Prolapse**

Women experience changes in pelvic floor support across their lifespan. The major risk factor for pelvic floor disorders is childbirth. As ligaments and muscles that support pelvic organs such as the uterus and bladder weaken or are damaged, those organs may fall into the vagina (stage II pelvic organ prolapse). In later stages of prolapse, pelvic organs bulge or protrude outside the vagina (stage III). In the first postpartum year, one quarter to one half of women who had a vaginal delivery had a stage II or greater prolapse, at least temporarily (Handa et al., 2009; O’Boyle, O’Boyle, Calhoun, & Davis, 2005; Wai et al., 2011). Half of women reported urinary incontinence and 17% reported fecal incontinence (Brown, Gartland, Perlen, McDonald, & MacArthur, 2015) during that time. Subtle pelvic floor support changes affect women’s quality of life (Dolan et al., 2004) and sexual activity (Brubaker et al., 2008). Some studies have found a correlation of pelvic organ prolapse with Hispanic ethnicity (Swift et al., 2005), and Hispanic women report more bother from stage II pelvic organ prolapse than non-Hispanic White women (Dunivan et al., 2014).

Our comparative ethnographic study involves both Mexican American women and Euro-American women living in the intermountain west in the United States. The study centers on

women's experiences of pelvic floor support after having their first baby. When complete, the study will include interviews with nearly 100 women to understand their awareness of changes in pelvic floor support, when and with whom they talked about pelvic floor issues, and what they did about pelvic floor changes. Both women who had recently delivered their first baby and those who had several children and were at midlife are taking part in the study.

The topic of pelvic floor health is a sensitive one for women on at least three grounds that the research team considered at length before launching data collection. Whether the language of the interview was English or Spanish, accuracy in recording the words used was important for political, social, and ethical reasons.

Politically, we were keenly aware of the political nature of women's bodies and women's health. We recognized that talking with women about postpartum pelvic floor changes could medicalize symptoms or signs that most clinicians would consider normal variation with age and childbirth. Choosing words in the interview that were neutral, such as *pelvic floor support* instead of *pelvic organ prolapse*, avoided the possibility that researchers would transmit a condition or language for bodily changes that was more medicalized than needed.

Socially, the topic of the interview was sensitive, bordering the permissible edges of polite conversation between strangers. We were careful to construct the interview guide to introduce terms likely to be mutually understandable, and to follow the lead of the woman in using words she supplied for bodily parts and sensations. This was intended to avoid embarrassment in the interview if women were uncertain about anatomical words. Social embarrassment outside the interview situation was avoided through adherence to privacy and confidentiality standards. As with other researchers, we found women valued sharing their experience with honesty and openness despite the social sensitivities of the topic (Sikweyiya & Jewkes, 2013).

Conducting an interview is a profoundly ethical undertaking in qualitative research (Hammersley & Traianou, 2012). The ethics of representation are even more pronounced in a study of personal and potentially stigmatizing symptoms represented as pelvic floor changes. Simply recording the conversation adds perceived risk. Representing women's language and experience can amplify their vulnerability if they are concerned about how we evaluate their story, portray their experience, or describe them in publications in unflattering or privacy-compromising ways. For example, they may fear that their recorded voices or stories may compromise them in the future. Behind these fears may be a deeper distrust of the motives of the scientific community. For these reasons and others, participants may shy away from being interviewed. How we collect and then share the intimate lives of others without appropriating or trivializing their experience is a matter of ongoing consideration (Black, 2017; Van den Hoonaard & Van den Hoonaard, 2013). Transcription makes research conversations tangible. Even so, a stance of relational ethics values representing participants with dignity (Ellis, 2007).

Because of the sensitive nature of this study, our research team insisted on establishing an audit trail to record our decisions supportive of reliability in transcription and translation.

Avoiding harm in the interview process was a priority, and we acknowledged both the dialogue and recording of that conversation as an ethical endeavor. With the political, social, and ethical dimensions of this study in mind, a case of faltering transcription illustrates how the transcription process can safeguard or compromise a study. The study was approved by the University of Utah Institutional Review Board, and participants were voluntarily enrolled after completing the informed consent process.

### Faltering Transcription Compromises Meaning: An Example

“Transcription is the process of producing a valid written record of an interview: would that it were so simple,” wrote Bill Graham (2005, p. 121). Qualitative researchers using interviews generally agree that a transcript is a word-for-word or verbatim record of the interview dialogue. Errors in the spoken words of both the researcher and participant—such as incomplete sentences, word choice mistakes, or sentence structure problems—are reproduced in the interview transcripts. Depending on the research purpose, pauses, stutters, utterances, volume, and emphasis can all be added. Transcription errors introduce inaccuracies into the transcript by omitting words, inserting sound-alike phrases instead of the uttered phrase, or mishandling colloquialisms or accented speech in ways that distort meaning (Poland, 1995, 2002; Witcher, 2010).

In the first year of our 5-year study, we interviewed 16 multiparous women previously treated for prolapse. In the following excerpt I (LC) was interviewing a nurse who was a study participant. A professional transcriptionist had been hired to transcribe the audiofile, and a member of our bilingual research team had already conducted a first-pass verification to assure transcript accuracy. In conducting the final review of the transcript, I noted the following errors and areas for improvement (see boxed text).

[Due to urinary incontinence], I've always carried extra scrubs, extra underwear, blah, blah and I just kind of let that go. I dealt with that. I had my next baby two years later and then ended up divorced and was single and not sexually active and so I kind of didn't care. Now by this time what I have is I have uterine prolapse, cystacil, and rectasil. I'm a total mess, like everything is just coming out.

I remember one day examining myself and I was like; this is not normal. I don't know what this is and I couldn't comprehend that my bladder was pushing into my vaginal wall so bad that it was bulging. And then I made the joke at work. I was like; if my uterus falls out just throw it away. Don't everybody panic. Because I was really close to all my co-workers – I was like; if my uterus comes out just throw it away for me. I was like; it's going to come out. Now I've seen Hispanic women – I don't know how you grade uterine prolapse – but I've seen women with it hanging all the way out.

I never was hanging out like that. And I was thinking; oh, I hope they never have to put a Foley catheter because you could not visualize my uterus at all because it was all prolapsed. (Fanny)

As the interviewer, I was verifying transcript accuracy while listening to the audiofile. First, I looked at the spelling errors for the medical words *cystocele* and *rectocele*. Those minor

errors were aggravating because we specifically asked the transcription company to provide standard spellings of medical terms. We also provided a list of all the terms they were likely to encounter in our interviews (slang terms, “dirty” words, medical words, and so forth). We provided spellings considered correct by U.S. audiences for both cystocele and rectocele. As a matter of professionalism, it is important for us to use correct words in our work, and these misspellings had to be changed before we published any papers using these particular quotes. Correcting misspellings is easier done at the point of transcription, but still salvageable in the verification process.

Second, there were some quotes within the interviewee’s statement that could have been transcribed more accurately as quotes. We had not explicitly directed the transcriptionist to do this, but it would have been helpful in the sentence when she said to her friends at work, “If my uterus falls out, just throw it away.” She directly quoted herself as a communicative strategy, and how she expressed herself deserved accurate representation in the transcript, a fix I could easily apply at the point of transcript verification.

Third, in the anonymization process the name *Fanny* was inserted at a prior level of verification in place of the participant’s actual name. We were careful to create a process for name substitution that relied on the age and language background of the participant and allowed us to identify a substitute name from language-appropriate names commonly used in the year each participant was born.<sup>1</sup> The selection of *Fanny* was an unfunny, clumsy anonymization mistake that failed to maintain the participant’s dignity given the topic of the study.

Finally, the most significant error of all puzzled me: “Oh, I hope they never have to put a Foley catheter because you could not visualize my uterus at all because it was all prolapsed.” I knew that the woman being interviewed was a nurse. And I am a nurse. I would have noticed immediately in our conversation if she had said “uterus” because Foley catheters are inserted into the *urethra* and then threaded up to the *bladder*, never into the *vagina* or *uterus*. This was clearly a transcription error. I listened to the audiofile; the word she said was clearly *meatus*, the opening of the urethra. How did it get transcribed this way?

In a discussion with the first-pass transcript verifier, who was not a nurse, I learned that she also identified a transcription error at that point in the interview: “Yes, I saw that in the verification process. It was clearly wrong.” When the transcript came back it read, “Oh, I hope they never have to put a Foley catheter because you could not visualize my monedas at all because it was all prolapsed.” In Spanish, “monedas” means coins. The professional transcriptionist had inserted a Spanish word, presumably because she was a Spanish speaker (I surmised) and because “meatus” sounded like “monedas” to her. The first-pass verifier on our study team was a native Spanish speaker as well, and she knew that “monedas” was not correct. In listening to the audiofile and comparing it to the transcript, she was uncertain about the exact word used by the participant in the interview. She inserted *uterus*, which was her best estimate. This series of mis-hearings and mis-specifications underscored my hunch

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<sup>1</sup>This process for language-congruent, culturally and historically situated pseudonym selection was also used by Deborah van den Hoonaard in her research for *The Widowed Self* (2001).

that many women (even those who work in professional transcription or on health-related research teams) may not have access to or familiarity with the extensive and arcane specialty language of biomedicine. Transcription work is often part-time, contingent, “pink collar” labor that introduces the “human factor” of gender, race, and class. “Transcriptionists are people,” as MacLean and colleagues remind us (2004, p. 118).

These four transcription missteps were, individually, of arguably minor consequence. Additively, they were vexing and potentially compromising to the validity of the transcript and ensuing analysis. In this case, a less-than-optimal transcript distorted the data at the level of words and meanings. The effect was disrespectful to the research participant, unnecessarily inaccurate in content, and misleading in interpretive possibilities. Based on our team values of minimizing vulnerability due to the social, political, and ethical nature of our work, we had to address transcription processes and develop a better protocol for data preparation.

What happened as a result of this experience? The research team modified the process for creating complete, accurate, and verified transcripts and implemented a step-by-step transcription protocol with double-verification.

## Establishing a Transcription Protocol

Three decisions need to be made at the outset study. How complete must the transcript be to accomplish the research process? How much detail is needed for analysis? And how will we assure content accuracy? Answers to these questions supply budgetary detail and establish the nature of the transcripts forwarded for analysis.

### Completeness

There is no simple process for creating a complete transcript that corresponds with the discursive event because multiple renderings are possible and may be valuable in analysis (Emerson, Fretz, & Shaw, 2011). Some clinical researchers recommend reconsidering the need to produce a verbatim transcript at all, and suggest basing content analysis on fieldnotes and audiotapes instead (Halcomb & Davidson, 2006). Even if transcribing the interview, parts of the interview could be omitted in the transcription process on the grounds that the speaker went off topic (Gibbs, 2012). Making judgments about what is “off topic” or not worth transcribing at all runs the risk of prematurely losing data that may be important later in analysis (Seidman, 2013); in those cases, noting the audiofile time sequence omitted and reason for omission maintains the audit trail. Part of the decision about the level of completeness of a transcript is based on budget. For studies with a limited budget, transcribing the vital information and inserting parenthetical summaries of what was not transcribed (and why) may suffice. This cost-saving measure runs the risk of predetermining what “counts” as data, eliminating the possibility of discovering unexpected connections or novel answers to the research question. Our research team opted for a complete transcript with no omissions or redactions of content. Every minute of tape-time was transcribed, resulting in a complete transcription of the interview.

### Level of Transcription Detail

The level of transcription should be congruent with the level of analysis and purpose of the study (McLellan-Lemal et al., 2003). Conversational analysis and discourse analysis require specialized orthotic or prosodic conventions in transcription (for examples, see Jefferson, 2004; Silverman, 2011; Werner, 1996). Detailed verbatim transcription of words may also capture pauses and silences, utterances (“ummm,” “ahhh”) and/or vocalizations (laughter, sniffing, snorts). Less-detailed verbatim transcription of words with significant pauses, limited utterances, and meaningful vocalizations is usually adequate for content-focused studies using descriptive or interpretive methods to analyze unstructured interviews (MacLean et al., 2004). Prior to hiring the transcription company, we established a shared expectation within the team about the value of utterances, vocalizations, and pauses. Then we wrote those expectations, with examples, into a manual for the transcriptionist following the sample provided by McLellan-Lemal and colleagues (2003). We instructed our transcriptionists to capture utterances and silences.

### Content Accuracy

In rendering spoken language in a verbatim written form, transcriptionists use judgment and even creativity, since spoken language rarely conforms to the expectations of written language. Seemingly innocuous punctuation choices can change meaning (Sandelowski, 2000; Trusse, 2004). “Slippage” between the interview and its transcript representation can be addressed, in part, through the knowledge and skill of the person transcribing the audiofile (Miles, Huberman, & Saldaña, 2014). Providing the transcriptionist with a list of technical or medical words reduces spelling or word-substitution errors (MacLean et al., 2004). The words we listed with correct spelling included *avulsion* (not *evulsion*), *cystocele*, *enterocele*, *hysterectomy*, *incontinence*, *introitus*, *Kegel*, *labia*, *levator ani*, *pessary*, *prolapse*, *pubic symphysis*, *rectocele*, *uterine*, *uterus*, and *vagina*. We specifically required expletives and obscene and slang words to be transcribed without substitutions; we also required that mispronunciations and inaccurate word choices be left uncorrected. In one interview, we asked a woman if she knew what to do for her pelvic floor. “No,” she said. Before she experienced prolapse herself, she’d “never heard of the—is it called a pursery? Pissary? Pursary? The thing that you can push up?” Transcribing her words without correcting pursery/pissary/pursary to pessary was important in our analysis of women’s understanding of the condition.

### Hiring a Transcription and Translation Service

Given the size of the research undertaking and the sensitivity of the topic, qualitative researchers may choose to out-source transcription and translation to secure a vendor with requisite knowledge, skills, and confidentiality standards. We undertook a formal bidding process managed by the university purchasing office and devised a three-tiered process to screen prospective transcription/translation vendors. First, vendors responded to a request for proposals issued by the university that outlined the technical standards of transcription required. Second, they supplied a sample of their professional work by providing a transcript of an English-language interview and a transcription and translation of a Spanish-language interview. We created simulated individual interviews of a Spanish-speaking and an English-

speaking confederate, drawing on the experience of our clinician colleagues who had extensive experience talking with women about prolapse. Each confederate was asked key questions from our interview guide and responded using a range of vocabularies, from medical terminology to slang. The vendors did not know that the interviews were simulated, but were aware that we were using their transcripts as part of the process of awarding the bid. Each vendor had the study requirements for transcription and the list of technical and medical words available. Once the transcripts were returned we rank ordered bidders by quality and eliminated vendors that submitted transcription of inadequate quality. The third step was a competitive review of bids based solely on price and judged by the university's purchasing department.

We developed a rubric to assess transcription accuracy and completeness that we used in rank ordering transcripts according to quality (Table 1). Accuracy in transcribing words, utterances, and punctuation was important to our content-focused study and vendors were given the transcription requirements we expected along with the simulated interview. A researcher listened to the interview and followed along with the transcripts, assessing each transcript for adherence to the transcription requirements specified in the request for bids. After completing the rubric for each transcript, the research team discussed the differences between the transcripts and the quality nuances that dampened or boosted our enthusiasm for each vendor's sample transcript.

For the Spanish-language simulated interview the vendor evaluation process was similar. The sample interview with a confederate was transcribed and then translated by the vendors. The bilingual, bicultural investigator on the team assessed the quality of translation using the rubric designed by the American Translators Association (2017). The research team discussed the completed rubrics and compared ratings of translation quality in order to select the most suitable vendor of translation services.

## Verifying the Transcript

We adopted the optimal two-pass process for data verification of professionally transcribed interviews against the audiofile (McLellan et al., 2003; Morse & Field, 1995). Both the first-pass and second-pass verifiers referred to the study protocol that provided explicit directions about the standardized format of the text and the expected level of accuracy and completeness of the transcription (Appendix A). In creating our study-specific transcription protocol, we adapted or adopted the recommendations of McLellan et al. (2003).

### First-pass transcript verification

The first-pass review was completed by a bilingual research assistant who listened to the audiofile and assured it was transcribed completely and accurately. Errors or word substitutions were rectified at this point. First-pass verification also included adding metadata per protocol, applying format guidelines to the transcript text, and anonymizing the transcript. Metadata included detail about the interview, interviewer, and participant in a textbox inserted at the beginning of every interview (Table 2). We labelled the transcript file using a system of predefined abbreviations to index participant characteristics. The first letter in the file was either M (meaning multiparous cohort) or P (meaning primiparous



cohort), followed by a code for Mexican American (MA) or European American (EA) cultural group, and then a unique code number for the participant. Next, the nature of the data was coded as interview (i), telephone call (tc) or fieldnotes (f). The final component of the file label was the date of the interaction. Strung together, the file label would be represented as follows for the first multiparous Euro-American woman interviewed on September 23, 2017: M.EA001.i.20170923. The result of such a transcript labelling convention was a meaningful, at-a-glance summary for each datafile that conveyed key information.

Each transcript was anonymized using pseudonyms in a pattern of systematic substitution. The research assistant chose the pseudonym by referring to online catalogues of most common baby names in the year of the participant's birth congruent with the participant's preferred language. The first participant was assigned letter A in the alphabet, the next was assigned letter B, and so on. Other proper names used in the interview transcript were also systematically substituted using the same alphabet letter. For example, Euro-American participant 001 was renamed Amanda, and her partner was renamed Alex, her baby Abigail, and her doctor Dr. Alexander.

### **Second-pass transcript verification**

The second-pass review was conducted by the interviewer using the original audiofile and anonymized, formatted transcript. The second-pass verification allowed the researcher who conducted the interview to review and agree with the chosen pseudonyms and assure that no original identifiers remained. In listening to the audiofile and checking the transcript, the interviewer also completed a final check of content accuracy and then adjusted the level of transcription for analysis.

### **Adjusting Level of Transcription for Analysis**

With the transcript in hand, the interviewer used her judgment to eliminate some utterances if they made women appear less articulate than they actually were. Filler words (“ummm ...”) and verbal tics (“ya’ know”) added little to our content-focused interest except when they were speaking about the sensations they experienced early in their awareness of pelvic floor changes. In recalling those sensations, it was important to note the delays and fillers women used as they were searching for words to express sensations and body parts. In the transcript review and verification process, we retained utterances and silences we judged to be meaningful and we eliminated those that introduced unnecessary noise and distraction. The same process was true of utterances used by interviewers, who used background conversational encouragers (“um-hmm”) during the interview. When transcribed, those utterances were brought to the foreground and appeared to interrupt the speaker. Representing each encouraging utterance also detracted from the content flow with inserted turn-taking lines that were not necessary for our content-focused study. Although transcriptionists were instructed to transcribe those utterances, we eliminated many of them before uploading for analysis in Atlas.ti version 7.0 (Muhr, 2012). Emotion was captured using the convention of square brackets (following MacLean, et al., 2004); for example, in a focus group setting, we added utterances to the transcript: “My husband didn’t understand that I had to stop for my bladder. [short sharp laugh followed by group laughter].”

We added a time-stamp signoff after both the first-pass and second-pass verifications. Once the second-pass verifier had signed off, the transcript was saved for uploading into Atlas.ti qualitative analysis software (Muhr, 2012).

## Translation

Translators and translations indisputably shape meaning. Two (or more) translators with expertise in the source and target languages may be superbly qualified, yet diverge in their approach to the task. The epic feud between Edmund Wilson and Vladimir Nabokov (Beam, 2016) is a case in point. Each critiqued the other's translation of *Eugene Onegin*, Pushkin's famously untranslatable novel written in verse. Hurling insults, the translators billed each other's work as "uneven and sometimes banal," "unreadable," and "an arty translation" akin to canned music (Emerson, 2017, pp. B12–B13). Compared to the nuanced stylistic disagreements about translation in the humanities, qualitative researchers in the health sciences most often debate how to include interpreters and translators in an effort to arrive at an "accurate" and "equivalent" verbatim transcript in a second language (Bradby, 2002; Brämberg & Dahlberg, 2013; Merry et al., 2011; Temple, Edwards, & Alexander, 2006).

Even so, how to translate words as well as context and intention is far from a settled concern. A translator makes "assumptions about meaning equivalence that make her analyst and cultural broker as much as a translator" (Temple & Young, 2004, p. 171). Ideally, translators share personal characteristics and life experience with those being interviewed, as well as a deep familiarity with the interview topic, context of the interviews, and culture of participants (Al-Amer, Ramjan, Glew, Darwish, & Salamonson, 2014; Brämberg & Dahlberg, 2013; Temple et al., 2006). Additional procedures to improve translation of interviews include involving a team of translators, cycles of translation and back-translation, documentation of translation decisions and phrases in a study-specific dictionary, and debriefing interviews with interpreters and translators after each interview and at the conclusion of the study (Lopez, Figueroa, Connor, & Maliski, 2008; Merry et al., 2011). We identified another necessity in working with translators: The importance of deep familiarity with Mexican and Mexican American culture. Given lexemic change, semantic shift, and idiomatic subtleties (Kay, 1979), a few translations early in the study were done by native Spanish speakers from countries other than Mexico, and their translations necessitated substantial modification.

For qualitative research purposes, interview translations aim for semantic equivalence at a minimum and aspire to conceptual equivalence (Marín & Marín, 1991). Applying these considerations to our study, we chose to produce the initial transcript in the source language and then translate it into English prior to conducting any analysis. Given our resources, we decided that translation review and verification by two members of the research team would suffice. Once verified, both documents were stored and analyzed side by side, a format that helped all members of the research team to discuss the transcripts and interact with the original and translated versions (Santos, Black, & Sandelowski, 2015) (see Table 2). Data coding was conducted by language-congruent researchers in the source language (as recommended by Olson, 2011), adjacent to the same data in English translation.

## Discussion

As a study of a women's pelvic health, we held our transcription and translation procedures to a high standard out of respect for the participants and the political, ethical, and socially sensitive nature of the research topic. A rigorous vetting process for the transcription company we hired and two-pass verification of the transcripts enhanced the rigor of interview data we forwarded for team analysis. Systematic scientific processes protect the integrity of interview data during the transformation from an aural record to a written transcript. Why this effort? In short, to safeguarding study validity.

The National Institutes of Health (NIH), the funder of our study, has concluded that procedural rigor and transparency in science is lacking (NIH, 2016). As a result, the agency has required more methodological rigor and transparency and directed researchers and reviewers to respond. Editors of basic science and biomedically-oriented journals agreed with these directives, and as a result of the NIH emphasis decided to strengthen science reporting requirements, primarily by expecting authors of hypothesis-driven quantitative research to explicitly state the standards used in sampling, inclusion and exclusion criteria, data management decisions, and plans for raw data storage that would enable later independent replication of a study (Munafò et al., 2017; McNutt, 2014). What might qualitative researchers do to enhance rigor and transparency?

We proactively addressed rigor and transparency by developing a protocol for the early phases of transcript preparation following previously published studies about team-based qualitative research (Guest & MacQueen, 2008; MacLean, Meyer, & Estable, 2004; McLellan et al., 2003). Prior to the first interview, methodologists recommend setting team-based expectations about the level of transcription, completeness, and accuracy congruent with the research purpose and methodology. This article synthesizes those recommendations into an actionable protocol. Furthermore, we outlined a process for securing bids from transcription companies and applying a rubric to compare and assess transcription accuracy prior to hiring a transcription company. We outlined a similar bidding and assessment process for transcribing/translating Spanish-language interviews into English. Delineating team-based data collection, preparation, and analysis protocols, to include transcript preparation protocols specifically, is a long-standing recommendation in qualitative research (Guest & MacQueen, 2008; MacLean, Meyer, & Estable, 2004; McLellan et al., 2003). We formalized a protocol for the preparation of transcripts to assure consistency of format, insertion of metadata, anonymization, and file labelling conventions. Adopting protocols, such as the one we propose for sensitive, team-based research, meets the need for management of large-scale digital data in audio and text forms, and responds to the call for documentation of reproducible and transparent methods.

## Outcomes and Limitations

The vendor bidding process and use of rubrics to evaluate quality of simulated interview transcription/translation made visible variation in accuracy and preservation of nuanced language across companies. The rates of errors in areas that mattered to our team were slight but discernably different across vendors in the areas of verbatim accuracy of words, utterances, technical and slang words, and punctuation. Another beneficial outcome of

transcription protocols was an organized, double-verified set of interview transcripts ready for further analysis. One limitation of a formalized vendor vetting and double-verification process for transcript/translation preparation is the misunderstanding that transcripts will be “perfect.” Of course, errors can and do occur in transcription and translation, despite safeguards. Transcription quality hinges on transcriptionists’ facility in the language(s) of the interview, whether those are biomedical, technical, English, Spanish, or other languages. A second limitation is budgetary. Large-scale studies and those with adequate budgets allow for professional transcription, and are most likely to benefit from formalized transcription and translation protocols. For qualitative studies, both large and small, researchers return to the data over and over in constant comparative processes. The iterative nature of interview analysis safeguards against errors being replicated at successive levels of analysis.

## Conclusion

Interviews are a mainstay of qualitative health research, and protecting the integrity of primary research data safeguards validity. Transcription and translation protocols make explicit the processes researchers use to render spoken interviews as written texts. Using the protocols and processes outlined in this paper, qualitative researchers can document procedures designed to maintain integrity in the transformation of interview data from spoken words to transcripts and translations of transcripts. Funders and journal editors increasingly expect rigor and transparency in the conduct of science and evidence of procedural rigor in the publication of results. For cross-cultural research on sensitive topics, slippage in transcription and translation may jeopardize political, social, and ethical underpinnings of the study and threaten the validity of analytic results. Conversely, assuring the integrity of transcription and translation of interview data safeguards the validity of interview-based research and delivers the rigor and reproducibility our audiences increasingly expect.

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## Appendix A: Sample Qualitative Data Preparation and Transcript and Translation Verification Protocol

### RESPONSIBILITIES

It is the interviewer’s responsibility to assure that verification of the interview transcript is complete. Usually, first-pass verification will be performed by the Research Assistant (RA).

The RA assigns the letter of the alphabet to be used for blinding transcripts. That letter will guide the selection of systematic pseudonyms (the first transcript is assigned “A” letter

pseudonyms, the second transcript is assigned “B” letter pseudonyms, and so forth). The RA lists the chosen alphabet letter in the Participants spreadsheet and emails it to the verifier.

The RA performs the first-pass verification and blinding work below and notifies the interviewer.

The interviewer performs the second-pass verification on both the transcript and the translation. The interviewer then uploads the transcript and a separate file for fieldnotes to the hermeneutic unit (HU). The translation is uploaded to the HU at the same time as the transcript and fieldnotes.

## DOWNLOADING and SAVING RAW TRANSCRIPTS

Once downloaded from the transcription site, all raw transcripts will be saved in the CC-MAP folder as a .docx Word document as an original archived transcript using the appropriate conventions for naming the file. The original audio file and the original transcript will be retained until the conclusion of the study in separate files.

## SAVING “VERIFIED” TRANSCRIPTS

Once the RAW file is saved, a duplicate copy of the same file will be made and placed in the Verified Transcript folder, and all verification steps will be undertaken on the copied file in the Verified Transcript folder.

## REVIEWING TRANSCRIPTS IN THE “VERIFIED” FOLDER FOR ACCURACY

The first-pass transcript verifier will check professional transcriptions against the audiotape and revise the transcript file accordingly. The RA as the first-pass verifier will use a single-pass-per-tape policy, meaning only one listen/correction pass will be made of the transcript against the audio file. When verification is complete, the verified transcript will be re-saved in the Verified Transcript folder. The second-pass verification process will be done by the interviewer who conducted the interview. The first-pass verifier will notify the interviewer at the end of each week as to the status of first-pass verified interviews. After both first-pass and second-pass verification, each verifier will sign and date the transcript as verified.

## TEXT FORMATTING

**General Instructions**—In first-pass **transcription verification**, format all professionally transcribed interviews using the following formatting:

1. Arial 11-point face-font
2. One -inch top, bottom, right, and left margins
3. All text shall begin at the left-hand margin (no indents)
4. Entire document shall be left justified

**Turn-taking documentation**—Comments or questions by the Interviewer should be labeled by typing the interviewer's name at the left margin, followed by a colon, and then the question or comment.

Any comments or responses from participants should be labeled with the participant's pseudonym at the left margin, followed by a colon, and then with the response. A response or comment from a different participant should be separated by a return and then a new name at the left margin.

Example [after the full informed consent process and as the audiotape is turned on]

**Mercedes:** OK, before we begin the interview itself, I'd like to confirm that you have read and signed the informed consent form, that you understand that your participation in this study is entirely voluntary, that you may refuse to answer any questions, and that you may withdraw from the study at any time.

**Penelope:** Yes, I had read it and understand this.

**Mercedes:** Do you have questions before we proceed?

**End of Interview**—In addition, the transcriber shall indicate when the interview session has reached completion by typing END OF INTERVIEW in uppercase letters on the last line of the transcript along with information regarding the total interview time (in minutes). A double space should precede this information.

Example

**Mercedes:** Is there anything else that you would like to add?

**Penelope:** Nope, I think that about covers it.

**Mercedes:** Well, thanks for taking the time to talk with me today. I really appreciate it.

END OF INTERVIEW—102 minutes transcribed

## TRANSCRIPT CONTENT STANDARDS AND REPRESENTATION CONVENTIONS

Audiotapes shall be transcribed verbatim (i.e., recorded word for word, exactly as said) (Gibbs, 2012). Initial transcription will include vocalizations (sighs, laughing, coughs), and utterances (ummm, my,my,my, Huh). Filler words such as *hm*, *huh*, *mm*, *mhm*, *uh huh*, *um*, *mkay*, *yeah*, *yuhuh*, *nah huh*, *ugh*, *whoa*, *uh oh*, *ah*, and *ahah* should also be transcribed. The second-pass verifier will trim excessive utterances if they are distracting or misrepresent the participant (see the section on Preparing for Analysis).

Transcription will exclude non-pertinent background sounds such as paper rustling and chair squeaking and sirens. Pertinent background sounds may be included as an interruption or part of the interview action (e.g., car horn, siren, gunshot if this is a conversation point or

significant impediment to the interview). Information from others in the interview scene should be managed as follows. For children, include the information. For example, if a child is crying or asking mother a question, this should be included. If an adult (such as a spouse) is contributing information to the interview or having a side-conversation with his spouse as the interview progresses, this cannot be included. Non-participating adults were not consented to take part in the study. For this reason, we insist on a private interview without other adults. If, for some unexplained reason, such a person is present, their presence changes the audience and the social nature of disclosure. Their insertions into the dataset cannot be included.

*Example*

- Nonverbal sounds shall be typed in parentheses, for example, (short sharp laugh), (group laughter).
- If interviewers or interviewees mispronounce words, these words shall be transcribed as the individual said them. The transcript shall not be “cleaned up” by removing foul language, slang, grammatical errors, or misuse of words or concepts.
- If an incorrect or unexpected pronunciation results in difficulties with comprehension of the text, the correct word shall be typed in square brackets.

*Example*

**Penelope:** I thought that was pretty pacific [specific], but they disagreed.

### **Inaudible Information**

The transcriber shall identify portions of the audiotape that are inaudible or difficult to decipher. If a relatively small segment of the tape (a word or short sentence) is partially unintelligible, the transcriber shall type the phrase “inaudible.” This information shall appear in square brackets. On verification, if the word or phrase is deemed audible, the correct word/phrase will be substituted for the “inaudible” segment.

*Example*

The process of identifying missing words in an audiotaped interview of poor quality is [inaudible segment].

If a lengthy segment of the tape is inaudible, unintelligible, or is “dead air” where no one is speaking, the transcriber shall record this information in square brackets. In addition, the transcription verifier shall provide a time estimate for information that could not be transcribed.

*Example:*

[Inaudible: 2 minutes of interview missing]

### Overlapping Speech

If individuals are speaking at the same time (i.e., overlapping speech) and it is not possible to distinguish what each person is saying, the transcriber shall place the phrase “cross talk” in square brackets immediately after the last identifiable speaker’s text and pick up with the next audible speaker.

Example:

**Penelope:** It’s the urination thing.

**Patrice:** No kidding, urination.

**Penelope:** here comes the Huggies diaper!

**Patrick:** [cross talk with multiple other speakers]

### Remarkable or Significant Pauses and Significant Delays

Non-notable pauses are usually less than two- to five seconds in length, and represent a typical break in the speaker’s speech pattern. Because this research is not a discourse analysis, we will not be undertaking an analysis of pauses. Indicating a pause may be an indication of emotion, and may be accompanied by [crying] or an interruption. If an individual pauses for a significant period of time, or if the pause is significant or atypical of his or her speech pattern, insert three ellipses to note the pause. Similarly, if a statements trails off at the end without completion, indicate this by using three ellipses. If a substantial speech delay occurs in a speech segment or at the conclusion of a speech exchange, use “long pause” in parentheses.

Example

**Penelope:** Sometimes, having a defect or problem with your...in the area of your...well, with sexual organs and things...is embarrassing. Really. How do you even talk about it? Especially when you’re in a brand new relationship and the man is... (long pause).

Example

**Mercedes:** Sometimes talking about this takes some time. No worries. I have time to talk about it with you. (Long pause). Do you want to pick back up where we left off?

### Unresolvable issues

In the verification process, there may be words or sentences that the verifier cannot fix or suspects are incorrect. In those cases, the first-pass verifier will highlight the questionable text. The second-pass verifier will resolve all questionable segments (if possible) using the audiofile, fieldnotes, and her recollection of the interview. Segments that remain unclear will be left as (inaudible).



## TRANSCRIPT BLINDING STANDARDS AND PROCESSES

### Blinding Identifying Text and Sensitive Information

After the verification process is complete, the transcript verifier will begin the blinding process to remove all identifying information. This will take place with the transcript (no need for the audiotape at this point).

If the transcript verifier recognizes a proper noun (the name of a person, place, location, healthcare provider, or so forth), the name is substituted with the letters assigned for that interview. The letters are assigned by the RA who also puts it in the Participants spreadsheet and emails it to the verifier. The example below shows the added text in **bold** typeface for purposes of illustration, although actual transcription does not require bolding. The verifier keeps a list of code names used (but not links to the original names) and sends them to the RA, as we anticipate using the same letter of the alphabet more than once over the course of the study.

Example:

**Penelope:** I wanted to switch to **Princeton** Hospital to see **Doctor Primble** because I think the conditions would be better.

## TRANSLATION STANDARDS

The processes above also apply to the English translation of Spanish transcripts, especially blinding.

The interviewer shall designate herself or the RA to review and revise the translation to improve accuracy for the purposes of this study. Culturally characteristic words such as ‘la cuarentena’ or ‘sobada’ shall be preserved in the English translation, rather than being translated, e.g., to ‘quarantine’, which is incorrect, or ‘massage’, which requires further explanation in English.

Spanish transcripts and their translations shall be uploaded to ATLAS.ti at the same time.

## PREPARING FOR ANALYSIS

### Adding Templated Information to the Transcript

There are 3 templated sections added to each transcript.

1. At the top of the document, the verifier (usually the RA) will assure that the **templated text box** containing interview information is inserted and assure formatting is acceptable (see transcript formatting template).
2. The verifier (usually the RA) will add the needed **background summary** next. This is a text summary of quantitative variables contained in surveys administered to the participant before the interview. The summary contains details of the interviewee’s physical, cultural, demographic, and lifestyle behaviors.

3. At the bottom of the transcript the RA or other first-pass verifier will add a **date/time stamp** and initials at the end of the file and send the verified file to the investigator/interviewer who completed the interview.

---

Transcript verified against audio file:    Date:

---

This version of the transcript is saved in the Rich Text Transcript folder.

### Interviewer Verification Prior to Upload and Analysis

The Interviewer who completed the interview will read over the verified transcript and translation and listen to the audiofile to assure the verification is accurate and complete.

Specifically, the interviewer will check the verified transcript against the audiofile to be sure:

- The transcribed text is verbatim, capturing the words used in the interview and recorded in the audiofile.
- All pseudonyms are appropriate
- No identifiers are in the transcript
- All [inaudible] or confusing text highlighted in first-pass verification is double-checked for accuracy
- The template is applied appropriately to format the document
- The transcript/translation is true to the experience of the interview, and any mis-transcription or translation is fixed.

The interviewer may also add additional contextual details to the transcript at this time.

Examples:

[interviewee in tears]

[gestures a 2-inch length of perceived prolapse]

[shows copy of Essential Oils book]

Finally, the interviewer at this stage of verification has the option of using her judgment to eliminate extraneous or excessive utterances if they made woman appear inarticulate and added nothing to the meaning of the passage. Filler words (ummm...) and verbal tics (ya' know) may be unnecessary, although in passages about sensations and experienced early in their awareness of pelvic floor changes these may be worth retaining as they may indicate the delays and fillers used the participant was searching for words to express sensations and body parts. Utterances and silences we judged to be meaningful and eliminated those that introduced unnecessary noise and distraction in the transcript review and verification process.

The interviewer adds a time/date stamp and initials for the final verification of both the transcript and the translation. These are then uploaded to the hermeneutic unit (HU), usually by the verifier.

---

Transcript reviewed for accuracy by interviewer:      Date:

---

The final and interviewer-approved version of the transcript is re-saved in the Rich Text Transcript folder.

## Biographies

Lauren Clark, RN, PhD, FAAN is a professor in the College of Nursing, University of Utah.

Ana Sanchez Birkhead, PhD, WHNP-BC, APRN, is Associate Professor in the College of Nursing, University of Utah.

Cecilia I Fernandez, MS, is a health educator in Salt Lake City, Utah.

Marlene J. Egger, PhD is a Professor in the Division of Public Health, Department of Family and Preventive Medicine, University of Utah.

## References

- Al-Amer R, Ramjan L, Glew P, Darwish M, Salamonson Y. Translation of interviews from a source language to a target language: Examining issues in cross-cultural health care research. *Journal of Clinical Nursing*. 2015; 24:1151–1162. DOI: 10.1111/jocn.12681 [PubMed: 25181257]
- American Translators Association. ATA Certification Program: Rubric for Grading. 2017 Jun 23. Version 2011. Retrieved from [www.atanet.org/certification/aboutexams\\_rubic.pdf](http://www.atanet.org/certification/aboutexams_rubic.pdf)
- Beam, A. *The feud: Vladimir Nabokov, Edmund Wilson, and the end of a beautiful friendship*. New York: Pantheon; 2016.
- Black SP. Anthropological ethics and the communicative affordances of audio-video recorders in ethnographic fieldwork: Transduction as theory. *American Anthropologist*. 2017; 119(1):46–57. DOI: 10.1111/aman.12823
- Bradby H. Translating culture and language: A research note on multilingual settings. *Sociology of Health and Illness*. 2002; 24(6):842–855. DOI: 10.1111/1467-9566.00321
- Brämberg EB, Dahlberg K. Interpreters in cross-cultural interviews: A three-way co-construction of data. *Qualitative Health Research*. 2013; 23(3):241–247. DOI: 10.1177/1049732312467705 [PubMed: 23258420]
- Brown S, Gartland D, Perlen S, McDonald E, MacArthur C. Consultation about urinary and faecal incontinence in the year after childbirth: A cohort study. *BJOG: An International Journal of Obstetrics & Gynaecology*. 2015; 122(7):954–962. DOI: 10.1111/1471-0528.12963 [PubMed: 25039427]
- Brubaker L, Handa VL, Bradley CS, Connolly AM, Moalli P, Brown MB, Weber A. Sexual function 6 months after first delivery. *Obstetrics and Gynecology*. 2008; 111(5):1040–1044. DOI: 10.1097/AOG.0b013e318169cdee [PubMed: 18448733]
- Davidson C. Transcription: Imperatives for qualitative research. *International Journal of Qualitative Methods*. 2009; 8(2):36–52. DOI: 10.1177/160940690900800206
- Dolan LM, Walsh D, Hamilton S, Marshall K, Thompson K, Ashe RG. A study of quality of life in primigravidae with urinary incontinence. *International Urogynecology Journal*. 2004; 15(3):160–164. DOI: 10.1007/s00192-004-1128-x
- Dunivan GC, Cichowski SB, Komesu YM, Fairchild PS, Anger JT, Rogers RG. Ethnicity and variations of pelvic organ prolapse bother. *International Urogynecology Journal*. 2014; 25:53–59. DOI: 10.1007/s00192-013-2145-4 [PubMed: 23807143]
- Ellis C. Telling secrets, revealing lies: Relational ethics in research with intimate others. *Qualitative Inquiry*. 2007; 13:3–29. DOI: 10.1177/1077800406294947

- Emerson C. Word wars. *Chronicle Review*. 2017 Feb 3.:B11–B13.
- Emerson, RM., Fretz, RI., Shaw, LL. *Writing ethnographic fieldnotes*. Chicago, IL: University of Chicago Press; 2011.
- Evans-Pritchard, EE. *Social anthropology*. London: Cohen and West; 1951.
- Gibbs, GR. *Analyzing qualitative data*. Los Angeles: Sage; 2012.
- Graham, B. *Research interviewing: The range of techniques*. Maidenhead, UK: McGraw-Hill Education; 2005.
- Guest, G., MacQueen, KM. *Handbook for team-based qualitative research*. Lanham, MD: Altamira Press; 2008.
- Halcomb EJ, Davidson PM. Is verbatim transcription of interview data always necessary? *Applied Nursing Research*. 2006; 19(1):38–42. DOI: 10.1016/j.apnr.2005.06.001 [PubMed: 16455440]
- Hammersley, M., Traianou, A. *Ethics in qualitative research: Controversies and contexts*. Los Angeles: Sage; (2912).
- Handa VL, Nygaard I, Kenton K, Cundiff GW, Ghetti C, Ye W, elvic Floor Disorders Network. Pelvic organ support among primiparous women in the first year after childbirth. *International Urogynecology Journal*. 2009; 20(12):1407–1411. DOI: 10.1007/s00192-009-0937-3
- Hennink M, Weber MB. Quality issues of court reporters and transcriptionists for qualitative research. *Qualitative Health Research*. 2013; 23:700–710. DOI: 10.1177/1049732313481502 [PubMed: 23512435]
- Jefferson, G. Glossary of transcript symbols with an introduction. In: Lernered, GH., editor. *Conversation analysis*. Philadelphia: John Benjamins; 2004. p. 13-31.
- Kay MA. Lexemic change and semantic shift in disease names. *Culture, Medicine & Psychiatry*. 1979; 3(1):73–94. DOI: 10.1007/BF00114693
- Lopez GI, Figueroa M, Connor SE, Maliski SL. Translation barriers in conducting qualitative research with Spanish speakers. *Qualitative Health Research*. 2008; 18:1729–1737. DOI: 10.1177/1049732308325857 [PubMed: 19008363]
- Marín, G., Marín, VB. *Research with Hispanic populations*. Newbury Park, CA: Sage; 1991.
- MacLean LM, Meyer M, Estable A. Improving accuracy of transcripts in qualitative research. *Qualitative Health Research*. 2004; 14:113–123. DOI: 10.1177/1049732303259804 [PubMed: 14725179]
- McLellan-Lemal E, MacQueen KM, Neidig JL. Beyond the qualitative interview: Data preparation and transcription. *Field Methods*. 2003; 15(1):63–84. DOI: 10.1177/1525822X02239573
- McNutt M. Journals unite for reproducibility. *Science*. 2014; 346:679.doi: 10.1126/science.aaa1724 [PubMed: 25383411]
- Merry L, Clausen C, Gagnon AJ, Carnevale F, Jeannotte J, Saucier J, Oxman-Martinez J. Improving qualitative interviews with newly arrived migrant women. *Qualitative Health Research*. 2011; 21:976–986. DOI: 10.1177/1049732311403497 [PubMed: 21441413]
- Miles, MB., Huberman, MA., Saldaña, J. *Qualitative data analysis*. Los Angeles: Sage; 2014.
- Morse, JM., Field, PA. *Nursing research: The application of qualitative approaches*. London: Nelson Thornes; 1995.
- Muhr, T. *Atlas/Ti for Windows Version 7.0*. Berlin: Scientific Software Deveopment; 2012.
- Munafò MR, Nosek BA, Bishop DVM, Button KS, Chambers CD, Percie du Sert N, Ioannidis JPA. A manifesto for reproducible science. *Nature Human Behaviour*. 2017; 1:21.doi: 10.1038/s41562-016-0021
- National Institutes of Health. *Principles and guidelines for reporting preclinical research*. Bethesda, MD: Author; 2016. Retrieved from <https://www.nih.gov/research-training/rigor-reproducibility/principles-guidelines-reporting-preclinical-research>
- O’Boyle AL, O’Boyle JD, Calhoun B, Davis GD. Pelvic organ support in pregnancy and postpartum. *International Urogynecology Journal*. 2005; 16(1):69–72. DOI: 10.1007/s00192-004-1210-4
- Olson, K. *Essentials of qualitative interviewing*. Walnut Creek, CA: Left Coast Press; 2011.
- Poland BD. Transcription quality as an aspect of rigor in qualitative research. *Qualitative Inquiry*. 1995; 1:290–310. DOI: 10.1177/107780049500100302

- Poland, BD. Transcription quality. In: Gubrium, JF., Holstein, JA., editors. Handbook of interview research: Context and method. Thousand Oaks, CA: Sage; 2002. p. 629-649.
- Sandelowski M. Focus on research methods—Whatever happened to qualitative description? *Research in Nursing and Health*. 2000; 23(4):334–340. DOI: 10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G [PubMed: 10940958]
- Santos HP, Black AM, Sandelowski M. Timing of translation in cross-language qualitative research. *Qualitative Health Research*. 2015; 25:134–144. DOI: 10.1177/1049732314549603 [PubMed: 25189538]
- Seidman, I. *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press; 2013.
- Sikweyiya Y, Jewkes R. Potential motivations for and perceived risks in research participation. *Qualitative Health Research*. 2013; 23:999–1009. DOI: 10.1177/1049732313490076 [PubMed: 23660499]
- Silverman, D. *Interpreting qualitative data*. 4th. Los Angeles: Sage; 2011.
- Swift S, Woodman P, O'Boyle A, Kahn M, Valley M, Bland D, Schaffer J. Pelvic Organ Support Study (POSS): The distribution, clinical definition, and epidemiologic condition of pelvic organ support defects. *American Journal of Obstetrics and Gynecology*. 2005; 192(3):795–806. DOI: 10.1016/j.ajog.2004.10.602 [PubMed: 15746674]
- Temple B, Edwards R, Alexander C. Grasping at context: Cross-language qualitative research as secondary qualitative data analysis. *Forum: Qualitative Social Research*. 2006; 7(4) article 10.
- Temple B, Young A. Qualitative research and translation dilemmas. *Qualitative Research*. 2004; 4:151–178. DOI: 10.1177/1468794104044430
- Trusse, L. *Eats, shoots & leaves: The zero tolerance approach to punctuation*. New York, NY: Penguin; 2004.
- Van den Hoonaard, DK. *The widowed self: The older woman's journey through widowhood*. Waterloo, Ontario, Canada: Wilfrid Laurier University; 2001.
- Van den Hoonaard, WC., Van den Hoonaard, DK. *Essentials of thinking ethically in qualitative research*. Walnut Creek, CA: Left Coast Press; 2013.
- Wai CY, McIntire DD, Atnip SD, Schaffer JI, Bloom SL, Leveno KJ. Urodynamic indices and pelvic organ prolapse quantification 3 months after vaginal delivery in primiparous women. *International Urogynecology Journal*. 2011; 22(10):1293–1298. DOI: 10.1007/s00192-011-1438-8 [PubMed: 21560011]
- Werner O. Notation for transcription conversations and interviews. *CAM: The Cultural Anthropology Methods Journal*. 1996; 8(1):11–12.
- Witcher CSG. Negotiating transcription as a relative insider: Implications for rigor. *International Journal of Qualitative Methods*. 2010; 9(2):122–132.

**Table 1**  
**Rubric for Evaluating Transcript Quality**

**Instructions:** Complete the rubric by comparing the audiofile and the transcript supplied by the vendor. Select the cell that best describes the quality of the transcript in comparison to the audiofile.

Item	Excellent	Adequate	Poor
Verbatim transcription of words	Word for word, with no omissions, insertions, or errors	One word is incorrectly transcribed. This could be a spelling error or a substitutional error.	More than one word is incorrectly transcribed. This could be a spelling error or a substitutional error.
Utterances	Sighs, laughter, ummm, ahhh, and similar utterances are represented.	More than one utterance is not transcribed.	Utterances omitted
Medical words properly rendered	Vocabulary for muscles, orifices, injuries, etc., accurately transcribed with proper scientific spelling	One error in accuracy	Uses [inaudible] rather than transcribing; uses a substituted, incorrect word or other errors (more than 1)
Slang words properly rendered	Vocabulary that may be idiosyncratic or unusual is identified and transcribed, including foul or slang language	One error in accuracy	Uses substitution, [inaudible], omissions, or misspellings of slang words
Punctuation	Punctuation preserves natural language flow while also inserting necessary written punctuation conventions that preserve intended meaning	Punctuation is too much, interrupting natural language flow; OR punctuation is too little, without conventions that delineate thoughts using periods and commas; OR punctuation used changes intended meaning	There is minimal or overtly incorrect punctuation used in more than 5 instances.

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**Table 2**  
**Metadata text box and transcript format conventions**

**Instructions:** Insert this textbox at the top of each transcript during the first-pass verification step. Complete the textbox fields, and upon completion the ID number will become part of the file extension when it is saved in the study folder. Check the formatting of the interview text as received from the transcriptionist to assure it adheres to the conventions outlined below.

ID #	
Participant's Pseudonym:	
Date of interview:	
Interviewer:	
Age (in years) of participant:	
Location of interview (home, coffeeshop):	
Minutes of interview tape:	
Initial ideas for analysis: <i>if the interviewer has ideas or hunches that arise during or after the interview, write a few lines in this space so you remember those thoughts.</i>	
<b>Transcript text formatting conventions</b>	
Format: single spaced, 1" margins on all sides. Page number bottom right.	
For each speaker use the following format, with a blank line between speakers.	
<u>Example:</u>	
Marlene: use single spaced typing here to state what the interviewer said.	
Amanda: replace the placeholder used by the transcriptionist with the participant's pseudonym for her name.	
Marlene: the next thing the interviewer said.... Etc.	
<b>Translation text formatting conventions</b>	
For Spanish-language interviews, place each conversational turn in a row. Each row will feature two columns. The source language (Spanish) will appear verbatim in the first column and the translated version (English) in the second column.	
<b>Example:</b>	
Interviewer: Okay, entonces Interviewee, gracias por dejarnos venir a su casa y por firmar el consentimiento.	Interviewer: Okay, so Interviewee, thank you for letting us come to your house and for signing the consent form.
Entonces como le hemos mencionado muchas mujeres estamos buscando la historia de las mujeres que han tenido más de un niño. Y solamente quiero que nos cuente los sentimientos o lo que usted – su historia ¿no? Quiero saber su historia de lo que le pasó a usted o lo que le pasa con los cambios que hay en su cuerpo.	So as we've mentioned, we're looking for the story of women that have had more than one child. And I only want you to tell us your thoughts or what you – your story, right? I want to know your story of what happened to you or what happened with the changes in your body.
Interviewee: Okay. Mire, lo que pasa conmigo que empecé a sentir mucho dolor como en mi espalda baja, y mis piernas se me desmayaban mucho, me dolían como si hubiera hecho mucho ejercicio y también me dolía siempre mucho como un lado en mi estomago, en la parte de abajo, y lo que yo hacía siempre como latina, iba y me sobaba con señoras que sobaban. Me iba y me sobaba y nada, lo que me decían que mi matriz se me había caído y ya me sobaban y duraba un tiempo, pues ya un poco mejor, después otra vez volvía a estar en lo mismo y así tardé mucho, tal vez como unos dos años que nada más con sobadas y sobadas.	Interviewer: Okay. Look, what's happened with me is that I started to have a lot of pain like in my lower back. And my legs got very tired, they hurt as if I'd done a lot of exercise. And also I always have pain like on the side of my stomach, the bottom part. And what I always did as a Latina, I went to women that rub/massage and they massaged me. I went and they massaged me, and nothing. What they told me was that my uterus had dropped and they massaged me. And it lasted a while, well, it was a little better. Afterwards another time it was the same. And I lasted like that for a long time, maybe like some two years with nothing more than with massages and massages.
Después ya no me hicieron tampoco ya con las sobadas que me daba, y por eso fui a la clínica con mi doctora, y ella me revisó, me chequeó. Y ella me mandó con un especialista que es para eso mismo de la vejiga y en un hospital que está a un lado del hospital, ahí con la doctora.	Afterwards the massages that they gave me didn't help. And because of that I went to the clinic to see my doctor. And she examined me, checked me. And she sent me to a specialist that is for that same thing with the bladder at a hospital that's next to the hospital there to see the doctor.