Beyond the Qualitative Interview: Data Preparation and Transcription

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The increased use of qualitative research, especially its application in multisite studies, requires robust data collection techniques and the documentation of research procedures. The inappropriate or inadequate preparation of transcripts from audio or digital recordings can delay or negatively affect the analysis process. Although no universal transcription format is adequate for all types of qualitative data collection approaches, settings, or theoretical frameworks, there are some practical considerations that can help researchers systematically organize and analyze textual data.

Keywords: *qualitative data; transcription guidelines; data reduction and management*

The increased use of qualitative research, especially its application in multisite studies, requires robust data collection techniques and the documentation of research procedures (Constas 1992; Miles and Huberman 1994:22; Mays and Pope 1996; Long and Johnson 2000; Malterud 2001). And the growing use of computers to assist with qualitative data analysis (QDA) necessitates special attention to how textual data, particularly transcripts of audiotaped materials, are prepared. Although QDA software potentially offers tools for more efficiently managing and processing textual data, researchers continue to play a key role in preparing, entering or importing, analyzing, and interpreting text (Mason 1994:108; Kelle, Prein, and Bird 1995:3; Drisko 1998; LeCompte and Schensul 1999:92; Malterud 2001:486). For example, QDA software applications may call for special formatting or file structure and have file size or text line limitations. Inappropriate or inadequate data preparation decisions can delay or negatively affect the analysis process (MacQueen and Milstein 1999).

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Although there is no universal transcription format that would be adequate for all types of qualitative data collection approaches, settings, or theoretical frameworks, some practical considerations can help researchers prepare transcripts (Mishler 1986:49; Mergenthaler and Stinson 1992; Kvale 1996:167; Drisko 1998:7). Instructions on how to prepare a transcript, however, are not enough. Guidelines for how to track and store the audiotaped materials are also necessary. Furthermore, specifications for handling confidential or sensitive information, as well as for assessing the reliability and validity of transcripts, must be established (Kvale 1996:163).

Transcription guidelines should help researchers systematically organize and then analyze textual data, regardless of the analytical techniques and tools used. They should not impose constraints on the data collected but rather accommodate an iterative process. Further, guidelines should help achieve a high level of certainty that transcripts were generated systematically and consistently. Atkinson and Heritage (1984) stressed that the production and use of transcripts are "research activities" and should not be approached as merely a "technical detail" that precedes analysis.

This article focuses on the preparation of transcribed, audiotaped, structured, unstructured, or semistructured interviews for QDA. Although audiotaping may also be used with dictated field notes and observational and survey research, we will not address strategies for preparing text for these data collection methods here. The transcription protocol we present in this article was derived from data preparation techniques developed for several Centers for Disease Control and Prevention–funded multimethod qualitative studies of HIV/AIDS that included individual and focus group interviews (see the Appendix). The protocol has undergone a number of revisions. Each study has helped inform subsequent data preparation decisions and identify researcher and transcription training needs.

Our transcription protocol was designed specifically to assist with analyzing interview data in AnSWR: Analysis Software for Word-Based Records (Strotman et al. 1998); however, it can easily be modified to accommodate other QDA software programs or analysis by hand (also referred to as manual or offline coding). This article does not provide an overview of AnSWR or other text management software, nor does it cover the instructions for text preparation required by specific applications. Miles and Huberman (1994), as well as Lewins (2001), provided excellent details of specific text preparation and formatting requirements of computer-assisted QDA software such as Atlast/ti, The Ethnograph, QSR N4 (classic NUD*IST), QSR N5, KWALITAN, and winMAX. Our transcription protocol can be easily modified to accommodate text format requirements ranging from ASCII/American

National Standards Institute text with line breaks to rich text format (RTF) or direct entry.

Recently, we discovered Mergenthaler and Stinson's (1992:129–30) seven principles for developing transcription rules. Some principles may be more applicable than others, but they appear to be consistent with the conventions established in our transcription protocol. The principles are as follows:

1. *Preserve the morphologic naturalness of transcription*. Keep word forms, the form of commentaries, and the use of punctuation as close as possible to speech presentation and consistent with what is typically acceptable in written text.
2. *Preserve the naturalness of the transcript structure*. Keep text clearly structured by speech markers (i.e., like printed versions of plays or movie scripts).
3. *The transcript should be an exact reproduction*. Generate a verbatim account. Do not prematurely reduce text.
4. *The transcription rules should be universal*. Make transcripts suitable for both human/researcher and computer use.
5. *The transcription rules should be complete*. Transcribers should require only these rules to prepare transcripts. Everyday language competence rather than specific knowledge (e.g., linguistic theories) should be required.
6. *The transcription rules should be independent*. Transcription standards should be independent of transcribers as well as understandable and applicable by researchers or third parties.
7. *The transcription rules should be intellectually elegant*. Keep rules limited in number, simple, and easy to learn.

DATA MANAGEMENT

Getting a Handle on Things

When a qualitative research design involves the collection of audiotaped in-depth interviews or focus groups, researchers must decide whether their analysis is best supported by transcription or by researchers' notes derived from or supplemented by a review of the audiotapes (Patton 2002:380–84). They must also take into account the cost, time, and expertise required to support either decision.

At some point, a researcher must also settle on what is transcribed. The phrase "settle on" has been deliberately selected because despite all best intentions, the textual data will never fully encompass all that takes place during an interview (Mishler 1986; Kvale 1996; Green, Franquiz, and Dixon 1997; Poland and Pederson 1998:294). Emerson, Fretz, and Shaw (1995:9) indicated that a transcript cannot ever produce a verbatim record of discourse, given the ongoing interpretive and analytical decisions that are made.

Essentially, researchers undertake their first data reduction step when they decide what will be transcribed and what will be left out (Miles and Huberman 1994; Emerson, Fretz, and Shaw 1995). As Kvale (1996) pointed out, transcripts "are not the rock-bottom data of interview research, [but] are artificial constructions from an oral to written mode of communication" (p. 163). For example, a researcher must make choices regarding whether a textual document should include nonlinguistic observations (facial expressions, body language, setting descriptions, etc.); be transcribed verbatim; and identify specific speech patterns, vernacular expressions, intonations, or emotions. Poland and Pederson (1998) reasoned that what is not said is just as important as what is said. Hence, transcripts may require that researchers include contextual information regarding silence or pauses in conversation.

Unless a "linguistic tradition" (Tesch 1990; Ryan and Bernard 2000) such as semiotics (Manning 1987) or conversation analysis (Psathas 1995) is adhered to, transcripts that read less like conversation and more like written text will be produced (Poland and Pederson 1998). Ashmore and Reed (2000) asserted that in conversation analysis, the audiotape is a "realist" object, whereas the transcript is a "constructivist" one. Hence, what counts as data are what they labeled the "mutual elaboration of tape and transcript."

The process of transforming speech into specific words is not without challenges. Speech elisions (the omission of a sound between two words, usually a vowel and the end of one word or the beginning of the next), incomplete sentences, overlapping speech, a lack of clear-cut endings in speech, poor audiotape quality, and background noises are just a few of the issues that a transcriber encounters. In addition, he or she must carefully determine where and when punctuation is required, so as not to change the intent or emphasis of an interviewee's response or comment.

The "Content" section of our protocol specifies that an audiotape should be transcribed in its entirety and provide a verbatim account of the interview. To ensure that all transcripts are generated systematically, we require that transcripts include elisions, mispronunciations, slang, grammatical errors, nonverbal sounds (e.g., laughs, sighs), and background noises. In multisite studies, this level of detail is very important. By assisting transcribers about what we want included, we can better ensure that all transcripts are prepared in a standardized manner and can better provide us with a consistently prepared and comparable textual record. For ease of readability, transcripts are formatted identically and support either manual or computer-assisted coding. A fixed-face font is set at ten-point Arial, with one-inch top, bottom, right, and left margins and left-justified text.

For some analyses, it may not be necessary to transcribe an entire interview. Selected sentences, passages, paragraphs, or stories relevant to the

research question or theory may be all that are needed (Emerson, Fretz, and Shaw 1995). In some instances, the audiotapes may be used to supplement ("bring in quotes" or "add depth") or clean up researchers' summary notes (Fasick 1977; Emerson, Fretz, and Shaw 1995; Crawford, Leybourne, and Arnot 2000). Strauss and Corbin (1990:31) indicated that text selected for transcription should take into account the analytical contribution it will provide to the overall study.

The level of transcription should complement the level of the analysis (Drisko 1997:190). If an analysis focuses on providing an in-depth description of the knowledge, attitudes, values, beliefs, or experiences of an individual, a group of individuals, or groups of individuals, a greater number and possibly lengthier units of text need to be included in the transcript. With this type of analysis, researchers are not only interested in identifying patterns and salient themes. They also want to demonstrate variations in how social phenomena are framed, articulated, and experienced as well as the relationships within and between particular elements of such phenomena. If researchers do not need such a detailed analysis, the exploration of general themes and patterns can be undertaken with less text.

In addition to ascertaining whether full, partial, or summary transcription will sufficiently meet analytical needs, attention to text relevance is required. What to include should always be driven by the research question that an analysis attempts to answer. And to effectively work with transcript (document) summaries, "granularity of analysis" must be closely tied into context and rely on linguistic phrases (Boguraev et al. 1998).

Generally, transcripts benefit by including appropriate labeling and content-related information. Regardless of the analytical approach or tools used, we find it useful to include a transcription header or coversheet with basic information about an interview participant. As illustrated in the protocol, changes in audiotapes and the end of the interview are contained in the body of the transcript. By documenting tape changes (i.e., when a new tape is used), we are able to note when the logistics of handling recording equipment may result in an "unnatural" disruption in the discussion or when information may have been recorded only partially. To avoid accidentally recording over an interview tape, the use of the flip side of a tape is discouraged strongly. The "end-of-interview" line signals that the interview session had formally reached completion.

The "Source Labeling" section of the protocol addresses text layout information, which allows us to quickly visually scan documents and identify whether the text is associated with the interviewer or the interviewee. Each time an individual speaks, his or her text is transcribed as a discrete unit of text and assigned a speaker label (i.e., a source ID). To further assist us in

quickly navigating through either the hard copy or an electronic version of the transcript, a double pound sign appears immediately before and after a source ID. Because a double pound sign does not typically offset a word or phrase in English, we decided that it was an appropriate means of signaling speaker markers and "boundaries," especially when the source ID is actually an individual's name or alias.

The transcription header or coversheet can also include an interviewee profile or set of characteristics (age set, ethnic background, culture, sex, gender, etc.) that may be relevant to the analysis. The inclusion of this type of information can then facilitate the comparison of narratives for a particular theme or pattern or the grouping of textual data for a subset of interviewees. Because interviewee demographic information can be linked to the qualitative data in AnSWR, the "Source Labeling" section of our protocol calls for limited transcript header information, such as participant ID, interviewer ID, date, location, name of interview, and transcriber name and ID. However, this information can be expanded easily to fit analytic approaches in other software systems.

Qualidata (2002), the United Kingdom's national agency for archiving qualitative data, provides more comprehensive header information for standardizing qualitative data sets. It recommends that transcript headers not only identify the interview participant but also provide an inventory of related materials and documents. For example, each transcript should carry a unique identifier or pseudonym to enable a linkage between interview transcripts, audiotapes, and field notes by a third party. Furthermore, the transcript should note where parts or sections of research materials are missing, the level of transcription completed (full, partial, summary), and the destruction of tapes. Minimally, Qualidata recommends that each interview contain a summary sheet, table, or line with participant biographical details and information about the interview itself: a unique case identifier, the interviewee's name or alias, the number of interviews, age and/or date of birth, interview date(s), the total number of pages of transcription, the number of tapes, and the filename. Technical notes regarding recording equipment used, tape quality and background noise, and the length of the recording are also valuable details that could be featured in the transcript header.

Maintaining Control

Once the "what to transcribe" question has been answered, it is necessary to determine how to manage this information most efficiently. If keeping track of potentially hundreds of audiotapes sounds challenging, the task of handling thousands of pages of text generated from a transcript, be it in paper

or electronic format, is not any easier to imagine (Miles and Huberman 1994; Kelle, Prein, and Bird 1995). The first step in making the task manageable is to avoid the tendency to approach the preparation of each transcript as a stand-alone word processing product. Rather, each transcript should be approached as an element that shares standardized features with other elements within a qualitative database (MacQueen and Milstein 1999). We have found that regardless of whether a researcher is working alone or collaborating with a team, it is important to establish a format template so that each transcript has an identical structure and appearance. For team-based projects, this allows researchers to delegate and efficiently supervise some of the more time-intensive transcription activities. For all researchers, it minimizes the amount of time spent locating standard text elements, such as specific questions or speakers, in the transcript. Researchers are able to focus their attention on analyzing and interpreting the text.

A manual or computer-based system for tracking the status of transcripts and the storage of audiotape materials is useful irrespective of the size or scope of the analysis. Digital audio recordings saved on a CD are an effective alternative to storing and managing audio data and ensure that the sound quality of the recorded interview is clear, audible, and does not deteriorate with repeated use (Maloney and Paolisso 2001). Along with a discussion of the equipment, hardware and software, and procedural considerations, Maloney and Paolisso offered excellent recommendations for using digital audio recordings to prepare transcripts with a PC, via a keyboard and remote foot pedal, the coding of digital audio data, and the presentation of digital audio data.

In terms of data management, Miles and Huberman (1994:45) indicate that decisions should ensure

1. high-quality, accessible data;
2. the documentation of just what analyses have been carried out; and
3. the retention of data and associated analyses after the study is complete.

The inadequate documentation and monitoring of data activities may threaten data integrity. In addition, inadequate data tracking practices may hamper analysis and increase the likelihood of research pandemonium. The ability to document whether all the data have been processed and analyzed and the ability to quickly retrieve specific information are critical when writing up an analysis. A well-thought-out data tracking, processing, and management system enables the timely identification and resolution of problems, allowing researchers to focus more on interpreting, retrieving, and comparing data. The data management system should be backed up and backups

updated while data preparation and analysis are in progress (Miles and Huberman 1994:46; LeCompte and Schensul 1999:40).

LeCompte and Schensul (1999:37–40) proposed seven steps for managing or "tidying up" qualitative data. These steps accommodate both manual and electronic analyses. The management involves (1) maintaining copies of all important materials; (2) ordering field notes or researcher memos using a chronological, genre, cast-of-characters, event or activity, topical, or quantitative data file schema; (3) designing and implementing a system for labeling and logging interviews; (4) cataloging or indexing all documents and artifacts; (5) establishing the safe storage of all materials; (6) checking for missing data; and (7) developing a process for reading and reviewing text. As illustrated in our transcription protocol, each transcript should be assigned a unique name or case identifier. Preferably, the file name or record number case identifier should "express key information about the file to the researcher" (Drisko 1998:6).

In a quantitative database, data cleanup and recoding are performed before the analysis is undertaken. With qualitative data, these processes generally proceed simultaneously. With smaller scale research projects, transcription is usually handled by the researcher, and a continuous process between transcription and data interpretation ensues (Lincoln and Guba 1985; Maxwell 1992; Miles and Huberman 1994). Larger scale or multisite qualitative projects, however, are characterized by a division of labor that often mirrors a quantitative approach to data management and analysis, such that data preparation is often separate from data interpretation (Lee and Fielding 1995:38).

In both small- and large-scale qualitative research scenarios, a transcription protocol is useful for two reasons: (1) It minimizes the chances that a researcher will have incompatible transcript "products" to work with, and (2) it reduces the likelihood that data analysis will be compromised or delayed. For example, if a qualitative data set consists of text documents that are presented and organized differently, it becomes difficult to perform cross-comparisons of data within transcripts (Kvale 1996). Data overload, not to mention researcher frustration, is likely to follow. Sadler (1981:27) defined data overload as "an informational bottleneck . . . which places severe limitations on the amount of data able to be received, processed, and remembered by the human mind."

Handling Confidential and Sensitive Information

Frequently, interviewees will mention the names of others or provide detailed information about their own lives as well as the lives of others. In

these instances, a researcher must determine if the inclusion of such information can result in personal or social harm, compromise the identity of the interviewee, or otherwise breach confidentiality (Morse 1994:232; Punch 1994:94). A systematic convention for handling this type of information needs to be addressed in the transcription guidelines. In some instances, a researcher may opt to replace the real names of individuals, organizations, or settings with aliases. In other instances, a researcher may rely on substitution words or phrases that help retain contextual and referential information. For example, in our protocol, rather than including "John Doe, a community advocacy leader for the Atlanta HIV/AIDS initiative," the substitution phrase "name of local AIDS community activist leader omitted" would be used. The substitution phrase would then permit a researcher to retain important information while protecting the identity of an individual, group, community, organization, or locale.

In other instances, a researcher may decide that the information is highly sensitive and that the only ethical choice is to completely remove this information. A decision regarding the omission of this type of information should be made before any transcription is undertaken. A researcher can opt to replace the highly sensitive information with a statement such as "sensitive information removed" or leave it out entirely. Sometimes, this decision is taken out of the researcher's hands by the funding agency or institutional review board (IRB) approving the research. Unless certificates of confidentiality[1] are obtained, it may not be enough to omit highly sensitive information from a transcript. The destruction of audiotapes after a specified time may be warranted. Research funding sources, IRBs, and research centers, however, may require that all data, including audiotapes, be stored for a substantial amount of time.

A Note on Computer-Assisted Analysis

If systematic data analysis is undertaken, the standardization of transcripts within a research project is crucial. Computers have certainly played a significant role in supporting systematic data analysis; however, we feel that the manual management and analysis of textual data can also benefit from a systems approach. A systems approach (1) emphasizes the distinctions among and relationships between the types of data generated; (2) supports the coordination of data collection, management, and analysis tasks; and (3) provides a framework to assess strengths, weaknesses, and biases within a database by making the content explicit (MacQueen and Milstein 1999).

Although deciding what to transcribe is largely left to the researcher, the analytical methods and tools, namely, the QDA software, may dictate how

the transcript is formatted. Thus, the analysis method or QDA software should be identified before transcription is initiated. When opting for computer-assisted analysis, researchers should have a thorough understanding of the software's requirements about how transcripts should be structured and the file formats or types in which they can be saved (e.g., ASCII text, RTF, hypertext markup language). Some software programs have memory or line limits that may necessitate splitting a lengthy transcript into smaller files. Others require specific "header" information or restrict the use of special characters. Instructions regarding the use of hard returns in the transcription file must also be carefully considered.

The number of QDA software packages available continues to grow. Patton (2002:442–47), Drisko (1998), Weitzman and Miles (1995), and Tesch (1990) provided reviews of the packages most commonly used. Richards and Richards (1994:450–60) covered the "architecture and purposes" of available qualitative software applications. We cannot overemphasize that consideration must be given to the type of qualitative data collected, its volume (e.g., pages of text, number of interviews, number of interviewees), its complexity, the type of analysis to be performed, the desired analytical output, and the number of researchers who must access and analyze the data before an analysis software package is selected (MacQueen 2002).

Reviewing Transcripts for Accuracy

Kvale (1996:163) recommended that two typists independently transcribe an audiotaped interview and that a concordance comparison be used to assess agreement between the two transcripts. Although the "document compare" feature currently available in some word processing applications makes it fairly easy to assess transcription agreement, the availability of two typists' time for transcription of the same interview audiotapes is a luxury that none of the authors has experienced.

Typically, we strive for an optimal strategy whereby each audiotaped interview is transcribed by a single professional transcriber and proofread by the interviewer. However, intensive data collection periods frequently require all or almost all of the interviewer's time, resulting in the reassignment of proofreading to the study data manager or another staff member properly trained to undertake this task. We have discovered that this process is subject to failure if the proofreader is not thoroughly familiar with the transcription protocol, the research topic, and related terminology, as well as with the vernacular used by interviewees.

Training data managers, transcribers, and proofreaders is highly variable given the research structure, the setting, the type and volume of data collected, the data produced, and the analytical approach taken. Hence, training must be tailored to fit the research. Minimally, all persons handling audiotapes and transcripts should be thoroughly familiar with the specific procedures for processing "raw" and "prepared" data, be able to demonstrate a consistent application of such principles, and know how to document exceptions (Kelle, Prein, and Bird 1995; MacQueen and Milstein 1999). In our studies, despite emphasis on generating verbatim accounts, we recognize that the text must also be readable. While "ums," "ahs," "uh huhs," and "you knows" are retained, linguistic- or phonetic-type transcripts are not produced. Because transcripts must be made accessible to our collaborators, conventional transcription symbols are not used. Silverman (1998:264) provided a simplified set of transcription symbols appropriate for transcripts that need to include the precise lengths of pauses, verbal stresses, overlapping talk, and interviewer or analyst descriptions rather than transcriptions.

Even the most proficient transcriber misses a word or two or transcribes some phrases that are slightly different from what was actually said (Weiss 1994:199). Therefore, it is necessary to proofread all or a random selection of transcripts. In our transcription protocol, transcribers and proofreaders are instructed to transcribe "inaudible text segment" if portions of the audiotape are inaudible or unintelligible. When interviewer and interviewee are simultaneously talking, and distinct comments are indecipherable, the phrase "cross talk" is inserted.

If only a subset of the transcripts is to be proofread, it is extremely important that the first two or three transcripts prepared by a transcriber undergo careful review. Otherwise, problems may go unnoticed until analysis is well under way, at which point it may be difficult and time consuming to correct transcription errors. Unless a formatting problem is present, there may be no obvious indication that a transcript inaccurately reflects what was actually said in an interview. This is why it is important to always check the transcript against the audiotape. The use of digital audio recordings permits the indexing of transcripts with "time markers." Maloney and Paolisso (2001:92) recommended that the top of each new page include this time stamp to support the quick retrieval of an audio component that matches the transcribed text. If a researcher decides to proofread a selection of transcripts, it is important that the tapes or digital audio files be retained for reference. As noted previously, this in turn may result in confidentiality issues, and these must be balanced against efforts to cut transcription costs.

CONCLUSION

The growing use of qualitative research methods requires greater attention not only to the documentation of data collection procedures but also to the preparation and management of interview transcripts and other qualitative data. No single transcript format can meet all QDA needs, but the accessibility and availability of such documentation help heighten researcher awareness of the decisions that must be made in preparing interview transcripts. The transcript is a tool that helps qualitative researchers make sense of and understand interviewees' experiences and perceptions. Moreover, it nicely complements computer-based QDA. However, researchers should always remember that what is transcribed, what is not transcribed, and how the transcript is structured very much influences the analysis process.

APPENDIX
Sample Qualitative Data Preparation and Transcription Protocol

TEXT FORMATTING

General Instructions

The **transcriber** shall transcribe all individual and focus group interviews using the following formatting:

1. Arial 10-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

Labeling for Individual Interview Transcripts

Individual interview transcript shall include the following labeling information left justified at the top of the document:

Example:

Participant ID:
Interview Name:
Interviewee Category/Subgroup:
Site/Location:
Date of Interview:
Interviewer ID:
Transcriber:

The transcriber shall insert a single blank line between the file labeling information and the actual interview transcription. A double pound sign (##) shall **precede and follow** each participant identification label (i.e., **Source ID**).

A single hard return shall be inserted immediately after the Source ID. The individual's comment/response shall begin on the next line.

Example:

Participant ID:	C071
Interview Name:	Vaccine Interview
Interviewee Subgroup #:	Trial Participant
Site:	UIC
Date of Interview:	11/14/91
Interviewer ID:	IC003
Transcriber:	John Smith

##IC003##
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 anytime.

##C071##
Yes, I had read it and understand this.

##IC003##
Do you have questions before we proceed?

Labeling for Focus Group Transcripts

Focus group transcripts shall include the following labeling information:

Example:

Site:
#Participants:
Focus Group Sample: (e.g., Men or Women)
Focus Group Interview No.
Date of Interview:
Facilitator ID:
Recorder ID:
Transcriber:

Audiotape Changes

The transcriber shall indicate when the interview is recorded on a new tape and include information verifying that the second side of the audiotape is blank as well as

the total number of audiotapes associated with the interview. This information shall be typed in uppercase letters.

Example:

END OF TAPE 1 (3 TAPES TOTAL); VERIFIED THAT SIDE B OF TAPE 1 IS BLANK
START OF TAPE 2 (3 TAPES TOTAL)
END OF TAPE 2 (3 TAPES TOTAL); VERIFIED THAT SIDE B OF TAPE 2 IS BLANK

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 number of audiotapes associated with the interview and verification that the second side of the tape is blank. A double space should precede this information.

Example:

##IC003##
Is there anything else that you would like to add?

##C071##
Nope, I think that about covers it.

##IC003##
Well, thanks for taking the time to talk with me today. I really appreciate it.
END OF INTERVIEW—(3 TAPES TOTAL); VERIFIED THAT SIDE B OF TAPE 2 IS BLANK

SOURCE LABELING

Individual Interviews

Source IDs shall begin with the alpha character that designates the data collection site/location followed by the individual's three-digit identification number (e.g., FI00 = Fenway interviewee #100).

Example:

Site designators for individual interviews are:
C = UIC interviews
F = FCHC interviews
H = HBHC interviews

All interviewer Source IDs shall begin with the alpha character **I** followed by the appropriate site/location designator and three-digit interviewer identification number (e.g., IF002 = Fenway interviewer #002).

Focus Group Interviews

All focus group participants and facilitators shall be assigned a unique Source ID. The transcriber shall be provided with a list of focus groups participants and recorder notes with each set of focus group audiotapes.

Example:

R500 = Rhode Island focus group participant #500

The group facilitator Source IDs shall begin with the alpha character **F** followed by the appropriate site/location designator and a three-digit facilitator identification number.

Example:

FR101 = Rhode Island focus group facilitator #101

The focus group recorder (note taker) Source ID shall begin with the alpha character **R** followed by the appropriate site/location designator and a three-digit recorder identification number.

Example:

RR002 = Rhode Island focus group recorder #002

The transcriber shall be provided a list of data collection sites/locations and one to three alpha character prefix for each site/location.

For focus group participants who cannot be readily identified, the transcriber shall type the alpha character that designates in which site the focus group was conducted, the focus group number for that site, and *-UNKNOWN* (e.g., RI-UNKNOWN = Rhode Island unidentifiable participant for focus group #1). *UNKNOWN* is not to be used in the individual interviews.

CONTENT

Audiotapes shall be transcribed verbatim (i.e., recorded word for word, exactly as said), including any nonverbal or background sounds (e.g., laughter, sighs, coughs, claps, snaps fingers, pen clicking, and car horn).

- Nonverbal sounds shall be typed in parentheses, for example, (short sharp laugh), (group laughter), (police siren in background).
- 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. A forward slash shall be placed immediately behind the open square bracket and another in front of the closed square bracket.
  Example:
  I thought that was pretty pacific [/specific/], but they disagreed.
- The spelling of key words, blended or compound words, common phrases, and identifiers shall be standardized across all individual and focus group transcripts. Enunciated reductions (e.g., *betcha*, *cuz*, *'em*, *gimme*, *gotta*, *hafta*, *kinda*, *lotta*, *oughta*, *sorta*, *wanna*, *coulda*, *could've*, *couldn't*, *coudn've*, *couldna*, *woulda*, *would've*, *wouldn't*, *wouldn've*, *wouldna*, *shoulda*, *should've*, *shouldn't*, *shouldn've*, *shouldna*) plus standard contractions of *is*, *am*, *are*, *had*, *have*, *would*, and *not* shall be used.
- Filler words such as *hm*, *huh*, *mm*, *mhm*, *uh huh*, *um*, *mkay*, *yeah*, *yuhuh*, *nah huh*, *ugh*, *whoa*, *uh oh*, *ah*, and *ahah* shall be transcribed.
- Word or phrase repetitions shall be transcribed. If a word is cut off or truncated, a hyphen shall be inserted at the end of the last letter or audible sound (e.g., he wen- he went and did what I told him he shouldn've).

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 segment." This information shall appear in square brackets.

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 transcriber 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:

Turn taking may not always occur. People may simultaneously contribute to the conversation; hence, making it difficult to differentiate between one person's statement [cross talk]. This results in loss of some information.

Pauses

If an individual pauses briefly between statements or trails off at the end of a statement, the transcriber shall use three ellipses. A brief pause is defined as a two- to five-second break in speech.

Example:

Sometimes, a participant briefly loses . . . a train of thought or . . . pauses after making a poignant remark. Other times, they end their statements with a clause such as but then . . . .

If a substantial speech delay occurs at either beginning or the continuing a statement occurs (more than two or three seconds), the transcriber shall use "long pause" in parentheses.

Example:

Sometimes the individual may require additional time to construct a response. (Long pause) other times, he or she is waiting for additional instructions or probes.

Questionable Text

If the transcriber is unsure of the accuracy of a statement made by a speaker, this statement shall be placed inside parentheses and a question mark is placed in front of the open parenthesis and behind the close parenthesis.

Example:

##B3003##
I went over to the ?(club on Avalon)? to meet with the street outreach team to talk about joining up for the study.

Sensitive Information

If an individual uses his or her own name during the discussion, the transcriber shall replace this information with the appropriate interviewee identification label/naming convention.

Example:

##B3003##
My family always reminds me, "B3003, think about things before you open your mouth."
#B3014##
Hey B3003, don't feel bad; I hear the same thing from mine all the time.

If an individual provides others' names, locations, organizations, and so on, the transcriber shall enter an equal sign immediately before and after the named information. Analysts will use this labeling information to easily identify sensitive information that may require substitution.

Example:

##B3014##
We went over to =John Doe's= house last night and we ended up going to =O'Malley's Bar= over on =22nd Street= and spending the entire night talking about the very same thing.

STORAGE OF AUDIOTAPES

When a tape is not actively being transcribed or reviewed, the transcriber/proofreader shall ensure that it will be stored in a locked cabinet.

REVIEWING FOR ACCURACY

The transcriber/proofreader shall check (proofread) all transcriptions against the audiotape and revise the transcript file accordingly. The transcriber/proofreader shall adopt a three-pass-per-tape policy whereby each tape is listened to three times against the transcript before it is submitted. All transcripts shall be audited for accuracy by the interviewer who conducted the interview or by the study data manager.

SAVING TRANSCRIPTS

The transcriber shall save each transcript as an individual MS-DOS ASCII text file with a .txt extension or a rich text file with an .rtf extension.

Individual interview transcript files shall be assigned the interview name followed by the participant ID (e.g., VaxC071.txt = Vaccine Interview for UIC participant #071).

For focus groups, the second character shall be a number designating the focus group number for the site/location. The remaining characters shall designate the sample population (e.g., C1WOMEN.rtf = UIC focus group #1, women)

BACKUP TRANSCRIPT FILES

All transcript files shall be backed up on diskettes or CD. The diskettes/CDs shall not be stored in the same location as the audiotapes.

DESTROYING AUDIOTAPES

Unless a specific timeframe is designated in the research protocol for retaining of audiotapes, they will be destroyed. Once audiotapes have been reviewed for accuracy and the corrected transcription file saved and backed up, the audiotapes will be erased using an audiotape eraser. Recycling of audiotapes shall be permitted provided that sound quality is tested and new labels are affixed to the tapes.

NOTE

1. According to the Health Resources and Services Administration (2001),

> The Secretary of Health and Human Services (HHS) may issue Certificates of Confidentiality under Section 301(d) of the Public Health Service Act (42 USC 241[d]). These Certificates are intended to protect researchers from compelled disclosure of the identities of research subjects. The Secretary has delegated the authority to issue these Certificates to all Public Health Service (PHS) agencies that perform or support biomedical research.

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