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TOBACCO DEPENDENCE TREATMENT IN HOSPITALS
AN INSTITUTIONAL ETHNOGRAPHY

by

Gina Intinarelli

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Nursing

in the

GRADUATE DIVISION

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by
Gina May Intinarelli

“Thinking only begins at the point where we have come to know that Reason, glorified for centuries, is the most obstinate adversary of thinking”

Martin Heidegger

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TOBACCO DEPENDENCE TREATMENT IN HOSPITALS

Gina May Intinarelli

ABSTRACT

Every year, millions of people who smoke are hospitalized and a large percentage of them would like to quit. Despite the fact that an acute hospitalization provides an important opportunity to engage patients who smoke in effective evidenced-based tobacco treatment interventions, most hospitals do not offer this type of coordinated tobacco treatment for hospitalized smokers. The purpose of this study was to explore and describe the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco treatment programs in hospitalized settings. The specific aims were to: identify the organizational processes involved in managing and implementing these programs and explore how people working within these programs conduct their routine operations, evaluate the effectiveness of the program, and measure patient outcomes. Institutional ethnography guided the study conduct and hermeneutic phenomenology guided the data analysis. Data were collected via interviews with thirty three individuals involved in tobacco dependence treatment programs in hospital organizations known to have excellent programs. Study results included: structural, cultural and operational barriers to care delivery, e.g. temporal constraints, patient stigmatization, and excessive demand for services, the impact of smoke free campus policies on care delivery and how it changed the emphasis of care from cessation to withdrawal management, and the influence of the Joint Commission core measure mandate on resource allocation and the difficulty in providing care or follow-up after hospital discharge. These findings suggest a need for new ways of conceptualizing tobacco dependence care delivery in hospital settings that accounts for these barriers. A hospitalization has the potential be a positive influence in these patients' lives, but in order to effectively treat and care for hospitalized smokers, organizations must identify them, approach them with empathy, and ensure evidenced based interventions and sound follow-up care are provided.

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CHAPTER ONE: TOBACCO DEPENDENCE TREATMENT IN HOSPITALS

Introduction

Tobacco use is the leading cause of preventable illness and death in the United States; more than 443,000 Americans will die prematurely this year from smoking related illnesses (Centers for Disease Control, 2012). A report from the Surgeon General concludes that cigarette smoking causes harm to virtually every organ in the body and that many different forms of cancer including kidney, cervical, stomach and pancreatic are caused by smoking (U.S. Department of Health and Human Services, 2010). Every year, 3.9 million smokers are hospitalized at least 1 day (National Health Interview Survey, 2008) and 70% of them would like to quit (Orleans, Kristeller, & Gritz, 1993).

Despite the fact that an acute hospitalization provides a golden opportunity (Emmons & Goldstein, 1992) to engage smokers in effective evidenced-based cessation interventions, smoking status in hospitalized patients is consistently under-identified and patients who smoke are left untreated (Orleans et al., 1993; Rigotti, Munafo, Murphy, & Stead, 2001; Freund et al., 2008; Gollust, Schroeder, & Warner, 2008). In one study, just 42% of smokers were counseled to quit smoking and 14% were offered any pharmacological therapy by their physician (Freund et al., 2008). All healthcare providers, including nurses, have failed to adequately address the needs of hospitalized smokers (Goldstein et al., 1997).

The most effective smoking cessation interventions by health care providers incorporate assessing tobacco use, offering behavioral strategies for coping with nicotine withdrawal, recommending pharmacotherapy, and continuing support over time. These recommendations for interventions are explicitly outlined in a clinical practice guideline

entitled *Treating Tobacco Use and Dependence*. Furthermore, this guideline advocates the incorporation of a systematic way to identify and treat smokers in health care settings (Fiore et al., 2000; Fiore, Jaen, & Baker, 2008).

Research on the provision of tobacco treatment in hospitals has focused primarily on the outcomes of the interventions. There is little understanding of the organizational factors that facilitate or inhibit the creation, adoption, and implementation of tobacco dependence treatment in hospitalized settings. Understanding the organizational factors necessary to manage and sustain these programs may facilitate other hospital organizations in doing the same.

Study Purpose

The purpose of this qualitative study was to understand the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco treatment programs in hospitalized settings. The specific aims were to: 1) examine the organizational processes involved in the management and implementation of these programs; 2) identify perceived barriers and facilitators to care delivery; and 3) explicate participants' perceptions of the effectiveness of these programs.

Sensitizing Frameworks

A framework that integrated institutional theory and the social ontology of institutional ethnography was used to explore the organizational factors affecting the provision of tobacco treatment programs in hospital settings.

Ontology of the Social

Smith theorizes that knowledge is a construction of social forces; and the everyday activities of people going about inhabiting their world form the social (Smith, 2002; Smith, 2005). Smith's theory incorporates several important concepts: 1) that work processes are shaped and influenced by extra-local forces that are often unknown to the participant, 2) that the experiential knowledge of the participant can identify and reveal organizational discourses, 3) that the social organization of institutions is text-mediated and 4) that the ruling discourse in an organization is typically oriented towards management. The concepts of institutional ethnography help to locate the researcher within the organization and help direct the direction of the data collection.

Institutional Isomorphism

According to DiMaggio and Powell (1983), structural change among organizations is less influenced by competition and efficiency, but more influenced by three forms of isomorphism. They define three mechanisms of institutional isomorphic change as coercive, mimetic, and normative isomorphism. Coercive isomorphism occurs when outside organizations, such as federal or state regulatory agencies, mandate changes in the environment. Organizations feel pressure to adopt these mandates and regulations typically due to societal pressures and financial consequences. Mimetic isomorphism occurs during times of symbolic uncertainty or when goals are ambiguous; organizations adopt innovations modeled upon the behavior of other organizations that they view as successful in coping with this uncertainty. Finally, normative isomorphism is defined as a product of professionalization. Professionals tend to belong to the same organizations

and train in the same schools; they share knowledge and trends which tend to homogenize managerial structures over time. These isomorphic mechanisms may help to explain why hospitals tend to adopt or not to adopt certain innovations and procedures; and perhaps why hospitals as organizations have resisted incorporating tobacco treatment into routine patient care.

This theoretical work helps to conceptualize the enormous forces on healthcare organizations, both internal and external, that affect their managerial structure and function. Situating hospitals in this larger context illuminates how changes made at the systems level in healthcare environments must be multi-factorial and contextually based. Innovations in organizations often gather momentum, not necessarily from efficiency, but from the perceived legitimacy that adopting an innovation would confer upon the institution and this legitimacy, in turn, is based on institutional factors such beliefs and norms (Scott, 2003).

Significance of Problem

Medical institutions are recognized as ideal settings to initiate tobacco treatment interventions to nicotine dependent individuals, yet the prevalence rate of the provision of tobacco treatment interventions among hospitals is shockingly low across the United States. Interventions that were implemented varied widely according to patient population, resource allocation, dedicated staff to provide tobacco treatment care, teaching methods and outcome measurements (Curry, Orleans, Keller, & Fiore, 2008; Emmons & Goldstein, 1992; Freund et al., 2008; Rigotti et al., 2001).

The best evidenced based practices have been described in a set of clinical practice guidelines that have been shown to be effective in hospitalized populations (Fiore, Jaen, & Baker, 2008). However, translating these best practices into clinical care has been difficult and fraught with both ideological and organizational barriers (Glasgow, 2003; Titler, 2007; Zapka, Goins, Pbert, & Ockene, 2004). There is a paucity of research on the organizational factors that facilitate or inhibit the implementation of tobacco treatment programs into hospital systems (Curry et al., 2008; Fiore, Keller, & Curry, 2007). Comprehensive tobacco dependence treatment programs typically require significant institutional level support. Given the fact that tobacco related diseases remain the leading cause of death and health disparities in the United States (Garrett, Dube, Trosclair, Caraballo, & Pechacek, 2011), it is important to understand how hospital organizations incorporate these treatment programs into routine care delivery systems. Because implementation of tobacco dependence treatment programs in hospital settings potentially offers a benefit to patients who smoke, research is needed to understand the complexities of hospital based care and the importance of hospital leadership, management, and organizational culture on the implementation of these programs.

Research Questions

Key questions to be answered by this research included: What factors influence hospital organizations to implement tobacco treatment programs? How are these programs managed, funded, and staffed? Do tobacco treatment programs exist within a broader institutional milieu of tobacco control strategies? What are the barriers to implementation? How are performance and outcome measures tracked and reported? How do mandatory practice regulations influence tobacco programs? How do

employees, other health care professionals and patients respond to the program? Do such programs conflict or coordinate with managerial or other organizational imperatives, and if so, in what ways?

Content of Dissertation

This dissertation consists of three parts. The first part (Chapter 2) is a description of the methodology and procedures used to conduct this research. The precepts of interpretive analysis are described in conjunction with the conceptual model of Smith's 'standpoint' theory (Smith, 2005). In the second part of the study (Chapters 3, 4 and 5), three papers will focus on key findings related to the organizational barriers and facilitators of program implementation in hospital organizations known to have the best programs in the United States. This understanding allows us to see and understand more fully the organizational forces present in not only program implementation, but the acceptance and legitimacy of these programs in an acute care environment. Finally, a concluding chapter (Chapter 6) summarizes and synthesizes the work and makes recommendations for clinical practice and future research.

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CHAPTER 2: METHODS

Introduction

The question of how to incorporate tobacco treatment programs across healthcare organizations has become a subject of scientific concern (Fiore, Keller, & Curry, 2007). Few hospitals have well integrated systems of tobacco dependence treatment, whereby all patients are screened for tobacco use and offered treatment (Freund et al., 2008). Given that 4 million smokers are hospitalized for at least one day each year, it is imperative that we learn how to integrate this care into hospital systems. (National Health Interview Survey, 2008)

The care that is needed has been distilled into a set of clinical practice guidelines. Each intervention is based on sound clinical trials and has shown to be effective in hospitalized populations (Fiore, Jaen, & Baker, 2008). However, translating these best practices into clinical care has been difficult and fraught with both ideological and organizational barriers (Glasgow, 2003; Titler, 2007; Zapka, Goins, Pbert, & Ockene, 2004). There is a paucity of research on the organizational factors that facilitate or inhibit the implementation of tobacco treatment programs into hospital systems (Curry, Keller, Orleans, & Fiore, 2008; Fiore et al., 2007); translational scientists have recognized that research to identify organizational factors in these complex environments will require qualitative methods (Pearson et al., 2010; Sobo, Bowman, & Gifford, 2008; Titler, 2010).

Most studies that look at the translation of tobacco treatment guidelines into organizations are grounded in the tradition of rational-empiricist science, where answers are sought through participant surveys, quantitative analysis of administrative data, and

randomized controlled trials of interventions (Bolliger, van Biljon, Humair, El Fehri, & Cornuz, 2008; Duffy, Reeves, Hermann, Karvonen, & Smith, 2008; Freund et al., 2009; Katz et al., 2009; Vaughn et al., 2002), but this type of research is limited to quantifying phenomena, measuring attributes, and searching for cause and effect relationships (Denzin & Lincoln, 2005). What these approaches fail to do is take into account the situated nature of the hospital environment and the people working within it. Questions such as: What barriers were overcome? How were these programs sustained? What cultural factors were present in organizations that manage these programs successfully? What is needed is a methodological approach that will describe and explore these factors. Qualitative methods are best employed in complex human or social situations where theoretical explanations are insufficient and where the phenomenon of interest can be explored in detail (Creswell, 1998). In qualitative approaches, the researcher is not an 'objective' observer, but is situated within the world of the study. The goal is to interpret phenomena within the natural setting (Denzin & Lincoln, 2005).

The purpose of this chapter is to provide rationale and description of interpretive phenomenology and its intersection with institutional ethnography as methodologies used in this dissertation study. Specifically, this research used institutional ethnography to structure the data collection and used Heideggerian interpretive phenomenology as the method of data analysis.

Interpretive Phenomenology

The philosophical and analytic processes for this study were informed by interpretive phenomenology (Benner, 1994) and the framework for data collection and

research design was based on institutional ethnography (Smith, 2005). While these methods vary in the application of Heideggerian philosophical principles, they are based on the same understanding, that the researcher and participants are part of a larger social world and are co-constitutive of that world. Unlike positivist science, whereby the researcher is supposedly positioned as an objective observer and collector of facts, both Smith and Heidegger view the researcher as an integral and involved part of the research (Heidegger, 1962; Smith, 1987). The essence of the lived life must be taken into account in the human sciences. This is the project of qualitative inquiry. It is not to prescribe but to discover, describe, and illuminate hidden factors that are overlooked in positivist science. In this way, the investigator is a part of the study, embodied and present in a way that cannot be extricated out and accounted for (Dreyfus, 1983).

The Cartesian Problem

In the 1600's, Rene Descartes proposed that there was a distinction between the knowing subject, which was the rational consciousness of man, and a world of objects outside of himself (Descartes, 1637/1999; Rosenburg, 2005). He proposed that "man", ergo his mind or ego, could stand apart from the world and look at it with an "objective" point of view. In other words, man himself became the rational thinking central nucleus, where objects outside in the world were to be discovered and reflected upon (Guignon, 1983). It is these objective or brute data that positivist science is concerned with measuring. Positivists describe man as having the ability to stand objectively 'outside of himself' and view the world without bias or interpretation and making the matter of *being* a subject/object enterprise or an inner/outer experience (Dreyfus, 1991).

In the early 1900's, Martin Heidegger questioned the traditional philosophical epistemology for explaining human existence by asking: what is the meaning of being ? His argument was that modern Cartesian philosophical views of science failed to account for the embedded and situated nature of humans; Cartesian philosophy views man as a rational cognitive animal who “knows” through representations of the world “inside” his mind. (Heidegger, 1962; Dreyfus, 1991).

According to Heidegger, while man certainly has these important cognitive abilities, they do not account for the majority of “beingness”, which is conducted in an automatic and absorbed coping of everyday-ness. In this everyday-ness, man concerns himself with activities that matter to him and create who he is, as well as helps to create the world around him. In this way, traditional positivist science cannot capture the true essence of what it means “to be” (Heidegger, 1962; Blattner, 2006; Dreyfus, 1991).

Being-in-the-World

It is this embeddedness that phenomenology seeks to reveal. Meaning for humans is wrapped up in the concerned activities of their everyday lives, and these are further embedded within the cultural and social times into which humans are ‘thrown’. Heidegger uses the terms ‘thrown’ and ‘thrownness’ to mean that we are involved in our life and it means something to us, we are “subject to life” in that we cannot extricate ourselves from our circumstances; we cannot recede from being who we are. Therefore, there are certain limitations of how one can “be”. Our background, the epoch we were born into, our language, our circumstances, limit the way that one can possibly ‘be’. Heidegger’s main point is that man cannot be separated from the world form which he is

embedded. Man is always in the world, coping with it, and dealing with others. The positivist view that we can stand entirely apart from ourselves and objectively assess and study the world around us is a false concept (Heidegger, 1962; Gerner, 2007).

Heidegger claimed that if one were to study human beings, one would have to study them in an interpretive way, with context and meaning. The goal of interpretive phenomenology is to reveal the tacit knowledges and taken-for-granted assumptions individuals make while living in the world (Dreyfus, 1991). Heidegger's project then was to describe the architecture of the meaning of being-in-the-world. He begins by explicating the different modes of being. The first and most primordial mode of being, he argues, has to do with the being of 'equipment' or the everyday usage of the objects we use to navigate our daily lives. For example, when a student uses a computer, accesses materials in the library, reads papers etc., the student is absorbed in these tasks without stopping to reflect upon them. Heidegger argues that this is the most primordial and primary way of being. This absorbed coping is so much a part of who we are that we simply take it for granted and do not reflect upon these activities. Heidegger calls this way of being, the ready-to-hand mode (Heidegger, 1962; Blattner, 2006; Dreyfus, 1991).

However, when the student's computer crashes, suddenly it shows up for her as an obstacle to smooth functioning. This is the unready to hand mode that involves active and engaged problem solving. Later, the student may reflect upon the rupture it has caused her and think abstractly in a theoretical way about the experience of breakdown or coping with breakdown. This stopping and reflecting and 'thinking' about something is called the present-at-hand mode. It is when this concerned coping with everyday life is interrupted, such as when a problem presents itself, that we are suddenly aware of our

surroundings and equipment and stop to think and apply our cognitive abilities to solve the problem. Therefore, we are not actually divorced from or standing apart from our world, but we stop and reflect upon it (Heidegger, 1962; Dreyfus, 1991). Heidegger argues that this present-at-hand mode of being has been overrepresented as our way of being; he states that most of the time we are absorbed and coping in our world, not reflecting upon it, and it is this everyday coping that holds meaning for us, yet has been overlooked by philosophy and science (Blattner, 2006; Dreyfus, 1991).

Heidegger does not dispute that there is value in approaching science in this present-at-hand manner, as the scientific method has given rise to many advances in medicine, technology and other physical sciences. Heidegger's point is that when evaluating human responses, we cannot stand back and take the human out of his/her context and conversely we cannot, as researchers, expect to be able to study human beings without acknowledging the embedded nature of humans and ourselves in the world (Leonard, 1994).

Intersection with Institutional Ethnography

Dorothy Smith's methodology parts slightly from interpretive phenomenology in that she posits that the experiential knowledge of participants is studied not to understand the participants' personal experiences with the phenomena, but to locate and identify the institutional processes and discourses through the daily work processes of the participant (Smith, 2002). While Smith implicitly agrees with the need to study participants in context, her interpretive goal is different in that the interpretation of the data will always

lead back to the underlying discourse and processes of the institution as opposed to the lived experience of the participants (Smith, 1987).

Heidegger's Conceptual Model of Forestructure

There can be no tabula rasa for any researcher; a human being has a background of understandings, which are embedded cultural and experiential 'knowledges' that cannot be separated or sometimes even known to ourselves; for to even be able to conceive of a question to ask, one must already have an implicit understanding about the phenomenon (Dreyfus, 1991; Heidegger, 1962). Heidegger has termed this implicit understanding the fore-structure. The fore-structure is composed of three separate yet interconnected concepts: the fore-having, the fore-sight, and the fore-conception.

When we enter into an interpretation we enter with a "fore-having". This is the taken for granted background that frames the way we even begin to be able to pose a question and is often not known to us. It is not something we can reflect upon, as our life experiences have given us a certain way of understanding that we cannot necessarily make explicit.

The fore-sight is the fixed perception we bring to the "first cut" of interpretation, our understanding begins to stand out from the totality of our understanding in the fore-having. The foresight then is the first blush of interpretation that begins to emerge and take form.

The fore-conception then represents the limits of the interpretive understanding, for as the interpretation emerges and takes form it becomes subject to the known boundaries of the phenomenon. We already have a structure and some grasp in advance

about what the interpretation will reveal (Heidegger, 1962). This understanding of fore-structure is important to interpretive analysis because it demands the researcher account for and explore their own understandings of the phenomenon.

Forestructure and Standpoint

Smith has been interpreted to understand the fore-structure as coming to the research from a specific viewpoint, or as she terms it, standpoint; as a critical feminist and institutional ethnographer, she theorized that this standpoint or viewpoint is typically from the margins within an organization (Smith, 2002). To be able to identify and locate the standpoint, the researcher must utilize his/her own knowledge of the problem coupled with the experiential knowledge gained from the participants. Therefore, the researcher must be armed with a cultural and experiential point of view/standpoint in order to locate a position from which to begin the institutional ethnography (Devault, 2006).

Smith contends that it is this ‘fore-structure’ that the researcher uses to locate the problematic as well (Smith, 1987). For example, in this research it is through the researcher’s own experiences with implementing a system wide tobacco treatment program that she was able to identify the problematic, namely that there are organizational barriers to providing this tobacco treatment care. This initial fore-structure and knowledge is then coupled with others’ experiential knowledge of this problematic to help locate the problematic into a wider field, across and organization or to extra-local sites.

The Hermeneutic Circle

The hermeneutic circle is a process whereby the researcher enters into an analysis with a forestructure, a way of knowing that precedes theoretical reflection, but nonetheless is present. The researcher enters the data with this background and uses this background as part of the interpretive process, slowly building and spiraling in a circular process, adding to the fore-structure with new information and understandings and then comparing those new understandings and analyzing it against the larger whole (Dreyfus, 1991; Packer & Addison, 1989). As analysis proceeds, during this constant back and forth between the part and the whole of the data, further understandings emerge. Heidegger teaches us that we have a circularity of understanding, in that we interpret the data through our fore-structure and as understandings emerge, we are able to grasp the data and the phenomenon in a way that adds to our existing understanding. When a new understanding has reached a point where it seems as if no new data adds to the whole of our understanding, then the data is considered saturated (Dowling, 2004; Packer & Addison, 1989).

Rationale for Method

Other research methods were considered and rejected. Analysis of hospitals' discharge data and administrative databases were considered, but ultimately rejected due to the inherent problem with using administrative discharge data as a proxy for organizational factors (Van Manen, 1990; Vaughn et al., 2002). For example, Vaughn (2002) used the ratio of registered nurses to patient volume as a proxy measure for the macro-organizational variable of professionalism. The authors found that the degree of

professionalism was inversely proportional to the adoption of tobacco treatment programs in hospitals; hospitals with better nurse to patient ratios were less likely to adopt such programs, which the author admitted, seemed counterintuitive. This illustrates the difficulty of measuring cultural and conceptual concepts like professionalism as a quantitative variables (Damanpour, 1991).

Questionnaires and survey data were considered but rejected, due to the narrow scope of possible responses one can derive from this type of data. Surveys assume the participant's answer is something the researcher already has in mind; in an exploratory study, where a phenomenon of interest is vague or not well understood; surveys tend to limit the wide range of human responses that are possible. Survey data are best used when trying to quantify a known phenomenon or to measure the prevalence of a phenomenon. Participants are not able to convey meaning and context within a limited range of responses with little room for variation. Surveys also level the playing field in terms of context; for example the responses of a chief executive officer of a hospital may be very different from those of a nurse working at the same hospital.

All qualitative methods and traditions share two overarching ideas: first, they assume that the researcher is an integral part of the research process, and second, they emphasize that human beings in any environment must be studied in context; in fact, it is the situated nature of the participants which provides the insight and rich descriptions that qualitative inquiry elicits (Creswell, 1998).

Other qualitative methods were considered and could potentially result in useful studies of this problem. For example, grounded theory seeks to generate theory by

studying how individuals engage in processes around a phenomenon, thereby producing categories and variables that may be subject to further empirical testing (Creswell, 1998). Although it does not seek to generate theory, institutional ethnography offers a way to view institutions with a wide lens and may offer policy makers and other decision makers an insight into the organizational factors that one must contend with when trying to implement this care.

Since little is known about the organizational factors necessary to create, manage, and sustain system wide tobacco treatment programs in hospitals, this dissertation study used an exploratory qualitative approach in order to investigate and describe the organizational discourse and factors that were present in organizations that were known to have excellent tobacco dependence treatment programs. Institutional ethnography guided the data collection procedures and data were analyzed using interpretive phenomenology methodologies. These approaches were chosen because they intersect with each other on a crucial philosophical basis; namely, that the experiential knowledge of the participant can reveal hidden organizational discourses and thereby provide powerful insights into important phenomena.

Research Design and Methods

Study Purpose and Specific Aims

The purpose of this qualitative study was to understand the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco treatment programs in hospitalized settings. The specific aims were to: 1) examine the organizational processes involved in the management and implementation of these

programs 2) identify perceived barriers and facilitators to care delivery; and 3) explicate participants' perceptions of the effectiveness of these programs.

Study Design

Institutional ethnography guided the conduct of the study and interpretive phenomenology guided the analysis of the data. A prospective interpretive design was used and interviews of 33 individuals from 12 different hospital based tobacco dependence treatment programs and one regulatory agency were conducted.

Study Setting and Participants

Recruitment

A modified Delphi method was used to identify institutions that were recognized as having the best acute care tobacco treatment programs. Using tobacco control and smoking cessation list serves from GLOBALink and ATTUD (Association for the Treatment of Tobacco Use and Dependence), all experts and advocates on the list serves were invited to respond, and were asked, *Which institution or institutions would you consider to have the best state-of-the-art, inpatient, treatment programs for tobacco dependence?* Seven responses were received. Ten organizations and 9 participants were identified for through this method. Using snowball sampling, 3 more organizations and 24 more participants were identified.

Identified participants were then contacted either by e-mail or by phone and were offered an opportunity to participate in the study. Interested individuals discussed the goals and the specifics of the program with the researcher and if an individual chose to

participate, written informed consent was obtained prior to the interview. Human subject approval for this research was granted by the Institutional Review Board at the University of California, San Francisco (#10-02843). All participants (N=33) who were contacted consented to participate in the study.

Participants were included in this study if: (1) their institution had an organization-wide tobacco treatment program; (2) if they were directly involved with the provision of tobacco dependence care, either in an administrative or provider role. Recruitment continued until data were saturated. Data saturation occurred when no new information or themes appeared and data became redundant (Denzin & Lincoln, 2005).

Participants

The sample was comprised of 33 participants, 18 women and 15 men. Their roles were comprised of 5 medical directors (4 physicians and 1 psychologist); 7 program directors (responsible for administrative oversight of programs); 8 tobacco treatment staff (6 tobacco treatment specialists- with Master TTS certification¹, 1 respiratory therapist and 1 nurse practitioner) ; 5 analytic, educational or program support staff (2 outcomes directors, 1 educational director, 1 outreach director, 1 clinical nurse specialist); 4 hospital executives (1 chief medical officer, 1 chief nursing officer, 1 chief executive officer and 1 cardiac service line director); and 2 regulatory agency staff members (See Table 1). 20 participants completed interviews in person and 13 completed interviews over the phone. Interviews were 60-90 minutes in length. No participants were excluded from the study.

¹ There are several nationally recognized certifying bodies that provide Master Tobacco Treatment Specialist (TTS) certification; certification requires demonstration of a core set of competencies coupled with a proscribed amount of hours of direct counseling experience.

Table 1
Organization and Participant Characteristics

Organization Type and Size	Geographic Location	Smoke Free Campus	Participants Interviewed	Site Observation
Academic Medical Center Beds-1057	Northeast	No	Medical Director Tobacco Treatment Specialist Tobacco Treatment Specialist Data Director Health Coach/ Prescreener	Yes
Academic Medical Center Beds-1190	Northeast	Yes	Medical Director Outreach Director Outcomes Director	No
Academic Medical Center Beds-1100	Northeast	Yes	Program Director Tobacco Treatment Specialist Tobacco Treatment Specialist	Yes
Non-Academic Medical Center-600 Beds	Northeast	Yes	Program Director	No
Academic Medical Center Beds-925	Midwest	Yes	Program Director	No
Academic Medical Center Beds-2050	Midwest	Yes	Medical Director Program Director Clinical Nurse Specialist Tobacco Treatment Specialist Director of Education	Yes
Academic Medical Center Beds-471	Midwest	Yes	Medical Director	No
Regulatory Agency	Midwest	No	Associate Director of Quality Associate Project Director	No
Non-Academic Regional Health System Beds-4000	Northwest	Yes	Regional Program Director	No
Non-Academic Medical Center Beds-250	Northwest	Yes	Chief Executive Officer	Yes
Academic Medical Center Beds-560	Northwest	Yes	Medical Director Program Director Nurse Practitioner	Yes
Academic Medical Center Beds-575	Northwest	Yes	Chief Medical Officer Chief Nursing Officer Tobacco Treatment Specialist Program Director Cardiac Service Line Director	Yes
Academic Medical Center Beds-580	Southwest	Yes	Medical Director Tobacco Treatment Specialist	No

Setting

Participants who completed interviews in person were interviewed at their sites of work, in their offices or work areas. Interviews that occurred over the phone, were conducted at a time of participants' choosing, and all were conducted during business hours. Site visits and observations were conducted at 6 medical centers. Medical centers varied in size and were located throughout the United States, and one organization was located in Northeast Canada (4 in the Northeast, 4 in the Midwest, 4 in the Northwest and 1 in the Southwest). Medical centers were comprised of 9 academic medical centers and 3 non-academic medical centers (see Table 1).

Procedures

Data Collection and Analysis

Interviews

Thirty-three interviews were conducted between November 2010 and October 2011. Individual interviews were conducted with each participant either over the phone or in their work place at a time that was convenient for them. Interviews lasted 60-90 minutes. Using a semi-structured interview guide (Appendix B), open ended questions were asked to elicit narrative accounts of daily experiences about program implementation and tobacco dependence care delivery. Open-ended questions were asked to ascertain the history of the tobacco treatment program, programmatic and organizational successes and failures, and how the program was staffed, funded and managed. Participants were also encouraged to tell stories or narratives about their daily interactions and any issues they considered salient the research.

With the participant's consent, interviews were digitally recorded. Two participants declined consent to a digital recording, but did consent to an interview; one interview was not recorded due to a failure of the recording device. Detailed field notes were recorded during the interviews to identify any responses that required further clarification or exploration and to note any observations or insights during the interview.

Interviews were transcribed verbatim by a UCSF-approved professional transcriptionist who was familiar and experienced in working with qualitative studies. All interviews were listened to again to check accuracy of the transcript and to note any inflections of voice or language.

Site Observations

Site observations were conducted at 6 medical centers. General observations were conducted in participant work areas, patient care units and tobacco treatment program centers were conducted. Four participants, who delivered direct patient care, were observed conducting their work throughout the day; production of work queues, patient assessment and counseling, interactions with other providers and documentation of care were part of these observations. Two medical directors and one program director were observed leading organizational meetings about their programs. Where it was possible and feasible to obtain, patient teaching materials, program brochures, marketing materials, order sets, and organizational protocols were collected.

Data Analysis

Data Organization

All data were deposited into Atlas.ti Version 5.6.3, a software program for qualitative data analysis. Hard copies of transcribed interviews, field notes, consents and participant demographics were kept within a locked cabinet at all times except when they were being analyzed. Electronic data was stored on a secure and password protected server.

Interpretive Analysis

Data were analyzed using interpretive phenomenological methods. Interpretive phenomenological data analysis began with data collection and continued throughout the entire process of research and analysis (Mackey, 2005). Transcripts of the interviews were reviewed and compared with the digital recordings; initial interpretations were recorded in a research journal. Transcripts were loaded into Atlas.ti and were coded as themes emerged. Data, codes and themes were also shared and discussed with a group of interpretive researchers. Because interpretation began immediately, the researcher was alerted to emerging themes or critical issues that needed to be explored in subsequent interviews (Benner, 1994; Mackey, 2005). Benner (1994) describes the use of paradigm cases and thematic analysis as useful analytic tools when analyzing data in an interpretive manner to uncover the meaning embedded in narratives.

Paradigm Cases

A paradigm case is a case which illustrates the essence of a phenomenon of the lived experience and may be illustrative of themes from other narrative accounts (Benner, 1994). Often paradigm cases emerge and are used to illustrate concepts and to compare other participant narratives and experiences. Two paradigm cases were identified and

discussed with other interpretive researchers. Patterns of actions and behaviors of participants were used to compare and contrast to other cases and narrative accounts. These paradigm cases embodied the thematic elements of the research.

Thematic Analysis

Thematic analysis was accomplished by a holistic reading of all of the research text (interviews, field notes, organizational materials, analytic notes) and then a close reading of each interview, looking for particularly revealing or essential statements about the phenomenon (Van Manen, 1990). Analysis proceeded with the first reading of an interview to obtain a sense of the interview as a whole and of the overall theme. A second close reading of the text occurred with a research group consisting of doctoral students and a faculty member who was very experienced with interpretive phenomenological methods. This close reading of the data helped to reveal emerging themes which were then explored through the writing of interpretative memos and narrative analyses.

The last part of the analysis, which was the interpretation of the whole, required the researcher to move back and forth between individual interviews and the emerging interpretative analysis to elicit a thorough understanding of the phenomenon (Mackey, 2005; Packer & Addison, 1989). As the researcher continued with the analysis and close readings, inductive and “in-vivo” codes emerged. For example, several participants at different organizations described the concept of “wagging the bony finger” both literally and figuratively; this became a very important code as it related to the initial approach with the patient and finding related to the adaptation of the “quit message”.

Each code was a descriptive label that was applied to a section of the text. Atlas ti, a qualitative analysis software program, was utilized to help organize the codes and data. It is important to note that this software does not “analyze” or assign codes to data but simply helps the researcher to manage and organize the vast amounts of data and text that emerge from the research. During analysis the researcher is able to electronically link memos, codes or analytic pieces to specific portions of text from a variety of data sources.

As each piece of data was analyzed on its own and then analyzed against the emerging whole of the project, themes and codes were identified and linked across data sources. As analysis progressed, key themes were identified. The combination of multiple sources of data is a strategy that adds “rigor, breadth, complexity, richness, and depth” to any inquiry (Denzin & Lincoln, 2005 p.5).

Rigor and Reflexivity

Rigor and reflexivity are intertwined in that they are strategies to ensure that the researcher has not introduced a personal agenda or has failed to see the data apart from their own pre-suppositions. On the one hand the researcher is acknowledged to be an important part of the research, but on the other hand, can be criticized for having an agenda and not letting the data speak for itself (Alvesson & Skoldberg, 2000; Benner, 1994). A reflexive journal was maintained in order to explore any conclusions about the data. Assumptions and experiences were examined to determine if the data could have been interpreted another way (Denzin & Lincoln, 2005; Plager, 1994). Assumptions and conclusions were further explored and discussed by conferring with colleagues and the

interpretive research group, and discussing the emerging analyses with participants (Alvesson & Skoldberg, 2000; Koch & Harrington, 1998).

Limitations

This study has limitations, including those common to all qualitative studies. Our sample consisted of individuals who worked mostly at academic teaching centers; the scale and scope of these programs may not be achievable in smaller community-based hospital settings. Sites were chosen using a modified Delphi technique and snowball sampling, so while we purposely studied institutions known for excellence in tobacco treatment, other sites with excellent tobacco testament programs that were not included in the study might have had different experiences. Not all participants were observed or interviewed at their place of work, some interviews were conducted by telephone, and due to funding constraints not all sites were visited.

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CHAPTER 3: THE JOINT COMMISSION CORE MEASURE PROGRAM: HOW A “LOW-BAR” QUALITY MEASURE PROMOTED SYSTEM CHANGE

Introduction

Despite significant reductions in tobacco use over the past 20 years, tobacco-related diseases remain the leading cause of preventable morbidity and mortality in the United States (Centers for Disease Control and Prevention [CDC], 2011a). Smoking prevalence in the United States has plateaued at around 20%, which means that tobacco use causes more than 8 million people to be ill or disabled and 450,000 to die prematurely each year (CDC, 2011b). Not surprisingly, many of these smokers will require hospital care: 28-38% of hospitalized patients are current tobacco users (Pell et al., 2008; Schofield & Hill, 1999). Hospitalization offers an ideal opportunity to offer patients treatment for tobacco dependence. Research has shown that brief focused interventions, combined with medication and a follow-up plan, can increase cessation rates up to 30% (Rigotti et al., 2011). However, clinicians have done a poor job of offering evidence-based treatment and counseling for tobacco dependence to hospitalized patients (Emmons & Goldstein, 1992; France, Glasgow, & Marcus, 2001). This suggests that setting guidelines for individual, practice-level behavior may be insufficient in promoting systemic changes in how tobacco-dependent patients are treated in hospital environments. In 2002, the Joint Commission issued a national standard, part of its National Quality Core Measures, that required hospitals to provide counseling on smoking cessation and quitting to patients with a primary diagnosis of congestive heart failure (CHF), myocardial infarction (MI), or pneumonia (Joint Commission, 2004).

The purpose of this study was to understand how treatment for tobacco dependence is being provided by organizations who are regarded as having the best practices in the United States. Through ethnographic interviews, observations, and document review, we analyzed how these programs function within the hospital system and how local constraints and opportunities shaped implementation practices. This paper examines how institutions reputed to have excellent in-patient treatment programs for tobacco dependence view changes in Joint Commission requirements whose aim is to strengthen quality measures on tobacco treatment in hospital settings.

The Joint Commission

One of the most influential regulatory bodies for U.S. hospitals is the Joint Commission, a non-governmental, not-for-profit organization without whose accreditation hospitals cannot participate in the Medicare and Medicaid programs (Hermann, 1999). The Joint Commission ensures that hospitals follow institutional standards for safe and effective care, which range from basic cleanliness and safety practices to implementation of best-practice interventions. Hospitals that meet Joint Commission standards and obtain accreditation are able to participate in and receive reimbursement from Medicaid and Medicare (Viswanathan & Salmon, 2000). Although accreditation is voluntary, its linkage to Medicare reimbursement compels most hospitals to meet Joint Commission standards.

The Joint Commission has been instrumental in promoting tobacco control policies and smoking cessation best practices in U.S. hospitals. For example, in 1992 it mandated that all hospitals be 100% smoke-free (Gardner & Burns, 1993); by 1994, more

than 96% of hospitals had complied with the regulation, and more than 60% had imposed stricter measures than the commission had mandated (Longo, Brownson, & Kruse, 1995; Longo et al., 1998).

National Quality Core Measures

Cardiovascular disease and pneumonia are among the top five reasons why people are hospitalized (DeFrances & Hall, 2007). In 2002, recognizing the importance of smoking cessation in improving health outcomes for patients who had experienced CHF, an MI, or pneumonia, the Joint Commission integrated tobacco cessation counseling with evidence-based interventions, such as medication administration and discharge teaching, as a performance measure of quality for all patients discharged with these diagnoses (Joint Commission, 2004; Landis, 2000). Hospitals are charged with collecting and reporting these data, known as the Core Measures; the results are publicly available (Laschober, Maxfield, Felt-Lisk, & Miranda, 2007).

The smoking cessation measure stated that any patient aged 18 or older with CHF, an acute MI, or pneumonia who had smoked within the past year should be advised or counseled to stop smoking and that intervention should be documented in the medical record (Joint Commission, 2004). The measure did not specify the type of counseling or advice, did not recommend pharmacotherapy or follow-up care, and was not aligned with existing practice guidelines that call for implementation of all of the aforementioned interventions (Fiore et al., 2000). Thus, although the Joint Commission's intention of addressing tobacco use in these populations was laudable, implementation of its measure often comprised a wide range of activities in actual practice. For example, Ginn, Cox,

and Heath (2008) described the process of implementing a tobacco cessation protocol in an academic teaching center. Because their hospital did not meet the Joint Commission's performance standard (90% compliance), the authors commented on the documentation "work-around" that ensued:

To address this, our hospital added preprinted tobacco cessation education to the backside of patient discharge instructions; the preprinted instructions ensure that all patients receive passive education at a minimum. Since the addition of preprinted tobacco cessation education to discharge instructions, hospital administrators report they are now at 100% compliance with the JC [Joint Commission] tobacco cessation education core measure in each diagnostic category (p. 277).

This artifice to claim a score of 100%, without ensuring that care and treatment were actually provided, was unfortunate; research has shown that passive education/counseling or advice to quit is not effective in tobacco cessation (Fiore, Jaen, & Baker, 2008).

Despite these shortcomings, few hospitals had an organized, efficient system of identifying and treating smokers before the Joint Commission's Core Measures were promulgated (Freund et al., 2008). Although initial reports suggested that the dispensation of smoking cessation advice in hospitals had improved, performance scores for this measure suggested that this reflected mere documentation practices as in the example above; as a result, the measure was retired as of December 31, 2011 (Fiore, Goplerud, & Schroeder, 2012).

Therefore, since January 2012, the Joint Commission no longer mandates that hospitals provide smoking cessation advice or counseling to patients who have been hospitalized with CHF, an MI, or pneumonia. According to the Joint Commission, the

smoking cessation performance measure does not meet the standard for public reporting as an “accountability measure” (Joint Commission, 2011). The Joint Commission defines an accountability measure as one that meets four criteria. First, the measure must be based on a strong foundation of research. Second, it must accurately document the delivery of care. Third, the measure should address a process that is most proximate to the outcome. And finally, the measure should have minimal or no unintended consequences (Chassin & Loeb, 2011; Chassin, Loeb, Schmaltz, & Wachter, 2010).

In place of the Core Measures requirement, the Joint Commission introduced a new measure for smoking cessation performance, which, if adopted by hospitals, requires that they screen every patient for tobacco use, provide counseling and medications, arrange for follow-up care, and assess their status after discharge (Fiore et al., 2012; Joint Commission, 2010). The implementation of this measure could essentially change how hospitals deliver treatment for tobacco dependence as this measure is more closely aligned with the recommendations of the guidelines (Fiore, Jaen, & Baker, 2008). However, unlike the earlier mandate, these more rigorous performance measures are optional and not linked to Medicare reimbursement; thus, are unlikely to be adopted by many hospitals (Fiore et al., 2012)

This paper presents the results of a qualitative study, the purpose of which was to explore the institutional processes and organizational factors that contribute to successful inpatient tobacco control programs. We argue that the experience gained from successful treatment programs for tobacco dependence suggests that the previous Joint Commission measure, which was weak and implemented unevenly, caused hospitals to redefine their institutional role in addressing tobacco dependence. However, replacing the weak but

mandatory measure with a strong but optional one may create negative consequences in hospitals' institutional support for tobacco dependence treatment.

The Study

Research Design and Methods

Study Purpose and Specific Aims

The purpose of this qualitative study was to understand the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco treatment programs in hospitalized settings. The specific aims were to: 1) examine the organizational processes involved in the management and implementation of these programs 2) identify perceived barriers and facilitators to care delivery; and 3) explicate participants' perceptions of the effectiveness of these programs.

Study Design

Institutional ethnography guided the conduct of the study and interpretive phenomenology guided the analysis of the data. A prospective interpretive design was used and interviews of 33 individuals from 12 different hospital based tobacco dependence treatment programs and one regulatory agency were conducted.

Study Setting and Participants

Recruitment

A modified Delphi method was used to identify institutions that were recognized as having the best acute care tobacco treatment programs. Using tobacco control and

smoking cessation list serves from GLOBALink and ATTUD (Association for the Treatment of Tobacco Use and Dependence), all experts and advocates on the list serves were invited to respond, and were asked, *Which institution or institutions would you consider to have the best state-of-the-art, inpatient, treatment programs for tobacco dependence?* Seven responses were received. Ten organizations and 9 participants were identified for through this method. Using snowball sampling, 3 more organizations and 24 more participants were identified.

Identified participants were then contacted either by e-mail or by phone and were offered an opportunity to participate in the study. Interested individuals discussed the goals and the specifics of the program with the researcher and if an individual chose to participate, written informed consent was obtained prior to the interview. Human subject approval for this research was granted by the Institutional Review Board at the University of California, San Francisco (#10-02843). All participants ($N=33$) who were contacted consented to participate in the study.

Participants were included in this study if: (1) their institution had an organization-wide tobacco treatment program; (2) if they were directly involved with the provision of tobacco dependence care, either in an administrative or provider role. Recruitment continued until data were saturated. Data saturation occurred when no new information or themes appeared and data became redundant (Denzin & Lincoln, 2005).

Participants

The sample was comprised of 33 participants, 18 women and 15 men. Their roles were comprised of 5 medical directors (4 physicians and 1 psychologist); 7 program

directors (responsible for administrative oversight of programs); 8 tobacco treatment staff (6 tobacco treatment specialists- with Master TTS certification², 1 respiratory therapist and 1 nurse practitioner) ; 5 analytic, educational or program support staff (2 outcomes directors, 1 educational director, 1 outreach director, 1 clinical nurse specialist); 4 hospital executives (1 chief medical officer, 1 chief nursing officer, 1 chief executive officer and 1 cardiac service line director); and 2 regulatory agency staff members. 20 participants completed interviews in person and 13 completed interviews over the phone. Interviews were 60-90 minutes in length. No participants were excluded from the study.

Setting

Participants who completed interviews in person were interviewed at their sites of work, in their offices or work areas. Interviews that occurred over the phone, were conducted at a time of participants' choosing, and all were conducted during business hours. Site visits and observations were conducted at 6 medical centers. Medical centers varied in size and were located throughout the United States, and one organization was located in Northeast Canada (4 in the Northeast, 4 in the Midwest, 4 in the Northwest and 1 in the Southwest). Medical centers were comprised of 9 academic medical centers and 3 non-academic medical centers (see Table 1).

Data Analysis

Using inductive coding of transcribed interviews, the authors reviewed whole-

² There are several nationally recognized certifying bodies that provide Master Tobacco Treatment Specialist (TTS) certification; certification requires demonstration of a core set of competencies coupled with a proscribed amount of hours of direct counseling experience.

coded text segments and themes and refined them by comparing data across individuals and institutions and across and within thematic categories. Work processes were traced to extra-local sites using documentary data to track institutional responses to regulatory mandates and quality measures. Rigor was enhanced by triangulating data sources (Denzin & Lincoln, 2005), sharing preliminary findings with participants and inviting comment (Koch & Harrington, 1998), and reviewing and discussing raw data and emerging accounts with a group of interpretive researchers. Atlas.ti, a qualitative software program, was used for data organization and management.

Findings

Participants reported that with the implementation of the Joint Commission's Core Measures program, significant organizational attention was devoted to meeting its goals. The Core Measures mandate enhanced the development of tobacco dependence treatment programs by increasing monetary and personnel resources, elevating their priority within the organization, and enhancing tobacco's clinical relevance to hospital leadership and health care professionals.

Elevated Organizational Relevance of Tobacco Dependence Treatment

The new mandate gave advocates of tobacco dependence treatment justification to seek the leadership and resources of other clinicians. Interviewees recounted that the implementation of the Core Measures was the primary impetus in creating or expanding their institution's acute care treatment programs for tobacco dependence. As the medical director of a large academic medical center noted:

That would be the core measures, and that's probably what got everyone's attention..... and then they looked to the clinical nurse specialist and said, "What do we have to do to meet these core measures and how can we do it?" Which is how the protocol came into place with the core measure.

Although researchers or passionate clinicians may have performed these services to some degree previously, the Joint Commission's Core Measures mandate gave these programs organizational priority.

Participants noted that executive leaders, aware that their institution would be compared with others, often commented that they had "ego at risk," or wanted to "avoid embarrassment," or not be seen as a "mediocre performer" on these quality measures. The onus to perform well on this publicly reported measure was important to hospital administrators and clinical leadership because their reputations were at stake. As one medical director observed:

So the stimulus here was when the Joint Commission adopted the quality measures. You know about the quality measures? ... As you know, it's a low bar. But what happened was that - and the data were publicly reported. Then there was some thought that it may affect reimbursement.....The CEO had ego at risk and he had potential money at risk and so they actually cared about the results, because a lot of places didn't care."

A chief medical officer commented on the importance of improving the quality of the care and commented on being a mediocre performer, ".....our culture reflected that we were a mediocre performer [on core measures], I wanted that challenge laid out to the staff and the physicians..."

Because smoking cessation was now thrust into the organizational “quality spotlight,” it was given attention at the organizational level in a variety of forums and meetings. As one chief medical officer commented:

In this position (chief medical officer) I can push at every meeting....I now give what I call the “harm report” at the manager’s meeting, at the executive medical board and all of the leadership meetings that I go to.....and I believe our culture has changedI mean, I think people really do feel a different level of responsibility over things they considered trivial before.

Thus, the Core Measures mandate allowed organizations that were willing to invest resources in developing expertise to have favorable visibility at an intra-organizational level. Because organizations chose to create more comprehensive and meaningful programs, their work seemed to change institutional attitudes toward tobacco dependence treatment. A medical director stated:

Hospital administration and physicians see it [tobacco dependence treatment] as very important. More and more often one of us, a counselor or me, will be in the room and a physician will come in and say, “Oh, this is important,” It lets the patient know they think it is important as well. I think they [the physicians] are seeing it as a vital service and something that they’re glad someone else is taking care of.

Engaging staff in the identification and referral processes also helped to change their understanding of this work’s importance and the effect it could have on patients’ lives.

One nurse explained it this way:

The nurses have done an exemplary job. As with the key to anything I think if they’re in on the groundwork and they have ownership and they understand the difference it’ll make in the lives of their patients, they’re willing to expend the time and energy.

Although the Core Measures mandate only required that hospitals show that some form of smoking cessation advice or counseling had been offered to patients with a diagnosis of CHF, an acute MI, or pneumonia, these programs offered comprehensive interventions that included pharmacotherapy, focused and relevant bedside counseling, follow-up appointments and/or a referral to outside resources, and oversight that patients continued to receive medication for nicotine dependence upon discharge.

Leveraged Medical Record Technology

Because the Joint Commission required that all patients admitted with a primary diagnosis of CHF, MI, or pneumonia had to have smoking cessation advice or counseling documented, the first challenge confronting health care organizations was how to reliably identify patients who smoked. Martha, a physician researcher and the medical director of her organization's tobacco dependence treatment program, reflected on the initial difficulty of this task, as the identification of smokers upon admission had been removed from admitting protocols due to the indoor smoke free policies implemented in 1992:

We needed to build a way to identify smokers, which was the hardest thing actually, it is a funny story actually. When I first did my research in the late 80's, we identified smokers upon admission because the admission officers identified smokers to try to place patients into smoking or non-smoking rooms. When we went smoke free in 1992, they took it out of the admissions workflow and then we no longer had a way to identify smokers.

In many organizations, the Core Measures and the transition to electronic medical records were implemented simultaneously, which both complicated and facilitated development of effective treatment programs for tobacco dependence. A medical director commented on his institution's system for identifying core measure patients:

One of the first things that we were able to get changed in our system was including smoking as a vital sign. It's a "yes," "no," and "former" are the three options that can be put into our electronic record. All the ones that came in with a "yes" and also with a diagnosis that qualified for that core measure would be chosen for intervention.

The opportune advent of electronic documentation enabled clinicians treating tobacco dependence to embed important treatment and identification fields in the medical record, thus facilitating implementation of the Core Measures mandate. However, many participants recounted that it took years to align the electronic medical record system with the needs of the treatment service so that patients were identified properly, work was documented, and data could be extracted from the system. One program director noted, “When we first started the service, Epic, the new electronic medical record, was six months from going into effect - this was a number of years ago - and so it had been built but this wasn't in it. You just can't go in and change Epic without everybody on the planet weighing in on it”.

The electronic mechanisms for patient identification and referral helped to organize and direct the workflow for the tobacco treatment counselors and specialists like other specialty consultants. As an administrative director explained:

We are just like a typical service. We are on service for shifts 365 days per year. In the morning we get two reports- we have an electronic medical record and then we have an electronic referral system. So when clinicians are doing the history and physical or the nurse is doing a nurse's assessment, if they find they are a tobacco user and if they have been a tobacco user within the last 12 months, they're supposed to put in a referral. So in the morning the counselors go to the office, they look at the number of referrals that we have for the day and then they go out to see the patients to do a brief bedside intervention.

Including tobacco dependence treatment in the medical record not only enabled participants to identify their patients and organize their workflow but also demonstrated the efficacy and legitimacy of their work, creating tobacco dependence treatment as a specialty service on par with others. A medical director elaborated:

They [the tobacco treatment counselors] were writing in the medical record just like anybody else did, we had special letterhead-in the old paper record we had a special sheet, it had a little cigarette with the circle and the rod through it, and in the electronic medical record we have our own notes, where the counselors write notes.....we put them right in the middle of the medical record, so that gives it legitimacy and credibility with everyone.

In designing the electronic medical record system, participants also took the opportunity to add other elements of tobacco treatment that they would like to address eventually, like secondhand smoke and interventions with pediatric populations. A medical director commented in this way:

On a hospital system-wide they're doing acute care documentation. It's a big enterprise movement where eventually - I mean it will be years but all of the hospitals will be using the same in-patient documentation, so the medical record will be all electronic. So we have put our smoking status questions in there and second-hand smoking status questions on there. It's on the nursing admission but also the physician admission note. That will be carried forward but you'll be able to document but it will be - that history, you'll be able to see history.

In addition to identifying smokers and organizing workflow, the data provided feedback on performance to hospital leadership and clinicians in other fields. It also made tobacco treatment more relevant and important, even to those not directly involved in its delivery. Julie, a program director, was excited that others in the organization were going to be compelled to participate in tobacco dependence treatment:

When it gets built into the performance measures of the hospital it's something that even those who might not be interested in it, will purposely do their part, because they don't want it to reflect poorly on their group.

In addition, capturing data electronically made it easier to measure process outcomes, which provided the feedback necessary to sustain work practices and improve performance. One medical director felt that his program was successful because of the performance reporting the electronic system facilitated, "One of the critical factors in terms of getting institutions to keep on doing things with smoking cessation and sustainability is giving them feedback on performance."

George, a program director, reflected on how the importance of quantifying the number of smokers seen and counseled as well as the volume of pharmacotherapeutic agents prescribed to patients was critical elements to demonstrate "program reach" and effectiveness, even beyond the core measure patient population:

We want to be able to track how many patients we're seeing. As a system, we want to track how many referrals we're making.....We want to be able to show the hospital or the leadership what kind of an impact we're making every year.

Organizations with mature electronic medical record systems relied on "real time" prompts or practice alerts to ensure that evidence-based interventions were offered to patients as needed.

The ultimate thing that the electronic medical record provides is real time quality care alerts....so that a patient who needs smoking cessation, who's been identified as somebody who needs smoking cessation services, and hasn't received them yet, an alert pop-ups and they get it. The computer, in a real time way, takes the

information that's in there and alerts you to what you need to do today, not in retrospect to what you should have done. (Andrew, chief medical officer)

Thus, the Joint Commission's smoking cessation mandate for core measure populations led to significant infrastructure and delivery system changes for patients who smoked, eventually including patients beyond the mandated core measure populations.

Expansion of tobacco treatment programs

All of the organizations in this study expanded their program beyond the core measure populations (e.g. patients with MI, CHF or pneumonia). Participants noted that the organizational focus on tobacco treatment was a natural platform for expanding this care to all patients admitted with a smoking diagnosis. Jill, a very experienced tobacco treatment specialist recounted how her organization made the transition from seeing only the mandated core measure patient population to seeing all patients identified as smokers:

Well, once we started using the electronic system, any person who smokes is documented and this generates a referral. We used to prioritize the core measure patients but now we see them all; I just trained another respiratory therapist.

To treat this increased volume of patients, organizations devised several implementation schemes, for example, embedding the work within existing departments like respiratory therapy, hiring people devoted to the work, or marrying the clinical work to robust research units. A tobacco treatment specialist recounted the increase in the hospital's referral volume and its organizational commitment to treat every patient: "For the outpatient program, it's 30 to 40 patients per month. In-patient is much larger, much

larger. Its average is 150 patients per month.....our motto is: ‘*every patient, every visit*’, because they’re documented as a smoker.”

However, constant vigilance was required to ensure that electronic systems and clinician training kept pace with the expanded patient populations, as one administrative director explained:

Being a teaching hospital, every year we lose 1,500 physicians and 1,500 new ones come in. So it’s always ongoing and refining and setting up a way to really make sure that our service is integrated into all of the communications and trainings of the clinicians, including nursing.

Participants conceded that consulting on every patient who was identified as a smoker was simply unachievable. Barriers to delivering treatment were constant: short lengths of stay, unavailability of patients when they underwent testing, and the limitations of a staff that worked mostly during business hours (see 5A’s Paper). Even when staff were embedded within 24 hour services like respiratory therapy, the ability to see every smoker, to offer treatment, to document and arrange for follow-up was nearly impossible. In one program, for example, despite having a staff of 11 full-time counselors, the administrative director commented on the inability to see all patients who smoked: “Last fiscal year we saw almost 7,200 patients, but I think that’s probably about 60-65% of who we should be seeing.”

One of the more interesting unintended consequences of the weak, mandated, Core Measures program was that the benchmark measure was artificially inflated because most hospitals "gamed the system" by using a preprinted admission or discharge form with an “advice to quit” statement embedded in the form. Despite their robust programs

and commitment to providing comprehensive care, several participants in this study also admitted to gaming the system to inflate compliance with the standard. A medical director explained it this way:

At least from our perspective, the core measures and our performance on the core measures is critical, even though I know a lot of hospitals, even ours, games the system by just putting something on a discharge form saying, 'If you smoke, we advise that you quit' and that meets the measure.

Unfortunately, the non-specificity of the previous measure made it impossible for the Joint Commission to differentiate those institutions that were gaming the system with passive compliance from those who were delivering high quality care. A Joint Commission project manager commented on the old measure:

That was not a particularly rigorously defined measure in terms of how we defined counseling.....We had some organizations that really went to town on it and provided all kinds of really good smoking cessation counseling and access to medication, quit aids and counseling programs and then we had others who checked a box when the physician said, 'You really should quit smoking'.

Recognizing that hospitals were gaming the system, the Joint Commission removed the smoking cessation metric from the Core Measures program. The new, optional measure was designed to make it more difficult to game the system and to ensure that hospitals were actually delivering evidence-based care. One of the experts on the Joint Commission panel that crafted the mandate explained:

Our challenge was to create an evidence-based robust set of measures that sees the hospital visit as an opportunity to promote tobacco dependence treatment and so we built it around the 2008 PHS [Public Health Service] guidelines and mandated what the guideline states is the most effective treatment and that is that everybody should be offered and urged to use both counseling and medications to quit and that there be some follow-up post-

hospitalization. So essentially that's what the measure that we recommended will include. There's universal asking, there's universal offering and urging of use of these measures and then finally that there is some post-hospitalization follow-up. Of course, this is one of a series of optional performance measures, optional in the sense that hospitals have to pick a few of them out of a group of ten or so.

The creation of new, stronger, and more specific tobacco treatment measures is an encouraging development. However, as long as they are optional, evidence suggests that few hospitals will adopt them. A medical center administrator explained how her organization makes decisions on resourcing and supporting programs:

I think either programs have to add revenue or they have to meet some mandatory regulation. As long as something isn't too costly, if it's a real patient satisfaction issue, you might be able to get it, or if it is a patient safety kind of thing, you might be able to get it through, but it usually comes down to a revenue or a regulation.

Because organizations prioritize programs based on their potential to raise revenue or comply with governmental regulations and because even top performing programs cannot reach all hospitalized smokers, the adoption of the optional Joint Commission tobacco dependence treatment measures created concern among these participants that these now-effective programs might be put at risk. When asked whether her hospital would adopt the Joint Commission's new measure set³, a program director at a large university health system was unsure which direction the medical center would take and was concerned with meeting the measure in its current form:

³ At the time of this interview, it had not yet been determined whether the proposed Joint Commission tobacco dependence measure set would be mandatory or optional.

It will help me if it's mandatory, then I know I've got the support of clinicians and they'll refer patients to our program, but I don't know how many I'll miss. I'm actually concerned about the way the new measure is set up, if we have to do 100% , then we agree to do 100% and I'm concerned about how we will get there and then we will be out of compliance with a measure that we chose to be in compliance with. I have actually not heard what we will do. The medical center may not decide to choose the optional measure – they may fire us all, who knows?

Discussion

Ingram and Schneider (2010) contend that policy serves both material and symbolic or interpretive purposes. This study suggests that the Joint Commission's initial mandated measure, which was admittedly weak, may have stimulated some hospitals, who were concerned about their reputation and comparative public performance, to make significant material changes in inpatient treatment of tobacco dependence.

Unfortunately, the non-specificity of the measure made it impossible for the Joint Commission to readily differentiate institutions who were earnestly providing comprehensive, evidence-based care from those who were merely gaming the system with passive compliance. The creation of new, stronger, and more specific tobacco treatment measures is, therefore, an encouraging development. However, as long as the new measures are voluntary, many hospitals will choose not to adopt them. In a recent editorial, the authors state that hospitals have a moral imperative to adopt the new Joint Commission smoking cessation measure, but admit that “the measure set is strategically flawed because its adoption is optional” (Fiore et al., 2012, p. 2). However, given the constraints to provide this care effectively and consistently in this environment, this study

suggests that even a mandatory measure would be difficult for most hospitals to achieve.

Clearly, the Joint Commission's initial core measure requirements for smoking cessation had a demonstrable effect on the hospitals studied. Although the measure was weak and unevenly applied, it spurred the growth of treatment programs for tobacco dependence by focusing organizational attention on publicly reported outcome metrics, stimulating changes in electronic health records to incorporate the assessment of patient tobacco use, and expanding these interventions into other patient populations.

For the participants of this study, the Joint Commission's Core Measures program and mandate were the impetus for the development and expansion of tobacco dependence programs. The imperative to perform well on this publicly reported measure drove these organizations to commit human and technological resources to effect organizational change. Although many of the participants had existing research centers and/or robust outpatient treatment programs, they acknowledged that the Joint Commission's Core Measures program was critical to the development and growth of their inpatient programs and participants worried that retiring the Core measures would symbolically retire tobacco dependence treatment as an organizational priority.

The patients targeted by the Core Measures program account for a high volume of the diagnoses seen in hospitals (Williams, Koss, Morton, Schmaltz, & Loeb, 2008). Removing the smoking cessation metric from the outcomes measured to assess quality care for these patients suggests that a patient's smoking behavior is not and not important to patient care, despite the fact that tobacco dependence treatment is the one of the most

clinically and cost-effective interventions for any patient with a diagnosis of CHF, MI, or pneumonia (Glantz & Gonzalez, 2012).

Our finding that the Joint Commission mandate spurred organizational change in tobacco dependence treatment is consistent with the findings of an exploratory study (Williams, Schmaltz, Morton, Koss, & Loeb, 2005), whose authors described the wide range of practices that organizations had used in implementing the Core Measures program and noted that the difference between “high rank and low rank” organizations was the varying levels of resources devoted to meeting the measure. This study also reinforces the findings of Campbell, Pieters, Mullen, Reece, and Reid (2011), who found that the social, political, and economic context are important organizational factors in the sustainability of these types of programs. In addition, they emphasized that “champions” are important in these endeavors to overcome resistance and gain acceptance of new delivery models.

Further research is needed to assess the consequences of removing the smoking cessation intervention from the Joint Commission’s core measure set and to better understand the organizational factors that facilitate or hamper adoption and sustainability of such programs.

Limitations

This study has limitations. Its exploratory nature and the purposive sampling of a small number of hospitals and key individuals means that our findings cannot be generalized. A larger study that involved more hospitals might lead to different conclusions. Our data do not allow conclusions about the sustainability of best-practice

interventions or a causal connection between changes in Joint Commission requirements and the prioritization of tobacco dependence treatment. However, our data underscore the importance of mandates in stimulating organizational change.

Conclusion

Our study shows that highly regarded hospitals devoted resources, at all levels of the organization, to mandated programs. Because the Joint Commission's mandate on smoking cessation treatment has ended, many organizations may no longer devote resources to provide tobacco dependence care to patients with the primary diagnoses of CHF, MI, or pneumonia. Although many hospitals may have gamed the system (Levy et al., 2011), our study revealed that other organizations implemented comprehensive, evidence-based, treatment interventions for tobacco dependence based on the mandate. As our study showed, organizational priorities for the expenditure of money and allocation of resources are often based on the need for revenue or the need to comply with a governmental regulation. No longer mandating care for tobacco dependence may create unintended consequences: Some hospitals may significantly reduce funding for treatment programs for tobacco dependence; others may not develop them at all.

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CHAPTER FOUR: “WE’RE STILL DOING THE 5 A’S, BUT IT’S JUST WITH A TWIST”: IMPLEMENTING TOBACCO DEPENDENCE BEST PRACTICE IN HOSPITALS

Introduction

Tobacco dependence treatment delivered in hospital settings is based on the paradigm of using the 5 A’s as a guidelines for practice, yet it seems that the 5A’s may not be ideally suited for the hospital environment as one program director succinctly summarized:

You take something like the 5 A's – the 5 A's, people talk about it in our field like it is something and it isn't a something, it's sort of a philosophy. Ask, advise, assist, arrange; that's not a program because you take all that stuff and then you say, "Okay, so how does this work? Where does it fit in the system? Who should be doing this? What should be the outcome if we do this? What should be the clinical outcome?" There are no guidelines for that. So healthcare providers are left sort of scratching their heads and figuring out that, yes, this is a good thing but how do we know if we're doing what we're supposed to? What's the outcome for the patient? Are we looking for someone who stops smoking for their entire lifetime? Is that the outcome that we're supposed to have? Is that the only outcome we're supposed to have?

Acute hospitalization has been well-recognized as an ideal time to engage a patient who smokes in tobacco dependence treatment (Emmons & Goldstein, 1992; Orleans, Kristeller, & Gritz, 1993; Rigotti, Munafo, & Stead, 2008; Stevens, Glasgow, Hollis, Lichtenstein, & Vogt, 1993). Bedside counseling, coupled with cessation medications and follow-up care, has been shown to improve long-term cessation rates (Rigotti et al., 2008). The approach most commonly used is called the *5 A's*, which is based on a clinical guideline for treating tobacco dependence developed by the United States (U.S.) Department of Health and Human Services (Fiore, Jaen, &

Baker, 2008). The 5 A's recommend that every patient who smokes should be *asked* about tobacco use, *advised* to quit smoking, *assessed* for readiness to quit, *assisted* if interested in quitting, and have follow-up care *arranged* after a provider visit or hospitalization (Fiore et al., 2008). The clinical guideline, which specifically targets health care delivery systems, recommends the systematic identification of smokers, educational support for clinicians, staff dedicated to the delivery of tobacco dependence interventions, and organizational policies that promote this work (Curry, Keller, Orleans, & Fiore, 2008; Fiore, Keller, & Curry, 2007; Fiore et al., 2008). However, despite tobacco's known harmfulness and the documented effectiveness of these interventions, this care is not routinely provided in most hospital settings (Levy, Kang, Vogeli, & Rigotti, 2011; Tong, Strouse, Hall, Kovac, & Schroeder, 2010).

The aim of this study was to understand how organizations known for having the best practices in the United States provide treatment for tobacco dependence. Through ethnographic interviews, observations, and document review, we examined how these programs functioned within the hospital system and how constraints and opportunities at the local level shaped implementation. We found that health care professionals devoted to this work were committed to implementing the 5 A's but had to alter or adapt their interventions to fit the context of the acute care environment. The extent to which this adaptation occurs in high-performing acute care organizations suggests that the clinical practice guideline requires further development and modification.

Background

In 2001, the Institute of Medicine (IOM) identified areas where important clinical evidence that affected patient outcomes and contributed to overall quality of care in the United States was overused, underused, or misused (IOM, 2001). The IOM identified smoking cessation as a grossly underused clinical intervention, despite the overwhelming evidence to support its efficacy, and singled it out as one of the interventions that could have the biggest impact in health care across the United States (IOM, 2001).

The best available scientific evidence supporting cessation treatment for tobacco-dependent patients can be found in the Clinical Practice Guideline *Treating Tobacco Use and Dependence*, which was developed by the U.S. Public Health Service (USPHS; Fiore et al., 2008). Its recommendations, originally published in 1996 and updated in 2000 and 2008, were based on a meta-analysis of over 8,000 articles and abstracts, which were reviewed by an expert panel of 70 professionals (Fiore et al., 2000). The guideline also tackles issues like organizational interventions, special populations, and cost effectiveness. Unfortunately, a large percentage of patients do not receive the recommended interventions (Grol, 2001; Wagner et al., 2001).

Mere dissemination of practice guidelines does not improve clinical outcomes or increase utilization of their recommended interventions (Cabana et al., 1999). The lag time between the creation of evidence-based guidelines and their assimilation into practice has been estimated to be 17-20 years (Grol, 2001). Obviously, this delay may cause patients to receive inappropriate care. Unfortunately, little consensus has been reached on how to improve this situation (Glasgow, 2003; Glasgow & Emmons, 2007;

Parker, Ritchie, Kirchner, & Owen, 2009). Addressing this impasse is a growing field of research called *translational science* that focuses on processes to implement evidence-based practice (Glasgow, Goldstein, Ockene, & Pronk, 2004; Titler, 2007).

Practice termed *evidence-based* takes into account scientific evidence, clinical expertise, and individual patient characteristics (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). Evidence-based guidelines are known to be difficult to translate into practice (Grol, Cluzeau, & Burgers, 2003; Titler, 2004; Titler, 2007). Barriers to implementing such care include clinical inertia, competing medical issues, disease complexity, and lack of time (Cabana et al., 1999; Gandara et al., 2009). Lack of organizational support and resources, lack of knowledge of particular guidelines, and ideological incongruence between providers and guideline recommendations have been identified as additional barriers to implementation (Brewer, Brewer, & Schultz, 2009; Heath & Andrews, 2006; Sasson et al., 2010; Walshe & Rundall, 2001).

These same barriers have been identified as reasons why clinicians do not provide tobacco treatment routinely (Gollust, Schroeder, & Warner, 2008; Marcy, Skelly, Shiffman, & Flynn, 2005; Revell & Schroeder, 2005). For example, in a survey-based study of Veterans Affairs staff and patients, the staff identified insufficient organizational resources and a lack of knowledge as barriers to providing smoking cessation care (Duffy, Reeves, Hermann, Karvonen, & Smith, 2008). In another study, the researchers identified staff perceptions of smokers as weak-willed and making poor lifestyle choices as barriers to care provision (Reid et al., 2010).

However, in a randomized, controlled, multisite trial, researchers showed a significant increase in cessation rates after implementing interventions when the study environment was taken into consideration. The multi-strategic intervention was conducted in several outpatient clinics. Recognizing that primary care providers had limited time to spend with patients, the researchers adapted the USPHS' guideline so that much of the preparatory work (i.e., asking about cessation use, advising to quit, and making arrangements for follow-up) was done by non-physician staff immediately before the primary care visit (Katz et al., 2004).

Environmental context is important not only as a potential barrier but also as a potential catalyst for providing care. For example, researchers who examined the effect of smoking cessation on patients after a myocardial infarction found that the presence of an organization-based, acute care, tobacco treatment program was associated with an improved one year mortality rate ($p < .001$). Documentation of tobacco treatment by a provider was not associated with improved outcomes. In their discussion, the researchers speculated whether the existence of an established tobacco treatment program in hospitals would be a better measure of quality care than measuring interventions for tobacco treatment in individual patients (Dawood et al., 2008). A Swiss study that undertook a nationwide initiative to measure the ability of hospitals to create and sustain smoking cessation programs using intensive training of targeted clinicians and partial funding of an educational trainer for one year showed a 50% increase in new hospital-based programs after one year (Bolliger, van Biljon, Humair, El Fehri, & Cornuz, 2008).

In summary, the literature suggests that contextually based barriers are critical factors in the implementation of evidence-based guidelines. How they are being

addressed in successful programs, however, is poorly understood. Thus, this qualitative study undertook to answer this question, “What are the institutional factors that facilitate or inhibit successful implementation of evidence-based treatment for tobacco dependence in hospital settings?”

Research Design and Methods

Study Purpose and Specific Aims

The purpose of this qualitative study was to understand the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco treatment programs in hospitalized settings. The specific aims were to: 1) examine the organizational processes involved in the management and implementation of these programs 2) identify perceived barriers and facilitators to care delivery; and 3) explicate participants’ perceptions of the effectiveness of these programs.

Study Design

Institutional ethnography guided the conduct of the study and interpretive phenomenology guided the analysis of the data. A prospective interpretive design was used and interviews of 33 individuals from 12 different hospital based tobacco dependence treatment programs and one regulatory agency were conducted.

Study Setting and Participants

Recruitment

A modified Delphi method was used to identify institutions that were recognized as having the best acute care tobacco treatment programs. Using tobacco control and

smoking cessation list serves from GLOBALink and ATTUD (Association for the Treatment of Tobacco Use and Dependence), all experts and advocates on the list serves were invited to respond, and were asked, *Which institution or institutions would you consider to have the best state-of-the-art, inpatient, treatment programs for tobacco dependence?* Seven responses were received. Ten organizations and 9 participants were identified for through this method. Using snowball sampling, 3 more organizations and 24 more participants were identified.

Identified participants were then contacted either by e-mail or by phone and were offered an opportunity to participate in the study. Interested individuals discussed the goals and the specifics of the program with the researcher and if an individual chose to participate, written informed consent was obtained prior to the interview. Human subject approval for this research was granted by the Institutional Review Board at the University of California, San Francisco (#10-02843). All participants (N=33) who were contacted consented to participate in the study.

Participants were included in this study if: (1) their institution had an organization-wide tobacco treatment program; (2) if they were directly involved with the provision of tobacco dependence care, either in an administrative or provider role. Recruitment continued until data were saturated. Data saturation occurred when no new information or themes appeared and data became redundant (Denzin & Lincoln, 2005).

Participants

The sample was comprised of 33 participants, 18 women and 15 men. Their roles were comprised of 5 medical directors (4 physicians and 1 psychologist); 7 program

directors (responsible for administrative oversight of programs); 8 tobacco treatment staff (6 tobacco treatment specialists- with Master TTS certification⁴, 1 respiratory therapist and 1 nurse practitioner) ; 5 analytic, educational or program support staff (2 outcomes directors, 1 educational director, 1 outreach director, 1 clinical nurse specialist); 4 hospital executives (1 chief medical officer, 1 chief nursing officer, 1 chief executive officer and 1 cardiac service line director); and 2 regulatory agency staff members (See Table 1). 20 participants completed interviews in person and 13 completed interviews over the phone. Interviews were 60-90 minutes in length. No participants were excluded from the study.

Setting

Participants who completed interviews in person were interviewed at their sites of work, in their offices or work areas. Interviews that occurred over the phone, were conducted at a time of participants' choosing, and all were conducted during business hours. Site visits and observations were conducted at 6 medical centers. Medical centers varied in size and were located throughout the United States, and one organization was located in Northeast Canada (4 in the Northeast, 4 in the Midwest, 4 in the Northwest and 1 in the Southwest). Medical centers were comprised of 9 academic medical centers and 3 non-academic medical centers (see Table 1).

⁴ *There are several nationally recognized certifying bodies that provide Master Tobacco Treatment Specialist (TTS) certification; certification requires demonstration of a core set of competencies coupled with a proscribed amount of hours of direct counseling experience.*

Table 1
Organization and participant characteristics

Organization Type and Size	Geographic Location	Smoke Free Campus	Participants Interviewed	Site Observation
Academic Medical Center Beds-1057	Northeast	No	Medical Director Tobacco Treatment Specialist Tobacco Treatment Specialist Data Director Health Coach/ Prescreener	Yes
Academic Medical Center Beds-1190	Northeast	Yes	Medical Director Outreach Director Outcomes Director	No
Academic Medical Center Beds-1100	Northeast	Yes	Program Director Tobacco Treatment Specialist Tobacco Treatment Specialist	Yes
Non-Academic Medical Center-600 Beds	Northeast	Yes	Program Director	No
Academic Medical Center Beds-925	Midwest	Yes	Program Director	No
Academic Medical Center Beds-2050	Midwest	Yes	Medical Director Program Director Clinical Nurse Specialist Tobacco Treatment Specialist Director of Education	Yes
Academic Medical Center Beds-471	Midwest	Yes	Medical Director	No
Regulatory Agency	Midwest	No	Associate Director of Quality Associate Project Director	No
Non-Academic Regional Health System Beds-4000	Northwest	Yes	Regional Program Director	No
Non-Academic Medical Center Beds-250	Northwest	Yes	Chief Executive Officer	Yes
Academic Medical Center Beds-560	Northwest	Yes	Medical Director Program Director Nurse Practitioner	Yes
Academic Medical Center Beds-575	Northwest	Yes	Chief Medical Officer Chief Nursing Officer Tobacco Treatment Specialist Program Director Cardiac Service Line Director	Yes
Academic Medical Center Beds-580	Southwest	No	Medical Director Tobacco Treatment Specialist	No

Analysis

Analysis involved inductive coding of transcribed interviews and the use of Atlas.ti, a software program for the management of qualitative data (2010). As emerging themes were identified, the interview guide was refined, consistent with the precepts of exploratory qualitative research (McNair, Taft, & Hegarty, 2008). Whole coded text segments and themes were reviewed by both authors and refined by comparing data across individuals and institutions and across and within thematic categories. Work processes were traced to extra-local sites using documentary data to track institutional responses to regulatory mandates and quality measures. Rigor was enhanced by triangulating data sources (Denzin & Lincoln, 2005), sharing preliminary findings with participants and inviting comment (Koch & Harrington, 1998), and reviewing and discussing raw data and emerging accounts with a group of interpretive researchers.

Findings

Overall, the participating clinicians and staff tried their best to implement the 5 A's, as outlined in the USPHS' clinical practice guideline (Fiore et al., 2008); they were committed to implementing these best-practice interventions. However, temporal and cultural constraints within the hospital setting required necessary adjustments. In this section, we explain how each of the 5 A's were implemented and/or adapted in these institutions.

Ask About Tobacco Use

The first, and arguably the most important, intervention is to identify patients who smoke. The USPHS guideline recommends that hospitals develop a systematic process

to ask patients about their tobacco use. All of the organizations in this study had incorporated the “ask task” into some type of electronic system to capture the smoking status of each patient admitted to the hospital. Most organizations had incorporated this task into the nursing admission workflow process. Because electronic identification of smokers drove the workflow of the tobacco treatment consult service or counselor, nurses were recognized as the “gateway” or the “key” to initiating the process of care. The extent of a nurse’s assessment of smoking status varied in each organization. Some simply asked about current tobacco use: “Have you smoked in the past year?” Others asked a series of sophisticated assessment questions that could lead to the ordering of nicotine replacement therapy (NRT), which was part of their organizational protocol. As one program director explained, nurses were the key to identifying patients and initiating the treatment process:

The “key” is actually better put, because we do rely on [nurses’] expertise with the electronic medical record..... that they need to put in responses about whether a patient uses tobacco, if they have quit, when was their last use, how much they currently smoke. They go through a checklist of criteria.

The nurses’ work was highly regarded and responsible for driving the workflow of the consult service for tobacco dependence treatment. As systems matured and nurses became more facile with the question and identification process, the number of referrals to tobacco treatment staff increased, straining the system in many institutions to the extent that the referral and assessment process had to be adapted to meet the increased workflow. For example, one organization hired a “health coach” who would prescreen patients to ensure that they were identified properly and were amenable to treatment. A tobacco treatment specialist (TTS) explained:

Yeah, we have a lot of referrals..... we've been really inundated with work, so it keeps us busy, which is why the pre-screening is necessary– we used to just counsel all patients, but now we are needing more help. So we have someone who just does the quick go-in-the-room, "Hi, are you actually a smoker?"

In this case, the prescreener, whose employment was less expensive than that of a registered nurse or a master's prepared TTS, could verify the accuracy of the electronic identification of smoking status and conduct a basic assessment of the need for more in-depth treatment and counseling.

Because the electronic systems reliably identified patients who smoked, many medical centers often had more consults for tobacco dependence treatment than they could handle. Thus, each organization created a set of rules for triaging the patient consult.⁵ For example, some organizations directed the nurse to ask the patient whether he or she would like to receive counseling; others only accepted referrals that were ordered by a physician; still others decided that every patient who was identified as a smoker would be seen and assessed, despite the burden on resources. Thus, although each referral process differed depending on resource availability, all of the organizations incorporated an algorithm within the electronic system to triage assessments and manage workflow.

Due to the heavy referral workload, many participants commented on how important it was that nurses identify smokers correctly so that time was not wasted in seeing a patient who did not smoke, had not been assessed for smoking, or was a smoker

⁵ Organizations often depended on a process within the electronic medical record to identify smokers. Although other areas of the medical record could be accessed to identify patients who smoked, these systems were specifically programmed to automatically print out or display daily work lists for the staff treating tobacco dependence.

who had quit years ago. Incorrect or incomplete answers to these questions introduced inefficiencies into workflow processes, as one TTS commented:

I think the nurses could do a better job of identifying smokers. I think that there needs to be more education on that part because they – I think what nurses do on admission forms seems to me – and again, I'm not there when they're doing it, but it just seems like we're getting a lot of people that are either not being seen because they weren't identified properly or being seen because they weren't identified properly..... [the nurses] just kind of like point-and-click through the screen.

Participants noted that national organizations have often promulgated competing definitions of who should be considered a current smoker. For example, in its Core Measures, the Joint Commission defines a current smoker to be a person who has smoked within a year; new “meaningful use” criteria define a much broader range of daily tobacco use. In this study, each organization asked a different series of questions to identify people who smoked. Some asked about all tobacco products; others asked only about cigarette use. Some organizations assessed exposure to secondhand smoke in patients with cardiac disease, others included pediatric populations as well. Protocols notwithstanding, participants noted that consensus eroded on the appropriate questions to ask patients and on the ongoing educational efforts to maintain their institution’s definition of a smoker. People still interpreted how to ask the “smoking question” differently. As one educator commented:

Suddenly what everyone agreed to last year or six months ago is not what people are following. It's really good to know that. What seems very simple and straightforward is not always the case.

Participants reported that initiating, maintaining, or changing electronic medical record systems often took “years of work” to ensure not only that they were operating correctly but also that they addressed their specific organizational needs. Changes to these sophisticated, organization-wide, electronic health records often required one to navigate through a complicated series of committees if he or she sought clinical consensus, technological expertise, clinician education, or, at times, workflow process redesign. As one program director commented:

It took quite a bit because you have to get the people who maintain the [electronic health record] system and all these multiple approvals. You just can't go in and change [it] without sort of everybody on the planet weighing in on that.

Thus, even the seemingly simple process of identifying tobacco users was subject to wide-ranging interpretation, involving continuous efforts to achieve institutional consensus and operationalization.

Advise to Quit

The USPHS guideline states that all patients should be advised to quit using “clear, strong, personalized language” (Fiore, 2008, p. 33). However, participants overwhelmingly agreed that the word *quit* or what they often referred to as the “Q word” was expressly avoided in the interest of establishing a relationship with a patient. Opening a conversation with advice on quitting smoking often precipitated hostility or an unwillingness to engage further in any further discussion about tobacco use. For example, using the word *quit*, a program director noted, often seemed too strong a word to use with a hospitalized patient. He opined that changing terminology and focusing on

the short-term goals of the hospitalization seemed to be a more effective approach for this care.

The 'Q' word is kind of a forceful term and when you consider that people usually have a series of different attempts before they finally are successful at quitting, many times either somebody has tried to quit and had a bad outcome of it or they think, "I've got too much going on to do that right now, it's just unbearable for me to even think about having to deal with that."

More specifically, their goal was to address the patients' comfort level with the enforced abstinence they had to endure during hospitalization. Michelle, a tobacco treatment counselor stated:

I found that when you go in a room and say, "I come from tobacco treatment," people are likely to ask, "Who are you and why are you here?" So I say, "I just want to make sure that you're comfortable and not having any cravings." I never go in the room and say, "You need to quit." I kind of walk through the conversation and they feel a little bit more comfortable when I'm there, I am an advocate for them. They know that I'm going to help them if they're having cravings and that I will answer their questions.

Others echoed this observation, affirming that having hospitalized patients agree to quit or being willing to quit was not the outcome for their work. Rather, they sought an opportunity to engage patients in a meaningful dialogue about their smoking behaviors. Participants recounted that for some patients the concept of quitting cigarettes for the rest of their life was too overwhelming so they used strategies to help patients cope with taking it one day at a time and relieving them of the psychological burden that quitting was an all or nothing event. Jean, a tobacco treatment specialist with more than 20 years

of experience, recounted how she was able to navigate this barrier with one of her patients:

A patient with ovarian cancer was referred to me who was told to quit smoking before her surgery. She was absolutely terrified, she had a lot of things that she was concerned about. She had been smoking for about 45 years and never made a quit attempt in those 45 years. She said “I just can’t imagine quitting, I’ve got so much stress” We talked about it and then I asked her, “What about stopping? Can you stop for now?” and she said, “Oh yes, I could stop, I could stop for now” So we started her on combination NRT and I saw her recently and 3 months later she’s still not smoking. The idea of never smoking again was something she couldn’t handle.

Most participants commented that patients had experienced an “advise to quit” message from health care providers in the past, which had often been embedded in a “shaming and blaming” narrative. Often, the participants recounted, they must “undo” that message if they are to establish a connection with patients. As one TTS recounted:

What I think is different, number one, I have that in the back of my mind that, okay, this person is probably not thrilled about having somebody come in and bug them about this so I want to interact with them in a different way. Usually the first thing I do, I identify myself as the smoking guy or as the tobacco guy and I very quickly go to, "I really want to find out are you comfortable, are you having strong cravings, do they have you on a patch? How are you doing?" So I want to just let them know, "Hey, I'm interested in how you're feeling regarding this particular topic. I'm not coming in shaming and blaming you and I want to find out if there's something I can do to facilitate you getting some medications or a patch or something that's going to help you feel more comfortable." I use that really as I guess a relationship-building tool right off the bat.

Because an advise-to-quit message could precipitate patient hostility or an unwillingness to engage, the tobacco treatment staff had to find a way to establish rapport with patients.

Most participants commented that motivational interviewing seemed to circumvent the blaming and shaming narrative. One medical director was delighted that her organization

was using motivational interviewing techniques and “...definitely getting away from the wagging the bony finger, ‘you-must-quit’ method”.

In many cases, the initial conversation with patients was focused on their level of comfort and assessment of well-being. TTSs understood that abstinence from tobacco use caused patients significant physical discomfort and used the advise-to-quit stage as an opportunity to build “credibility” and express “empathy” and understanding, “meeting the patient where they are at”.

Even participants who believed that a strong quit message should be delivered were cognizant that delivering such a message compassionately and effectively was a delicate balance. As one program director explained:

There's a real difference: empathy and being practical and strategic and respectful of what the patient feels they can do and having agreement with the ultimate goal are really different things. I think it's important to keep those things separate. I can have empathy and work with the patient strategically while still being very clear that “Smoking is likely to kill you” but if you can't think of it for the rest of your life, let's do one day at a time, that's great. Don't worry about tomorrow.

Advising patients to quit was a highly nuanced event. The TTS assessed each patient's mood and other contextual factors in the moment and used the platform of a smoke-free facility and the assessment of withdrawal symptoms to open lines of communication.

Assess for Readiness to Quit

The USPHS guideline states that a clinician should assess a patient's willingness to make a quit attempt. In 11 of the 12 organizations studied, tobacco dependence care was occurring in a smoke-free environment, both inside and outside of the institution. Smoking was prohibited on hospital grounds, and patients were not allowed to leave the

building to smoke. In many ways, this negated the need to assess the readiness of patients for a quit attempt because they were already in an enforced state of abstinence. Thus, the process of assessing patients' readiness to quit was tied directly to assessing their level of physical discomfort and withdrawal symptoms from enforced nicotine abstinence. Withdrawal symptoms were often significant and uncomfortable. Yet, although most TTSs agreed that patients were often not ready or willing to engage in a quit attempt, the hospital's smoke free policy allowed them to "get their foot in the door" to speak with patients about a treatment they may have declined in the past:

It's really good [the smoke free campus policy] because it gets your foot in the door. When you come in and someone's like, "I don't want to quit," we say, "Well, I just want to make sure you know it's a smoke-free hospital".

However, TTSs confronted a formidable barrier to the full assessment process - time constraints. Their visits were necessarily brief due to competing demands for patients' time and attention. Participants said it was quite difficult to find the "right moment" to meet with patients because they were often with other clinicians, off the unit for a test, in the midst of a treatment, visiting with family, or had just been medicated for pain and were groggy and unfocused. One TTS commented:

I also find that it's frequent to have interruptions in the hospital. There's somebody coming, you need to draw blood, you're going to a CAT scan, lots of different things happening so it tends to be a little bit more condensed in the hospital. So I gather information from them, go through the most salient parts of the interactive manual with them, give them a little bit of addiction education and make sure that we have a clear plan regarding what we're going to do for their medication use; if they're on something, if they want to add something, if they want to start something, if they want to switch to something else.

In this environment, most TTSs typically interacted with a patient just once. Most visits lasted anywhere from 4-20 min; visits lasting longer than 20 min were rare. Mitch, an experienced TTS, summed up his interaction with patients as a “one shot deal”:

With the one-shot deal I start off with, "How are you feeling? Let's get you comfortable. Have you been offered anything? Do you have anything on [i.e. a nicotine patch]? Hey, is it okay if I gather some information from you?"

An assessment typically gathered information on the number of cigarettes used daily, the history of cigarette use and/or prior quit attempts, and a medication history. This assessment was especially important because it gave the TTS the best information upon which to recommend pharmaceutical treatment.

The overall goal in the assessment phase, in most of these programs, was to assess for the proper dose of NRT and to make it available to patients as quickly as possible, to ameliorate withdrawal symptoms and to facilitate comfort. Less often, other medications, like Chantix® or bupropion, were recommended.

Participants recounted that it was rare for patients to view their hospitalization as the occasion for a legitimate quit attempt. Thus, their focus was not on quitting but remaining abstinent after discharge. Accordingly, TTSs saw themselves as “opening a door” by making a medication available to patients so that they could experience an amelioration of withdrawal symptoms and perhaps want to follow through on discharge. As one program director observed:

The service provides a bridge to cross a void that was there when they didn't have an advocate to come and help them out and figure out what kind of nicotine

replacement therapy they would need to get them through this time when they can't smoke, because people are different. When you show them that you can do it compassionately, therapeutically...so they're not climbing out of bed and going crazy and having problems.....I think psychologically it really makes a big difference.

Many participants saw relief of withdrawal symptoms and a brief discussion of the neurobiological basis of nicotine addiction as successful clinical outcomes.

Assist with Quit Attempt

The USPHS guideline recommends that assisting patients with quitting should incorporate interventions such as designing a quit plan; recommending medications; and providing practical counseling, social support, and supplementary educational materials. In the organizations studied, the assistance phase was overwhelmingly characterized by obtaining nicotine replacement for patients.

Participants recounted how important it was to ensure that their hospital's formulary included all of the options for FDA-approved cessation medications. As Steve, a program director, commented:

We brought all of the FDA-approved medications for nicotine dependence onto formulary here so we have them all—we didn't have them all before we went smoke free. There was an effort to bring them all on and a commitment to bring them all on.

Because most of the TTS staff were not providers, they could not initiate medication orders; the appropriate type and dose of medication, mostly NRT, had to be communicated to the physician or team caring for the patient. Typically, this would entail leaving a consult note in the medical record, contacting the team and offering

recommendations, or, in some cases, completing a preprinted order set for the physician to sign and activate.

TTSs embraced the consultant role because it gave them an opportunity to “educate the provider” about NRT and dosing regimens. There was a perceived lack of understanding of the efficacy and dosing of NRT and other drugs and the assessment and recognition of withdrawal symptoms, as Mike, a TTS, recounted:

The physician who really, I feel, is naïve to what they should be doing with any of this.... It’s neat because they actually learn from us, because we interact with a physician and we say ‘This is what we’re going to do’. We don’t write the orders, we consult on the patient and then say, ‘This is what we recommend’, we fill out the order sheet, and give it to the physician so they can sign it.

Yet, the consultant role also sparked conflict with some physician groups and minimized the legitimacy of the TTS’s role and expertise by conceding control to physicians despite their recognized lack of expertise in this area. Participants recounted that certain groups of physicians (i.e., neurologists, neurosurgeons, oncologists, orthopedic surgeons, and plastic surgeons) were expressly opposed to using NRT although the scientific literature has not shown it to be harmful. Thus, despite the fact that a patient was having symptoms of acute nicotine withdrawal and was amenable to NRT, attending or primary services expressly forbade its use. A program director commented:

Sometimes with our orthopedic physicians there is still a battle with using any sort of nicotine in regards to their concerns around healing. I recall one time, I looked through the chart, talked to the nurse, there was nothing, no restrictions and I went in and talked to the patient and came up with a plan that included the patch and gum. While I was in there, the doc came by and saw I was in there and wrote on the patient’s chart, “no nicotine”.

n addition, both physicians and nurses clearly did not know how to properly dose or use NRT and assess for withdrawal symptoms. Ralph, a program director spoke to this issue:

The patch is pretty straight forward, but the lozenges-it has not been uncommon to go in and see lozenges sitting next to the bedside and ask the patient if they've used them and they said "no." They're not sure if they're supposed to eat them, or what they're supposed to do with them. In talking with the nurses, they don't know either. They thought that the patients should know or would know.

As with assessing readiness to quit, assisting with a quit attempt was also a "one shot deal" because of time constraints. TTSs had only a limited time to engage with patients and competed with others for the patients' time. Because of these time constraints, they were unable to make follow-up visits. As one TTS explained:

In an ideal world, I'd stop back and see them in the hospital, I think that would be great. Being able to say, "I'm going to stop back in two days and see how you're doing on that patch" I think that would be fantastic. A lot of time we're scrambling just to see people for the first time.

Eileen, a medical director explained how they compensated for this lack of time to see patients more than once; they made significant efforts to educate nursing staff on how to assess for withdrawal symptoms and patient response to NRT:

The bedside nurse is in many ways closest to the patient and so can monitor withdrawal. Providing nicotine patches humanely helps people through withdrawal when they have enforced abstinence. The nurses are trained to provide a brief educational intervention and/or a consult with one of our tobacco treatment specialist staff.

Many participants felt that the lack of continuity of care reflected an ideological barrier to providing this care and were unsure if any lasting benefit could be realized during a patient's brief hospital admission as there had not been efforts to follow up with patients and ascertain their status. One program director elaborated:

We're certainly hoping we'll be able to take the next step, which is really funding follow-up. Without follow-up we were not even sure if what we do in the hospital is effective.

Arrange for Follow-Up Care

The USPHS guideline states that follow-up care should be arranged within a week of a quit date. This study's participants acknowledged that arranging for follow-up care was their "weak point" or that part of the process where they would "drop the ball." Yet, all agreed that follow-up care was perhaps *the* most important intervention after providing NRT. Most organizations did not have the manpower or processes to follow-up with patients after discharge. A TTS conceded that "We don't have the staff to do phone calls so we actually just mail out program information."

Arranging follow-up typically consisted of giving patients written material, sometimes the TTS's business card, and perhaps an appointment at an outpatient smoking cessation clinic if the patient lived nearby. Mitch, a TTS, had this to say:

We'll try to arrange with the patient some type of telephone follow-up at least. Within a week or so after discharge the counselor who saw that patient will do their best to follow up by phone. That's really a place where we drop the ball and we'd like to improve the quality but it's something that doesn't pay. Certainly patients don't come from the hospital to an out-patient service with any type of frequency.

Other TTSs sent letters to primary care physicians informing them of their patients' initial attempt at abstinence, a list of their current medications, and the need for a follow-up appointment. Others tried to link with state quit lines but lamented about the degree of efficacy. As one medical director commented:

We have a fax-to-quit line for out-patients in our system, so we tried using it for the in-patients where the counselor would actually fax it in. What we found is that our quit line-it's our own quit line in the State-wasn't doing a good enough job of calling people up because it was meant for out-patients, so if they didn't call you for a week it didn't matter. But they weren't doing what they said, which is to call within three days. Plus it was a complete stranger who asked all of the same questions and I just think that system doesn't work.

Participants admitted that follow-up care was an overlooked and underfunded part of care. Participants noted that recently discharged patients *might* return for follow-up if they received a call, but just providing a number with instructions to call for a follow-up appointment was not effective in any of the settings. Carol, a TTS who worked both on the inpatient side and ran follow-up groups on the outpatient side, commented that even patients who had follow-up appointments arranged at discharge were often "no-shows."

This is not a strong point for us and I must confess when I was doing the in-patient intervention I wasn't very effective at getting people into my own group. In terms of when I analyze how people get into our group, it's very few turnovers from the referrals in-patient. That is a weak point.

Two organizations used interactive voice recognition (IVR) software to automate follow-up telephone calls to discharged patients; this helped to manage workflow. Patients who identified themselves as needing assistance would be flagged and called by a counselor. This IVR system was expensive to purchase and somewhat difficult to set up, but both

organizations thought that it showed promise not only in managing workflow but also in informing inpatient staff how patients were faring after hospital discharge. As one of the medical directors explained:

The IVR system is really-it's a triage system, it doesn't substitute for counseling but what it does is allow you to have a small number of healthcare professionals follow a large number of people and it helps keep track of what patients are doing.....The other important function that the calling system serves is in its 'databasing' function. One of the critical factors in terms of getting institutions to keep on doing things with smoking cessation and sustainability is giving them feedback on their performance.

All of the organizations in this study stressed that it was critically important for discharged patients to continue taking the medications that they took during hospitalization. However, this was easier said than done. Several barriers frustrated the achievement of this objective: prescriptions not being written on discharge, medications not being covered by the patients' insurance provider, or medications being too costly for patients to pay out of pocket. In several organizations, the tobacco dependence treatment team assumed the responsibility of ensuring that patients' prescriptions were telephoned into their pharmacy. As a nurse counselor noted, physicians could not be counted upon to ensure that these medications were prescribed on discharge:

Once somebody is discharged from the hospital, we actually try to make it so that our physician (at the tobacco center) will be the prescriber and we'll have a prescription faxed to the patient's pharmacy. The reason being that the discharge service a lot of times seems to drop the ball, and they're not sure how to handle the tobacco medications.

In one organization, patients were given a three-day supply of medications free of charge; this was made possible through a research protocol. At another organization that treated mostly indigent patients, a week's supply of medications was provided through a state grant program. However, participants commented that often patients did not fill their prescriptions or ran into barriers of cost and no insurance coverage. A program director described the situation in this way:

But we certainly have that problem with the private insurers and the Medicare folks too, whose prescription coverage could be all over the place depending upon what plan they choose, Medicare D. So we do have that problem. And so frequently we'll be asked for a pre-approval. The pharmacy will say they need a pre-approval and process it –It's always rejected it seems. It really just seems to be a nonsensical delay in saying “no”.

Ralph, a program director with over 23 years of tobacco cessation experience in both large clinical trials and outpatient care, commented on the changes he had to make to work in the hospital setting.

The hospital was- I figured I had plenty of experience, but when I went into the hospital I had to learn a lot of different things and we had to reconfigure a lot of what we did, because it just didn't make sense. In the hospital, you may have one seven-to-fifteen minute period with that patient before they're discharged. That's really challenging, but at the same time you have some real potential motivation tools and the fact that this person is abstinent in the hospital-so its learning how to use those to help them remain abstinent when they leave, and we're figuring that out. The field is sort of figuring that out. There's one thing to figure out kind of what's helpful and the other is thinking out what's reasonable in the hospital.

Despite Ralph's many years of treating patients in the outpatient and clinic setting, he was still ill-prepared to do this same work in the hospital setting;. This suggests that the

current guidelines are best applied to settings where patients have continuity of care and there can be specific time devoted to the intervention, without the competition for patients time and attention that characterizes the hospital setting.

Table 2
Adaptation of the 5 A's: Organizational Best Practices and Barriers

Evidence-Based Guideline Interventions ⁶	Organizational Best Practices	Barriers and Problems
<p>Ask</p> <p><i>Recommended Strategy</i></p> <ul style="list-style-type: none"> Systematically identify all tobacco users at every visit. <p><i>Recommended Action</i></p> <ul style="list-style-type: none"> Implement an office-wide system that ensures that tobacco use is questioned and documented for <u>every</u> patient at <u>every</u> clinic visit. 	<ul style="list-style-type: none"> Sophisticated electronic systems identified smokers. Nurses were trained to assess patients for tobacco use. Varying levels of assessment for tobacco use were embedded in the "ask task." Electronic identification of smokers was linked to counselors' workflow list. 	<ul style="list-style-type: none"> Electronic systems create barriers to change because systems are not easily updated or amended due to sophisticated programming requirements and organizational priorities. System-wide identification produces a large volume of smokers each day. Staff cannot see all patients identified. Misidentification or incomplete identification leads to work inefficiencies. No nationwide consensus exists on the definition of "a smoker."
<p>Advise</p> <p><i>Recommended Strategy</i></p> <ul style="list-style-type: none"> Strongly urge all tobacco users to quit. <p><i>Recommended Action</i></p> <ul style="list-style-type: none"> In a clear, strong, and personalized manner, urge every tobacco user to quit. 	<ul style="list-style-type: none"> Strong quit messages were avoided because they could cause patient disengagement and hostility. Quit messages, if given, were often preceded by empathic dialogue on comfort and symptom relief. Smoke-free campus policies enforced abstinence. Patient had already "quit." Smoke-free campus policies were used as an entrée to talk with patients about smoking. Alternative messages were offered, for example, stop while you recover and focus on exposure to carbon monoxide 	<ul style="list-style-type: none"> Contrary messages from other clinicians are frustrating, for example, patient is too sick to quit or smoking is a last pleasure (oncologist) or patient is concerned with fetal nicotine withdrawal (obstetrician). Shame and blame, smoker stigma.
<p>Assess</p> <p><i>Recommended Strategy</i></p> <ul style="list-style-type: none"> Determine willingness to make a quit attempt. <p><i>Recommended Action</i></p> <ul style="list-style-type: none"> Assess every tobacco user's willingness to make a quit attempt at this time. 	<ul style="list-style-type: none"> Notwithstanding smoke-free policies, most patients were in an enforced state of abstinence. Initial assessments focused on comfort level and management of nicotine withdrawal symptoms. Daily identification of large numbers of smokers required triaging systems. Assessment for the appropriateness and dosing of nicotine replacement therapy (NRT) was shared with nursing staff. 	<ul style="list-style-type: none"> Time constraints (i.e., patient visits usually last only 5-20 min) limit ability to perform an in-depth assessment. Most hospitalized patients are not ready to quit; it is rare to find a patient ready and willing to quit.

⁶ M. C. Fiore, C. R. Jaen, and T. B. Baker. (2008). *Treating tobacco use and dependence: 2008 update. Clinical practice guideline*. Rockwell, MD: U.S. Department of Health and Human Services. Public Health Service.

Evidence-Based Guideline Interventions	Organizational Best Practices	Barriers and Problems
<p>Assist</p> <p><i>Recommended Strategy</i></p> <ul style="list-style-type: none"> • Aid patients in quitting (counseling and medications). <p><i>Recommended Actions</i></p> <ul style="list-style-type: none"> • Help patients with a quit plan. • Recommend approved medication except where contraindicated or with specific populations for which there is insufficient evidence of effectiveness. • Provide practical counseling. • Provide intra-treatment social support. • Provide supplementary materials, including information on quit lines. 	<ul style="list-style-type: none"> • Focus was on symptom relief, wrapped into a quit attempt. • Most forms of NRT were included in the hospital formulary. • All recommendations for medications were evidence-based. Tobacco Treatment staff knew the literature. • Providers and nurses were educated about NRT dosing and titrating for effect. • Motivational interviewing techniques were used. • Materials and resources were personalized for patients. 	<ul style="list-style-type: none"> • Some physicians expressly oppose NRT. • Little time is allotted for follow-up and symptom assessment following NRT administration. • Time constraints for counseling.
<p>Arrange</p> <p><i>Recommended Strategy</i></p> <ul style="list-style-type: none"> • Ensure follow-up. <p><i>Recommended Action</i></p> <ul style="list-style-type: none"> • Arrange for follow-up, either in-person or via telephone. 	<ul style="list-style-type: none"> • Focus was mainly on ensuring patients had medications and/or prescriptions upon discharge. • Follow-up appointments were made for outpatient cessation services, if available. • Interactive voice software was used for follow-up at two organizations. 	<ul style="list-style-type: none"> • Few resources exist for follow-up care, calls, or outreach to primary care physicians. • Outpatient follow-up suffers from high “no show” rate. • NRT is not covered by insurance; its cost prohibits patients from obtaining medication. • Patients typically do not initiate follow-up even if given contact information.

Discussion

This study suggests that implementation of evidence-based guidelines for the treatment of tobacco dependence requires that health care institutions adapt recommended interventions to their environment and patient needs (see Table 2). Our findings expose the hidden assumptions embedded in the 5 A’s approach, such as seeing patients in a setting that offers continuity of care, having enough time, and having a volitional patient. Hospital settings violate these assumptions. Thus, clinicians are required to perform extensive interpretive and adaptive work in implementation, making decisions on the basis of their situated understandings. Our findings are consistent with

those in the literature that describe how difficult it is to implement the 5 A's in any setting (Berndt et al., 2011; Dixon et al., 2009; Dosh et al., 2005).

Despite the USPHS guideline recommendations, most participants in our sample were averse to using a strong quit message when first approaching patients, believing that this language closed down communication and prevented therapeutic engagement. In contrast, a Cochrane review showed that physician advice to quit smoking had a small effect on long term smoking cessation (>6 months) (Stead, Bergson, & Lancaster, 2008). Perhaps because many of the participants in the current study were not physicians, they lacked the confidence or perceived authority to relay a strong quit message. It could also be that participants were uncomfortable with the initial hostility experienced from the patient, or that they generalized from one or a few unwelcoming encounters. However, it is also possible that the setting itself, with multiple care providers interacting with patients, reduced patient receptivity to strong quit messages, requiring providers to strategize alternative approaches based on their practical experiences.

Despite the perceived barriers to delivering these interventions, tobacco treatment staff remained convinced that this care was crucial to the care of the hospitalized smoker.

Consistent with other research, smoke-free hospital campus policies seemed to change the dynamic of the work into a more culturally accessible form of care. The tobacco treatment staff could assist with smoke free policies while ensuring that patients were comfortable during their enforced abstinence. Such policies forced hospital management and staff to create contingency plans not only for hospitalized smokers but

also for their family members and employees as well (Schultz, Bottorff, & Johnson, 2006).

Many studies show that the identification of smokers increases with centralized identification systems, either with using computer prompts, training of admissions staff, or during the initial admission nursing assessment (Freund et al., 2009; Joseph et al., 2004; Koplan et al., 2008; Swallow & Dykes, 2004). For example, Koplan and colleagues (2008) looked at the effect of adding an order set to a computerized order entry system and found that after 4 months of use, the identification of smokers had increased significantly. Across hospitals though, even this seemingly simple assessment is not performed for 40% of hospitalized smokers (Freund et al., 2008). Unfortunately, the identification of smokers alone does not automatically lead to an increase in pharmacotherapy, counseling or follow-up care; it must be utilized in conjunction with other interventions to treat the smoker (Fiore et al., 2007; Freund et al., 2009).

Studies that utilized dedicated, highly trained specialists to provide the tobacco treatment were able to demonstrate improved cessation rates (Stevens et al., 1993), and an increase in the use of NRT and counseling interventions (Bolliger et al., 2008). For example, Stevens et al, (1993) utilized Master's level counselors with 5 years of experience to provide bedside counseling and follow-up care. Patients in the intervention group were 50% more likely to have remained abstinent at 3 months. However, it remains to be seen if the use of tobacco treatment specialists will be accepted into all hospital settings, as lack of resources is often cited as a reason for not hiring a dedicated staff person to perform this care (Bolliger et al., 2008; Joseph et al., 2004; D. Katz et al., 2009).

Limitations

There are several methodological issues that should be considered when interpreting the findings of this study. Our sample was limited to only clinicians and staff working in or directly affiliated with (administrators and leaders) tobacco dependence treatment programs. Patients and other staff members may have had different views or insights. Further, staffing models of care and resources devoted to these programs varied widely among organizations and the degree to how these factors affected each site is unknown.

Conclusion

Our findings describe the cultural and practical barriers to performing tobacco dependence treatment in hospital settings. In particular, time constraints and smoke-free campus policies must be examined to determine whether these variables facilitate or inhibit smoking cessation care in hospitals. This study's findings give a unique insight into the barriers that obstruct the delivery of evidence-based tobacco dependence care in hospital settings. It also broadens our understanding of the gap between practice guidelines and their implementation.

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Chapter Five: A Vocabulary of Motives: Understanding Tobacco Dependence Treatment in Hospitals

Introduction

The health care system is an important venue for the delivery of tobacco dependence interventions. For more than 20 years evidence has shown that treatments for tobacco dependent patients in hospital settings are safe and effective (Fiore, Keller, & Curry, 2007; Rigotti, Munafo, Murphy, & Stead, 2001; Rigotti, et al. 2011); yet, these interventions are not routinely incorporated into hospital care (Freund et al., 2008; Regan, Viana, Reyen, & Rigotti, 2012). Research suggests that organizations are challenged by various barriers to enacting this care, such as funding, cultural barriers and time constraints (Martinez, 2009; Tong, Strouse, Hall, Kovac, & Schroeder, 2010; Fiore et al., 2007; Rigotti et al., 2001). However, there are some centers that have described the successful delivery of care for tobacco dependence in hospital settings (Reid et al., 2010; Rigotti, Clair, Munafo, & Stead, 2012; Zarling, Burke, Gaines, & Gauvin, 2008). The purpose of this research was to describe the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco dependence treatment in hospital settings.

The most recent Federal Clinical Guidelines for the treatment of tobacco dependence recommend that all healthcare systems implement systematic identification and treatment of patients who smoke (Fiore, Jaen, & Baker, 2008). Despite the plethora of evidence and the magnitude of potential life and costs savings (Schroeder, 2013), this care is not routinely provided in organizations. Tong and colleagues (2010) performed a

prevalence analysis of hospitals offering this type of care and found that only 21% of hospitals routinely offered comprehensive tobacco dependence care interventions. Some researchers have examined the sustainability of these programs and found that leadership support was a key driver; others have suggested that the organizational factors necessary for sustainability were more cultural (Campbell, Pieters, Mullen, Reece, & Reid, 2011; Reid et al., 2010). Others contend that this care requires significant systems development and specialized work for which funds may not be available (Fiore, Goplerud, & Schroeder, 2012; Wang et al., 2008). There has been little research on how organizations offering organized or system-wide tobacco treatment programs sustain this care.

This study explored how care for patients who smoked was delivered within these institutions that were known to have exemplary tobacco dependence treatment programs. Even in these very exemplary institutions, there were considerable tensions around program implementation and explicit gaps in care. This study fills a gap in research on the implementation of tobacco treatment programs in hospital environments by directly asking people who delivered this care about the facilitators and barriers to providing it. The study reveals a “vocabulary of motives” used by tobacco treatment professionals to explain their work in an environment in which their work requires navigating organizational tensions to sustain program legitimacy.

Conceptualizing Vocabularies of Motive

“Vocabularies of motive” is a term that describes motives as socially constructed actions which are fundamentally situated in language (Mills, 1940). This understanding contrasts with psychoanalytical theories of motive, which describe motives as inner

psychological and behavioral actions and as internal attributes of the individual. In Mills' view, motives are not reflections or statements of "inner springs" of action, but are socially situated, normative vocabularies by which actors define and justify action within particular contexts. Mills argued that professionals are equipped with certain "vocabularies of motive appropriate to their respective behaviors that accompany institutional activities and function as cues and justifications for the normative actions in it" (Mills, 1940).

Mills asserted that people draw on a vocabulary of motives to explain and promote their actions in a contextually appropriate manner and described how these "specific verbal appendages of variant institutionalized actions" can be studied empirically. Using Mills' theory as a framework, this research sought to identify and describe the vocabularies of motive that were conventionally and prominently accompanying the situations of action in the tobacco dependence treatment enterprise in these studied hospitals. Mills argued that the only source for a terminology of motives is the vocabularies of motives "actually and usually" verbalized by actors in specific situations. Motives are of no value apart from the delimited societal situations for which there are the appropriate vocabularies.

By describing the vocabularies of motive that were "ultimate and operative" (Mills, 1940, p. 908) in this setting, this research helps to illuminate the facilitators and barriers for those working in inpatient tobacco dependence care. In this paper we describe four types of vocabularies: moral, scientific, service and administrative. These vocabularies of motive provided the impetus for both individual and organizational actions.

The Study

Research Design and Methods

Study Purpose and Specific Aims

The purpose of this qualitative study was to understand the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco treatment programs in hospitalized settings. The specific aims were to: 1) examine the organizational processes involved in the management and implementation of these programs 2) identify perceived barriers and facilitators to care delivery; and 3) explicate participants' perceptions of the effectiveness of these programs.

Study Design

Institutional ethnography guided the conduct of the study and interpretive phenomenology guided the analysis of the data. A prospective interpretive design was used and interviews of 33 individuals from 12 different hospital based tobacco dependence treatment programs and one regulatory agency were conducted.

Study Setting and Participants

Recruitment

A modified Delphi method was used to identify institutions that were recognized as having the best acute care tobacco treatment programs. Using tobacco control and smoking cessation list serves from GLOBALink and ATTUD (Association for the Treatment of Tobacco Use and Dependence), all experts and advocates on the list serves were invited to respond, and were asked, *Which institution or institutions would you*

consider to have the best state-of-the-art, inpatient, treatment programs for tobacco dependence? Seven responses were received. Ten organizations and 9 participants were identified for through this method. Using snowball sampling, 3 more organizations and 24 more participants were identified.

Identified participants were then contacted either by e-mail or by phone and were offered an opportunity to participate in the study. Interested individuals discussed the goals and the specifics of the program with the researcher and if an individual chose to participate, written informed consent was obtained prior to the interview. Human subject approval for this research was granted by the Institutional Review Board at the University of California, San Francisco (#10-02843). All participants (N=33) who were contacted consented to participate in the study.

Participants were included in this study if: (1) their institution had an organization-wide tobacco treatment program; (2) if they were directly involved with the provision of tobacco dependence care, either in an administrative or provider role. Recruitment continued until data were saturated. Data saturation occurred when no new information or themes appeared and data became redundant (Denzin & Lincoln, 2005).

Participants

The sample was comprised of 33 participants, 18 women and 15 men. Their roles were comprised of 5 medical directors (4 physicians and 1 psychologist); 7 program directors (responsible for administrative oversight of programs); 8 tobacco treatment

staff (6 tobacco treatment specialists- with Master TTS certification⁷, 1 respiratory therapist and 1 nurse practitioner) ; 5 analytic, educational or program support staff (2 outcomes directors, 1 educational director, 1 outreach director, 1 clinical nurse specialist); 4 hospital executives (1 chief medical officer, 1 chief nursing officer, 1 chief executive officer and 1 cardiac service line director); and 2 regulatory agency staff members. 20 participants completed interviews in person and 13 completed interviews over the phone. Interviews were 60-90 minutes in length. No participants were excluded from the study.

Setting

Participants who completed interviews in person were interviewed at their sites of work, in their offices or work areas. Interviews that occurred over the phone, were conducted at a time of participants' choosing, and all were conducted during business hours. Site visits and observations were conducted at 6 medical centers. Medical centers varied in size and were located throughout the United States, and one organization was located in Northeast Canada (4 in the Northeast, 4 in the Midwest, 4 in the Northwest and 1 in the Southwest). Medical centers were comprised of 9 academic medical centers and 3 non-academic medical centers.

Analysis

Analysis involved inductive coding of transcribed interviews and the use of Atlas.ti, a software program for the management of qualitative data. Whole coded text

⁷ *There are several nationally recognized certifying bodies that provide Master Tobacco Treatment Specialist (TTS) certification; certification requires demonstration of a core set of competencies coupled with a proscribed amount of hours of direct counseling experience.*

segments and themes were reviewed by both authors and refined by comparing data across individuals and institutions and across and within thematic categories. Work processes were traced using documentary data to track institutional responses to regulatory mandates and quality measures. Rigor was enhanced by triangulating data sources (Denzin & Lincoln, 2005), sharing preliminary findings with participants and inviting comment (Koch & Harrington, 1998), and reviewing and discussing raw data and emerging accounts with a group of interpretive researchers.

Findings

Four types of vocabularies of motive were identified (See Table 1). These vocabularies—moral, scientific, service, and administrative discourses-- functioned as the impetus for individual and organizational action to ensure care was delivered, to establish the legitimacy of this care and to motivate others to participate in this care.

Table 1
Relationship of Typal Vocabulary to Normative Behavior and Organizational Function

Typal Vocabulary	Terms Utilized	Normative Behavior	Ascertainable Function
Moral	safety comfort rights blame shame	Empathic communication with patient Championing the program	To relieve “suffering” of patients To reframe tobacco dependence care To motivate others to participate in care To ensure care delivery
Scientific	evidence literature outcomes knowledge benchmarks	Acting as expert consultant Contesting other’s care decisions Maintaining scientific knowledge base	To establish legitimacy of care interventions To establish a consensual outcome To ensure care delivery
Service	help work educate assist train	Assisting with workflows Educating and training others	To ensure care delivery To motivate others to participate in care To build capacity of fellow clinicians
Administrative	mandates systems funding policies protocol	Building systems embeddedness Enhancing funds flow Enforcing policies Meeting external mandates	To ensure care delivery To establish legitimacy of program To build system capacity

Moral Vocabularies: Navigating Strong Feelings

Participants reported that a powerful moral narrative existed among many healthcare providers and patients, as well as their family members and the society at large; patients who smoked were often characterized as being “weak-willed”, “irrational” or having a “moral failing”. Yet, participants also recognized and described the powerfully addictive nature of tobacco and the complex emotions and behaviors it created for the smoker and his or her family. Janice, an executive who was very supportive of her organization’s program, described how destructive and divisive her sister’s smoking addiction had become, and the impact it had on the family dynamic:

I have a sister who is the only one in our family who smoked.... she only has 20% lung function left. She is so bright, very intelligent, she teaches kindergarten, she is an excellent teacher, they loved her and now she is not going to be able to teach next year. She’s had three hospitalizations in the past year and she is preparing for a lung transplant. I recognize that it doesn’t matter how bright and intelligent you are, if you’re addicted. We tried to push her, we knew it was bad, we tried until she got to the point where she didn’t want to come home and visit us because she felt bad about smoking. She couldn’t stop, so it made her depressed and it made her stay away.

In this story, other family members feel badly over their inability to “save” the addicted sister from smoking, and the subsequent family estrangement due to the sister’s shame at being unable to quit.

Similarly, participants described how patients in their institutions often initially “lied” about the extent of their tobacco use, because they were ashamed and embarrassed about their smoking. This not only figured prominently into the patient’s willingness to engage in a therapeutic dialogue, but often rendered the recommended dosing regimen

for nicotine replacement therapy as ineffective. Marcelo, a veteran tobacco treatment specialist, explained how he recognized this behavior and engaged with patients to coax the truth out of them, to ensure medications were effectively dosed.

I encourage them to let me know if the [nicotine] patch is enough because maybe they are lying. They tend to lie when they tell you how many cigarettes they smoke because they feel like you are judging them. They put the 21 mg patch on and they say ‘this doesn’t work’, and I say ‘Really? Because it makes a big difference between a pack and a pack and a half’ and *now* we start talking.

Because they saw “blaming and shaming” messages as a barrier to engaging the patients in a therapeutic relationship, participants explained how important it was to address and reframe the issue. Tom, a Masters’ prepared certified tobacco treatment specialist, believed that part of his role was to try to “undo” the negative messages patients may have received from others in the past:

I never know what a patient’s experience is going in, so that it makes me doubly want to do this work well, because I don’t want to just be seen as another hospital person, if that was their experience, who maybe wasn’t as sensitive to it, inadvertently blaming or shaming. Instead of it being a negative message, rather the focus is on ‘Hey, number one, let’s get you feeling comfortable’ and then let’s see if we can talk a little bit too.

Participants recognized that an empathic, caring approach and “meeting the patient where they are at” was the key to opening up dialogue and beginning a therapeutic relationship. They did not want to take a “hard line” or “wag the bony finger” with patients but sought to infuse their exchange with the patient with empathy and caring; they felt this approach enhanced the treatment plan and gave them credibility with the patient as one tobacco treatment specialist explained:

You have to have empathy and I think there needs to be a certain flexibility, you know you can't always just take a hardline and I think patients appreciate it and I think they are more likely to make a serious quit attempt if you have credibility with them and that's how you gain credibility with patients, with empathy.

The use of an empathic vocabulary that focused on comfort and symptom relief also resonated with the nursing staff. "Making patients comfortable," "relieving suffering" of withdrawal symptoms, and being "safe" were often articulated as rationales for encouraging nurses to perform tobacco use assessment and initiate treatment referrals. Redirecting the nurses' attention to the concept of patient comfort and safety as opposed to a focus on smoking cessation, offered a mutual reference point for care delivery, one that seemed particularly relevant in the acute care setting. Paul, a psychologist with more than 20 years of tobacco dependence treatment experience, felt that nurses were especially receptive to this approach: "The nurses tend to think of it [tobacco dependence treatment] as smoking cessation, which really isn't what is going on in the hospital, because they are already not smoking [due to smoke free policies]. It's really comfort and the nurses hadn't thought about it as comfort".

The notion of symptom relief and comfort was also in alignment with the implementation of organizational smoke-free policies. Participants described how the discourse in the environment was changing from an emphasis on patient agency and the responsibility of the patient to engage in "quitting behaviors" and "smoking cessation" to one that emphasized the "rights" of the patient to receive treatment during forced abstinence and the ethical responsibility of the organization to provide this treatment. George, a Masters prepared tobacco treatment specialist and program director explained:

We frame our program as not only a smoking cessation program but now that hospitals have gone smoke free, ethically, if we want to look at it that way, we need to be providing support for smokers who are in nicotine withdrawal. When they cannot go out to smoke we need to be providing medications that might help them with their withdrawal or support, or other types of tactics that help them cope with being in a smoke free environment.

The focus on a patient's right to receive treatment also figured prominently in the adoption and operationalization of protocols and policies that allowed nurses to order nicotine replacement medications for patients upon admission, thereby mitigating withdrawal symptoms earlier in the patient's stay. Liz, an experienced cardiac clinical nurse specialist and a recognized clinical champion at her organization, described how she was able to achieve buy-in for a nicotine replacement protocol that nurses could initiate upon admission; "We started going to all the major committees in the organization and we made the decision that every patient had a right to have their tobacco use assessed; if they wanted the nicotine patch, they had a right to it". The emphasis on patient rights and the ethical imperative to offer treatment to patients for symptom relief was changing the culture at these organizations.

Scientific Vocabularies: Mitigating Resistance and Defining Outcomes

Participants recognized that misinformation and myths surrounded the use of nicotine replacement therapy [NRT] in the acute care setting. They described how they needed to be prepared with scientific evidence; they spent significant time defending their recommendations for the use of NRT in many patient populations, as Liz, a tobacco treatment specialist explained:

One of the biggest hurdles was convincing physicians, particularly surgeons, plastic surgeons, orthopedic surgeons, and neurosurgeons that using nicotine patch therapy would not negate healing and there's a lot of evidence to show that it does not.

The reluctance of physicians to provide NRT to these patient populations figured prominently as one of the main barriers to care provision at all of the studied organizations. Dave, a program director, described orthopedic surgeons' resistance to the use of NRT, despite the obvious and deleterious effects continued smoking had on their patients:

Many of the orthopedic surgeons seem convinced that the nicotine patch or nicotine replacement can interfere with healing, and it very clearly doesn't, but they believe it does. I just left a woman who has had three full knee replacements and fourteen surgeries on her knee. Every time she's left the hospital, she's smoked and got an infection. She's dying for a cigarette right now; she's a pack-and-a-half-a-day smoker. She's completely miserable; she said, '*If I had a cigarette, the pain would be better*'. The nurse said that the surgeon would not allow nicotine replacement. I'm going to page him later today; it's going to be a long conversation. I have couple of articles I am going to show him that it is tobacco, not the nicotine, that is the problem; but I am not feeling very hopeful.

However, participants also recognized that physicians could be "remarkably responsive to data" and described how the use of scientific evidence could sway clinicians to change their minds and subsequently change the culture of care. Bryan, a tobacco treatment specialist, described how his relationship building and educational efforts changed the culture of NRT use for cardiac patients at his organization:

At the onset of our initiative, there was a culture of '*no NRT for for patients on the cardiac units*'. This was driven largely through concerns about its effect on vaso-constriction, about raising blood pressure, even though many of those concerns were not based on evidenced-based research, they were still prevalent and dominant on those units. Now they are placing a referral to us quickly, and I think that's been a function of the education and outreach we've done on those units.

Even some oncologists were described as reluctant to refer patients for tobacco dependence treatment, not because of concerns related to the use of NRT, but because it would be removing one of the patient's "last joys in life". Paul, a medical program director, described how important it was for him to take responsibility for disseminating the latest literature and evidence regarding the efficacy of chemotherapeutic treatments and tobacco use:

There are quite a few studies that show the negative effect of smoke on cancer treatments. I saw this data presented at a meeting of the National Cancer Institute in Washington, DC and they were stunned to see that a lot of the treatments were being compromised, *hugely compromised*, by any patient who continued to smoke. So we've incorporated that data into our work with oncology patients and with the clinicians. But the oncologists themselves are harder to get to, because they firmly believe that their patients, who have these terminal diagnoses, derive such pleasure and comfort from smoking; we shouldn't be making their life harder because it is already hard and they just don't know the literature and that's really our fault.

In one organization, the medical director spoke about the importance of aligning physician engagement with recent updates and concerns about tobacco cessation medications; participants recognized this as an area where physicians were familiar, comfortable and could be engaged.

What I do is I run a – it's not really a blog, it's like an e-mail list to a lot of the physicians about new things that are coming up, that have come up, new data. For instance, all this action on Chantix recently about the heart, I will write a brief summary of what I think this means for our patients, attach the original articles and any comments to it. I send material out constantly. I probably do four or five of those a week, I send them to selected physicians in different groups, I don't send it to all the physicians in the hospital because they wouldn't pay any attention – and, of course, I send them to our own staff. So I'm keeping up with all of that. Then when we do our physician training or when I do grand rounds, I talk about those kinds of issues in terms of the hospital population and the drugs. They're mostly interested in the drugs.

Participants recognized that physicians did not have the time, expertise or the buy-in for counseling but that they were responsive to understanding the most recent advances in this class of medications and the hope was this exposure would create a sense of comfort and facility with the use of these drugs.

Participants commented on a lack of clearly defined outcome goals for tobacco treatment care. Very few thought that achieving long term abstinence was a valid outcome within this setting. The outcomes that were identified ranged from relief of withdrawal symptoms and achievement of patient comfort, to remaining “abstinent when they leave hospital, so they heal”. Many felt that achievement of the processes of care, such as assessing smoking status and making a referral, were credible outcome goals, while others thought that simply achieving a basic level of patient engagement was a successful outcome, as Eileen, a medical director with many years of experience described:

Your whole expectation for the visit is to begin that conversation about change. Why is it that with smoking cessation, we’ve defined success only at the quit level? We need to figure out how to redefine the success parameters.

The lack of clearly defined outcome goals for this work left some participants feeling dissatisfied with their work. Josh, a tobacco treatment specialist, commented that he was envious of those who worked in outpatient settings, as he perceived that they would be able to experience the “success stories” and relate patient outcomes directly to the work they were doing:

Sometimes it’s difficult to see the forest through the trees. It’s cliché to say, but it’s true. I think it’s very difficult for people to see the benefits to the patient when you’re not actually following them out into the world and you only see them

once and you think to yourself; *‘What am I really doing? Are they really going to quit smoking or are they just going to be back here with more health problems six months from now or a year from now?’*.....and I think that’s why I’d like to work in an outpatient setting. I think it would be nice to see the success stories, I envy that part of it.

Participants recognized the gap that existed between clinicians’ knowledge of the benefits of smoking cessation and how that translated into practical interventions that they could use with patients during a hospitalization. Mike, a tobacco treatment specialist, explained:

I mean every health professional acknowledges the importance of smoking cessation and probably recognizes the magnitude of it, if it’s really kind of drawn to their attention, but that knowledge is not translated into any kind of clinical intervention for the most part, particularly in the in-hospital setting.

Others felt that there was no need to measure outcomes of care, or “scientize” care delivery, because it was the right thing to do for the patient and should be part of a patient centered care delivery model; several participants suggested that “measuring everything we do” and having outcomes for all aspects of care was not necessary. A chief medical officer commented: “I realized that not everything was science, I am not dismissing science, but it should not be the dominant thing that drives care, the dominant thing is patient centered care”.

The sheer volume of smokers that could be accessed in this environment, however, was seen as a great advantage of the setting. A researcher and program director commented:

One of the things that hospitals have in spades is that they have access to smokers. They walk through their door or they’re wheeled through every day. There’s nothing like having your customer come to you. You can’t beat that kind of

access and it's a time when people's motivation to do something is really high. I'm a behavioral scientist by training and motivation is really hard to create when it doesn't exist. We should be taking advantage of these opportunities to really get ourselves in the face of smokers at a time when they want to do something.

Others recognized a lack of available benchmarks in the field to monitor their performance and were concerned about their organization's level of achievement around utilization, outcomes and processes of care. Bryan described how difficult it was to really know how his program was performing:

We like to benchmark ourselves against hospitals of like size around the country. We think we're doing a good job but we have no idea. I mean we think we've got good numbers and good referrals but we like to compare. We usually benchmark ourselves against the Mayo Clinic, MGH (Massachusetts General Hospital) University of Michigan, just to see what they're doing, what size staff, how many patients, so we can sort of gauge ourselves.

Service Vocabularies: Ensuring Care Delivery and Building Capacity

For tobacco dependence treatment to be embraced and institutionally-accepted care, participants had to find ways to ensure that the work they produced was not seen as a barrier or as creating extra work for other professionals involved in the patients' care. This was reflected in the vocabularies of service that were used to ensure that this care was delivered.

In order to achieve buy in from clinicians to participate in this care and to make referrals, tobacco treatment professionals had to ensure they did not create more work for their nursing or physician colleagues. One way they achieved this was by creating smoker identification systems that would initiate automatic electronic referrals with "one click" technology or would guide medication ordering with "hot button" order sets. As one

medical director commented, “We want to make it as easy to order a consult as it is to order an x-ray”. Participants were cognizant of the workload constraints of nurses and physicians and their focus on the “acute issues” of patients, so they recognized that tobacco dependence care was often not viewed as a priority. Tom stated: “To them, it’s just one more thing to cross off their list”.

Mitch explained how his department worked to ensure physicians that the tobacco treatment team would assist in the patient care, rather than create extra work for the physicians:

Most of the time the physicians are just really relieved that there’s somebody taking responsibility for this care. They like that. Then when I say to them, ‘we’ll take care of the discharge stuff’ it’s one less thing they have to worry about. It’s another thing off their plate, and in the discussions we’ve had up in our department, that’s been kind of the goal...what can we do to relieve extra work? We don’t want to be perceived as ‘Oh, these nicotine guys, they come in and then we have to do extra stuff’. We want it more like, ‘Hey, they help the patients and they don’t require any additional work from us most of the time’.

Another program director similarly spoke about the need to make themselves “invaluable” to physicians and other clinicians:

Ultimately, who runs the hospitals are the physicians. The goal is to make ourselves invaluable to them. We are keeping their patients a little happier because they are not going through withdrawal while they’re in the hospital. It helps nursing, it helps clinicians, and so that’s one of things we’re identified by, being an invaluable member of the treating team.

Helping to keep patients comfortable by ameliorating their withdrawal symptoms was seen in the larger context of sustaining a productive work environment for the nurses and physicians who might also have institutional power over resources.

Participants described the importance of their role in the enforcement of organizational smoke free policies, and commented on their ability to help with unruly or problem patients who were experiencing nicotine withdrawal. One tobacco treatment specialist explained how he helped with policy enforcement by educating resident physicians in a way that was both collegial and collaborative:

I would say a good example is like yesterday, we had a patient who smoked in the room, and what we've started doing is calling the intern or the resident and saying, 'What can I do to help you help your patient?' I know that is a lot of help and help and help but, 'What can our service do to help you help your patient with their nicotine withdrawal?' It's sort of gently presenting to them that it's not permissible for a patient to be leaving the unit to smoke, [or] to write orders [that the] patient may leave the unit to smoke.

Participants recognized that most nurses and physicians lacked training in this area, as George, a program director, commented: "We are training the next generation in tobacco treatment, knowing that it is woefully lacking from medical and nursing school curriculums". Other participants echoed this comment and saw knowledge diffusion and the education of clinicians as one of their primary roles in the organization, especially in the areas of motivational interviewing, pharmacotherapy, relapse prevention, and interventions for special populations (i.e. pregnancy and mental illness). Richard, a physician, researcher and the medical director of his organization's program, described how much of these educational efforts were focused on helping the clinicians understand the proper dosing and ordering of tobacco cessation medications comparing them to the way other common medications are used:

We make intelligent use of pharmacotherapy in our program. We titrate medications to meet the patient needs and we're moving completely away from

the old fixed-dose kind of medication paradigm. I now tell physicians in a variety of settings that if they've got patients who are smokers and [who] are being treated for hypertension and hyperlipidemia, 'don't spend a lot of effort trying to ensure these people are treated to consensus guideline levels, because it doesn't make any difference if you're not treating their smoking.'

Participants described themselves as a “consult service” and as “facilitators of care” who brought specialized knowledge to patient care. Their typical workflow consisted of making an assessment, determining a treatment plan and then transmitting this plan to the treatment service; this is not unlike other consulting services, as the treatment team ultimately writes all of the treatment orders for the patient and determines the patient's care, as Mitch described:

I'll page the service [treatment team] and just talk to whoever is on call and I'll just walk them through. “I met with Mrs. Jones and here's what's going on, and here's what she'd like to do. Can you arrange for the medications”?

However, this “specialized” consult care delivery model also created barriers due to the sheer volume of smokers at these organizations. Participants at larger centers reported having as many as “100-150 smokers” per day who needed care, or up to “18%” of their hospital admissions. It was challenging, both operationally and temporally, to see all patients who needed tobacco treatment, and this led to ambiguities and a lack of consensus around the best staffing model for care delivery.

Administrative Vocabularies: Achieving Organizational Relevance

Participants described the importance of navigating organizational factors which clustered around four main domains: the influence of the external environment, the need

for systems' embeddedness, the influence of the social-organizational culture and the ambiguity around the best care delivery staffing models.

External pressures, such as the regulation of care through the Joint Commission core measures program, influenced resource allocation and organizational attention (*see Joint Commission Paper*). Participants described how the institutional adoption of smoke free campus policies influenced the scope and importance of their work. George explained how his organization made contingency plans for policy implementation and enforcement which spurred resource allocation and full leadership support.

The joint hospital executives decided they wanted to have a smoke free campus. They were very passionate about it, and a lot of resources were initially devoted towards this initiative, including funding 1.7 FTE's [full time equivalents] for a director and treatment staff. They gave us a significant amount of money for CO [carbon monoxide] meters, as well as medications and counseling for staff.

Research dollars and grant funding subsidized tobacco treatment care delivery in several organizations through the provision of personnel and/or medications, which were made available at no cost or reduced cost to low-income patients. However, there was much uneasiness and concern about the uncertainty of continued grant funding, as grants were often funded from state tobacco settlement dollars which were "drying up" or being "reallocated" to other chronic disease problems such as obesity and diabetes care.

Martha, a physician and researcher and the director of her medical system's tobacco program, described how research funds were used to provide no cost medication for patients, expressing concern about the unlikelihood of the medical center picking up these costs after the grant was finished:

My idea was to give the patients 30 days of medications. Because we're giving free medications we focus on medication compliance and assessing for side

effects. I think that's what we have to do, but I don't know who is going to pay for it. I think we have to show that it works and then we can start the argument about who's going to pay for it and think about cost effectiveness.

At another large academic medical center, the medical director was concerned that the entire program was at risk for closing and staff being laid off, due to the reallocation of funds from tobacco settlement funds and taxes to other urgent state needs:

The grant covered our two smoking cessation counselors and the costs of the pharmaceuticals, and our target audience was our 'University Care Patients', which is our indigent care program. The program chugged along very nicely with 12 years of continuous funding. We were able to show great outcomes. It had been our hope over the years that the hospital would sustain the program whenever the grant money ran out, and it looks like this year that the grant money is not a sure shot for renewal and my coordinator was told to start looking for another job. Given the hospital's response to the loss of grant funding, I think we're going to be back in the 99.9% of hospitals that don't provide this care. Having brought in \$1.7 million in grant monies to support this program over the past 12 years, I'm just really devastated.

In almost all of the organizations, sophisticated electronic systems were used to identify smokers upon admission, facilitate referrals for tobacco dependence care teams and determine workflow and productivity. Participants recognized the "power and permanence" of the EMR [electronic medical record] and leveraged these systems to ensure their care remained relevant and integral to the delivery system. One program director described how embedding their workflows into the medical record allowed him to track utilization and cost data to ensure that leadership understood the value his program added to the organization.

I like to keep track of how many patients we're seeing. I like to keep track of our charges our revenue, and our budget. How much are we spending on signage literature and other materials. I can account for how many visits we've had this year, how many CO tests we've performed. So, when I go in to meet with the president at the end of the year, I can say more than just, "Were doing a great job".

Many participants described the importance of having a champion or advocate in an area of influence, typically in hospital management. This allowed for program exposure at important organizational committees, lending legitimacy and increasing organizational support for the programs. Martha, the medical director for a multi-hospital system-wide tobacco dependence treatment program, describes how she felt lucky to have made a “friend” in management to ensure that she had access to resources and her program remained relevant:

I’ve been lucky because I have an advocate that I work with who is very high up in management and really believes this. Although we’re not that sexy, [and] diabetes is the chronic disease they want to fix now, they’re still impressed with what we’re doing to some extent

Conversely, participants also described the barriers to moving forward with programs when they had no advocate in management, or worse yet, someone who was outwardly hostile toward or critical of the program. One medical director, with more than 20 years’ experience in tobacco dependence treatment, described how one manager was accelerating significant changes to her program:

The nurse manager who oversees the education department, who had nothing to do with the smoking cessation program from its inception, is so uncommitted to tobacco dependence care that despite our excellent results, she told my coordinator the program was being ended and she should look for another job, and in fact, told her to ask the State if they wanted their unused grant funds returned, if she found a job before the program ended.

Participants understood that there were competing priorities for resources at the organizational level and were acutely aware that their programs were often viewed as

“flowing with red ink” or “loss leaders.” They spoke of the importance of framing arguments for those making the decisions and of “selling the service” to others in order to sustain and maintain resources. Linda, a program director with more than 11 staff devoted to tobacco dependence care and a program serving over 7,200 patients per year explained:

I’ve learned things now that I didn’t employ 12 years ago, and that is how to see my program and see what we do and how to make sure we are considered. If things are left to the book balancers, we’re nothing but red ink, but I make sure they see other things than just the book balances.

Another medical director further explained the importance of reframing and aligning tobacco dependence care with organizational trends and interests, to ensure the program remained relevant in the organizational discourse:

Our system is trying to do chronic care management and were trying to figure out how tobacco is going to fit into that that now...We’re trying to follow what the system is interested in doing and trying to build it in. That’s the challenge. I don’t know how long it will go on for, it’s really challenging. We’re trying to see tobacco as a chronic disease and build tobacco into care redesign, that’s the lingo were using.

Discussion

This study suggests that tobacco dependence care is a contested area of practice for many of the people working in hospital organizations and that those interested in promoting this care utilized several vocabularies of motive to account for and justify the efficacy and legitimacy of their work (Johnson, Dowd, & Ridgeway, 2006). Participants made their work show up as meaningful by using these four dominant vocabularies of motive which propelled institutionalized actions to ensure care delivery, mitigate resistance, educate others and legitimize the work. Participants used these vocabularies to provide “compelling accounts” for engaging and sustaining participation from all levels of the organization (Benford & Snow, 2000; Snow, Rochford, Worden, & Benford, 1986), from those on the front lines engaging in patient care to administrators and hospital executives who were planning organizational strategies and executing operations.

This study has also provided important insight into the facilitators and barriers to providing tobacco treatment care in hospital settings. Despite having robust programs, participants encountered considerable tensions and practice ambiguities that created barriers for care delivery. Consistent with other studies, the tobacco dependence treatment leaders at these organizations reported that there was a powerful moral narrative present that impacted care delivery (Bell, Salmon, Bowers, Bell, & McCullough, 2010; Leichter, 2003; Schroeder & Morris, 2010; Stuber, Galea, & Link, 2008), that misinformation of the effects of nicotine replacement therapy was prevalent and operative (Murphy, 2001; Cummings & Hyland, 2005; Shiffman, Ferguson, & Hellebusch, 2007; Bobak, Shiffman, Gitchell, Bery, & Ferguson, 2010; Zapawa, Hughes,

Benowitz, Rigotti, & Shiffman, 2011) that clinicians were often uneducated and/or untrained on the provision of treatment interventions and the use of pharmacotherapy (Freund et al., 2008; Gollust, Schroeder, & Warner, 2008; Rigotti et al., 2009; Tong et al., 2010) and that smoke free policies may play a significant role in tobacco dependence care delivery (Gadomski, Stayton, Krupa, & Jenkins, 2010; Schultz, Finegan, Nykiforuk, & Kvern, 2011; Shopik, Schultz, Nykiforuk, Finegan, & Kvern, 2012).

Participants emphasized the importance of reframing the “shaming and blaming” narrative that patients had been exposed to by their friends and families as well as other health care providers and society at large; and they constructed moral vocabularies to address this issue. They recognized that smokers were stigmatized and marginalized; and that smokers might actually become less likely to receive services due to further societal denormalization of smoking (Gadomski et al., 2010; Schultz et al., 2011; Shopik et al., 2012). Participants recognized the presence of this pervasive moral narrative and indicated that this led to necessary adjustments in the initial encounter with the patient, to promote communication and a therapeutic relationship. The use of motivational interviewing techniques and empathic communication figured prominently in this exchange (Bell et al., 2010).

In many ways, the presence of smoke free policies helped to redirect the moral overtones, from a “you should quit” sentiment to one that directed attention to the patient’s comfort and relief of symptoms in the face of “restrictive” policies. The appropriateness of smoke free campus policies in hospital settings has been shown to be well accepted by both clinicians and patients (Hetteema & Hendricks, 2010). While smoke free policies helped to ensure that patients received assistance with their nicotine

withdrawal; many participants also viewed this as a way to engage patients in a serious quit attempt. They felt that this was a key opportunity for patients to experience the benefits of pharmacotherapeutic treatment, often for the first time. However, the use of these medications, especially nicotine replacement, sometimes resulted in clashes with other clinicians who believed that nicotine replacement contributed to poor wound healing and infections (Gajendra, Ossip, Panzer, & McIntosh, 2011; Schultz et al., 2011; Shopik et al., 2012).

Therefore, participants used scientific vocabularies to counter this resistance and contest these care decisions. They emphasized the importance of remaining abreast of the latest scientific literature, using “evidence” to try to persuade clinicians that the use of NRT would not have harmful effects on patients healing but in fact, that continued smoking represented a far greater risk for developing an infection or preventing wound healing (Warner, Sarr, Offord, & Dale, 2004). They were able to use literature effectively to argue these specific care decisions.

Overwhelmingly, participants recognized the lack of a clear outcome goal for this care as a barrier to their work. Many reported that this led to dissatisfaction with their role and a lack of a clear way to validate their work both within their own organizations, and in their professional “field” as well. There was wide variation in opinion as to the appropriate clinical outcome measurement for this work, as some felt that simply managing a withdrawal episode was a valuable and a valid outcome, whereas others thought that documented abstinence after discharge was a more credible and scientific metric. Still, many participants could not articulate an appropriate measure for this type of chronic relapsing condition; especially in a setting where there was often only one 5-

15 minute opportunity to interact with a patient. These findings mirror previous work which describe the variability and lack of consensus of outcome measurements in tobacco dependence care; encompassing outcomes such as medical record documentation of care (Mills et al., 2011; Sorensen, Karlsmark, & Gottrup, 2003; Sørensen, 2012), increased utilization of nicotine replacement therapies (Bolliger, van Biljon, Humair, El Fehri, & Cornuz, 2008; Freund et al., 2009; Swallow & Dykes, 2004), and post hospitalization point prevalence cessation rates (Joseph et al., 2004; Koplan, Regan, Goldszer, Schneider, & Rigotti, 2008).

This perceived lack of an outcome also left participants “scratching their heads” trying to figure out what it is they should be “doing” and how that translated into the interventions they could feasibly accomplish or they could articulate to other clinicians or hospital leadership. For many, documentation of the volume of smokers they were able to treat, or quantifying the provision of nicotine replacement therapy seemed to be valuable utilization and organizational outcome metrics.

Participants used administrative vocabularies to describe these utilization and productivity outcomes because they were organizationally relevant but it also contributed to a sense of confusion about which interventions should be prioritized. Consequently, follow-up care was often significantly lacking (see 5A’s paper), despite being one of the most important interventions for continued abstinence after hospital discharge (Stevens, Glasgow, Hollis, Lichtenstein, & Vogt, 1993).

Participants noted the importance of “being of service” to other clinicians and used vocabularies of service in order to ensure care was delivered to patients and that

treatment was initiated. They strove to make it easy for clinicians to create referrals or order pharmacotherapy. They accomplished this through designing systems with ease of use in mind. They emphasized the importance of creating “automated” systems, such as comprehensive order sets to help guide the correct choice of pharmacotherapy, or service referral mechanisms that were initiated automatically upon smoker identification or may have required just “one-click” in the electronic system. Studies have shown that systematizing and “automating” care can engage clinicians in tobacco treatment interventions and improves provision of care (Rigotti et al., 2012).

They recognized the busy workload of nurses and physicians and designed both their referral and care delivery processes to create the least amount of work possible for them. In order for this care to be accepted and integrated into the care delivery system, they had to make it easy and rather ‘mindless’. Participants recognized a lack of interest in doing this work, especially from physicians, and while not all physicians were supportive of this work. Most agreed this work needed to be done but they were not interested in performing these interventions themselves.

The tobacco treatment leaders framed their work as assistance and service, doing work that no one else was doing or cared to do, or that others may have been too busy to do. They often framed these vocabularies of motive using terms like help, work, and responsibility; yet this framing left their work vulnerable to clinicians’ interpretation of what kind of help they needed, rather than being seen as having essential institutional value.

Participants not only recognized the busy workload of their physician and nursing colleagues, but also noted that many felt unprepared and untrained to provide this care. This phenomenon has been described extensively in previous research and has been identified as one of the main barriers to routine delivery of this care in most health settings (Koplan et al., 2008; Kruse, Kelley, Linder, Park, & Rigotti, 2012).

One of the most salient findings of this study, which has not been described elsewhere, is the extent to which these tobacco treatment leaders assumed the responsibility and practice of educating their colleagues about tobacco dependence care in their day-to-day work life. Participants described being involved in a myriad of educational activities; speaking at grand rounds, educating clinicians one-on-one during the provision of care, completing “order sets” for physicians to sign, and constructing training modules and classes.

In many ways, the implementation of the smoke free campus policies created several achievable and tangible outcome goals for this care; to manage withdrawal, to promote comfort, and to enforce policy. These goals were in alignment with organizational culture and were acceptable to many people. Nurses and physicians embraced these policy goals because they “fit” well with their professional ethos to promote comfort and relieve suffering; but also because they did not have to escort patients out of the hospital to smoke (Addo, Maiden, & Ehrenthal, 2011; Curry, Keller, Orleans, & Fiore, 2008; Heath & Andrews, 2006; Raupach, Merker, Hasenfuß, Andreas, & Pipe, 2011; Tong et al., 2010). Hospital leadership embraced these policy goals because implementation of the policy created organizational legitimacy amongst their peers (DiMaggio & Powell, 1983; Flood & Fennell, 1995; Suchman, 1995), as many

hospitals were adopting 100% smoke free policies (Gadomski et al., 2010; Gajendra et al., 2011). Finally, tobacco treatment leaders embraced them because they created legitimate outcomes for their work, those that were both achievable and recognized as relevant and helpful in this context.

While patients were not interviewed in this study, research suggests that patients understand and are accepting of smoke free policies, although they may have trouble abiding by the rules (Williams et al., 2009).

While smoke free hospital campuses have not been mandated, the external pressures and natural tendency of organizations to act and look alike over time has been well described (Cook, Shortell, Conrad, & Morrissey, 1983; DiMaggio & Powell, 1983; Shortell et al., 2001). Therefore, the resources devoted to the implementation of an organization wide smoke free policy could offer a “back door” way to engage with patients and hospital staff focusing not on traditional smoking cessation, but on promoting comfort and enforcing existing policy. This study suggests that leveraging smoke free policies and aligning these with tobacco treatment may be a way to circumvent some of the moral stigmatization of smokers and educational gaps among clinicians described in this study (Schultz et al., 2011; Shopik et al., 2012). Taking advantage of the trend to promote 100% smoke free hospital grounds is an important step forward in this field.

The clinically important elements for practice are the importance of engaging of patients in a non-judgmental, empathic way, using motivational interviewing techniques. Participants perceived that patients had shameful feelings about their smoking behavior

and this stigma created barriers to the effective delivery of care (Gadomski et al., 2010; Glassman, Reindl, & Whewell, 2011; Martinez, 2009; Martinez, 2009). Further inquiry should examine the effect of smoke free policies on the attitudes of clinicians and whether they reshape the tobacco treatment goal. Future research should explore alternative models of care delivery and establishing an accepted outcome of this care.

Limitations

This study has limitations, including those common to all qualitative studies. Our sample consisted of individuals who worked mostly at academic teaching centers; the scale and scope of these programs may not be achievable in smaller community-based hospital settings. Sites were chosen using a modified Delphi technique and snowball sampling, so while we studied institutions known for excellence in tobacco treatment, other sites not included in the study might have different programs or experiences. Not all participants were observed or interviewed at their place of work, some interviews were conducted by telephone and due to funding constraints not all sites were visited. Despite these limitations this study is among the first qualitative studies to obtain tobacco treatment program implementation insight from an open ended interview format. A strength of the study is the inclusion of a wide range of individuals working in various roles within their organization.

Conclusion

This study demonstrates that although these treatment program experts were regarded as leading the best programs in the country, they continually needed to navigate institutional tensions, including time and budget demands and a general lack of

legitimacy accorded to their programs and in some places, even a general hostility toward them. This speaks to the continuing need for external pressures (e.g. the Joint commission, Smoke free policies) to remind these organizations that tobacco dependence care is part of the the important work they must perform. This study also reveals that despite years of effort and education, tobacco addiction remains regarded as a non-acute care problem. Enormous progress in tobacco control has been made during the past several decades, but the institutionalization of care for tobacco dependent smokers has not kept pace. Better understanding of the ways institutional decision making occurs and the incentives and disincentives shaped by health systems financing will be essential for achieving better outcomes for patients who smoke. According to participants, this care is difficult to deliver effectively and consistently in the acute care setting; constraints include competing priorities for the patient's time and attention and competing logics for the outcome of this care.

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CHAPTER 6: IMPLICATIONS FOR CLINICAL CARE, POLICYMAKING AND FUTURE RESEARCH

Introduction

The purpose of this research was to understand the institutional factors that facilitate or inhibit successful implementation of evidenced based tobacco treatment programs in hospital settings. The specific aims addressed in this dissertation were: 1) to examine the organizational processes involved in management and implementation of these programs; 2) to identify perceived barriers and facilitators to care delivery; and 3) to explicate participants' (individuals involved in developing and implementing such programs) perceptions of the effectiveness of these programs. Through institutional ethnographic methodology and hermeneutic analysis, participants shared their experiences with delivering care, managing programs and navigating organizational culture. The analysis found that despite their programs having significant resource allocations, organizational support and long standing champions of this care, these tobacco dependence treatment leaders still encountered significant barriers to care delivery. There were also commonalities amongst participants in their perceptions of and responses to the barriers and facilitators they encountered in this setting. Finally, this analysis uncovered the specific ways participants navigated these barriers and adapted their institutionalized actions in this fluid environment.

This research adds important knowledge to the current literature on treatment for tobacco dependent patients in hospital settings (Rigotti, Clair, Munafo, & Stead, 2012). The findings are also valuable because they provide new insights into the implementation and sustainability factors of the care interaction between people working in tobacco dependence care and other care providers in hospital organizations. Within the health

care and sociological literature, little is known about the adaptation of practice guidelines in this setting. Much of the current research has focused on the clinical outcomes of care (Kruse, Kelley, Linder, Park, & Rigotti, 2012; Regan, Viana, Reyen, & Rigotti, 2012; Rigotti, Bitton, Kelley, Hoepfner, Levy, & Mort, 2011). The influence of organizational culture on the successful implementation of tobacco dependence programs in hospital settings is less well understood, particularly from the vantage point of the individuals working in the field (Campbell, Pieters, Mullen, Reece, & Reid, 2011; MacDavitt, Chou, & Stone, 2007; Seren & Baykal, 2007). This study addressed these previously unexplored aspects of program implementation. It illuminated the health care practices and beliefs about the relevance of these clinical interventions as well as patterns of engagement with health care providers, hospital leadership and patients who smoked. It also provided evidence of the power of regulatory and policy actions to influence institutional practice, as participants frequently noted how the Joint Commission core measures program and smoke free campus policies affected their capacity to achieve essential components of program implementation (Fiore, Goplerud, & Schroeder, 2012b; Williams, Schmaltz, Morton, Koss, & Loeb, 2005).

This chapter will discuss the study's findings within the context of relevant research as well as present implications for clinical care, policymaking and future research. The first section will summarize the relevant findings from this research. The influence of participants' institutionalized actions on their ability to achieve care delivery and to effectively interact within the organizational culture will be discussed. The barriers to and facilitators of program implementation will be summarized. Finally, specific patterns of engagement with other members in the health care system that impacted

participants' beliefs about the efficacy of clinical services will be discussed. The second section will speak specifically to the clinical, policy and research implications of this research. Implications for improved clinical care, more efficacious policy and further suggestions for substantive research of these programs will be presented.

Review of Relevant Findings

This study revealed that participants responded to the demands of program implementation in three primary ways: 1) prioritizing care needs, 2) sustaining organizational relevance, and 3) building organizational capacity. Necessary adaptations were developed in response to internal and external pressures within the organization. These adaptations served to mitigate resistance, ensure care delivery and legitimize the work.

Prioritizing Care Needs

Participants were frequently overwhelmed by the sheer volume of smokers referred for tobacco dependence care. Because demand for services exceeded program capacity, program leaders and staff developed various contingent processes to prioritize care; i.e. tiered staffing models, nurse initiated nicotine replacement therapy (NRT) protocols, single or 'one time only' visits to patients and patient permission for a referral/consult. In addition, the competition for patients' time and attention in the acute care environment resulted in significant modification and adaptation of the tobacco dependence treatment interventions recommended in the best practice guidelines.

This speaks to the temporal, spatial and cultural boundaries of the acute care environment. The implementation of the 5A's model of care assumes a volitional patient, continuity of care and adequate time to implement treatment interventions, which are

simply not achievable in this environment. Therefore, new treatment models must be considered and tested.

A priority was placed on establishing a connection with the patient; therapeutic communication, establishing trust and gaining credibility with the patients was considered paramount prior to any counseling or treatment intervention. The perceived positive outcomes resulting from such encounters encouraged participants' interest in adapting the "advise to quit message" into something slightly different, yet perhaps more effective. The onus to quit was no longer the sole responsibility of the patient but an ethical imperative of the care delivery system, to ensure relief of suffering and promote comfort. Finding alternatives that circumvent the pervasive moral discourse surrounding tobacco use, which remains such a powerful determinant of patient and clinician engagement in tobacco dependence care, is important.

The general lack of consensus and ambiguity related to the outcome goals of tobacco dependence care in this environment introduced another area of care prioritization: follow-up care was given little, if any, priority. Since achieving long term abstinence after hospitalization was generally not considered a valid or achievable goal of inpatient care, little effort was devoted to the follow-up care of patients. However, follow up care for any condition after discharge is difficult for hospital organizations to perform. They are simply not well-equipped organizationally or culturally to ensure that the transition to home is optimal, despite recognition that it is a very vulnerable period for many patients (Kripalani, Jackson, Schnipper, & Coleman, 2007; Snow et al., 2009). Therefore, designing new models of tobacco dependence care delivery that focus on

acute symptom management while hospitalized, provision of cessation medications and follow-up care is important.

Sustaining organizational relevance

Participants expressed significant concerns about sustaining relevance in their organizations. However, tobacco treatment leaders were extremely savvy in their approaches with hospital leadership to ensure that their programs remained relevant and important to the organization.

Programs had developed sophisticated programmatic infrastructure (data production and reporting hierarchies, committee attendance, staffing models) in order to monitor and report organizational performance to leadership. They had endeavored to systematically identify all patients who smoked in the organizations, and since it was difficult to ignore the sheer volume of patients who required care, they framed their work in the context of important organizational initiatives (i.e. smoke free policy enforcement).

The implementation of smoke free policies is extremely relevant and important to hospital organizations. In order to implement a comprehensive smoke free policy, organizations have to create comprehensive rules, contingent policies and procedures (Gadomski, Stayton, Krupa, & Jenkins, 2010; Gajendra, Ossip, Panzer, & McIntosh, 2011). Because these strategies typically involve the provision of NRT, as quickly as possible, to minimize withdrawal symptoms and address patient comfort, they create important ‘policy’ functions for the tobacco treatment staff. However, these policies also create an opportunity for a quit attempt vis-a-vis management of withdrawal symptoms.

Reframing tobacco dependence care to align with both policy goals and with emerging models of care delivery (population health management, accountable care,

medical homes, transitional care) will be important for sustaining organizational relevancy and ensuring care delivery.

Building organizational capacity

Program participants understood the importance of and the organizational clout of their nurse and physician colleagues. They also recognized the importance of having friends, or allies, in hospital management and cultivated those relationships to ensure that their programs remained in favorable standing within the organization. They had established themselves as the “experts” in this care and made themselves available to educate and train others as well. Despite the burden of tobacco related disease, many clinicians remain uninformed and uneducated on how to best achieve treatment interventions. This speaks to the general lack of importance accorded to this care in medical and nursing education.

Participants’ interactions with certain groups of physicians were sometimes confrontational and unsatisfying, and they saw these groups of physicians as ill-informed about treatment and misguided about the effects NRT had on healing and other surgical outcomes. The ability to resolve these encounters effectively was often restricted by participants’ limited professional agency. Enhancing the scope of practice for those working as certified tobacco treatment specialists could help ensure consistent and efficient care delivery and circumvent this problem.

Implications for Clinical Care, Policymaking, and Future Research

Implications for Clinical Care

Clinicians working with hospitalized smokers need to be sensitive to the powerful moral discourse these patients have been subject to from family, friends and other

healthcare providers. Patients who smoke are frequently ashamed of their behavior and may engage in avoidant or outwardly hostile behaviors (Kim & Shanahan, 2003; Stuber, Galea, & Link, 2008). Therefore, clinicians need to actively engage this population, and communicate concern, empathy, and some understanding of their marginalized status (Schroeder, 2008). Motivational interviewing techniques should be employed as these have been shown to be an effective way to engage with patients about their smoking (Hetteema & Hendricks, 2010).

Patients may experience uncomfortable and, at times, severe withdrawal symptoms which can lead to significant behavioral problems (Shopik, Schultz, Nykiforuk, Finegan, & Kvern, 2012). Understanding the neurobiological basis for nicotine withdrawal may help clinicians to understand these behaviors and initiate treatment interventions (Benowitz, 2008). Clinicians should also ensure that patients who received NRT in the hospital are provided with these medications upon discharge, as recent evidence shows such patients are more likely to continue NRT therapy than those who are not provided NRT upon discharge (Chan et al., 2011; Regan et al., 2012). While the specific impact of altering the quit message is not known, there is some evidence to suggest that alternatives to recommending complete abstinence may eventually contribute to long term cessation over time (Chan et al., 2011).

Finally, clinicians should begin to conceptualize and model tobacco dependence care just as care is provided for other chronic diseases, and incorporate this care into emerging models of care such as medical homes and transitions of care (Rigotti, Bitton, Kelley, Hoepfner, Levy, & Mort, 2011).

Implications for Policymaking and Future Research

This research demonstrates that regulation of care and mandates tied to performance drive organizational behavior. The joint commission core measures program provided the organizational impetus to expand or create robust inpatient tobacco treatment programs in the studied organizations, but due to the weak nature of the measures, this ultimately failed to be a continued driver of care. While the new Joint Commission measure set is robust, it is not mandatory and will not have the same impact mandatory measures have had in these settings. Therefore, the optional designation should be reconsidered (Fiore, Goplerud, & Schroeder, 2012).

The importance of smoke free campus policies and their effect on the treatment of smokers is an important finding. The cultural and practical resources as well as “contingent” policies (i.e. withdrawal management) devoted to smoke free policy implementation create an opportunity to improve delivery of tobacco dependence care. While accrediting bodies like the Joint Commission have not yet mandated smoke free hospital campus policies, the external pressure to conform and the natural tendency of organizations to act and look alike over time is encouraging (Cook, Shortell, Conrad, & Morrissey, 1983; DiMaggio & Powell, 1983; Shortell et al., 2001). Taking advantage of the trend to promote 100% smoke free hospital grounds is an important step forward in this field.

Further research that could aid in determining the most efficacious components of the practice guidelines in this setting is recommended. It is clear from this research that systematic identification of smokers was successfully achieved. Further development of ‘meaningful use’ standards may assist with the standardization of smoker identification

(Blumenthal & Tavenner, 2010). The effectiveness of adapting the “advise to quit” message for this setting has not been previously reported or studied and should be a research priority, given the trend of hospitals adopting smoke free campus policies and the prevalence of the practice in these settings.

This research also suggests the importance of transitional care in the vulnerable period after hospitalization. In the present study, participants described how important follow-up care was to offer support, medication access, and assessment of symptoms and titration of medications. Although the follow up care was difficult to operationalize, those that did have follow up programs reported successful interactions with patients and improved clinical outcomes (Japuntich et al., 2012; Reid et al., 2010). However, further study is needed to determine the impact of consistent follow up care coupled with ongoing medication access.

Conclusion

Despite enormous progress in tobacco control and years of work in tobacco dependence care, normalized tobacco use remains a social phenomenon, so much so that clinician engagement remains a constant struggle. In order to remain organizationally relevant, competing demands for organizational resources required constant adaptation and reframing of program goals. While this study’s results reflect the experience of twelve organizations known to give excellent care for tobacco dependence, and may not be generalizable to other hospital organizations, they do illustrate the tremendous efforts required at both individual and organizational levels to deliver this care in the inpatient environment. Hospital organizations have the potential be a positive influence in these individuals’ lives. However, in order to effectively support and care for patients who

smoke, health care systems and those who run them must begin to address the institutional blind spots that have left the largest preventable cause of death entirely unaddressed or inadequately addressed in inpatient settings.

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Appendix A

Tobacco Dependence Treatment in Hospital Settings

Interview Guide

Ruth Malone, PhD, RN, Principal Investigator

Gina Intinarelli, RN, MS, Co-Principal Investigator

1. Describe your role as _____.
 - Probe: How is the program funded and staffed?
 - Probe: Describe the day-to-day operations of your program?

2. Are there other members of the institution who assist you with this program?
 - Probe: Do these people possess information that is unique?
 - Probe: What do you value most in the people who assist you?

3. How are new programs or projects incorporated into your institution?
 - Probe: How does this program differ, if at all, from other types of organizational programs?
 - Probe: Describe programs that you believe were implemented well?
 - Probe: What characteristics made such programs successful?

4. Describe instances where you disagreed with other people about the implementation of this tobacco treatment program ?
 - Probe: How did such disagreements affect your work?

5. What do you think about tobacco control legislation in _____ and does it affect your institution in any way?

6. Describe your organization's role in the implementation of the tobacco treatment program?

- Probe: How did other key leaders feel about implementing a tobacco treatment program in your institution?
- Probe: Describe the barriers and the benefits of implementing a tobacco treatment program of this type?

7. What else would you like to share about this topic?

Appendix B

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Study Title: Tobacco Treatment in Hospitals: An Institutional Ethnography

This is a research study about tobacco dependence treatment programs in hospitals. The study researchers, Gina Intinarelli, RN MS, a doctoral student and Ruth Malone, PhD, R.N., Professor, Department of Social and Behavioral Sciences at the University of California San Francisco, will explain this research study to you.

Research studies include only people who choose to take part. Please take your time to make your decision about participating, and discuss your decision with your family or friends if you wish. If you have any questions you may ask the researchers.

The researchers are conducting a study to understand and describe the organizational factors in the creation, management and funding of tobacco dependence treatment programs in hospital settings. You are being asked to take part in this study because you have experience into the decision making processes regarding the creation and implementation of tobacco treatment programs in health care environments. The study seeks to enroll individuals familiar with the creation, implementation, and management and funding of these tobacco treatment programs.

Why is this study being done?

The purpose of this study is to understand how hospital based tobacco treatment programs are created, funded, managed, and sustained in these environments.

The investigators have no financial interests to disclose and the study is not being funded by any entity.

How many people will take part in this study?

About 30 individuals from Medical Centers across the United States will take part in this study.

What will happen if I take part in this study?

If you agree to take part in this study the following will occur:

1. You will meet privately with Ms. Intinarelli, for no longer than 60 minutes, at a time and place convenient to you. It is possible that Ms. Intinarelli may contact you a second time, to ask a few further questions.
2. You will talk about your understanding of and experience with new program creation and implementation and your decision making processes as it relates to tobacco treatment programs.
3. This interview will be digitally recorded. The interview will be typed into a computer, and your name and any other identifying information will be removed. All recordings will be destroyed once they are transcribed and checked for accuracy.
4. Ms. Intinarelli will also be making hand written notes to record her observations and thoughts during the study. These notes will remain confidential.

How long will I be in the study?

Participation in the study will take a total of about 60 minutes.

Can I stop being in the study?

This study is completely voluntary and you can decide to stop at any time. Just tell Ms. Intinarelli right away if you wish to stop being in the study.

Also, Ms. Intinarelli may stop you from taking part in this study at any time if she believes it is in your best interest or if the study is stopped.

What side effects or risks can I expect from being in the study?

- The interview is time consuming and you may get bored
- Some of the interview questions may make you uncomfortable but, you are free to decline to answer any questions you do not wish to answer.
- For more information about risks and side effects, ask one of the researchers.

Are there benefits to taking part in the study?

There will be no direct benefit to you from participating in this study. However, the information that you provide may help health professionals better understand the processes in the creation of tobacco treatment programs.

What other choices do I have if I do not take part in this study?

You are free to choose not to participate in this study. If you decide not to take part in this study, there will be no penalty to you.

Will information about me be kept private?

We will do our best to make sure that the personal information gathered for this study is kept private. However, we cannot guarantee total privacy. Your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

Organizations that may look at and/or copy your research records for research, quality assurance, and data analysis include:

- UCSF's Committee on Human Research

What are the costs of taking part in this study?

There will be no cost to you if you decide to participate in this study.

Will I be paid for taking part in this study?

You will not be paid for taking part in this study.

What are my rights if I take part in this study?

Taking part in this study is your choice. You may choose either to take part or not to take part in the study. If you decide to take part in this study, you may leave the study at any time. No matter what decision you make, there will be no penalty to you in any way.

Who can answer my questions about the study?

You can talk to the researcher about any questions or concerns you have about this study. Contact the researcher, Gina Intinarelli at: 415-353-1660 or via e-mail at gina.intinarelli@ucsfmedctr.org. You may also contact the primary investigator, Dr. Ruth Malone at: 415-476-3273 or via email at Ruth.Malone@ucsf.edu

If you have any questions, comments, or concerns about taking part in this study, first talk to one of the researchers (above). If for any reason you do not wish to do this, or you still have concerns after doing so, you may contact the office of the **Committee on Human Research**, UCSF's Institutional Review Board (a group of people who review the research to protect your rights).

You can reach the CHR office at **415-476-1814**, 8 am to 5 pm, Monday through Friday. Or you may write to: Committee on Human Research, Box 0962, University of California, San Francisco (UCSF), San Francisco, CA 94143.

CONSENT

You have been given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You have the right to decline to be in this study, or to withdraw from it at any point without penalty or loss of benefits to which you are otherwise entitled.

If you wish to participate in this study, you should sign below.

Date

Participant's Signature for Consent

Date

Person Obtaining Consent

Appendix C



Human Research Protection Program Committee on Human Research

Notification of Expedited Review Approval

Principal Investigator
Ruth E Malone

Co-Principal Investigator
Gina M Intinarelli

Type of Submission: Initial Review Submission Packet
Study Title: Tobacco Treatment in Hospitals: An Institutional Ethnography
IRB #: 10-02843
Reference #: 012942
Committee of Record: Laurel Heights Panel
Study Risk Assignment: Minimal

Approval Date: 01/08/2011

Expiration Date: 01/05/2012

Regulatory Determinations Pertaining to this Approval (if applicable):

This research is not subject to HIPAA.

The iMedRIS system will generate an email notification eight weeks prior to the expiration of this project's approval. However, it is your responsibility to ensure that an application for [continuing review](#) approval has been submitted by the required time. In addition, you are required to submit a [study closeout report](#) at the completion of the project.

Approved Documents: To obtain a list of documents that were [approved with this submission](#), follow these steps: Go to My Studies and open the study – Click on Submissions History – Go to Completed Submissions – Locate this submission and click on the Details button to view a list of submitted documents and their outcomes.

For a list of [all currently approved documents](#), follow these steps: Go to My Studies and open the study – Click on Informed Consent to obtain a list of approved consent documents and Other Study Documents for a list of other approved documents.

San Francisco Veterans Affairs Medical Center (SFVAMC): If the SFVAMC is engaged in this research, you must secure approval of the VA Research & Development Committee in addition to CHR approval. The CHR [website](#) has more information.

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