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5 A Template Approach to Text Analysis: Developing and Using Codebooks

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Introduction

Qualitative research often results in large volumes of verbal text that must be interpreted and summarized using one of a number of text-based analysis techniques. Text data include transcripts from focus group interviews (Chapter 12) or depth interviews (McCracken, 1988; Miller & Crabtree, 1992), participant observation field notes (Chapter 3), key informant interviews (Chapter 4), or historical documents and transcripts (Chapter 9). Data from these sources can be analyzed, using a number of different approaches, as overviewed in Chapter 1. In this chapter an approach to text analysis is presented in which a template in the form of "codes" from a "codebook" is applied as a means of organizing text for subsequent interpretation. This approach is illustrated using participant observation field notes from research on health-seeking behaviors of community-dwelling elderly persons.

Deciding on a particular analytic approach depends on the goals of the analysis and the stage of the research. Field notes and participant observation data already have been "filtered" through an observer and may not require the open interpretive process needed for most interview transcript data. Researchers wishing to confirm an already

well-defined hypothesis may also be better advised to use a structured approach, such as that provided by a priori codebooks or content analysis. These approaches are often more time efficient than more unstructured styles, such as the editing approaches described by Crabtree and Miller (1991) and Addison (Chapter 6), albeit with a trade-off with respect to the potential for discovery of new interpretations.

The style of analysis described in this chapter differs from an editing style (cf. Crabtree & Miller, 1991) in two critical ways—when “codes” are defined, and how interpretations are made. Researchers using an editing style generally make observations in the margins of the text during a systematic reading of the text and then organize these observations into categories or “codes” that are then reread for further interpretation, as illustrated by Addison in Chapter 6 (also see Glaser & Strauss, 1967; McCracken, 1988; Strauss & Corbin, 1990). This process is presented schematically on the lower left in Figure 1.4 of Chapter 1 (p. 18). When using a template, on the other hand, the researcher defines a template or codes before an in-depth analysis of the data (either a priori or based on preliminary scanning of the text)—the process being represented on the upper right in Figure 1.4 of Chapter 1. While these representations are somewhat simplistic and overly linear, they serve to illustrate that the same basic processes are occurring, only in a different fashion. In the editing style, the researcher makes interpretations (observations) of segments of text, and these interpretations then are used to make further abstractions, while the researcher using a codebook identifies segments of original text that are sorted and used to make further abstractions (note where the recursive arrows occur in each). Both approaches allow the text to alter the “codes,” unlike a more structured approach such as basic content analysis (Weber, 1985).

Coding and sorting textual materials based on codebooks is one of several qualitative analysis approaches using structured or semi-structured templates. Another commonly used form is basic content analysis, a quasi-statistical approach that looks for regularities in terms of words, themes, or concepts, using a classification procedure (Weber, 1985). A less apparent template is the sociolinguistic approach described by Spradley (1979) in which the analyst applies certain semantic criteria to the interviews in the search for domains and relationships (see Chapter 1, p. 27).

Several approaches may be taken to creating the codebooks that serve as the template. The approach used reveals the paradigmatic assumptions of the researcher. The most structured and closed approaches rely on a priori codes, based on either the research question or theoretical considerations. This structured approach is recommended by Miles and Huberman (1984), who acknowledge, “We think of ourselves as logical positivists . . . soft-nosed logical positivism, maybe” (p. 19). At the other extreme, researchers read over large amounts of the text and then formulate the codebook, a style well described by Willms and colleagues (Willms et al., 1990). We take the middle ground, beginning with a basic set of codes based on a priori theoretical understandings and expanding on these by readings of the text. Miles and Huberman (1984) have suggested test-coding a number of pages of text and modifying the codebook accordingly, making it possible for many codes to originate from interpretive observations.

Once a codebook has been prepared, different approaches may be taken for using the codebook, in particular: (a) using codes as a data management tool in which segments of similar text are printed for subsequent reading and analysis, and (b) coding the text and then counting the frequency of different code occurrences as a means of identifying key areas for further investigation. In this chapter, the former approach is illustrated.

To illustrate the use of codebooks for the analysis of text, we use a field study designed to discover how elderly persons living in a rural community make decisions about dealing with musculoskeletal pain. This study uses a combination of participant observations collected over a year at a community senior center and a series of life history interviews of community-dwelling elderly persons utilizing the senior center. The participant observation field notes are used to illustrate the process of coding and interpreting textual materials, since these type of data more readily lend themselves to this style of analysis than do interview transcripts.

Health-Seeking Behaviors of Community-Dwelling Elderly

Musculoskeletal problems are a frequent concern of the elderly (Kelsey et al., 1979). While it has been observed that there is often

considerable variation in functional status or in health care utilization among elderly with similar degrees of physiologic impairment, the literature presently offers little understanding about these observations (Levkoff, Cleary, Wetle, & Besdine, 1988; Rosner, Namazi, & Wykle, 1988). This anomaly generated the research question, "Why is there a discrepancy among musculoskeletal physiology, functional status, and illness behavior?" This research question asks for description, meaning, and an answer to the generic questions, Who are these people, and what are they doing? For this reason we selected qualitative methods based within a constructivist paradigm (see Chapter 1) for the research project. The long-term goal of the study is to identify patterns that can be used by family physicians to facilitate the health care of this population.

Initial fieldwork, using participant observation as the primary method of data collection, focused on defining the investigator's role in the community under investigation, establishing informal ties, and charting a basic map of the community. The research site was a small geopolitically bounded community in rural, central Connecticut near a large university. The fieldwork activities were centered around a senior center and an associated housing development. For over a year an anthropology doctoral student spent several days each week actively participating in the activities at the senior center. This participation included playing bridge, reading newspapers in a low-vision group, attending exercise classes, helping in the organization of special activities, and participating in the numerous social events occurring at the senior center. The participation observation field notes were typed directly onto a computer file by the fieldworker.

Participation observation field notes recorded over a 1-year period form the basis of the analysis in this chapter. It should be remembered that, in qualitative research, data analysis proceeds simultaneously with data collection. The initial data analysis reported here illustrates the process of coding the participation observation field notes. Coding immerses the researcher into the often massive and confusing jungle of text and has three primary purposes: (a) to identify "chunks" of text to facilitate future data retrieval and analysis, (b) to identify key data areas, and (c) to generate initial cultural hypotheses.

Developing and Applying a Codebook

The goal of this analysis strategy is to code a large volume of text so that segments about an identified topic (the codes) can be assembled in one place for interpretation. Once these segments are assembled, several strategies may be used for making further interpretation, just as a number of strategies may be used for constructing the codebook.

Assuming the use of a computer, text analysis consists of a series of steps:

1. Entering and printing field notes (or transcribing interviews) and creating an ASCII version (see below) of the field notes or transcripts if not already in ASCII format (for variation see Chapter 7)
2. Creating a codebook
3. Hand-coding the printed text in the margins, while making memos on 5 x 7 index cards
4. Computer-coding of the text into a software program and sorting and printing segments with the software program to get all similar text in one place
5. Reading these segments and making interpretations

While this process seems linear, the analyst must recall that constructivist inquiry is an iterative process, requiring continual interaction between collection and analysis of data (cf. Addison in Chapter 6).

ENTERING AND PRINTING TEXT

It is possible to perform the analysis described in this chapter using a number of different computer software programs or doing the entire analysis by hand. The amount of time saved by using computer text-analysis software packages to sort and print the data makes it well worth the time becoming familiar with the computer processes. For this particular study, we used Qualpro (Blackman, 1987; Tesch, 1990) as the program for coding, sorting, and printing segments of text. Another alternative is that described by Reid (Chapter 7), in which codes are embedded into the text itself and the search facilities of a word processor are used to retrieve text.

In the senior center analysis, a general purpose text editor, Kedit (Mansfield Software Group, 1987) was used for entering the field note data. For those not wedded to a particular word processor, the use of a "plain vanilla" text editor such as Kedit may be a useful addition, since they generally save files in an ASCII format (American Standard Code for Information Interchange), a generic way in which computers can store data (also see Chapter 7). Researchers using word processing programs such as WordPerfect or Word Star need to convert their text to ASCII format before analysis, since text-analysis programs require data to be in an ASCII format. This requirement is due to the word processor's embedding special characters in the text (e.g., for bolding, paging, etc.) that are meaningful only to them. Fortunately most word processors are able to save the text in an ASCII format.

During the participant observation fieldwork on the elderly health-seeking behaviors project, the field-worker made "jottings" (see Chapter 3, p. 61) during the day but had easy access to a computer for entering data each evening. Each day's field notes were typed into a continuous file that was identified by date, time, and place. After several months this file became too large to handle easily, growing to an excess of 2,000 lines. A new file was then begun, and so forth. In transcribing the life-history interviews, each interview was saved as an individual file. Most text-analysis software programs are able to code and search multiple files.

A useful strategy is to have hard copy of the text printed on wide-margin computer paper, to allow ample room for coding the text, and then bound into the type of binders used by computer programmers. It is also very helpful if the computer image text (text seen on the computer screen) has a line-by-line, page-by-page correspondence to the text found in the bound volumes. This identicalness can save a lot of paper (and trees), because most analysis programs require a numbered, printed version of the document (or at least you will need to know the line numbers—also available on the screen with most text editors). Thus editing and corrections to text should be complete before coding begins. It is very discouraging to find that all your line numbers have changed after you have begun coding!

DEVELOPING A CODEBOOK

The first step in coding is the development of a codebook or template. Before beginning, the researcher must decide on the level of detail to be coded, a decision generally related to the type of data (e.g., field notes vs. interviews) and the level of previous understanding. In constructing the codebook, the researcher is always walking a fine line between premature closure and creating codes so encompassing that every line of text requires coding. At one extreme the analysis resembles content analysis, while at the other extreme the researcher is inclined to read the text and to decide that everything is important. The codebook is a data management tool: It is used to organize segments of similar or related text for ease in interpretation and to search for confirming/disconfirming evidence of these interpretations. How detailed the codebook becomes is a function of where the researcher is in the research process. For example, preliminary studies may require a much broader net to catch alternative explanations than a study designed to enlighten several specific hypotheses emerging from earlier research.

In the analysis of the senior center field notes, the goal was to capture broad categories of information around several initial concerns found in the literature. These include health seeking/illness behaviors, senior center activities, and diet and health beliefs, as shown at the upper portion of Table 5.1. The advantage of using these broad categories is that large amounts of text can be coded rapidly and that coded segments are longer with broader context preserved, allowing the researchers to access more text for interpretation with a given search. The disadvantages are almost the same: Many coded segments of peripheral use would not have been captured with more specific codes; some coded segments are very long, making reading tedious; and a given segment may contain multiple ideas, which makes later sorting more difficult. To illustrate, compare Table 5.1 with the codebook used by Willms, Johnson, and White (Figure 11.4 p. 200 this volume) for their study in which an extensive coding system was developed to capture greater detail.

A preliminary codebook often is based on an initial conceptual model and/or a literature review. Miles and Huberman (1984) offer some useful suggestions for the development of a codebook, including having individual members of the research team independently coding a number of pages of text to test for both intercoder reliability

Table 5.1 Preliminary Code Manual for Senior Center Field Notes. The Boldface Codes Were Identified After Coding Process Had Begun

HEALTH SEEKING/ILLNESS BEHAVIOR	HSB
SENIOR CENTER ACTIVITIES	SC-ACT
DIET & HEALTH HABITS	DIET
TALKING ABOUT DEATH	DEATH
DONATIONS (e.g. Time, Things, Money)	DONATIONS
LACK OF COMPETITION (e.g. in games)	LACK OF COMP
RISK-TAKING BEHAVIOR (e.g. driving)	RISK-TAKING
PEER GROUP IDENTIFICATION	PEER GROUP ID
CONFLICT/CONFLICT AVOIDANCE	CONFLICTS
THRIFT	THRIFT
RESEARCHER ROLE	ROLE

and the utility and appropriateness of the codes. The codebook can then be modified to correct for deficiencies.

Another strategy for revising a codebook, which proved useful in our study, is to first code the text with the broad preliminary codes, retrieve and read these, and then develop refined subcodes based on these larger segments of text. For example, Table 5.2 is a rather large segment of text that was coded as "health seeking/illness behavior." Clearly many different ideas fall within this segment, including descriptions of the doctor-patient relationship, medication strategies, and the health decision-making process. After reading many such large segments, all about health behaviors, additional subcodes become evident. In fact this process led to the revised codebook that is partially displayed in Table 5.3.

The codebook not only contains the original a priori codes and the more detailed subcodes, but also incorporates additional codes that emerged while perusing the text (see bold portion of Table 5.1). These latter codes note some key features/patterns that provide a better understanding of the social and interpersonal context of this group of elderly and provide deeper insights into the health-seeking processes of interest. These include "talking about death," "conflict/

Table 5.2 Sample of Participant Observation Field Notes to Be Coded with Line Numbers Added (Not Corrected for Typographical Errors and Names Changed for Confidentiality)

Beverly is back and waiting in the library with Jane for group to begin. When I come in she is busy rubbing her knees and shins. These have been bothering her for several weeks. Beverly tells me that she is not sure what is the matter with her, but it is either her bones, her veins, or her muscles. Jane suggests to her that she strained her knees bending them in order to avoid bending from the waist while she was recovering from her cataract surgery. Beverly has been putting a heating pad on her knees. She puts a wet piece of sponge inside her heating pad so that the heat will be moist. Her doctor suggested to her that she try the heat. He offered to give her some pain medication but she refused since she wanted to see if she could control it with just the heat. She feels that she is already taking a lot of medicine for her high blood pressure and doesn't want to add to it. She told me "I'd rather take a pill than lose a pound." Last fall (??) she said that she had been having some side effects from her high blood pressure medication. I asked her what exactly bothered her and she said that the medication caused her to have pains and unpleasant feelings in her breasts, "her sex organs." She had told the doctor about this "He didn't do anything," so she decided to stop taking the medication. She had some other medication left from an earlier time and she took this plus I think she was also taking something else that had been prescribed for her for her high blood pressure. She did this for about three months until she began to feel that "my system was really upset." She returned to her doctor who took changed her medication. (I'll try to get this in an interview with her, I've forgotten the names of the meds and some of the details of this story). Beverly thinks that her present problems with her knees might be related to a fall that she took last fall. She tripped going out the door.	2804 2505 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818 2819 2820 2821 2822 2823 2824 2825 2826 2827 2828 2829 2830 2831 2832 2833 2834 2835 2836 2837 2838 2839 2840
Beverly, like Jane, reads a lot about the medications she is taking. She likes to discuss her ideas with the doctor and she likes to feel that she is in control of her own treatment. Jane and Beverly talked about drug interactions, Jane thinks that the doctors can't possibly keep all the information about the different drugs in their heads. She thinks that it is the patient's responsibility to be aware of what drugs they are on and possible side effects and interactions. She recently read about a computer program for doctors that will help them with this problem (keeping all the info about drugs straight).	2841 2842 2843 2844 2845 2846 2847 2848 2849 2850 2851 2852

Table 5.3 Modified Code Manual for Senior Center Field Notes Illustrating the More Detailed Codes Used for "Health Seeking/Illness Behaviors"

HEALTH SEEKING/ILLNESS BEHAVIOR	HSB
Health Beliefs	HSB-BELIEFS
Illness Experience	HSB-ILLNESS
Hospital Experience	HSB-HOSP
Doctor/Patient Relationship	HSB-DOC/PAT
Medications	HSB-MEDS
Pain	HSB-PAIN
Illness Impact	HSB-IMPACT
Role of Family/Peers	HSB-FAM/PEER
Personal Decision-making	HSB-DECIDE
Coping	HSB-COPING
Money/Access	HSB-MONEY

conflict avoidance," "risk-taking behavior," "lack of competition," "thrift," "donations," and "peer group identification." Additionally, codes pertinent to the role and participation of the researcher are defined as a means of capturing possible influence of researcher context and the topics of conversation/observation. Given the iterative nature of constructivist inquiry, further revisions of the codebook may be necessary as a better understanding of the data unfolds.

To accommodate text-analysis software programs, it is best to limit the maximum number of characters in any code. For example, Qualpro (Blackman, 1987) has a maximum code length of 15 characters, while THE ETHNOGRAPH (Bee & Crabtree, 1992; Seidel, Kjolseth, & Seymour, 1988) has a 10-character limit. This limit is not an issue when using a word processor as described by Reid in Chapter 7.

HAND-CODING TEXT

Computer-coding of text entails telling the software program where each segment begins and ends; however, it is advisable to hand-code a hard copy (printed version) initially with a pencil (Bee & Crabtree, 1992; Miles & Huberman, 1984; Seidel, Kjolseth, & Seymour, 1988; Tesch, 1990). To do so, the analyst generally needs a printed copy of the text that also has the line numbers printed on it. This requirement is not as simple as it might seem because the analysis software is coding and sorting the version that is in the computer, which may or may not be identical to that on the hard copy. Note that this is not

a problem if using the style described by Reid in Chapter 7, since paragraphs are being coded within the software program. Fortunately the analysis software programs are able to print numbered versions of the field notes for this process—which unfortunately results in the creation of a duplicate copy of all the field notes! We have found it is possible to bypass the printing of the numbered copy by using a split screen editor (using Kedit) with the file being coded on the top screen and the file used by the analysis software program to identify the segments (refer ahead to Table 5.4) on the bottom. Since the editor has line numbers on the screen, it is possible to hand-code on the printed field notes and follow the computer version for line numbers. Codebook in hand, segments then are marked in the margins.

Whenever coding is taking place, the researcher should be making "memos" in text margins or on file cards of interpretive insights that come about from being closely involved with the data. The researcher should be open also to the potential for codebook modifications that might emerge as these "memos" take on more focused meaning.

COMPUTER CODING AND RETRIEVING TEXT

It is not the intent of this chapter to advocate the use of any particular computer software package or to describe in detail the use of any specific software program. Different software programs have advantages and disadvantages, making them more or less useful for a particular study or style of analysis (see Reid in Chapter 7; Tesch, 1990). For example, THE ETHNOGRAPH provides superb searching and retrieval facilities but is discouraging by limiting line length to a maximum of 40 characters, thus considerably expanding the total number of pages (see Bee & Crabtree, 1992). Qualpro is used here to illustrate the template style of analysis because it is very simple to use and is extremely easy to code. Yet its simplicity can be a major drawback by limiting the types of searches it can perform. **One should certainly not develop an analytic strategy based on software, but rather select the software according to analysis needs.**

The goal of computer coding is to match text data with the organizational strategy of the codebook. Most text analysis programs have both an interactive mode accessed through a menu, as well as another "batch" mode in which a separate computer file identifies the text segments. The simplicity of this latter approach in Qualpro was a

Table 5.4 Code File (.COD) That is Used to Match Codes with Line Numbers of Text in Qualpro

HSB-ILLNESS, 2804 , 2840
HSB-PAIN, 2805 , 2818
HSB-FAM/PEER, 2809 , 2812
HSB-DECIDE, 2812 , 2818
HSB-MEDS, 2815 , 2837
HSB-BELIEFS, 2815 , 2821
HSB-DOC/PAT, 2815 , 2835
HSB-PAIN, 2823 , 2828
ROLE, 2835 , 2837
HSB-BELIEFS, 2837 , 2840
HSB-DOC/PAT, 2841 , 2852
HSB-MEDS, 2841 , 2852
DOCTORS, 2815 , 2852
HSB, 2804 , 2852
MEDS, 2815 , 2852

major factor for using the program for this particular analysis. An individual file is created for each of the field note files to be coded, with the stipulation that this file is required to have the same file name as the text file and .COD as its three-letter extension. The code file contains the code name from the codebook, the starting line, and the ending line for each segment, as shown in Table 5.4, and then is processed by the program. The analyst can request frequency counts of occurrences of each code or the printing of text segments in which all instances of a particular code are found within the text.

In our senior center example, we first coded all the data with the preliminary codebook (Table 5.1); however, note that one does not necessarily need to use all the codes if some are clearly outside the immediate question of interest. One of the preliminary codes, "health seeking/illness behavior," was noted with a code of HSB and yielded 153 segments from the nearly 200 pages of single-spaced participant observation field notes. Because this code category is very broad, some segments were extremely long, occasionally exceeding one page of single-spaced print. These large text segments were printed and hand-sorted, marginal notes were written on each, and a hierarchical system of subcodes, similar to that used by Willms, Johnson, and

Table 5.5 Sample Segment of Text About Doctor/Patient Relationship (Code HSB-DOC/PAT) Retrieved by Qualpro

File NOTES3 Code HSB-DOC/PAT found in lines 2815 to 2835

2815 moist. Her doctor suggested to her that she try the	2815
2816 heat. He offered to give her some pain medication but	2816
2817 she refused since she wantd to see if she could control	2817
2818 it with just the heat. She feels that she is already	2818
2819 taking a lot of medicine for her high blood pressure	2819
2820 and doesn't want to add to it. She told me "I'd rather	2820
2821 take a pill than lose a pound." Last fall (??) she	2821
2822 said that she had been having some side effects from	2822
2823 her high blood pressure medication. I aske her what	2823
2824 exactly bothered her and she said that the medication	2824
2825 caused her to have pains and unpleasant feelings in her	2825
2826 breasts, "her sex organs." She had told the doctor	2826
2827 about this "He didn't do anything," so she decided to	2827
2828 stop taking the medication. She had some other	2828
2829 medication left from an earlier time and she took this	2829
2830 plus I think she was also taking something else that	2830
2831 had been prescribed for her for her high blood	2831
2832 pressure. She did this for about three months until	2832
2833 she began to feel that "my system was really upset."	2833
2834 She returned to her doctor who took changed her	2834
2835 medication. (I'll try to get this in an interview with	2835

All the codes in lines 2815 - 2835 are:

HSB-ILLNESS HSB-PAIN HSB-DECIDE HSB-MEDS HSB-BELIEFS
 HSB-DOC/PAT HSB-PAIN ROLE DOCTORS HSB MEDS

White in Chapter 11, was created. The .COD file then was updated to include these new codes, and the smaller, more specific text segments were printed for interpretation.

The passage in Table 5.2 is a single segment retrieved by the original code of HSB; however, the revised codebook refined the specificity of the original code considerably. This revision is seen easily by comparing the coding of this same passage into numerous overlapping segments as illustrated in Table 5.4. For example, the subcode for "doctor/patient relationship" (HSB-DOC/PAT) was coded to include lines 2815 through 2835. The Qualpro output for this particular segment is shown in Table 5.5. Note that the program provides information on which file was searched, as well as a summary of other codes that overlapped the segment. A search of all three field note files yielded 63 segments that contained information regarding doctor-patient relationship. These were printed for further interpretation.

MAKING INTERPRETATIONS

Once segments have been organized and printed, the goal is to summarize the data. As with other steps described in this chapter, the researcher has different options about the best way to proceed. One option is to cut the printed output into individual segments and to sort them in the manner described by Addison in Chapter 6. Another option is to read through all the segments about a particular topic and to determine tentatively which themes seem to be recurrent. These themes then can be color-coded with different highlighter pens and read repeatedly for a better understanding. Once themes become salient, the researchers must create strategies for finding disproving cases, often requiring going back and collecting additional data. (See Miles & Huberman [1984] for some strategies for evaluating completeness of data.)

A number of themes emerged from the doctor/patient relationship segments which seemed important to this group of elderly persons. One of these was a theme of "not wishing to consult with physicians because they don't listen and take time." A few examples of segments addressing this issue, retrieved by the HSB-DOC/PAT subcode, are presented in Table 5.6. These and many other segments create a picture of dissatisfaction among these elderly persons due to prolonged exposure to health professionals who fail to communicate adequately (from the elderly person's perspective). Over time they become reluctant to consult physicians and develop expectations that physicians will not show concern about their individual problems and just classify them as "old." This theme also finds credence when reading segments retrieved by the HSB-MEDS subcode, in which patterns of sharing prescription medications and deciding to stop taking their own prescription drugs is common (this latter interpreted by their physicians as noncompliance). As segments from other "health seeking/illness behavior" subcodes are interpreted, other connections are found until a coherent description is possible and hypotheses are formulated.

The credibility, dependability, and confirmability of these and all future hypotheses are verified using triangulation, reflexivity, member checking, and independent audit (Kuzel & Like, 1991; Lincoln & Guba, 1985). The long-range goal remains to link these and future hypotheses into explanatory cultural models that explicate the

Table 5.6 Sample Segments From Field Notes From a Search of Doctor/Patient Relationship (Code HSB-DOC/PAT) that Support a Theme of Physicians Not Taking Time or Listening to Patients (Names Changed to Protect Confidentiality)

Bea did go to the doctor (Johnson) to have her blood pressure checked. She said that he yelled at her for not having it checked in three years. He did a bunch of tests, including some blood work, and what sounded like an electrocardiogram. . . . Bea didn't seem to know what any of the tests were really for. I asked her what the doctor had said about her sweats, and she said "He didn't say nothing much, I don't think he thinks much of me." She said that he said something about cancer and she has to go back and have some more tests. Again she complained that she would be happy if he would just treat her blood pressure and not do all these tests. One thing she was upset about was that the doctor does all these tests and then you never hear anything more about them. I asked if we could get together again sometime right after her next appointment (Sept 9) to talk about it and she said that would be fine, adding "Maybe you can tell me more than my doctor."

He mentioned another doctor that he likes. I asked why he liked this doctor and he said that he treated you like a person and was willing to sit and talk to you. He feels free to make suggestions regarding his own treatment and health to this doctor, feels that the doctor respects his opinion, and takes his suggestions into account. Bob feels that you have to aggressively seek treatment because many doctors are too busy to provide you with the correct services, and that you have to push to get what you need.

Janet complained that when you go to the doctor's you are given an appointment, but then you must sit and wait. . . then you wait again in the examining room. Finally you see the doctor, but only for a few minutes and he never seems to have the time to answer any of your questions. Beverly said that she used to bring a list of questions with her when she went to see Dr. Joseph but he never seemed to want to really take the time to answer them. At first she said that he would go over them, but later just looked at them and put them in her file. She said that if something was really important he would answer it. Finally he suggested that she switch to Dr. Howard. She likes him better and feels that he is more willing to answer questions. She said that at Joseph's she usually was not kept waiting and that apparently his priority was getting his patients in and out as fast as possible.

Edward is very bitter about the treatment he received for Masters. Janet said that doctors never take time to really look for what's wrong with you that they have full waiting rooms and they spend too much time looking at their watches and thinking about their pocketbooks and not enough time really taking time to take care of their patients and find out what is really wrong with them. Mary added that she thinks doctors are too quick to categorize people. She said that if you are old and go to the doctor that right away the doctors assume that you have arthritis or diabetes, or have some other older person's disease. She thinks that doctors assume if you are in pain or have some problem that is because you are old, and that this is why they don't take time to find out what is really wrong. Carolee agreed with this.

context-dependent, decision-making processes elderly persons in this community use to manage their musculoskeletal problems. The transferability of these models to the family physician's office then will be evaluated.

Discussion

The template analysis style has advantages and disadvantages when compared with other analysis methods. Making the codebook and coding the text is relatively quick, reproducible, and easy to grasp for those skeptical of qualitative research. On the downside is a potential for missing information, especially if the codebook is produced in a completely *a priori* manner and the analyst runs the danger of not looking beyond the codes.

Clear descriptions of exactly how to develop and apply codebooks to text data are scarce. Tesch (1990) provides some insights and overviews several software options, while the workbook originating from educational research published by Miles and Huberman (1984) is probably the most complete description. The examples and educational context of the latter do not readily transfer to primary care research. The manual for THE ETHNOGRAPH software program (Seidel, Kjolseth, & Seymour, 1988) provides a description from the anthropology and sociology traditions for coding and retrieving data that is very similar to those we apply here (also see Bee & Crabtree, 1992). The analysis strategy in this chapter initially began as a test of the approach described by Miles and Huberman (1984) but gradually evolved to be more like the approach briefly summarized by Altheide (1987) as "Ethnographic Content Analysis."

The coding of text need not lead directly to computer applications, as well described by Addison in Chapter 6. Once the text is coded, it is possible to cut and paste (sort) the segments without ever using the computer. This process requires multiple copies of field notes, since codes are not mutually exclusive and the same segments of text need to be sorted into different places. Some logistical difficulties also arise if the codes are modified over time.

Another simplified approach, one using colored highlighter pens, was demonstrated to us by Terrie Wetle, a sociologist at the Institute of Living in Hartford, Connecticut. In her analysis of depth interviews of case managers, she developed a simple codebook in which pink indicated ethical concerns, green meant a client type, orange represented a communication among provider issue, and blue marked a case manager management strategy. After marking a transcript, she had her secretary copy the computer version of the transcript to a new file and delete everything except the colored text. Thus, for each trans-

cript, she had four files, each with only those segments pertaining to a particular code.

Alfred Reid in Chapter 7 illustrates yet another simplified approach (also see Pfaffenberger, 1988), in which coding is done directly on the field notes within a word processor. In using this approach, the codebook strategies described in this chapter also apply. One potential drawback to the word processor approach arises when multiple files need to be searched. This situation is not uncommon when extensive participant observation field notes are involved. This is less of a problem when analyzing interview data, since each interview is usually coded and interpreted separately.

The analysis of a mountain of information-rich, purposefully sampled, qualitative text data can easily appear insurmountable and quixotic, especially to researchers proficient in quantitative methods. There is reason enough to pause and briefly tremble. The template approach to text analysis described in this chapter, however, is one specific way for quantitatively trained primary care researchers to take the first step into qualitative analysis.

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