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APPLYING ANTHROPOLOGY AT AN ACADEMIC COMMUNITY HOSPITAL: COLLABORATIONS ACROSS THE CONTINUUM OF CARE

INTRODUCTION

Practicing anthropology at an academic community hospital involves collaborations across the full continuum of care, from hospital, to doctor's office, to the medical education classroom and into the community. Through these collaborations the anthropologist learns about hospital culture through many different lenses and is, in turn, able to provide valuable insights into organizational culture and patient care from a variety of vantage points.

This chapter explores the collaborations of a hospital anthropologist with colleagues in five projects. Each project provided a different way of looking at

hospital culture and enabled the anthropologist to understand the hospital system through different lenses (Miller and Crabtree 2005, Schwartzman 1993). In addition, collaborators had the opportunity to learn about anthropological method and perspective. Important lessons learned through these collaborations are also discussed.

The chapter includes co-author perspectives on collaboration with the hospital anthropologist. These perspectives shed insights on the translation of anthropology, their views of collaborations, as well as the value of applying anthropology in a health care setting, an often overlooked aspect of collaborations. One co-author, a health care system senior vice president, summarized her new insights into the field of anthropology as follows: 'Health care involves the care of people who exist in the context of their beliefs and attitudes, families, support systems, culture and community. The holistic perspective of an anthropologist can assist care givers to determine how to best care for patients/families/communities based on the understanding of this context'. Co-author collaborators came to better understand and appreciate anthropological methods and theories.

Finally, we discuss key lessons in terms of the three book themes, translations, transgressions and the transformative impact of doing anthropology in a large, complex health care organization. Beyond episodic consultation, this chapter will focus on the unique challenges of working as an in-house measurement and problem-solving anthropologist, matching methods to multiple levels, groups and interactions, and guiding process and quality improvement through the unique lens of the anthropologist. Given the scale and complexity of delivering high quality health care, there will almost certainly be a role for anthropologists in larger health care institutions in the future.

THE HOSPITAL SYSTEM

In many cases, anthropologists who have studied aspects of health care are from outside the hospital and come to the hospital with specific research projects in mind, often focusing on anthropological issues, rather than health issues of interest or benefit to the hospital itself (Rylko-Bauer and Farmer 2002, Bennett *et al.* 1982, Browner 1999, Morse 2005, Philips 1985, Press 1985, van der Geest and Finkler 2004). While anthropologists have been working in medical and nursing schools as teachers and researchers for many years (Chrisman and Maretzki 1982, Chrisman and Johnson 1990, Crabtree and Miller 1999, Leighton 1972, Miller and Crabtree 2005, Stein 1985, von Mering 1985), anthropologists employed by hospitals are still not common. We like the term 'clinically-applied medical anthropology' to define this role, since the anthropologist is situated in the clinical setting (Chrisman and Maretzki 1982). The anthropologist works as part of the hospital's research department, and is expected to add a social science, qualitative and evaluation research focus to a biostatistically-focused research department. These anthropologists working within the hospital setting as direct employees allow the development of working relationships within a research climate that permits access to insights into a variety of health care issues that might not be available for those not employed within the institution (Crabtree and Miller 1999).

One goal of hospital-based anthropology, we suggest, is to demonstrate to clinicians and administrators that anthropology is a relevant and useful perspective and encompasses methodology helpful in addressing key issues of 21st century medical care. The Committee on Quality of Health Care in America under the auspices of the Institute of Medicine (IOM) identified six aims of quality health care where improvement is warranted (2001:43). These include healthcare that is safe, effective, patient-centered, timely, efficient, and equitable. Hospital-based anthropologists are positioned to provide insights on many of these aims through research that is

sensitive to the many 'voices' involved in these issues (Deitrick *et al.* 2006, Miller and Crabtree 2005).

The IOM report (2001:116) also recommends 6 changes/challenges that health care organizations will need to make as they move towards meeting the challenges of twenty-first century health care. These six challenges include redesigning care processes; making effective use of information technologies; managing clinical knowledge and skills; developing effective teams; coordinating care across patient conditions, services and settings, and incorporating performance and outcome measurements for improvement and accountability. Further, as the hospitals meet the challenges for redesign of health care organizations implied in the IOM report, researchers will be needed to help hospitals manage these changes. Anthropologists must be willing to adapt and transform their perspective in a way that builds trust and provides actionable insights into hospital culture and practice.

CHALLENGES IN THE HOSPITAL SETTING

There are challenges working as a hospital anthropologist. Chief among these is the need to work within the confines of the hospital's Institutional Review Board (IRB) and U.S. government HIPPA (Health Insurance Patient Portability Act) regulations. IRBs pose limits on hospital research, often necessitating creative ways of gathering data that both meet IRB requirements and provide the needed information (Wasser 2004, Morse 2005). A different set of ethical issues also is present when working within the hospital system. Government rules such as HIPPA often dictate what is private, and the need for written informed consents and more rigorous IRB review can make research difficult. Ownership of data is also an issue. Some organizations routinely claim ownership of intellectual products produced by employees. Hospital researchers also have to understand how issues such as patient protection, liability and litigation can affect what is written for submission to professional journals.

Another challenge for the anthropologist working within the system as a direct employee is to show the relevance of anthropology to everyday patient care. Also, convincing clinical colleagues of the value of anthropological method, theory and perspective in research can be difficult. Personnel trained in the biomedical knowledge model may look at social science as less 'scientific'; but doctors and other researchers need to understand that patients do not live only in a randomised control trial world. Research in the hospital setting often focuses on topics such as patient satisfaction, quality improvement studies and evaluation of programs or processes (Bond *et al.* 2004, Bond *et al.* 2006, Deitrick *et al.* 2005, Deitrick *et al.* 2006, Miller and Crabtree 2005).

The hospital anthropologist must, therefore, demonstrate the value of anthropological perspective and methods and develop teamwork partnerships. As colleagues learn about anthropology by participating on collaborative research teams they begin to understand the value of anthropological method and theory in this setting. A helpful approach is to build cross-checks for qualitative data into data collection. Biomedical colleagues are educated to look for 'reliability and validity' in data; the anthropologist can use mixed methods and collect data from a variety of sources to cross check the other as a way of 'validating' findings to colleagues.

THE NAME GAME

In the medical setting titles are important. The first author, when hired by the hospital, was given the title 'ethnographer.' While she and the search committee knew what an ethnographer was, many people at the hospital had difficulty pronouncing the word as well as defining it. This naturally led the anthropologist to ask the head of the search committee the following question. Why did the hospital hire an anthropologist? His response was that the idea of hiring an ethnographer emerged from discussions he had about what information is strategically most

valuable for developing, nurturing and sustaining a learning organization (i.e. a culture of inquiry and learning). The context-rich information often results in dissonance with 'group mind' assumptions. These corrective lenses from ethnography were felt to be particularly valuable organizational self-knowledge and would greatly enhance organizational intelligence (June 2005, personal communication).

In the hospital setting discussed here, the ethnographer is a PhD level anthropologist, which is an immediate asset, since it allowed her to be called 'Dr' in a world in which people with that level of education gained credibility from the title. Also, with her supervisor's permission, she began including 'medical anthropologist/ethnographer' in her title. This seemed to provide more understanding to colleagues, since the term 'medical' they obviously understood, even though she was often questioned about what a medical anthropologist was or did. The anthropologist also is an RN (registered nurse), and that title is used on her badge as well. The RN also conveyed credibility, since it was clear that as an RN the anthropologist was familiar with the clinical setting, understood patient care, understood biomedicine and science, knew anatomy, physiology and pharmacology, and could speak the 'language' of medicine. All of these made establishing relationships and navigating the hospital system easier.

THE 'PLACE' OF ANTHROPOLOGY IN HEALTH CARE SETTINGS

Kleinman notes that anthropologists need to make themselves useful in the clinical setting (1985). The clinically-applied medical anthropologist employed in the hospital setting can help bridge the divide between the biomedical and psychosocial paradigms through collaboration with biomedical colleagues. The development of two-way dialogue and exchange allows the anthropologist and colleagues to learn from each other and collaborators can see anthropology in action. The anthropologist can translate anthropological method and theory into terms easily understood by

their biomedical colleagues. Examples are presented later in this chapter.

Press points out that the anthropologist working within the hospital system can work directly on important problems affecting patient care, including quality assurance, patient satisfaction, and evidence based medicine (Press 1985). Berwick says that 'even at its biological best, medicine is always – always – a social act' (2004:xx). The purpose of health care, he notes, is to provide patients and communities with safe, effective, patient-centered, timely, efficient and equitable care. He suggests that quality improvement should be defined at the level of the patient and based on the patient experience. The top and most important level, he notes, is that of patient and community, and is based on patient experience. Berwick emphasizes that 'the level of purpose; true north, lies in the improvement of the experiences of patients and communities, and no where else' (2004:249). Hospital anthropologists are in a unique position to assist hospital administrators and clinicians in understanding of the patient experience; a key quality improvement issue since the health-care consumer (patient) is the person who utilizes and therefore judges the hospital and perceived quality of care provided.

Anthropology in the hospital setting is a blend of both medical and organizational anthropology (Schwartzman 1993; Jordan 2003). The anthropologist looks at both the macro and micro levels of culture at the institution, and translates findings for the lay audience. Nelson *et al.* define clinical microsystems as 'the small, functional front-line units that provide most health care to most people. They are the place where patients and providers meet. The quality and value of care produced by a large health system can be no better than the services generated by the small systems of which it is composed' (2002:474). Thus, in order to improve health care, Nelson and his associates point out that the focus of quality improvement must be at the level of the clinical microsystem. Their idea of applying microsystem learnings to a systematic transformation at all levels of the system provides a framework for

anthropologists working within the hospital system, and validates the need for organizational learning about interactions at all levels of the system. Ethnographic methods, as well as the theoretical orientations of anthropology, can provide important tools useful in documenting information about quality of care. Both the emic (cultural within) and etic (orthodox from without) perspectives are used, depending on the 'level' of the organization at which the research is being conducted. Knowledge of the structure of organizations is crucial. Anthropologists can work at many levels within the organizational system and for a variety of different stakeholders (Jordan, 2003; Miller and Crabtree 2005).

Rylko-Bauer and Farmer point out that ethnographers have already contributed insights into issues such as broader understanding of how managed care is transforming clinical practice, challenging professional autonomy, and presenting practitioners with moral and ethical dilemmas. They suggest that anthropologists can provide important insights into how provider accounts of clinical practice link with patient perceptions of care and provide important information about both sides of key issues (2002:490).

Hospital-based anthropologists are in a unique position, with their access to both clinicians and patients in the hospital setting. They can translate knowledge into practice, study aspects of organizational culture and recommend how to manage culture change. Rylko-Bauer and Farmer point out that clinical medical anthropologists can provide insights into the structures of power in corporate medicine (the hospital system) (2002:492). This involves both studying up and studying down within the system (Miller and Crabtree 2005). The medical anthropologist becomes a participant observer in the course of daily work. This can mean struggling at times to remain a detached observer all the while experiencing the system as it really is. The anthropologist attempting to study power in the hospital system from outside the system would probably not have the entrée

necessary to understand the intricacies of these relationships to the level that one employed within the system could.

Stein suggests that one transformative role of the ethnographer in the clinical setting is to help clinicians become better observers of clinical interactions (Stein 1985). This teaching of methodology is part of the collaboration that happens within the hospital system and is facilitated when the anthropologist is employed by the institution and has familiarity with clinical colleagues and settings. The 'gaining access' part is not a problem when the anthropologist is known in the institution. Stein goes on to say that one strength of anthropologists in medical settings is the ability to have a sense of the entire system (1985). Through the holistic perspective anthropologists can see both the macro as well as the micro levels of the system; something an outsider might not be able to do as easily. Stein further stresses that it is important for the clinically based anthropologist to learn the essence of biomedical culture, including the language, values, organization, rituals, and worldview of the hospital system.

It is important for the anthropologist to convey understanding of not only the patient culture but also the clinical culture as well and understand that the 'field' for the hospital anthropologist has many layers: clinic, unit, examining room, conference room, classroom, organization and community. In other words, the entire hospital system is the 'field' and the effective hospital anthropologist must be able to understand and navigate the entire system.

ORGANIZATIONAL THINKING

Anthropology in the hospital setting also has the obvious task of working within the medical culture. This includes understanding all of the levels of medical culture, medical terminology, and an understanding of medical education and patient care. It includes the relationships and power between all stakeholders in this complex

cultural system. As previously mentioned, it is helpful if the anthropologist has medical credentials such as nurse or physician because these bestow credibility and acceptance by medical professionals, who might be wary of social scientists. The medical model view often does not include a view of the whole person, but instead focuses on the effect of disease on a particular body organ or system.

The holistic perspective of anthropology is critical in ensuring that the human voices—those of the patients, physicians, administrators, nurses, staff, as well as other stakeholders—are heard. Being able to ‘speak’ the language of medicine makes it easier for the anthropologist to clearly communicate with health care workers, and enables the anthropologist to translate social science into concepts that will be understood by and clinically relevant to health care workers. Anthropology in the hospital setting, then, is a unique blend of organizational anthropology, medical anthropology, and traditional cultural anthropology.

COLLABORATION

Collaborations provide an opportunity for the anthropologist to teach colleagues anthropological method and theory without people necessarily knowing that they are learning anthropology. Opportunities to learn different ways of looking at an issue from a variety of perspectives occurs through collaboration, as colleagues are encouraged to understand and explore culture and look at issues from a holistic perspective. A clear clinical focus and demonstration of clinical relevance is important when conducting research in the hospital setting. Also, the research question and methods must sometimes be adjusted to the clinical setting and questions should be framed with the clinical objective in mind. Qualitative research in the clinical setting is often an interpretive process. It is often necessary for the anthropologist to describe, organize, connect, corroborate and legitimize the findings from his/her work (Miller and Crabtree 2005).

Incorporating a mix of qualitative and quantitative methods in projects not only strengthens research but also demonstrates the strength of qualitative methods and the human perspective and thick description that these methods bring to a project. In addition, collaboration with non-anthropologist colleagues allows the anthropologist to introduce new software, such as NVivo, Nud*ist or Atlas, to the research endeavour. Most hospital researchers are familiar with traditional business and research software such as Word, Excel and Access, as well as SPSS and/or SAS, but few understand the value of NVivo in the analysis of text data, or that text data is even able to be analyzed.

It is important, though, for the anthropological researcher to demonstrate 'rigor' in research methodology, and to 'validate' findings, through the use of software, replicable methodology and a mixed methodology design. For example, the use of surveys containing both Likert-scale and open-ended questions allow the respondent to not only make a 'forced choice' based on the scale, but also allows him/her to answer some questions in their own words. Often, the responses to such open-ended questions provide deeper insight into a clinical problem and sometimes serve as validation of the insights gained in the scaled question portion of the survey. (Deitrick *et al.* 2005)

Another strategy is to validate qualitative findings from transcript coding using statistical tools such as kappa. Kappa statistics were used in several projects discussed in this chapter (Bond *et al.* 2004; Bond *et al.* 2006) to validate the level of agreement among the coders of qualitative data. The calculation of the kappa statistic in this instance helped make the transcript coding appear less subjective, and, more importantly, 'validated' the qualitative findings adequately enough for the peer reviewed journals to accept and publish.

Also, a qualitative component can be proposed as part of a larger randomized controlled trial (RCT) study. This qualitative component can be designed to provide

additional data regarding the effect of the drugs or intervention studied from the patient experiential perspective and thus can provide more complete data about the effects of the drug or intervention on the patient than an RCT alone.

Research collaboration also enables non-anthropologist colleagues to understand anthropology method and theory and the research process itself through participatory data analysis. Colleagues are able to see the results of data collection using interviews, focus groups and ethnography, and how software, such as NVivo can assist in organizing and analyzing textual data. Collaborating with colleagues throughout the research process, from design to analysis, enables the development of teamwork and shows the value of the anthropologist as an important team member in the hospital research program.

Knowing how to report and present qualitative data is often difficult for non-social scientists, so collaborations in writing are helpful. Research in the hospital setting is often published in a variety of journals including medicine, management, and business as well as social science publications (Bond *et al.* 2004; Cohen-Katz *et al.* 2004; Deitrick *et al.* 2005).

COLLABORATIONS ACROSS THE HOSPITAL SYSTEM

The five very different projects we describe in this section are included because each represents a different collaborative model at our institution. In each of these collaborations, the anthropologist had the opportunity to use anthropological method and theory to research these topics. Collaborators were included in the project planning, as well as in the data analysis and synthesis process, learning about qualitative research methods through participation. Each of the projects in this section involved working with colleagues from other disciplines who often were not familiar with social science research. This section includes insights about the value of anthropology in the hospital setting as told by the collaborators themselves.

THE PATIENT SATISFACTION PROJECT

The first project, an ethnographic assessment of in-patient satisfaction, represents a 'working for the boss' model of organizational change collaboration with two senior vice-presidents at the hospital (Deitrick *et al.* 2006). An ethnographic assessment of one in-patient medical-surgical unit was done to understand the drivers of patient satisfaction and loyalty. In this model, the project was requested by senior management to explore a quality improvement issue. The anthropologist was given the problem/research questions, the unit that was to be studied was assigned by management, and the anthropologist designed the project to find answers to the questions posed by management. Management assisted with the research by facilitating communication with appropriate physician and nursing leaders and unit managers.

Throughout the project planning, it was important to keep a clear clinical focus. Ethnographic methodology was employed to provide information from the bio-psycho-social perspective about the in-patient experience. The use of ethnography was the 'fresh' and interesting approach for the primary investigators who wanted to see whether this methodology could provide insights into the in-patient experience. One of the senior vice presidents who requested the Patient Satisfaction Project said,

Collaboration with a researcher with a background in anthropology and focus on qualitative methodology was helpful in the inpatient customer service project. The qualitative analysis approach introduced a methodology that added value and insight to the issues surrounding satisfaction with care. When presented in a non-threatening manner, staff, patients and patients' families were able to share thoughts and opinions with data collection being facilitated.

Qualitative research methodology, particularly ethnography, also had to be explained to nursing administrators and staff on the unit where the work would be

done. This provided an opportunity to introduce research and qualitative methodology to unit staff. By including staff in the research, the project became participatory, and staff became excited about the research. They looked forward to understanding more about patient satisfaction on their floor, and were eager to see the results of the research translated into actions they could put into practice on their unit to improve patient care.

As the research went on, the nurses became comfortable with the ethnographer's presence on the unit, and they would **discuss information they thought she should be aware of as part of the research**. For example, one nurse's aide came up to the ethnographer during one observation period, took her by the arm and said 'I want to show you something' and took the ethnographer into the clean utility room. The nurse's aide pointed to the clean linen that had just been delivered to the unit, and lamented about the lack of adequate linens for the upcoming evening shift. The nurse's aide asked the ethnographer 'Whose mother am I not supposed to clean up this evening due to the lack of linen?' This exchange was important, because it **demonstrated** that staff wanted to help in the research, and felt comfortable with the ethnographer's presence. It also showed that nurses and staff intuitively had a sense of what was important to patients, such as physical comfort, and the frustration they felt at perceived 'barriers' to their ability to provide comfort to their patients due to the lack of adequate necessities such as clean linen.

After the project was complete, one of the senior vice presidents elaborated on the benefits of introducing ethnographic methodology to the unit staff. 'The added benefit of first hand experience with a researcher/anthropologist utilizing a qualitative approach', she said, 'was exposure of our staff to the benefits of this approach to research. It fostered an understanding and appreciation for utilizing more than one approach to research to analyze and interpret information. And, an attitude of respect for its benefits was promoted and achieved.'

This research was also an example of the plan-do-study-act process. The formalized set of observations, including work flow, staff interaction with patients and each other, measurement of furniture, chairs and wheelchairs, mapping of the unit layout and work zones, interviews with patients and staff, and sound level measurements of the unit during the work day, revealed a subset of domains that appear critical to overall patient satisfaction as measured by Press-Ganey satisfaction scores (Press-Ganey 2000). This was the first project undertaken by the hospital anthropologist after her arrival at the hospital in the fall of 2001, and was an important 'testing of the waters' for introduction of qualitative research to the institution.

Specific barriers to reliable results from this project included staff attitudes about 'being measured', reaction to negative findings, and careful handling of data and reports within the system. The unit staff themselves went through a transformation from skeptical at the outset to appreciative as results from the ethnographic analysis were translated into specific process changes that did result in increasing Press-Ganey scores for that unit.

In this collaboration, the anthropologist met several times with the senior management project sponsors to introduce them to ethnographic methods. This involved explaining each method that would be used in the data collection, and the type of data that would result. Also, an explanation of how the data would be organized and analyzed was given to the project sponsors, so that they could see how the data and findings would provide the desired clinical information about patient satisfaction.

In addition, once the research was completed and the project report was delivered, the ethnographer had a final meeting with the project sponsors to review the findings. Translating the findings into usable patient care improvement information was the final, and perhaps most important aspect of this project. This

final meeting was also helpful in reinforcing management understanding of the ethnographic process. The ethnographer used this meeting to show the linkage of methods with findings in a logical manner and also provided recommendations for staff education that would allow for clinical implementation of the components of patient satisfaction identified with this research (Deitrick *et al.* 2006). As one of the senior vice-president collaborators said,

The results added valuable and positive information upon which to plan actionable improvements. They provided insight into the true issues that were at the heart of satisfaction for those experiencing the health care environment. The richness of the data allowed a clearer understanding of the quantifiable data collected concurrently and added a human element to the personal experience involved with health care. This human element was beneficial in providing the guidance needed to plan improvements that would be meaningful and significant in the eyes of patients.

The value-added for this project was the demonstrated effectiveness of these anthropological methods that are now accepted and being used in several current projects in the Hospital network. This project opened up administrative eyes to the effectiveness of qualitative methods in impacting a quantitative measure of satisfaction (Press-Ganey 2000) that is an industry standard. (Deitrick *et al.* 2006)

EMERGENCY MEDICINE RESIDENT EDUCATION

The ethnographer's collaborations with an emergency medicine department physician (Bond *et al.* 2004, Bond *et al.* 2006) evaluated using human simulation to teach emergency medicine residents about diagnostic error prevention and reduction in the emergency room. The project represented a traditional education intervention evaluation model and used mixed methods (survey and interviews) to obtain

necessary information. Interviews were an important component of this project and were helpful in eliciting feedback from the residents about their experience using the simulation mannequins to learn about diagnostic error prevention as one component of their medical training.

In this project, the lead researcher was a physician who had no prior experience of qualitative research. Through this research he gained an understanding and appreciation of the value of qualitative methodology in capturing key insights on the use of educational interventions among medical residents. The emergency medicine physician researcher began his project with a traditional clinical educational research question: what is the effectiveness of an educational intervention in teaching metacognitive strategies for avoiding diagnostic error to emergency medicine residents? It quickly became apparent that traditional methods would have a hard time capturing such a subtle concept. He came to the ethnographer for help with the interview component of the project. The physician-researcher notes that,

We explored the concept of a qualitative methodology as a theory-building exercise rather than a hypothesis-testing exercise as would be found in traditional educational research. By using interview data during our first project we were able to explore, through open-ended questions, whether or not residents were grasping the concepts that were being taught. We were also able to explore the differences among different PGY [post graduate year] levels of learner. The first project [Bond *et al.* 2004] was purely descriptive and no comparison group was made.

For the follow-up project (Bond *et al.* 2006) residents were randomized to a particular educational intervention (technical versus cognitive debriefing after simulation) and administered a similar survey and interview evaluation. We mixed

the randomized methods of quantitative research methods with traditional qualitative methods. These methods allowed us to tease out subtle qualitative differences between groups when quantitative methods would be either too crude to find the differences or would require overly large sample sizes to achieve statistical significance.

In the clinical world, numbers rule, and charges of subjectivity are often made against qualitative research. In both the initial and follow up projects on this topic, four project team members participated in individual coding of de-identified resident interview transcripts. Kappa statistics were calculated to understand variation in inter-coder reliability in both projects. This multiple rater coding and kappa determination of inter-rater coding reliability was done to help lessen the amount of subjectivity in the analysis, thus making the research more 'acceptable' for publication in medical journals. By quantifying and looking at which coding nodes or themes were agreed upon by three out of four raters we add substance to the conclusions we draw from such qualitative data by minimizing effects of observer bias on the transcripts. Another method we used to strengthen the analysis included blinding the interview transcripts so that the people coding the interview transcripts could not be biased by group assignment of the transcripts they reviewed. By adding these traditionally quantitative methods (determination of inter-rater reliability and blinding of transcripts) to qualitative research we increased the scientific rigor and increased the likelihood of publication in the medical education literature.

The work on this project was collaborative from the start. The ethnographer showed the physician how interviews could tease out abstract concepts regarding teaching, learning and thinking in resident education. Together the physician and ethnographer developed the interview guide, the ethnographer conducted the interviews, and together they worked through the code book development and interview analysis methodology described above. The

ethnographer also showed the physician the process of computer-assisted textual data organization and analysis, and how qualitative methods could contribute to theory building about cognition and learning in graduate medical education. In addition, the ethnographer drafted the qualitative sections of both project papers, and suggested to the physician how interview data could most effectively be presented in both papers.

Through this collaboration, the physician learned about qualitative data collection and analysis by participating in the process. He learned about NVivo software, codebook development, text analysis, and presentation of qualitative data by working in tandem with the ethnographer. In return, the ethnographer learned about cognition, thinking, clinical diagnostic error reduction and its relevance in graduate medical education. The ethnographer was second author on both published papers that resulted from this process, and the collaboration was satisfying for both.

DIABETES GROUP MEDICAL VISITS

The value of group medical visits as a primary care option for patients with type 2 diabetes was studied in collaboration with the hospital's diabetes centre. Qualitative methods included observations of a one-year cycle of group visits at two primary practice physician offices, interviews with patients from both practices, as well as interviews with both physicians, and the diabetes educator. An attitude survey was also administered to patients to examine the role of activation or empowerment in the patient experience. This project is an example of an anthropologist collaborating on a project that was externally funded.

In an effort to better meet the needs of our patients our hospital's diabetes centre implemented a new chronic care model which addressed many of these influential factors in the patients' primary care physician office. The initial evaluation of this program was designed to measure quantitative data including

clinical measures such as HGB A1C and blood glucose levels, as well as quality of life and patient satisfaction measures. Although beneficial, the quantitative data did not provide the depth or richness of information our implementation team desired.

‘Like many other chronic disorders, optimal management of diabetes requires patients to be actively engaged in their own care,’ the diabetic program administrator said. She went on to say that, ‘The patient’s ability to engage in self disease care is affected by many factors including their knowledge of the disease process and treatment regime, support systems, economic situation, value of health, and cultural influences.’ The ethnographer collaborated with the diabetes program administrator to develop methodology for capturing information about patient perspective on these issues in order to supplement the quantitative data already being collected.

Qualitative methods, including observation of and participation in group medical visits and patient, physician and diabetes educator interviews were used to gather information about the experiential aspects of being diabetic as well as the dynamics of the diabetic group medical visit process. A formal interview process was developed to capture the health care providers’ and patients’ perceptions of the effectiveness of this model. This information was not only helpful in validating the success of our program, but also in helping to guide which components were the most helpful for patients.

In this collaboration, the administrator met with the ethnographer and discussed the gaps in the information she currently had, and looked for assistance with the qualitative component of this project. The administrator was very busy and preferred to hand over the qualitative component of the project to the ethnographer. Patient, physician and nurse interview guides were developed in consultation with the administrator. The ethnographer conducted the interviews, group observations, and also did the data analysis. Meetings were held periodically with the

administrator to review progress on the data collection and analysis and to discuss emerging themes. The ethnographer also assisted with preparation of poster and oral presentation content for several national scientific meetings.

In this collaborative model the administrator was the subject matter expert, and the ethnographer the methods expert. This partnership worked well, with both the administrator and anthropologist lending expertise to the research.

EMPOWERMENT EVALUATION

An empowerment evaluation was begun in collaboration with the project leader, a physician in the hospital's family medicine department. Empowerment evaluation is a collaborative evaluation methodology that uses 'evaluation concepts, techniques and findings to foster [program] improvement and self-determination' (Fetterman 2001: 3). The goal was to complete an evaluation of the family medicine department through the organization and analysis of seven years of data. Data included reports from site visits by an external evaluator, focus groups with faculty and yearly focus groups with the residents from all three levels of residency. The empowerment evaluation project was started by a family physician with a PhD in anthropology who worked as a physician and researcher at another hospital. The project began at the same time that the family medicine department and residency programs began at our institution.

This project is an example of the 'speaking to power' model of collaboration. In this project, the **hospital** anthropologist worked to help plan the evaluation as well as organize and analyze the data. Her expertise with NVivo software helped in the organization, coding, synthesis and analysis of large amounts of project data. The hospital anthropologist joined the project after approximately seven years of data collection had occurred. The project leader speaking about the collaboration said, 'She [the anthropologist] has contributed to the organization and initial analysis.

Since this is an on-going project, she has continued to collect data yearly.' 'Department leadership,' the project leader added, 'views this project as a tool to hear about and make sense of the story of the department's evolution, growth, change, areas of stress or difficulty as well as identifying where the gaps are with regard to the vision of the department.'

This was a unique collaboration since the family medicine department at our hospital has a chairman who is both an anthropologist and physician. In addition, a number of faculty have backgrounds and skills in qualitative research so that there is much more partnership and collaboration as well as understanding, acceptance, validation and valuing of the anthropological approach than with some of the other projects discussed in this chapter.

DOMESTIC VIOLENCE CULTURE CHANGE EVALUATION

This project involved the anthropologist collaborating with the hospital's domestic violence workgroup to design and carry out an evaluation of five years of the hospital's domestic violence work. The goal was to measure how the culture surrounding domestic violence work at the hospital had changed, and to produce both a culture change model as well as evaluation tools for future use by the institution. This is an example of the 'working across the system' model of collaboration because it involved collaborating with members of the workgroup who represented a number of different departments within the hospital as well as representatives of the local community's domestic violence referral agency and shelter.

The hospital anthropologist was asked to help with the evaluation of the hospital's out-patient domestic violence program activities. Various qualitative, quantitative and evaluation methods and tools were used to measure the organizations culture change during the five years of programmatic work as well as develop evaluation tools that could be used to evaluate various aspects of the

program in the future. This evaluation of an on-going initiative needed both qualitative and quantitative methodology. It was also important for the working group to develop skills and process that they can continue without total reliance on the hospital anthropologist.

As the project progressed, the project leader, who was the same family practice physician who led the empowerment evaluation discussed above, noted that, The anthropologist's role evolved as an evaluation and qualitative methods resource. She continues to be part of the working group, not just the 'outside evaluation/researcher'. Some issues that resulted during this collaboration involved questions such as: Whose evaluation is it? Whose data? Whose questions to answer for the evaluation? How do we keep it participatory and assure appropriate confidentiality, privacy? These were issues that the anthropologist helped us resolve as we worked together on this project.

In this project the anthropologist was asked to develop the evaluation plan, plan the data collection methodology, and collect the data. She then put the data into the computer and reviewed and organized it using NVivo, developed a draft codebook, and brought both the codebook and de-identified transcripts back to the group. The group then worked collaboratively on the analysis of the data, guided by the anthropologist. The project team worked together on the analysis and reached consensus on areas where they disagreed about coding or interpretation.

The resulting report and culture change model helped the workgroup explain their work to the larger hospital network, and assisted with planning and implementation of the next phase of education and training for various clinical departments at the hospital. The unique aspect of this collaboration is that it included many different people from both within the hospital as well as representatives from the local domestic violence advocacy group. In this case, results

had to be translated so that members of the larger hospital community could understand the project and results and the application of the evaluation results to clinical practice.

LESSONS LEARNED

The five projects summarized in our paper illustrate the combination of applied models utilized in the hospital setting. These consist of top-down, bottom-up, across the system and traditional clinical and evaluation research, and provide important lessons to be learned about the role of anthropology in the hospital setting.

First, the importance of clarity of roles and goals—the anthropologist should have a clear role in the institution and clear goals for research. Second, it is critically important for stakeholders to participate in the analysis. Such collaborations enable two-way learning and information exchange, and help validate the methodology used in the project. Third, the power of methods, particularly the value of ethnographic approaches for answering particular types of questions, contributes to the ease of selling that to hospital administration. Methods that produce results and answer clearly defined questions will be an easier ‘sell’ to administration, who may want to approve research at various steps during a project. Fourth, the hiding of anthropological theory is often necessary. Social science theory is often poorly understood and can be potentially alienating to stakeholders. Research should be clearly anchored by theory, but the theory does not necessarily have to be articulated to stakeholders. Fifth, the necessity of having adequate leadership support within the organization is important. If leadership does not understand or support the project, entry into key areas of the hospital or access to key people could be withheld. Six, maintaining a clinical focus, including knowing and speaking the language of the institution is crucial. Knowledge of medicine and organizational theory, and ideally, possession of medical credentials (RN, MPH) can

help 'legitimize' the researcher. It is also important that all research have a clear clinical focus and fill one of the six IOM aims mentioned earlier in this chapter. Lastly, remembering to speak for the 'missing voices' is critical. Many biomedical researchers depend on numerical data as the basis for their research. Anthropologists bring the holistic perspective and the knowledge and methods needed to capture the many 'voices' that are important when researching health care topics.

TRANSLATION/CONCLUSIONS

Anthropologists no longer limit their methods to observation and description. Using concepts from phenomenology to approach research questions that do not yield easily to quantification, many traditional qualitative methods are seen as techniques to discover (uncover) meaningful phenomena that enhance learning and understanding by all stakeholders and perhaps lead to a measurable construct. This epistemology has been labelled 'grounded theory' (Haig, 1995). Through the introduction of phenomenology, the social construction of reality, sociolinguistics and other social science paradigms, the uniquely social nature of medical practice is underscored. The relative complexity of health care organizations and patient etiology has given rise to application of complex systems theory (IOM 2001:309) and microsystem analysis (Nelson *et al.* 2002) within health care organizations and venues, focusing attention on the point of care and patient-centred care, yielding new knowledge through 'connected knowing' (Haig, 1995).

It is argued here that the evidence base for medicine, built on the biological, **hypothetico**-deductive model requires continual questioning and refinement by revisiting the point of care to develop and refine our understanding of every day medical practice and effectiveness in the context of individual and organization complexity. Each of the above examples uses qualitative or mixed methods to apply 'connected knowing' to better understand a given research problem and its

measurement.

It is therefore, a significant translation challenge that confronts anthropologists in study of modern organizations. It may be too much for those trained and relying upon a hypothetico-deductive evidence base to fully understand and accept grounded theory, but it is the anthropologist's job to translate the observed data of ethnographic method into the prevailing paradigm, demonstrating its power in the biological paradigm.

Anthropologists have long abandoned the illusion of 'objective observation'. In this context it is not a transgression of traditional anthropology to assume the point of view of a reflective member of the group, taking advantage of familiarity over time to observe and confirm phenomena as well as assume the mission and objectives of the organization as rightful starting points for inquiry. This context may limit the capacity of anthropologists, however, to transform their emerging role as critical theorists. They can only refine organization-specific processes of care within the prevailing socioeconomic structure and constraints of a specific medical delivery system with only passing reference to the prevailing socioeconomic paradigm. The anthropological mission is transformed from demystifying the lives of different cultures to the grounding of phenomena for the rationalization of purposeful action.

As we move forward into the twenty-first century and anthropology continues to explore its contributions to modern life, it is clear that anthropologists working in hospital settings are on the frontline of health care. The hospital anthropologist can work along with colleagues in the hospital setting to conduct research and evaluations that provide insights into important health care issues such as those outlined in the IOM report. Anthropologists are able to capture information from the variety of 'voices' that influence health care, and can translate this information into knowledge that can be used to improve health care at all levels of the system.

GLOSSARY OF TERMS AND ABBREVIATIONS

PGY: Post Graduate Year. Refers to the year of training after graduation from medical school in the United States. A resident physician in his second year of training is a PGY 2. In the UK residents are typically referred to as registrars.

MPH: masters of public health. A graduate degree from a U.S. university that signifies that the holder has completed a program of graduate coursework in public health. Holders of this degree are entitled to use the initials MPH after their names.

RN: registered nurse, a licensed professional nurse. This is the main level of nursing licensure in the United States. Holders of registered nurse licenses are allowed to use the initials RN after their names.

Medical Resident: A graduate of an accredited medical school who is enrolled in an internal medicine residency program at a U.S. hospital. A resident in a surgery program would be referred to as a surgical resident. Residents have the title doctor, but are not allowed to practice medicine independently of a supervising physician. The supervising physician is referred to as an attending physician. The equivalent to an attending physician in the UK would be a consultant physician. Upon completion of the residency program, residents sit for specialty-specific licensing exams and, once passed, are allowed to practice medicine independently.

Press Ganey survey: A satisfaction survey developed by Press Ganey Associates that is used in hospitals around the U.S. to measure patient's overall care evaluation

IOM: Institute of Medicine. **The IOM is a non profit, independent institute affiliated with the National Academy of Science. The Institute provides evidence based, scientific, authoritative information on medical and health matters that can help policy makers and the public make well informed health decisions.**

IHI: Institute for Healthcare Improvement. **The IHI is a non-profit organization that provides research in the area of health care value and quality.**

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