Examining the Use of Institutionally Designed Documentation Templates as a Vehicle for Changing Values and Practices in Health Care

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Abstract: Changing values and requirements are common occurrences in today's health care settings. Institutionally designed documentation templates are often developed to demonstrate that these changes have been incorporated into clinical work. Little research has been completed to examine whether the use of these institutional templates leads to the intended change or whether the changes clash with other influences on clinical work. This paper illustrates how two qualitative methods: think aloud interviews and frame analysis can be combined to examine the use of the templates, the changing values themselves, and the influences on changes in clinical practice. An analysis of local change from expert planning to person centered planning is used to illustrate the value of the approach. The analysis reveals influences that affect the adoption of this particular change, the usability of the template, and points of change that need to be negotiated with the users of those documents.

INTRODUCTION:

Health care in the United States is constantly changing due to new research findings, new technologies, changing service delivery systems, changing funding sources, and changing accreditation structures. Studying the impact of these changes on the practice of health care has been a particularly difficult problem attempted by only a few researchers (vanEyk and Baum, 2003). One common method for incorporating change into a health care system is to design templates for documentation that are intended to both guide the work and document the results. These templates then stand as evidence for accreditation organizations and third party payers that a particular type of clinical work is being done within that institution.

The salient question however is whether the templates actually lead clinicians to change their work in the ways that the institution would like them to. A particular combination of qualitative methods: think aloud interviews (from cognitive science) and frame analysis (a sociolinguistic approach) is effective in examining how clinicians use these templates and how the clinicians react to changes suggested by the templates, incorporating or not incorporating those changes into their work

In this combination of approaches, clinicians are asked to participate in a think aloud interview making their thinking processes and clinical approaches verbal while working their way through an institutionally-constructed template (Boren & Ramey, 2000). A frame analysis (Tannen, 1993) is then completed on the interview transcript. This analysis examines linguistic markers clinicians use to frame their work and their reactions to the values embedded in the institutionally-constructed template.

Although, the actual work of clinicians is not observed, the strength of the think aloud interview is the examination of the cognitive processes used in the completion of work (Nisbett & Wilson 1977). When the interviews are analyzed through frame analysis the tensions between institutional demands and other influences (such as clinical training) are revealed.

I offer an examination of community mental health center outpatient psychotherapists adjusting to person centered planning (a state mandated approach) as an example of this methodological combination.

INSTITUTIONALLY-CONSTRUCTED TEMPLATES AS A DEMONSTRATION OF PRACTICES

Institutionally constructed texts are constructed by administrators not only to document and guide the work of those within an institution, but also to demonstrate the value of important changes; indicating that those changes have been incorporated into practice (Ravotas and Berkenkotter, 1998). These texts also act as a form of accountability to outside regulators like insurance companies, managed care companies, and accreditation organizations. Since these texts are used for multiple purposes there are times that each of the purposes are not satisfied by the resulting text. Dauterman (1997), for example, examined the process of nurses' collaborative work developing policies and procedures and found that the pressure to conform to the demands of outside and internal regulators rendered the documents un-usable by their intended audience, nursing staff.

Documentation is a constant partner of clinical work in health care settings. It is not possible (nor preferable) for documentation to represent the complexity of clinical work. To focus the documentation institutional representatives frequently construct documentation templates (sometimes referred to as scripts or checklists). These institutionally constructed templates are heuristic documentation tools that are intended to clearly focus the work of clinicians on the institutional values and goals by structuring the work of the clinician, guiding the documentation of the work, and communicating information to other providers.

Templates, then, are used not only to document work but also to direct the work that is completed. Since templates are organized to define information that should be entered in each section, clinicians usually organize their work according to the template that they will need to complete. Rhodes, Langdon, Rowley, Wright & Small (2006) however found that electronic checklist templates used in diabetes consultation are sometimes used by nurses in a way that sets up a rigid agenda (to complete the form) that leaves patients with few openings to discuss their own agendas. In this study, even when a patient attempted to discuss his own concerns the nurse terminated the discussion with a minimal response, returning to the checklist as soon as possible. This, of course, raises flags in today's patient centered care environment.

Templates, themselves, can be interpreted by clinicians in many different ways and clinicians can adjust templates through their oral work with a client, which can adjust the purpose of the question. These adjustments made by clinicians may be important resistances or oppositions to the focus of a template (or an institution) and can point to a trajectory of change in the use of a template.

Institutional managers commonly design templates for intake forms, psychosocial assessments, history and physicals, treatment planning, consultations, family medical histories, daily notes, and discharge forms. Increasingly, templates are electronically-based and completed at the computer while working with the patient/client. Rhodes, Small, Rowley, Langdon, Ariss and Wright (2008) found that how nurses used electronic biophysical checklists (a form of template) within meetings with diabetic patients profoundly affected the patient's ability to raise topics in the meeting. Whenever clinicians use templates within a session they move back and forth from oral communication with clients to written documentation. Rhodes, et al. found that elements of this constant shifting from interview to documentation include not only verbal clues but non-verbal signals such as body position and gazing. All of these clues are used by patients to determine when and if they should contribute to the meeting. Patients often find it difficult to interrupt a meeting that is dominated by documentation needs; giving them limited input in the treatment process that is not scripted into the template (2008). The work of Rhodes et al. is unusual as there are few studies that examine the intersection of oral and written communication in health settings.

THE STRENGTHS OF THINKING ALOUD INTERVIEWS

Thinking aloud techniques (also known as verbal protocols) were originally developed by Ericsson and Simon as a method for studying the cognitive processes used in problem solving (1984). In this method of collecting data participants are given a task with defined steps and asked to "think aloud" as they illuminate how they would approach that task. Henderson, Smith, Podd, & Varela-Alvarez, (1995) found these protocol techniques to be the most effective usability approach as opposed to interviews, logged data, or questionnaires.

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Other cognitive researchers have used think aloud strategies to compare expert vs. novice problem solving in business decisions (Minarik 2008), in artistic process (Fayena Tawil, 2007), in marketing (Reed, Dew, et al, 2009) and in the writing process (Hayes and Flower, 1983). Many of these researchers use an analysis method known as protocol analysis (Newell and Simon, 1972) to identify the process of thinking and decision making.

Health researchers also have used think aloud methods. Anastasi, Currie & Kim (2009) examined the diagnostic processes of traditional Chinese medicine practitioners, while Lutley, Campbell, Renfrew & Marceau (2008) examined how patient characteristics affected their physicians' treatment decisions. Think aloud strategies have also been used in examining the decision making processes of recipients of health care. These include the food selection process of obese and non-obese participants (Gray, 2006) and the decision making process based on myocardial infarction symptoms (anonymous 2009).

Thinking aloud protocols are also common in usability studies. Usability studies examine the effectiveness of tools in use (Dumas & Redish, 1993). Usability specialists examine the cognitive processes revealed in think aloud approaches to search for how participants approach the use of the tool. This approach recognizes that tool use must be understood as a situated action; an action set within a particular social, organizational and individual structure of work (Brown & Duguid, 1992; Spinuzzi 2001; Engestrom 1999). The human users within that organizational context often adapt and change that tool as it is used in accordance with other influences within the system and those influences that reside within the individual user (Adler & Winograd 1992).

The field of computer sciences extensively uses think aloud techniques to test the effectiveness of computer icons to guide computer work (Smith & Dunkley, 2002; de Mul &van Oostendorp, 1996). The use of these approaches has also spread to human factors engineering, technical communications, instructional design, questionnaire design, and cartography, to name a few (de Jong and Ramey, 2000). Two recent examples of computer science think aloud studies have focused on the use of library electronic search engines (George 2008) and student nurses' process of using e-learning resources (Cotton & Bresty 2007). Researchers in the area of medical informatics use think aloud strategies to guide their development of computer interfaces for use in medical practices (Jaspers, M. W. M, Steen, T, van den Bos, C; & Geenan, M; 2004)

When think aloud strategies are used in usability studies they are used to identify the elements of the tool that need to be changed. Most likely the spread of the study of usability is due to the intuitive notion that any type of tool (including a written template) might be analyzed for whether it is being used (in its present context) for its specified goal in its most effective way. It is surprising then that few studies exist examining the usability of written (or electronic) tools such as the institutionally-designed template.

I propose that thinking aloud can be used to study both the cognitive processes of health providers and the usability of tools that those health providers use. The most appropriate type of think aloud technique for this purpose is a think aloud interview with a speech communications emphasis. Boren and Ramey (2000) suggest that using a speech communications approach structures the actions of the interviewer in a way that supplements but does not derail the think aloud process. This semi structured interview allows initial, final, and clarifying questions. Smith, Podd, & Varela-Alvarez, (1995) found that the addition of an interview (rather than silent observation) increased interferences in the task and failed to add significantly to information about the usability of the tool. Later, however, Boren and Ramey (2000) found that the combination revealed important information about the use of the tool and did not seem to interfere with the process.

According to Boren and Ramey (2000) in the speech communications approach researchers are careful to define the user as the expert and the researcher as the listener or learner and direct the communication toward the goals of the study (which always includes the use of the product as the "subject" of the study)

FRAME ANALYSIS REVEALS CONFLICT

Tannen's (1993) frame analysis is a powerful tool for analyzing oral and written communication. She derived her framing theory from Bateson's (1968) concept of frames, Goffman's (1974) concept of footing and Shank and Abelson's (1977) concept of schemas.

Tannen (1993) has examined the language that people use that reveal how they are "framing" an understanding of what is happening in oral and written communication. According to Tannen, individuals enter any situation with a particular organization of knowledge: schemas they have from earlier experiences. These schemas are always carried into communicative activity and contribute to the sense making process. Linguistic frames then reflect the schemas underlying a person's interpretation of a situation. Frames can also be indicated by non verbal communication (Rhodes, et.al 2008). Tannen points out that a clash in schemas (which indicates at least two different expectations) in a communicative activity leads to the necessary invoking of a new frame.

Frame analysis can examine shifts in frames as they occur within contexts by examining the linguistic markers that indicate a shift. Since frames reflect a person's interpretation of the situation a frame analysis can detect when interpretations are developed from earlier sources including training, values, and developing practices. When applied to a think aloud protocol it also can grasp agreements and/or disagreements with the values behind a tool through an examination of recontextualization from one communicative activity to another (such as from an oral to a written text or from one written text to another). Recontextualization has been linked to changing practices by many researchers (Sarangi & Roberts, 1999; Ravotas and Berkenkotter, 1999; Linell 1998)

Tannen and Wallat (1993) analyzed the multiple frames that doctors use in doctor/patient communication. Frame analysis has been used by other researchers in a variety of contexts. Most recently, a common use of frame analysis is to analyze media frames. For instance, health communication researchers have used this approach to examine media frames regarding HIV/AIDS (de Souza 2007)

THE STRENGTH OF COMBINING A THINK ALOUD INTERVIEW AND A FRAME ANALYSIS

I would suggest that think aloud interviews have a specific frame structure because of the nature of the interviews. The purpose of this type of usability study is to have the user tell the story of the process of use. Therefore, the basic frame structure of this process falls into two large frame categories: the procedural frame and the explanation frame. Users go back and forth between these two large frames while working their way throughout their use of the tool.

The procedural frame is the actual telling of the process. It is marked linguistically with temporal phrases and self quotation such as "FIRST I..." "THEN WE..." "AT THIS POINT I ASK "WHAT ARE YOUR GOALS?"".

The explanation frame is the frame that users switch to when they want to explain their actions within the process. These explanation frames use a wider range of markers and linguistic structures because there are many ways that a person can explain their actions. However, a common example would be. "I ask that BECAUSE..."

Additional frames, however, are often used as subsets of each of these frames. In fact, the specific sub frames that are important in think aloud interviews of institutionally designed templates are institutional frames and community of practice frames. Institutional frames are frames that present or react to the institutional requirements and expectations. A common linguistic marker of this type of frame is a modal "We HAVE to…" "We MUST ask…" or a negative "This is NOT the best…"

Community of practice frames, on the other hand, are used to indicate the expectations the clinician has internalized from various communities of practice, including their training, professional organizations, and local practices. Linguistic markers are often emphatic expressions such as, "It is IMPORTANT...", "The BEST way..." often mark community of practice frames.

Clinicians move back and forth between these two frames when they are explaining their actions (in the explanation frame). This is particularly the case when they are explaining actions that don't fit securely into the institutional frame. Some linguistic markers indicate both the institutional frame and the community practice frame through the use of negatives, "This is NOT the best BECAUSE..." "This DOESN'T help the client..." "I WON'T do this..."

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Another way that users shift from institutional frames to community of practice frames is demonstrated when the script portion of the template is rephrased. This change is noted within the procedural frame of the interview and it doesn't carry linguistic markers except for the changing of the words from the script. According to frame theories (Tannen 1993, Goffman 1974, Bateson 1972) rephrasing (a form of reframing) is done because it is more consistent with a person's schema of the activity that they are engaged in. In terms of health services the reframing makes more sense to the clinician in some way. It complements the work that he or she is involved in. This is generally because the reframing fits in with their professional way of completing the process or because they feel the patient/consumer would have a better chance of understanding the task as it is rephrased. Either way, this reflects a community practice; either the professional community out of which the clinician conducts his/her work or the immediate community of practice of the clinician and the patient/consumer.

Identifying the institutional frame as it is contrasted to the community of practice frame in the think aloud interview reveals the user's opposition to institutional requirements based on community of practice directives. It also reveals changes that the user is making in the use of the template. Finally, it points to possible future changes in either the template or the community of practice.

The combined approach of the think aloud interview and the frame analysis then produces data that reveals the structure of a clinician's schemas while approaching a specific task. Neither approach alone could produce data that can lead to a clear understanding of practice within the system as stated above.

Although I was unable to find other researchers who used this specific combination of approaches, I was able to find a study based on a think aloud strategy with a linguistic analysis. Phansalkar (2007) examined the decision making strategies of pharmacists using a verbal protocol while conducting a chart review to detect adverse drug events. When a semantic analysis was done on the results of the protocol analysis the researcher was able to identify textual signals that were used by pharmacists that had been overlooked by other professionals. Phansalkar proposes that the textual signals might be incorporated into expert computer systems to detect adverse drug events.

UNCOVERING THE COMPLEXITY OF INFLUENCES ON CLINICAL WORK AND DOCUMENTATION

To illustrate the power of this combination of methods I will use some data from a study conducted in a community mental health center outpatient department. I completed think aloud interviews with all five psychotherapists in a small community mental health center on their use of a Person Centered Planning template. I then conducted a usability analysis to examine whether the tool had been used in the way it was intended and a linguistic frame analysis to extend the study to a micro level of resistances and changes to the template and institutional values.

Person centered services (or patient centered services) have become important throughout the health field in a variety of disciplines. Several researchers have examined difficulties in the transition to patient centered care. Rogers, Kennedy, Nelson & Robinson (2005) found in their interviews with physicians and patients regarding self management of irritable bowel disease that while physicians thought that planning sessions were patient centered; patients felt that some of their concerns were not included in the planning sessions. Furthermore, they also found that parameters of the health care setting itself (such as limited time with patients, an inflexibility of scheduling despite the limits of the disorders in question, and poor continuity of care) interfered with the patient centered planning. Rogers, et. al. emphasized the importance of considering the practitioner and patient input as well as the organizational system when designing patient centered care.

Milton (2009) examined how health innovations such as electronic health records have the potential to impact person centered services. Before examining the use of electronic checklists in planning sessions Rhodes, et al. (2006) interviewed patients to determine the concerns that they wished to discuss in the planning session with a nurse. However, when those patient concerns were brought up by the patient they were not addressed adequately by the nurse who returned to the electronic screen. Later, Rhodes et al (2008) found that although the use of electronic checklist templates presented a challenge to patient centered services some nurses were able to attend to patient's concerns while using the templates.

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Person Centered Planning is a legal requirement of the Michigan Mental Health Code (1996) and therefore; the law mandates that all clinicians in all the departments of Michigan community mental health centers must demonstrate their use of person-centered planning. This legislation was passed into law to assure that the values of self-determination would be applied to all of the mental health services provided in the state. It represents a shift from expert driven planning sessions, conducted and dominated by the expert clinician; to the consumer as an active planner, creating a plan that is driven by the needs and desires of that consumer who sets his/her own goals based on preferences, strengths and abilities rather than on diagnoses or problem categories.

The need for this paradigm shift from expert to consumer driven planning is not only supported by self determination advocates (Pierpont, 1990; Snow, 1992) but also by a series of researchers examining psychotherapy and/or medical encounters (Maynard 1991, Mischler 1984). Ainsworth-Vaughn (2002) found that physician's maintain power in interviews with patients as they are occurring and in the direction of future action through a series of linguistic moves such as ritualized routines and phrases. Ferrara (1994) found the same pattern in psychotherapy sessions. In one case study, Hak and DeBoer (1995) found, that a therapist consistently interrupted a client's narrative account to "extract" objective symptoms and then through a series of modeling activities encouraged her to accept and participate in his formulation of the problem.

One challenge of incorporating person centered planning into the therapist-consumer relationship is that the relationship is perceived by both participants as hierarchical. Consumers seek therapy to avail themselves of the expertise of the therapist while the therapist is trained to use his/her expertise in planning and conducting psychotherapy. The shift to person centered planning challenges these roles at least to some extent and is a difficult shift that is mediated by an institutionally-constructed documentation template, intended to explicitly draw the consumer into the planning process

The interviews for this study were conducted within the first few years of the legislative change so it coincides with the time period in which person centered planning was beginning to be incorporated into the work at mental health centers.

Self determination advocates (Pierpont 1990, Snow 1992) stress the importance that any type of intervention should arise from the global dreams and hopes of an individual. Michigan mandates concur. According to the Michigan Mental Health Code (1996 revision):

"Person-centered planning is a process for planning and supporting the individual receiving services that build on the individual's capacity to engage in activities that promote community life and that honor the individual's preferences, choices and abilities. The person-centered planning process involves families, friends and professionals as the individual desires or requires" (330.1712)

According to the Self Determination Policy and Practice Guidelines (Michigan Department of Community Health 2003, p. 1) "PCP is the crucial medium for expressing and transmitting personal needs, wishes, goals and aspirations." In other words treatment and intervention goals set within the community mental health system must arise from these global dreams of the consumer.

Administrators of most community mental health centers in response to this mandate developed training for clinicians in self determination and person centered planning and developed institutional templates to guide the process.

Two sections of the PCP template used in this study are particularly salient to the fostering of self determination and the transition from expert based to consumer based planning. These sections are section #2: "My Dreams, Desires, and Goals" and section #8 "Goals and Objectives". Section #2 was written to identify these global guiding elements of a consumer's life that can then later be used to set goals and objectives for the planning process in section #8. The use of these sections then is intended to support the basic values of self determination.

A usability analysis of the think aloud interview was helpful in identifying a number of points in the use of the template at this particular mental health center. All of the psychotherapists interviewed used the templates within the session to guide their actions. They also all used some parts of the PCP template like a structured interview and/or script: reading the question and writing down the response. Even though they often read the question

verbatim, all of the psychotherapists also reframed some of the sections of the template before asking the questions and or added their own interpretation after reading the question. Some of these interpretations changed the meaning of the question. Therapists frequently changed the "My Dreams, Desires, and Goals" by reframing the printed phrase to the consumer. Only one of the therapists quoted this directly and then wrote down the consumer's response. The other therapists all narrowed the focus of this section through rephrasing the statement and thereby, changing the intention of person centered planning. Some of the rephrasing includes, "Where do you see yourself in five years?" What do you think you will do next?", "What are your plans for the future?" and "Last time we met you wanted to work on...is that still your goal?" While each of these questions is valid they do not address the larger "dreams, desires, and goals" of the person centered plan.

Therapists also did not base their joint development of treatment goals and objectives on the global "dreams, desires, and goals" of the consumers or even connect the goals to what was written down in the earlier section. None of the therapists made a connection between the two. These findings point to the fact that the document was not being used in the manner it was intended. This level of analysis certainly suggests changes within the template are warranted. In particular, the template itself should make an explicit connection between the "My Dreams, Desires, and Goals" section and the "Goals and Objectives" section.

The linguistic frame analysis however goes beyond the usability dimensions to identify patterns in the adjustments and decisions made by psychotherapists. In the procedural frame the rephrasing of "My Dreams, Desires, and Goals" shifts the work from the institutional frame to the community of practice frame. All of the psychotherapists reframed this statement to a smaller, more accomplishable goal.

The explanation frame of the cognitive interview suggests that therapists narrow the "dreams, desires, and goals" section to goals that are possible to accomplish in psychotherapy. Psychotherapy practice went through major changes in the 1980s and 1990s leading to shorter term therapy and more sharply defined treatment goals. This emphasis is reflected in the therapist's responses. Most of the therapists spontaneously supply an explanation for why they rephrase the section, apparently recognizing their deviation from the institutional mandate.

One therapist points out that the institutional frame (the statement itself) leads to responses that must be adjusted to be useful in therapy. "'My dreams, desires and goals'...you have to kind of rephrase that for them... 'Well, what are your plans for your future?' And so, you break that down for them and... 'Maybe, you want to be a doctor...but, well let's get through high school.'...so, you know realistic goals help them."

This therapist suggests a community of practice frame by references to the activities of a therapist (the use of the pronoun "you" implies that she sees these activities as a common action of therapists not idiosyncratic to her, and that she is connecting to the interviewer who is also a psychotherapist). She also indicates her perceived necessity of adjusting the wording for the consumer through her use of the words "for them" and "help them" as in "...rephrase that for them...break that down for them...realistic goals help them..." She then goes on to contrast the institutional frame induced response "Be a doctor" with a substitute goal "get through high school" invoking the value of "realistic goals" and thus returning to a community of practice frame.

Another therapist implies that these type of global dreams are "too ethereal" for the work of psychotherapy. She also does not use the institutional phrasing but rephrases to specific goals for therapy. Her explanation frame implies that not only is the institutional phrasing unworkable, but that it has a ridiculous element to it that is not grounded in psychotherapy practice., "...sometimes it's like 'Your dreams desires...' (sing-songy voice) is kind of too ethereal for people (laugh)..you know, 'I want to be Queen" (pretend voice)

While none of the therapists use the "My Goals, Desires & Dreams" section (# 2) to develop the treatment plan, three of the five therapists prewrite this section (# 8) of the PCP from the preliminary PCP (completed on the first day that the consumer has come to the clinic-in a screening process). Although the next excerpt is selected from one interview, other therapists had very similar responses, Then the goals...they usually told me on that preliminary PCP what they want to work at... I put it in goals and objectives form and put it on here...then I lead them to this and say, "Is this ok with you?" I have had few people object."

The next excerpt introduces a psychotherapist's frustration with institutional paperwork being imposed

on the therapy process. Note the way the therapist moves from Institutional frame to Community of Practice frame. It is clear that this therapist sees the documentation process as a process that interferes with the consumer's needs and desires. She is ironically referring to the patient centered planning documentation. They have waited a really long time to get...some help...So, once they get to the therapist after the whole intake process...screening process...finally they are in the therapist's office, sometimes, they fall apart right away... they are ready to do the work...and so it is real difficult for me to say, "Whoa, wait a minute, we have to do this paperwork and so that is a difficulty that I have...I can't just sit and comfort someone...or let them talk or tell me their story...therapy, that I think works really well with people who are really having trouble...I have to be more concrete than they are ready to be in the first session.

The modal in this segment (have to) indicates the institutional frame that the therapist is invoking, "we have to do this paperwork" (line 17)... "I have to be more concrete" (line 29). She also indicates the contrasting community of practice frame with the negative construction, "I can't just sit and comfort someone" (lines 23-25). The therapist is commenting on what she sees as two very different work expectations: The institutional expectation of foregrounding the completion of paperwork in that first session vs. the professional psychotherapist expectation that when the consumer is "ready to do the work" the therapeutic dyad begins to work on the problem. It is not unusual for psychotherapists to see paperwork and particularly the PCP as separate of the real work they are involved in. This is mentioned throughout the usability interviews.

Finally, most of the therapists point to the difficult task of balancing the consumers' goals with the expert role as a therapist, pointing out that therapists often must step in and help consumers see the urgency that some goals must have over others. To qualify as an outpatient consumer in today's mental health system consumers must have persistent mental illness and often have life damaging behaviors, therefore this is a very real concern.

"they don't always have their priorities on the same order as I do...and I will change the goals and we will negotiate as necessary but...(you realize this too as a therapist)...I can't say well 'yeah, you are trying to commit suicide every day, but we are just not going talk about that because you don't want to...Yeah, there is a compromise and some negotiating of goals..."

This therapist uses a frame construction that starts out with a strong personal stand against institutional mandates, marked by the repetitions of the pronoun "I", but then switches into a professional therapist community of practice frame through her aside to the interviewer "...You realize this too as a therapist..." (lines 9-11). She then contrasts the institutional and the community of practice frames with the help of a constructed example. One of the interesting things to note in this example is that she uses a negative that actually negates the consumer, "you don't want to" (lines 17-18). This has the effect of blending the institution and the consumer together, indicating that she disagrees with the power that the institution has given the consumer in this case.

Based on the usability interview and frame analysis this researcher was able to meet with the therapists and administrator to discuss the results and offered the following suggestions.

- 1. Write into the template an explicit connection between the "My Dreams, Desires, and Goals" and the "Treatment Plan" sections to prompt the therapists to consider the intended connection between the two.
- 2. Open a dialogue regarding the conflicts psychotherapists feel between their work as psychotherapists and the person centered planning process. This dialog should include: a. conflicts between the previous training of narrowing a focus and the PCP value of using global dreams; b. when psychotherapists should use their expert power to guide away from inappropriate consumer goals; and c. when psychotherapists should move away from paperwork functions to the urgent needs of a consumer.
- 3. Open a dialogue regarding the practice of pre-writing and what pre-writing makes sense from earlier documents.

CONCLUSION

Changes from expert centered to patient centered care are not unique to the mental health segment of health services, this is an ongoing trend that will continue as more health care systems take on this value. Yet, this is only one of a host of other changes made in health care all of the time. These changes, by their very nature challenge earlier values and ways of doing things. Changes, in turn, are often challenged by those seeing value in the earlier approaches. Identifying elements of this conflict can go a long way toward maintaining quality services throughout the change process. Since these changes are often reflected in the development and use of institutionally designed

templates a combination of think aloud interviews with both a usability analysis and a linguistic frame analysis offers a powerful tool for examining the intersection of values embedded in their use.

REFERENCES

- Adler, P. S. & Winogard, T. (1992). Usability: turning technologies into tools. New York, Oxford University Press. Ainsworth-Vaughn, N. (2002). Claiming power in doctor-patient talk. New York, Oxford University Press.
- Anastasi, J. K., Currie, L. M & Kim, G. H. (2009). Understanding diagnostic reasoning in TCM practice: tongue diagnosis. *Alternative Therapies in Health and Medicine*, 15, 18-29.
- Bateson, G. (1972). Steps to an Ecology of Mind. New York, Ballantine Books.
- Boren, M. T. & Ramey, J. (2000). Thinking aloud: reconciling theory and practice. *IEEE Transactions on Professional Communication (Special Issue)*, 3, 261-278.
- Brown, J. S. & Duguid, P. (1992). Organizational learning and communities-of-practice. *Organizational Science*, 2, 40-57.
- Cotton, D. R. E. & Gresty, K. A. (2007). The rhetoric and reality of e-learning: using the think aloud method to evaluate an online resource. *Assessment and Evaluation in Higher Education*, *32*, 483-492..
- Dautermann, J. (1997). Writing at Good Hope: a study of negotiated composition in a community of nurses. London, Ablex.
- de Souze, R. (2007). The construction of HIV/AIDS in Indian newspapers: a frame analysis. *Health Communication*, 21, 257–266.
- de Jong, M. & Ramey, J. (2000). Introduction: new perspectives on document evaluation methods. *IEEE Transactions on Professional Communication*, 43 (Special issue), 237-241.
- de Mul, S. & van Oostendorp, H. (1996). <u>Learning user interfaces by exploration</u>. *Acta Psychologica*, 91, 325-344 Engestrom, Y. (1996). *Cognition and Communication at Work*. New York. Cambridge University Press.
- Fayena Tawil, F. (2007). A problem solving approach to understanding thought processes in a creative task: A protocol analysis comparison of artists and non-artists. (Doctoral dissertation, University of New York, 2007). *Proquest Dissertations and Theses.* 46 (357).
- Ferrara, K. W. (1994). Therapeutic ways with words. New York, Oxford University Press.
- George, C. A. (2008). Lessons learned: usability testing a federated search product. *The Electronic Library*. 26 (5). Goffman, E. (1974). *Frame analysis*. Cambridge, Harvard University Press.
- Gray, B. C. Weight status and decision making in a food selection task. (2006).(Doctoral dissertation, Florida State University, 2006). *Proquest Dissertations And Theses*. 71 (384).
- Gunnarson, B., Linnel, P. & Nordberg, B. (1993). Research on language for specific purposes in the past and in the future. Uppsala, Uppsala University Press.
- Hackman, G. M. (1993). A comparison of three usability testing thinking aloud methods. *Paradigms*: xviii, 187 leaves
- Hak, T. & De Boer, F. (1995). Professional interpretation of patient's talk in the initial interview. In J. Siegfried (Ed), *Therapeutic and Everyday Discourse as Behavior Change*. J. Norwood. N. J. Ablex, 341-361.
- Hayes J. & Flower. L. (1983). Uncovering cognitive processes in writing: An introduction to protocol analysis. In P. Mosenthal, L. Tamor & S. Walasley (Eds), *Research I Writing: Principals and Methods*. New York: Longman.
- Henderson, R.D., Smith, M.C., Podd, J. & Varela-Alvarez, H. (1995), A comparison of the four prominent user-based methods for evaluating the usability of computer software, *Ergonomics*, 38, 2030-44.

- Jespersa. M.W.M, Steena, T, van den Bosb, Cor, & Geenenb, M. (2004). The think aloud method: A guide to user interface design. *International Journal of Medical Informatics*. 73 (795).
- Linell, P. (1998). Approaching dialogue: Talk, interaction and contexts in dialogical perspectives. London. Benjamins.
- Lutley, K. E., Campbell, S. M., Renfrew, M. R., Marceau, et al. (2008). How are patient characteristics relevant for physicians'clinical decision making in diabetes? An analysis of qualitative results form a cross-national factorial experiment. *Social Science and Medicine*. 67 (1391).
- Michigan Mental Health Act, 330 M.S.C. 1712 (1996)
- Milton, C. L.(2009). Information sharing: Transparency, nursing ethics, and practice implications with electronic medical records. *Nursing Science Quarterly*, 22 (3).
- Minarik, Melanie M. (2008). Building knowledge through sensemaking: Connecting the dots with the new information. (Doctoral dissertation, University of Nevada, 2008). *Proquest Dissertations And Theses* 2008, 139, 454.
- Mishler, E. (1984). The discourse of medicine: Dialectics of medical interviews. Norwood, NJ, Ablex.
- Nisbett, R. E. & Wilson, W.T.D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231-259.
- Pearpont, J. (1990). Room behind the piano: building Judith Snow's unique circle of Friends. Toronto, Inclusion Press.
- Phansalkar, S. (2007). Advanced methods for detection of adverse drug events in clinical notes. (Doctoral dissertation, University of Utah, 2007). Proquest Dissertations and Theses, 240, 124.
- Ravotas, D. & Berkenkotter, C. (1998). Voices in the text: The uses of reported speech in a psychotherapt's notes and initial assessments. *Text*, *18*, 211-240.
- Read, S., Dew, N., Sarasvathy, S. D., Song, M., & Wiltbank, R. (2009). Marketing under uncertainty: The logic of an effectual approach. *Wiltbank Journal of Marketing*, 73, 1.
- Rhodes, P., Langdon, M.; Rowley, E. Wright, J. & Small, N. (2006) What does the use of a checklist mean for patient-centered care? The example of a routine diabetes review (Electronic version), *Qualitative Health Research*, 16, 353-376.
- Rhodes, P., Small, N., Rowley, E., Langdon, E., Ariss, S., & Wright, J.. Electronic medical records in diabetes consultations: participants' gaze as an interactional resource (Electronic version), *Qualitative Health Research*, 18, 1247-1263.
- Rogers, A., Kennedy, A., Nelson, E. & Robinson, A.(2005). Uncovering the limits of Patient-centeredness: implementing a self-management trial for chronic illness. (Electronic version), *Qualitative Health Research*, 15, 224-228.
- Sarangi, S & Roberts, C.(1999). Talk, work and institutional order: Discourse in medical, mediation and management settings. Mouton de Gruyter.
- Schank, R. & Abelson, R. Scripts, plans, goals and understanding. (1977). Hillsdale, NJ, Lawrence Erlbaum. Smagorinsky, P. (1989). The reliability and validity of protocol analysis. (Electronic version) *Written Communication*, 6, 463-478.

- Smith, A. and Dunckley, L. (2002). <u>Prototype evaluation and redesign: structuring the design space through contextual techniques</u>. *Interacting with Computers*, 14 (6).
- Snow, J. (1992). What's really worth doing and how to do it: A book for people who love someone labeled disabled (possibly yourself). Toronto, Inclusion Press.
- Spinuzzi, C. (2001). Grappling with distributed usability: A cultural-historical examination of documentation genres over four decades. *Journal of Technical Writing and Communication*. *31*, 41-59.
- Tannen, D. (1993). Framing in discourse. New York, Oxford University Press.
- Tannen, D. & Wallet, C. (1993). Interactive frames and knowledge schemas in interaction: examples from a medical examination/interview. In Deborah Tannen (Ed), *Framing in discourse* (pp. 57-76). Oxford: Oxford University Press.
- Van Eyk, H. & Baum, F. (2003). Evaluating Health System Change-Using Focus Groups and a Developing Discussion Paper to Compile the "Voices From the Field" Qualitative Health Research, 13, 281-286.