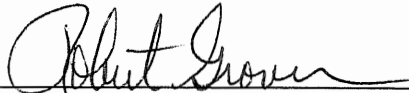# Proposal Acceptance Form

Name of Candidate_____Cathy Perley_____

Date____May 18, 2000___

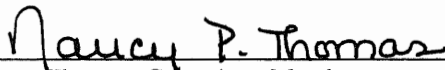Title of Dissertation__Underlying Meanings of the Physician Curbside Consultation

Signatures:

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Robert Grover, Dean of the School of Library & Information Management

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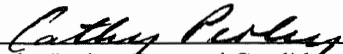Timothy Downs, Dean of the School of Graduate Studies & Research

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James M. Nyce, Committee Chair

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Nancy Thomas, Committee Member

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Martha Hale, Committee Member

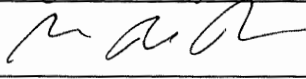_____
Cathy Perley, Doctoral Candidate

AN ABSTRACT OF THE DISSERTATION
DEGREE DOCTOR OF PHILOSOPHY IN THE
SCHOOL OF LIBRARY AND INFORMATION MANAGEMENT

Cathy M. Perley
_____
(Name of Student)

presented on ____November 19, 2001_____

Title: Underlying Meanings of the Physician Curbside Consultation_____

Abstract approved: _____
(Chair)

This study explored what goes on during the curbside consultation, a type of informal conversation between physicians for the purpose of managing a patient case. The study used a naturalistic inquiry perspective, qualitative research methods, and a case study approach. The investigator observed the work of 16 primary care physicians located in three geographical areas of one Midwestern state. Data was collected from field observations, 60 formal interviews, informal interviews, and conversations with peer review physicians. During data analysis, Giddens's framework for analysis of regularized social conduct and Goffman's ideas about the performative aspects of role served as entry points to identify elements of the practice that were less evident but nonetheless active. Study results indicated differences between what physicians say they want to accomplish in curbside consultations and what they report as a consequence of that activity. They also indicated the purposes for which physicians initiate curbside consultation, the tacit rules that govern those interactions, and the consequences when those rules are not followed. Finally, the results indicated that the curbside consultation constitutes a "presentation of self" during which physicians demonstrate their clinical reasoning abilities and their understanding of the values and norms that distinguish medicine from other professions. Based on these findings, the investigator concluded that the curbside consultation can be an effective means of information transfer among physicians but that professional conversations about what the curbside consultation "is" and how it is "used" in everyday clinical practice could increase its usefulness. Study findings also suggested that rethinking library and information services based on increased understandings of how physicians construct knowledge could lead to benefits for physicians as well as the patients whose needs they serve.

UNDERLYING MEANINGS OF THE PHYSICIAN
CURBSIDE CONSULTATION

By

Cathy M. Perley

November 2001

A Dissertation

Presented to

EMPORIA STATE UNIVERSITY

In Partial Fulfillment
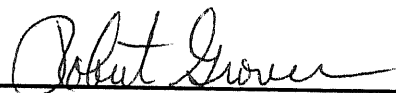
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Doctor of Philosophy

The School of Library and Information Management

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Dean of the School of Library
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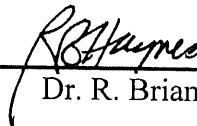
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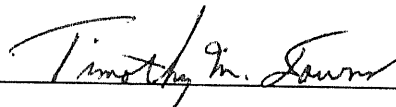
Dr. Nancy Thomas

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Dr. Martha Hale

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Dean of Graduate Studies and Research

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CHAPTER 1
INTRODUCTION

As a medical librarian for eleven years, the investigator had an ongoing interest in how physicians use libraries in everyday clinical practice. Records of physician search requests and library use indicated that resources provided by the medical library did not appear to play a significant role in physician work. Why was this happening? Did it signal a need to rethink library services, given the ways in which physicians sought out and used information in their clinical work?

From a broader perspective, given the volume of medical information available to physicians, how did they decide what information to use with their patients? How did they distinguish information that was relevant to the case at hand from information that was not relevant? Neither reflection on these questions nor conversations with professional colleagues yielded satisfactory answers. Fellow medical librarians, for example, voiced concern that physicians appeared to turn first to their colleagues for information, rather than to the "best medical evidence" contained in their libraries or available from authoritative electronic resources.

At this point in the investigator's reflection, a conversation between two physicians "opened a door." "It is interesting," mused the two doctors, "that we don't really think about something we do all the time [a curbside consultation]." The time was late summer, 1997, and the two doctors were George Bergus, M.D., Associate Professor of Family Medicine at the University of Iowa College of Medicine, and John Redwine, D. O., Vice President for Medical Staff Affairs at St. Luke's Regional Medical Center. The idea for this investigation arose from that discussion.

The conversation between Dr. Redwine and Dr. Bergus about the curbside consultation made it clear that the curbside consultation is an important means by which physicians share information. It seemed possible that understanding more about the curbside consultation might provide some answers to the questions that troubled the investigator.

As a result, the investigator followed up the conversation between Dr. Redwine and Dr. Bergus with a preliminary search in the medical literature. The results of that search provided a better understanding of what the curbside consultation is and an indication of its significance in the information transfer cycle of patient care physicians. It also confirmed what Dr. Bergus and Dr. Redwine had said: that although physicians routinely use curbside consultations to share information, they were aware of gaps in their understandings about the practice. The review of the medical literature later in this chapter will talk more about those expressed information needs.

Intrigued by the conversation between Dr. Bergus and Dr. Redwine as well as by the results of the medical literature search, the investigator looked for information about the curbside consultation in the literature of health sciences librarianship. She found nothing about the practice. Although the literature acknowledged that physicians frequently consult colleagues rather than print information resources, it appeared that means by which they do so have gone unnoticed and unexamined. That omission seemed significant and the investigator decided to address it in this study.

Chapter 1 introduces this study of the curbside consultation. It begins with an overview of the problem, a definition of the curbside consultation, and an explanation of its significance to physicians and information professionals who work with physicians. It

moves on to a review of the literature and concludes with a statement of the problem, the

research questions, and definitions of terms used in the chapters that follow.

Definition of the Curbside Consultation

Keating, Zaslavsky, and Ayanian (1998) provided a useful explanation of what

the curbside consultation is. Prior to a formal survey of physicians on the topic, they

conducted a focus group of physicians to arrive at the following definition:

> An informal or "curbside" consultation is the process in which a physician seeks
>
> information or advice about patient care from another physician who has a
>
> particular expertise without obtaining a formal consultation between the patient
>
> and the consultant physician at that time. (p. 901)

In other words, a physician seeing a particular patient may have a question about how

best to care for that patient. To get an informed opinion, the physician may choose to

approach another physician who is unconnected with the patient case but is nonetheless

willing to provide information or advice, based on information provided by the

requesting physician. Agreeing to take part in a curbside consultation does not make the

consulted physician responsible for the patient in question—the responsibility for the

patient remains entirely with the requesting physician. No money changes hands as a

result of this information exchange. The consulted physician is not reimbursed for

providing information or advice. In essence, the consulted physician provides a "free"

service for the physician requesting a curbside consultation. This informal type of

physician consultation is contrasted with the formal consultation in the definitions section

that appears later in this chapter.

Further reading in the medical literature and talk with physician colleagues revealed that the term "curbside" is commonly used by itself to denote an informal consultation. In conversation, some physicians used the term curbside as a verb—they talked about "being curbsided," or asked for advice. Other physicians used the terms "backdoor," "hallway," "lunchroom," or "coffee room" consultation. Each of these "place" terms emphasizes the informal nature of curbside consultations and the fact that they frequently take place opportunistically, as physicians go about their routine activities.

Significance of the Curbside Consultation in Information Transfer

Whatever the appellation, a review of the medical literature and discussions with physicians indicate that the curbside consultation is common practice, as much a part of a physician's persona as the stethoscope draped about the neck. As Myers (1984) pointed out, "informal consultation is a valuable tool in the day-to-day practice of medicine" (p. 801). Given the complexity of modern medicine and medical practices, the volume of medical information available, and the need to keep up with current medical evidence, it is possible to assume that physicians use the curbside consultation as one way of meeting these challenges.

It is also possible to assume that physicians do curbside consultations without talking much about how they do them. Like many practices that make up the ordinary activities of professional life, the curbside consultation may not be something that one is taught to do—but rather a part of the tacit knowledge of contemporary practice. For that reason, it may not be considered or discussed among physicians themselves or in the medical literature. This point was made explicit in an editorial commentary printed in the

Journal of the American Medical Association. Golub (1998) confirmed the importance of the practice. He noted, however, that despite the prevalence of the curbside consultation in the routine practice of patient care, there were comparatively few studies of the practice available in the literature (p. 929).

This much is clear: the curbside consultation is a routine site of information transfer among patient care physicians. Since the quality of patient care is at stake, the curbside consultation is an important activity, one that should be understood by physicians who engage in it as well as by information professionals who work with those physicians.

<div align="center">Review of the Literature</div>

Parameters of the Literature Search

Searches for literature that could inform this study were carried out in the literatures of medicine, library and information science, and the broader area of the social sciences. The investigator searched both electronic and print resources. The searches of electronic and print resources were complemented by readings recommended by university colleagues and faculty, physician peer reviewers, and physician informants.

Electronic database searches. Electronic searches were carried out in Dialog, a suite of over 450 databases, and PubMed, a product of the National Library of Medicine. MEDLINE is the premier database included in PubMed. It contains over 11 million bibliographic citations and author abstracts from more than 4,000 biomedical journals published in the United States and 70 other countries, dating from the mid-1960s to the present. See Appendix A for detailed information about the databases searched, the strategies used, and the search results.

Resources identified through other means. Resources identified using print sources and resources suggested by colleagues complemented resources identified during searches of electronic databases. For example, to make sure that key studies of physician information needs and use had not been missed, the investigator consulted print indexes of *The Annual Review of Information Science and Technology*. In addition, the investigator scanned the literatures of medicine, library and information science, and related disciplines over the course of four years. Finally, university colleagues and faculty, physicians, and informants suggested readings they believed might be useful to the investigation. For example, Dr. Bergus suggested *Medical Problem Solving: An Analysis of Clinical Reasoning* by Elstein, Shulman, and Sprafka (1978) and faculty advisors suggested readings in Goffman (1959, 1967) and Giddens (1979, 1996).

The literature search identified relevant documents from the literatures of medicine, library and information science, and the social sciences. In the sections that follow, key resources identified during the literature search are organized and discussed under three headings: Physician Information Needs and Use, Perspectives from Other Disciplines, and Studies of the Curbside Consultation.

Physician Information Needs and Use

The investigator searched the literatures of library and information science, the social sciences, and medicine in the hope that they would provide perspectives on physician information needs and use. In particular, the investigator hoped to identify studies specific to the information needs and use of physicians who care directly for patients. As Allen (1969) pointed out in his introduction to the chapter on information needs and uses in Volume 4 of the *Annual Review of Information Science and*

Technology, professional populations work from "very marked differences in motivation and enculturation…that underlie their differences in information needs and uses" (p. 4). While the information needs and use of professionals working in fields related to patient care medicine were interesting, Allen's point emphasized the importance of studies specific to patient-care physicians.

A search of the indexes of the *Annual Review of Information Science and Technology*, 1969 forward, identified a number of studies on information needs and uses in professions related to patient care medicine. These included studies on the information needs and uses of psychologists (American Psychological Association, 1969; Garvey & Griffith, 1964; Prescott & Griffith, 1970); scientists (Crane, 1968; Orr, 1970; Pelz & Andrews, 1966; Voight, 1961); physicists (Slater & Keenan, 1967, 1968); biomedical researchers (Rubinstein & Schultz, 1968); ophthalmology researchers (Miller, 1968); chemists (Gushee, 1968; Menzel, 1970); psychiatrists (Davis, 1970); medical school faculty (Friendlander, 1973; Summers, 1981); and toxicologists (Musser, 1973).

Of studies included in the *Annual Review of Information Science and Technology*, relatively few focused on the information needs and use of patient care physicians. Three exceptions included an investigation by Gruppen, Wolf, Van Voorhees, and Stross (1987), which examined information seeking strategies of primary care physicians; an investigation by Williamson, German, Weiss, Skinner, and Bowes (1989), which examined the information management and continuing education needs of primary care physicians; and an investigation by Woolf and Benson (1989) that examined the information needs of internists and pediatricians in an academic medical center.

The literature search process identified a number of additional studies that were relevant to a consideration of physician information needs and use. Haug (1997) reported on the results of a meta-analytic study of physicians' preferences for information sources. Haug's study was published in the *Bulletin of the Medical Library Association*. It considered 12 studies published between 1978 and 1992. Among criteria for consideration (the articles must have been published in English and subjects must be inhabitants of either the United States or Canada) was the requirement that "the studies must have included quantitative observational or survey data in the form of frequencies, proportions, or ranks of information sources used by physicians" (p. 224).

This is not to suggest a fault with Haug's (1997) approach—a meta-analytic study must compare quantitative apples to quantitative apples. But it does call attention to the possibility that scholarly studies of physician information preferences (i.e. Cohen, 1982; Stinson & Mueller, 1980; Strasser, 1978; Williamson, et al., 1989) tend to focus on things that can be counted or measured in some way. There are exceptions. More recently, Osheroff, Forsythe, Buchanan, Bankowitz, Blumenfeld, and Miller (1991) observed communication in a university-based general medical service to consider the information needs expressed during clinical work; Forsythe, Buchanan, Osheroff, and Miller (1992) used ethnographic methods to study the needs of internal medicine physicians in clinical practice; and Ash et al. (2001) used observational fieldwork to identify what they called "bundles," a pattern healthcare professionals used to organize selected pieces of information. The findings reported in all of these studies have contributed to our understanding of how physicians seek out and organize information. But they do not

address how physicians construct knowledge and clinical intervention through consultations and social exchange.

Additional studies of interest include those by Davenport (2000), who discussed problems that had to do with translating clinical texts into clinical action, and Urquhart (1998), who talked about the need for health information professionals to play a role in clinical knowledge management activities. Marshal (1992) looked at the role played by hospital libraries in physician decision-making. Ely, Osheroff, Ebell, Bergus, Levy, Chambliss, and Evans (1999) analyzed questions asked by family doctors to characterize their needs for clinical information. Dee and Blazek (1993) described the information needs and information seeking behavior of twelve rural physicians. Covell, Uman, and Manning (1985) studied the self-reported information needs of 47 physicians, considering questions that crossed all medical specialties.

Perspectives from Other Disciplines

The literatures of other disciplines offered perspectives from which to explore the curbside consultation as a social act and a locally situated system rather than as an aggregate of unrelated actions divorced of context. Doing so allowed the investigator to look for elements that are less evident but nonetheless active. Giddens's framework for analysis of regularized social conduct and Goffman's ideas about the performative aspects of role served as entry points for that line of inquiry.

Giddens's framework for analysis of regularized social conduct. Studies of the curbside consultation in the medical literature (Keating, Zaslavsky, & Ayanian, 1998; Kuo, Gifford, & Stein, 1998; Magnussen, 1992; Manian & McKinsey, 1996; Myers, 1984) indicated that physicians view the practice as being a part of day-to-day clinical

activity. They reflected physicians' common sense understandings of that activity. But were these common sense understandings of the curbside consultation, couched as they were in the ordinary language of the practitioners, really that dependable? Should scholarly investigation stop at identifying common sense understandings?

In the realm of the practitioner, ordinary language and common sense built upon specialized education and experience generally inform day-to-day actions. Giddens's understandings about what common sense and ordinary language are will be used here to help "unpack" what goes on in the curbside consultation.

Giddens (1979, 1996) is interested in the question of where scholarly investigation should "start and stop" in relation to informant understandings of their social world. This has led him, in particular, to explore what constitutes the differences between lay and social science forms of knowledge. In his work, Giddens went on to make a distinction between explicit and tacit social knowledge.

When people interact they draw from social knowledge, shared understandings about how things are or should be. In some situations, shared knowledge is explicit, represented in some tangible way so that all of its elements are apparent. Written protocols, for example, provide guidelines on how people should behave in certain situations. Because explicit social knowledge represents what we are aware of when it comes to the social world, participants can talk about the issues involved.

Tacit social knowledge, on the other hand, involves a complex set of unstated assumptions that people cannot easily access. These unspoken understandings govern, to a large extent, how participants in social interactions behave—what they say, what they do, and how they respond to others. In many situations, people act on tacit social

knowledge without putting voice to or even thinking about what their underlying assumptions are. But what happens if participants in a given social interaction hold different or even conflicting assumptions? If these assumptions are not made explicit in some form, how can people negotiate their differences? Giddens(1979) offers a framework for thinking about this problem.

In a discussion of the prospects for social theory, Giddens (1979) asserted, "All forms of regularised social conduct…can be analyzed as involving typical sets of connections between the unacknowledged conditions of action [the tacit rules], the rationalisation of action in the context of its purposive reflexive monitoring, and the unintended consequences of action" (pp. 243-244). If we think of the curbside consultation as a form of regularized social conduct, we can look at it as a process of social interaction—one that comes with its own set of tacit and embedded rules and unintended consequences when those rules are broken.

This appears to be the situation in the case of the curbside consultation. A review of the medical literature and conversations with physicians failed to reveal a standard protocol for doing curbside consultations. The investigator was told that physicians "just do" them. This is not surprising. As Giddens (1996) pointed out, "'To know how to go on' is not necessarily, or normally, to be able to formulate clearly what the rules are" (p. 67). As a result, physicians "just do" curbside consultations, soldiering on in the absence of explicit rules.

It is plausible to assume that, given the absence of explicit rules, physicians can unintentionally get themselves into trouble. Giddens's (1979) notion of "reflexive monitoring of conduct" (p. 56) suggests that when physicians take part in curbside

consultations, they are constantly monitoring their own behavior as well as the behavior of the physicians with whom they are speaking. In essence, they are asking themselves, "Am I following the rules? Is the physician I am talking to following the rules?" They measure their own performance and the performance of the other physician using the rules they think are appropriate to the situation. If both participants accept the same set of rules, this would not be a problem. A problem might arise, however, if one physician unintentionally violated another's understanding of what the rules are.

The situation is further complicated by the fact that, even as physicians monitor their own behavior and that of others, they may not be able to explain why they are doing what they are doing. Giddens (1979) used the phrase "practical consciousness" to refer to "tacit knowledge that is skillfully applied in the enactment of courses of conduct, but which the actor is not able to formulate discursively" (p. 57). He asserted that actors' attempts at accounts of their conduct to themselves and to others are necessarily subject to what they are able to articulate, the complexities of social encounters, and unconscious motivation (p. 58). This situation seems quite daunting. Furthermore, curbside consultations do not take place in a vacuum.

Curbside consultations take place within the context of a local setting and local practice, with local actors. Why does a physician request a curbside consultation from one physician rather than another? Why does one physician agree to answer a curbside consultation question when another does not? What happens when one physician breaks a rule without understanding that it was a rule? As these questions indicate, curbside consultations are subject to a myriad of complicating factors. Given this, it is likely that at least in some cases, participants in curbside consultations are surprised by

consequences they neither intended nor were able to predict. If this is the case, it is possible that once these connections are made explicit they could be applied as both rules and resources.

Giddens (1979) pointed out that there are many uses of language beyond the transmission of information. Language is a "medium of social practice," a "toolbox" for social actors (p. 245). As he pointed out, however, participants in social interactions were not always aware of the tacit rules that governed their talk. As a result, their interactions did not always work out in the way they intended. Work by Segal and Anspach in the area of medical discourse supported his view.

Segal (1993) used the Aristotelian categories of invention, arrangement, and style to study the rhetoric found in medical journal articles. According to Segal, the fundamentally persuasive nature of scientific writing is generally accepted within the disciplines of sociology, philosophy, and rhetoric, but largely unrecognized by scientists themselves (p. 521). Segal said that the purpose of her work was "to bring rhetorical strategies themselves to the surface of discourse in medicine, and so to enable a medical metadiscourse" (p. 521).

Anspach (1988) investigated the language of case presentations, labeling the case presentation as a "linguistic ritual in which physicians learn and enact fundamental beliefs and values of the medical world" (p. 357). Anspach echoed both Giddens and Segal. She established that self-presentation and professional socialization were tacit elements of the case presentation, and that "the medical students, residents, and fellows who present case histories may come to be used by the very words they choose" (p. 372). Anspach set the stage for us to see that the curbside consultation is an exercise in self-

presentation—one that can enhance or detract from one's standing in the medical community.

Goffman's ideas about the performative aspects of role. Physicians use the language of medicine to demonstrate their clinical reasoning abilities and their understanding of the values and norms that distinguish medicine from other professions. They learn to present themselves within the social contexts of clinical rounds and conferences with their colleagues. The work of Erving Goffman, a sociologist who has written extensively on the performative aspects of social life, provides a means by which to look closely at the performative aspects of curbside consultations.

In *The Presentation of Self in Everyday Life,* Goffman (1959) looked at the ways people present themselves during social interactions. He used the term "performance" to refer to "all the activity of a given participant on a given occasion which serves to influence in any way any of the other participants" (p. 15) and the term "part" to describe the pattern of action carried out by each participant (p. 16). As interactants in a performance, participants express themselves in ways that affect others. They do this intentionally or unintentionally (p. 2). That is, their verbal and nonverbal behavior creates an impression, either by design or by accident.

Goffman (1967) used the term "face-work" (p. 12) to talk about how participants in performances "present" a certain picture of themselves. "Face" is "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact" (p. 5). In other words, by playing a certain role, each participant claims a certain identity. Mokros (1996) pointed out that this is a joint

undertaking—"participants collaboratively construct their faces in the process of interaction" (p. 175).

It is important to note that face-work is not just a performance put on for the benefit of others. Through the roles they play during face-work, individuals construct understandings about who they are and where they are. As Goffman (1967) pointed out, "a person tends to experience an immediate emotional response to the face which a contact with others allows him; he cathects his face; his 'feelings' become attached to it" (p. 6).

Mokros (1996) used an analogy between dance and the construction of identity to illustrate the process of constructing an understanding of self and others through face-work. He explained how this process could be successfully negotiated in the following way:

> If the interaction dance is to be graceful, the other participants must honor the line that he establishes by showing deference, "a type of promise—to maintain the conception of self that the recipient has built up" (Goffman, 1967, p. 60). In addition, all participants must display demeanor that indicates that they "can be relied upon to maintain [themselves] as interactants, poised for communication and to act so that others do not endanger themselves as interactants to them" (Goffman, 1967, p. 77). (p. 175)

In "graceful" face-work, participants successful carry out the behavior expected of them. Goffman used the terms "deference" and "demeanor" to refer to these expectations. Deference relates to activity that conveys appreciation to a recipient (Goffman, 1967, p. 56). Demeanor is "the element of the individual's ceremonial behavior typically

conveyed through deportment, dress, and bearing, which serves to express to those in his immediate presence that he is a person of certain desirable or undesirable qualities (p. 77).

Goffman's (1959, 1967) ideas about face-work, deference, and demeanor provide a way of looking at what happens when physicians interact during curbside consultations. For example, what face do physicians want to present during curbside consultations? How do they go about creating the impression they want to convey? How is the face they construct related to their understanding of who they are as physicians?

Deference and demeanor have to do with these expectations. They have to do with rules of conduct, the infraction of which leads to social sanctions (Goffman, 1967, p. 48). Thinking about deference and demeanor in terms of the curbside consultation gives rise to another set of questions: What are the rules of conduct for the curbside consultation? What happens to someone who breaks the rules? In situations when one person is in danger of losing face during a curbside consultation, is the other person expected to help maintain it? Is the curbside consultation a way of making points for either participant? To what extent does membership in a professional group determine the face one is expected to present?

Goffman (1959) asserted that social groups develop their own ways of doing things—routines that become institutionalized and take on normative role. He talked about this set of routines as a "social front" (p. 27), and said, "when an actor takes on an established social role, usually he finds that a particular front has already been established for it" (p. 27). The task, then, is for the actor to perform within the parameters accepted by the group.

Sinclair (1997) talked about the social roles that physicians learn to play while they are in medical school. He based a model for thinking about a medical education on Goffman's metaphor of the theater applied to everyday social life (p. 16). Sinclair asserted, "Goffman's theatrical analysis [in *Presentation of Self and Everyday Life* and other works] indicates that the medical school's official function of producing doctors is frontstage work. Teachers teaching the 'manifest' curriculum, a stage on which students also appear when they attend lectures and clinical teaching and take exams" and where they play out different social roles (p. 15).

Within Sinclair's model (1997, p. 16), backstage work involved both the construction and the contradiction of impressions made on the frontstage as well as the work students did without the observation of official staff (p. 15). In addition, both frontstage and backstage work had official and unofficial components, depending on whether activities are part of the official curriculum of the program or not. Sinclair made it possible to see that the curbside consultation may be considered backstage work—work not visible to either patients or to information professionals who work with physicians.

Goffman's (1967) concepts about face-work, deference, and demeanor were useful in thinking about the performances that physicians must master. An effective case presentation may be considered face-work. During case presentations students learn to present themselves in such a way as to display or enhance their credibility (Anspach, 1988, p. 372).

On some occasions, students fail this credibility test. Bosk (1979) described disciplinary action taken in the case of a medical student whose behavior caused his superiors to question his character. The student's behavior during the discipline process

exacerbated the problem (pp. 161 – 162). Bosk explained that the student "had failed to internalize the norms of the doctor role while displaying great technical talent" (p. 163). As a result, the student's superiors dismissed him from their program. Bosk used the phrase "moral error" (p. 168) to describe errors related to the code of conduct that supports physician work. The idea that certain types of conduct call into question a physician's membership in collegial ranks is an important one—it suggests that certain behaviors during the curbside consultation might carry serious repercussions for the offending physician.

  The curbside consultation as a locally situated social system. Other scholars shed light on the nature of physician work and suggest ways of looking at the curbside consultation as a locally situated social system. For example, Berg (1992) considered the issue of how physicians reduce patient problems by determining what to do next, a process that involves selecting and deselecting information—in essence, reconstructing the problem. Berg contended that locally situated routines, which encompass both expressed and unexpressed rules, determine a physician's frame of reference and the way in which a problem is articulated (p. 170). Sackett, Richardson, Rosenberg, and Haynes (1997) talked about the importance of this local frame of reference in the practice of evidence-based medicine (EBM). "It is this expertise," they wrote, "that decides whether the external evidence applies to the individual patient at all and, if so, how it should be integrated into a clinical decision" (p. 4). Even strong advocates for gold standards in clinical care acknowledge how socially situated clinical cognition is for physicians. The physician's constructed understanding of the patient's situation determined the relevance of external evidence.

Engeström (1993) studied primary care medical practice from the base of activity theory, focusing on "expert work as collective, institutionally organized activity" (p. 65) and suggested a methodological framework for identifying discoordinations, or breakdowns in communication. Berg (1992) and Engeström (1993) made it clear that physicians work within a social context—they work in concert with one another rather than autonomously. In *Conversational Realities: Constructing Life through Language*, Shotter (1993) talked about ways in which people constitute themselves and their worlds through a flow of "responsive and relational activities" (p. 7) he called joint action. Describing a version of social constructionism he identified as rhetorical-responsive, Shotter gave us a way to think about the curbside consultation as "situated, practical-moral, joint activity" (p. 11) during which physicians construct an understanding of a patient case.

The idea of a "web of knowledge" (Talja, 1997) may be one way of modeling the social construction of a patient case during a curbside consultation. In a discussion of the discourse analytic viewpoint, Talja described information as being formed within a socially constituted episteme, or web of knowledge. "Within this web," Talja stated, "individuals are shaped into subjects, at the same time as they together, by communicating, weave the web anew" (p. 5). If we accept this viewpoint, it is possible to think about the curbside consultation as the production of knowledge about a patient case by physicians sharing a "mix of scientific or expert knowledge and unconscious, selective and culture-specific background assumptions" (p. 7).

Thus far, this review of the literature has looked at studies that provide understandings about physician information needs and use and theoretical perspectives

available from other disciplines. At this point, the review moves on to studies of the curbside consultation in the medical literature.

Studies of the Curbside Consultation

Common practice. Curbside consultations take place routinely in the practice of patient care medicine (Fox, Siegel, & Weinstein, 1996; Keating, Zaslavsky, & Ayanian, 1998; Manian & McKinsey, 1996; Myers, 1984). When physicians have clinical information needs, they generally turn to their colleagues rather than to print resources (Ebell, 1999; Ely, Burch, & Vinson, 1992; Gorman, Ash, & Wycoff, 1994), a preference which may partially explain the ubiquitous nature of the curbside consultation. Physicians report that they initiate curbside consultations for a variety of reasons, including the perceived reliability of the expert's opinion, urgency, cost, timeliness, accessibility, convenience, fear of malpractice litigation, reassurance, desire for an academic discussion, and autonomy (Curley, Connelly, & Rich, 1990; Keating, Zaslavsky, & Ayanian, 1998; Manian & Janssen, 1996; Myers, 1984).

Physician concerns. Despite the prevalence of curbside consultation, physicians have expressed concerns about the practice. Studies by Magnussen (1992), Manian and McKinsey (1996), and Myers (1984) indicated physician concern about accuracy of information exchanged and inappropriate questions. Keating, Zaslavsky, and Ayanian (1998) reported concerns about the lack of official documentation, the recording of consultants' names, the lack of time provided consultants in formulating answers, lack of compensation provided consultants, and malpractice litigation (pp. 902 – 903). Consultants providing their services via electronic mail have expressed frustration with lack of follow-up information on patients (Bergus, Sinift, Randall, & Rosenthal, 1998).

Kuo, Gifford, and Stein (1998) noted concerns that insufficient information was exchanged and that significant clinical detail was left out (p. 907). In addition, study findings indicated discrepancies in the ways primary care physicians and internal medicine subspecialists perceived the purpose and quality of curbside consultations. Subspecialists were less comfortable with the adequacy of information exchanged than the primary care physicians (p. 908). Keating, Zaslavsky, & Ayanian (1998) also reported significant differences in the perceptions of those who ask for curbside consultations and those who are asked.

Mode. Technology has increased physicians' options for addressing their information needs via curbside consultations. In 1984 Myers found that 76% of curbside consultations were done face-to-face and that 24% were done over the telephone (p.798). Later studies (Magnussen, 1992; Manian & McKinsey, 1996) reported that the telephone was used in approximately 60% of the curbside consultations done. More recently, electronic mail has been used as a communication mode for some forms of the curbside consultation. For example, members of the Department of Family Medicine at the University of Iowa implemented the E-Mail Consult Service in 1996 (Bergus, Sinift, Randall, & Rosenthal, 1998). Physicians are also using listservs such as the Pediatric Emergency Medicine Mail List for informal consultations ("How Do Pediatricians Use the Web?," 1998).

Methods used in key studies. Five key studies of the curbside consultation (Keating, Zaslavsky, & Ayanian, 1998; Kuo, Gifford, & Stein, 1998; Magnussen, 1992; Manian & McKinsey, 1996; Myers, 1984) are frequently cited in the medical literature. In keeping with the traditional, positivist worldview dominant in clinical research

(Littlejohn, 1992, p. 25; Miller & Crabtree, 1994, p. 340), these studies concern themselves with things that can be measured objectively. Reading the studies, however, reveals troubling disconnects--differences between what physicians say they want to accomplish and what they report as the consequences of the activity. For example, the studies by Keating, Zaslavsky, & Ayanian (1998), Magnussen (1992), Manian and McKinsey (1996), and Myers (1984) indicated that physicians were concerned with miscommunication—they were troubled about the exchange of inaccurate or insufficient information. These concerns warrant investigation, since the purpose of the curbside consultation is to exchange useful information that can benefit patients. But, in addition, what about those intentions and consequences that go unreported (either because physicians do not or can not recognize them) but are nonetheless significant in curbside consultations?

Statement of the Problem

Given the importance of the curbside consultation, the investigator was surprised that she had seen nothing about it in the literature of medical librarianship or in the broader literature of library and information science. Was it possible that the informal nature of the curbside consultation somehow made it invisible to those outside the practice of medicine? How might a better understanding of the role the curbside consultation plays in the information transfer cycle of patient care physicians assist information professionals who work with those physicians? How might physicians themselves benefit from understanding more about this commonplace practice?

This investigation was undertaken to address those issues. In exploring meanings that underlie the curbside consultation, the investigator hoped to bring tacit

understandings about the practice to the surface so that they could be considered and discussed by physicians and the information professionals who work with them.

Research Questions

The study addressed the following questions:

Research Question 1: Are there differences between what physicians say they want to accomplish in curbside consultations and what they report as the consequences of that activity?

Research Sub-Question 1-A: What does the phrase curbside consultation mean to physicians?

Research Sub-Question 1-B: What do physicians say a good curbside consultation looks like?

Research Sub-Question 1-C: What do physicians believe constitutes responsible behavior with respect to medico legal and financial issues?

Research Sub-Question 1-D: How does the social nature of the practice impact information transfer?

Research Question 2: How do physicians describe the purposes and rules for doing a curbside consultation? What happens if the rules are not followed?

Research Sub-Question 2-A: For what purposes do physicians say they initiate curbside consultations?

Research Sub-Question 2-B: For what purposes do physicians say they provide curbside consultations?

Research Sub-Question 2-C: What do physicians say about the rules for doing a curbside consultation?

Research Sub-Question 2-D: What do physicians say about the consequences of not following the rules?

Research Question 3: Do Goffman's ideas about the performative aspects of role appear in descriptions articulated by physicians?

Definitions

The Formal Consultation

A definition of the curbside consultation that was drawn from the medical literature was provided in the first section of this chapter. But how does one distinguish a curbside consultation from casual physician talk or from its formal counterpart, the official consultation? The investigator spent a great deal of time talking with physician informants about the differences in these activities. A model that represents the curbside consultation on a continuum of physician information exchange is shown in Chapter 5, which discusses the study's results. At this point, however, it may be most useful to contrast the curbside consultation with the formal consultation so that some of the more obvious differences can be brought to the reader's attention.

The curbside consultation is an informal conversation between physicians. It is generally invisible to the patient, since the consulted physician does not see the patient and no mention is usually made of the conversation in the patient's medical record. The consulted physician voluntarily provides free information or advice, and is therefore neither reimbursed nor legally liable for the care provided by the requesting physician, who retains full responsibility for the patient.

In contrast to the curbside consultation, the formal consultation does establish a relationship between the consulted physician and the patient involved. In this situation,

one physician formally refers the patient to another physician for consultation. The consulted physician sees the patient, documents the care provided in the patient's medical record, and is reimbursed for the services provided. Ideally, the two physicians exchange information to provide an integrated program of care for the patient. They are each held legally accountable for the care they provide.

Medical Credentials

Primary care. The designation "primary care physician" is applied to physicians who work in general practice as well as to specialists who have completed supervised training programs called residencies. Primary care physicians have completed four years of undergraduate school, four years of medical school or an osteopathic program, and a minimum of one year of post-graduate work. Physicians who end their professional preparation at this point are called general practitioners. The physicians observed in this study were all specialists, rather than general practitioners. That is, they had all followed their graduation from medical school or osteopathic programs with residency programs in either family practice medicine or internal medicine specialties.

Family practice medicine. The American Board of Family Practice (2001) defines family practice medicine in the following way:

> Family Practice is the medical specialty which is concerned with the total health care of the individual and the family. It is the specialty in breadth which integrates the biological, clinical, and behavioral sciences. The scope of family practice is not limited by age, sex, organ system or disease entity. (¶ 1)

As this definition indicates, family practice physicians treat a broad range of patients and a broad range of human conditions. Family practice physicians complete a three-year

residency program. Those who are "board certified" have additionally and voluntarily met the ongoing certification requirements of the American Board of Family Practice or, in the case of family practice physicians trained in Canada, the College of Family Physicians of Canada.

Internal medicine. Like family practice physicians, internal medicine physicians also provide primary care. Unlike family practice physicians, they limit their practice to adults. Internal medicine physicians complete three-year residency programs. Those who are board certified have met the ongoing educational requirements of the American Board of Internal Medicine. Some internal medicine physicians complete additional years of training in the subspecialty areas of cardiovascular disease; endocrinology, diabetes, and metabolism; gastroenterology; hematology; infectious disease; medical oncology; nephrology; pulmonary disease; and rheumatology.

Subspecialists. A number of the consulted physicians interviewed in this study were subspecialists. That is, they had completed training not only in a general medical specialty like family practice medicine or internal medicine, but also in a more specific area of that specialty. The American Board of Medical Specialties (2000) provided the following explanation:

> This training increases the depth of knowledge and expertise of the specialist in that particular field. For example, cardiology is a subspecialty of internal medicine and pediatrics, pediatric surgery is a subspecialty of surgery, and child and adolescent psychiatry is a subspecialty of psychiatry. The training of a subspecialist within a specialty requires an additional one or more years of full-time education. (¶ 5)

Group 3 subspecialists interviewed during this study included those in the areas of pulmonology, cardiology, and pediatric oncology.

Chapter 1 introduced this study of the curbside consultation. It provided an overview of the problem, defined the curbside consultation, and explained its significance to physicians and information professionals who work with physicians. It reviewed literature used to inform the investigation and continued with a statement of the problem, the research questions, and definitions of terms used in the chapters that follow.

Chapter 2 describes the rationale for using a naturalistic inquiry perspective, qualitative research methods, and a case study structure to investigate the research questions. It explains methods used to identify study sites and informants as well as to collect and analyze data.

Following those explanations, Chapter 3 provides more detail on the study sites and selected physician informants; Chapter 4 presents results gathered from observation and interviews, organized by research question and sub-question; and Chapter 5 acknowledges limitations of the study, interprets the study results, discusses possible implications, and recommends areas for future study.

CHAPTER 2
METHODS

Chapter 1 reviewed a number of studies of the curbside consultation that are published in the medical literature (e.g. Keating, Zaslavsky, & Ayanian, 1998; Kuo, Gifford, & Stein, 1998; Magnussen, 1992; Manian & McKinsey, 1996; Myers, 1984). These studies conform to the traditional, positivist paradigm of clinical research (e.g. Littlejohn, 1992, p. 25; Miller & Crabtree, 1994, p. 340). As such, the questions these studies can address are limited to those that lend themselves to quantitative inquiry.

Investigation of underlying meanings of the curbside consultation requires walking around this medical practice and taking a look at it from a different angle. A naturalistic inquiry perspective, qualitative research methods, and case study structure offer a means of getting at the curbside consultation from another perspective. This chapter describes the rationale for those choices as well as the study sites, informants, and procedures for data collection and data analysis.

Naturalistic Inquiry

Naturalistic inquiry assumes a worldview that breaks with the traditional perspective of "normal" science. Naturalistic inquiry defies easy definition because scholars who espouse it as a paradigm perceive it somewhat differently (Lincoln & Guba, 1985, p. 8). Indeed, naturalistic inquiry has a number of "aliases," including "postpositivistic, ethnographic, phenomenological, subjective, case study, qualitative, hermeneutic, [and] humanistic" (p. 7) inquiry.

Notwithstanding these shadings of diversity, Lincoln and Guba (1985) view fourteen characteristics as central to the naturalistic perspective. They include the following: a natural setting, a human instrument, utilization of tacit knowledge,

qualitative methods, purposive sampling, inductive data analysis, grounded theory, emergent design, negotiated outcomes, case study reporting mode, ideographic representation, tentative application, focus-determined boundaries, and special criteria for trustworthiness (pp. 39 – 43). Taken collectively, these characteristics open investigation of the curbside consultation in areas not accessible within the traditional paradigm, complementing what is already known about the practice.

The value of complementary research perspectives was confirmed by Haynes (personal communication, October 8, 2001), who made the following point:

> Which [scholarly perspective] is most appropriate in a given circumstance
> depends on the questions you are interested in trying to find an answer to. You
> shouldn't accept a medical treatment with possible important benefits and harms,
> evaluated solely by qualitative means (e.g. as was likely the case with blood
> letting, purging, puking, arsenic, etc). On the other hand, who should accept any
> such treatment is very much a matter of naturalistic inquiry.

The naturalistic inquiry approach offers a means to get at answers to a different set of questions about the curbside consultation—answers that should contribute to a scholarly understanding of the practice.

Assumptions of a Naturalistic Worldview

Ontological assumptions: What is the nature of reality? (Lincoln & Guba, 1985, p. 37). From the naturalistic inquiry perspective, reality does not exist until "*either* (1) it is *constructed* by an actor or (2) it is *created* by a participant" (p. 87). The notion of what Berger and Luckmann (1966) call "the social construction of reality" (p. 3) and Lincoln and Guba call "constructed reality" (p. 87) asserts that there is no one "objective" reality,

existing separately and independently from human perception. Instead, it suggests that individuals construct their own representations of what is real out of their own experiences. What Giddens and Goffman give us is a set of analytic tools (and a vocabulary) to both track and talk about how this occurs.

According to Lincoln and Guba (1985), those who take this position believe that "events, persons, and objects are indeed tangible entities. The meanings and wholeness derived from or ascribed to these tangible phenomena in order to make sense of them, organize them, or reorganize a belief system, however, are constructed realities" (p. 84). From a constructed reality viewpoint, reality exists as creation of lived experience. It does not exist prior to that experience.

If the concept of the social construction of knowledge is accepted, then it follows that different experiences will give rise to multiple constructed realities. To illustrate by microcosmic example, one might consider the activity in a surgical suite on any given morning. The surgeon cutting into a patient's knee is registering a different set of sensory impressions than the anesthesiologist, who is monitoring the patient's status from a different part of the room. If the patient has chosen to stay awake during the surgery, she might be watching the surgeon's actions as they are reflected in a mirror. The reflected image does not replicate what the surgeon, with years of training and experience, is seeing. On the other hand, as both the subject and the object of surgical activity, the patient sees the incision in her knee from a perspective that no one else in the room can wholly share. There are at least as many realities in the surgical suite that morning as there are participants.

The concept of multiple realities is key to the naturalistic understanding of reality. According to Lincoln and Guba (1985), an acceptance of this idea makes it doubtful that the prediction and control sought by the traditional approach can be achieved. Instead, they say, reality is relativistic, "dependent for their form and content on the individual persons or groups holding the constructions" (Guba & Lincoln, 1994, pp. 110 – 111).

Epistemological assumptions: What is "the relationship of knower to known"? (Lincoln & Guba, 1985, p. 37). Positivists working within the traditional worldview regard reality as an object that can be discovered by an independent observer. The goal is to prove or disprove hypotheses in order to arrive at the ability to predict and control future events through knowledge of causal effects. The context of individual situations is stripped away in order to make way for universal laws, which span time and location.

Naturalistic inquirers, on the other hand, believe that knowledge is subjective, that "what we take to be objective knowledge and truth is the result of perspective" (Schwandt, 1994, p. 125). Given this understanding, Lincoln and Guba (1985) assert that the knower and the focus of the knower's attention not only are inextricably bound (p. 94), but must also interact (pp. 98 – 99). The positivist's view of the independent observer is abandoned in favor of an understanding of interaction between knower and known.

Finally, in direct contrast to positivism, naturalistic inquiry both portrays and makes sense of context. Meaning is created as a product of the investigation (Guba & Lincoln, 1994, p. 111) within the specific, local context of the activity. The goal is "Verstehen," an understanding of "the actor's definition of a situation" (Schwandt, 1994, p. 118).

Qualitative Methods

A naturalistic inquiry approach opens the field to a diverse set of methodologies (Denzin & Lincoln, 1994, p. 12; Tesch, 1990, p. 4). In this study, qualitative methods facilitated investigation of the curbside consultation in a natural setting with a human instrument, opened the way to an understanding of tacit knowledge, and made it possible for the investigator to identify key themes in the data. Ethnographic and grounded theory methods were used to shape procedures for data collection and analysis.

Investigation in a Natural Setting with a Human Instrument

Existing quantitative studies of the curbside consultation (Keating, Zaslavsky, & Ayanian, 1998; Kuo, Gifford, & Stein, 1998; Magnussen, 1992; Manian & McKinsey, 1996; Myers, 1984) necessarily lumped subjects together. To combine apples with apples they separated actors from their locally situated interaction and stripped away the context.

The problem with that approach is that the curbside consultation necessarily involves more than one participant, whether it is done face-to-face, by telephone, or by electronic mail. As such, the meaning of that activity is not a product of individual cognitive action; it is a product of social interaction. Furthermore, it occurs within a specific context that shapes meaning. As Lincoln and Guba (1985) pointed out, "realities are wholes that cannot be understood in isolation from their contexts" (p. 39).

Naturalistic inquiry offers ways of understanding the curbside consultation as a unit of social interaction occurring within a specific context. First, naturalistic inquirers place themselves in the natural setting of the activity under investigation. Proximity to everyday life opens that world to the investigator interested in its layers of meaning,

some of which lie beneath the surface of self-evident understandings. The aim of understanding lived experiences depends on careful attention to what Schwandt (1994) called "the details, complexity, and situated meanings of the everyday life world" (p. 119). Naturalistic inquirers seek to understand a set of lived experiences from the inside out, through an interpretive understanding of social constructions of those who are directly involved in those experiences. Naturalistic inquiry not only assumes but also takes advantage of the belief that the knower cannot be separated from the known (Lincoln & Guba, 1985, p. 37). Second, naturalistic inquirers perform as human instruments. The idea is that only humans are capable of understanding and interpreting the complex meanings revealed during the course of social interaction (pp. 39 – 40).

The Use of Qualitative Methods for an Understanding of Tacit Knowledge

According to Altheide and Johnson (1994), implicit or tacit knowledge "includes what actors know, take for granted, and leave unexplicated in specific situations, things that may have been 'learned' in some formal or semiformal sense at some earlier time, both substantively and procedurally" (p. 492). From this viewpoint, knowledge is only partially explicit. Layers of meaning remain unexpressed. What do physicians say they know, take for granted, or simply do not explain about the curbside consultation?

For one thing, physicians say they initiate curbside consultations for specific reasons. Two recent studies by Kuo et al. (1998) and Keating et al. (1998) list a number of those reasons and extend what earlier studies (Magnussen, 1992; Manian & McKinsey, 1996; Myers, 1984) reported. Kuo et al. (1998) asked 413 primary care physicians and medical subspecialists why they initiated curbside consultations. Survey respondents reported a number of intended consequences, one of which was "maintaining good

relations with other physicians" (p. 907). The same survey also indicated physician concerns about insufficient information, non-compliance of requesting physicians with the information received, and lack of reimbursement for the providing physician (pp. 907-908).

A related study by Keating et al. (1998) reported the findings of a survey responded to by 705 physicians. The Keating survey focused on physicians' experiences and beliefs with regard to the curbside consultation. Thought-provoking discrepancies about the consequences of curbside consultations appeared between the perceptions of generalists and specialists, including differences of opinion about incomplete or inaccurate information, the lack of official documentation, and the potential legal liability. (p. 902).

As these studies indicate, there are differences between what physicians say they want to accomplish and what they report as the consequences of the activity. These differences warrant investigation. But, in addition, what about those consequences of the curbside consultation that go unreported (either because physicians do not or can not recognize them) but are nonetheless operable?

The principal studies available on the curbside consultation (Keating et al., 1998; Kuo et al., 1998; Magnussen, 1992; Manian & McKinsey, 1996; Myers, 1984) all explore the research problem from self-reported data. Can that approach mine the depths of intended consequences not reported by survey respondents? Can it consider the unintended consequences not reported because they are not self-evident?

It is more likely that a naturalistic approach can get at tacit knowledge. The qualitative methodologies embodied in a naturalistic approach adapt to multiple realities

and locally situated routines. Naturalistic studies may, in some studies, include self-reported data, but the focus is on qualitative methodologies that put the inquirer in a position to learn through personal interaction with the social actors. "Tacit knowledge," said Lincoln and Guba (1985) "becomes the base on which the human instrument builds many of the insights and hypotheses that will eventually develop" (p. 198).

The qualitative researcher has a number of tools with which to work. Tesch (1990) asserted that qualitative researchers reject the idea of standardized methodologies, preferring the freedom to do what works (p. 4). According to Denzin and Lincoln (1994), qualitative methodologies include "interviewing; observing; artifacts, documents, and records; visual methods; personal experience methods; data management methods; computer-assisted analysis; and textual analysis" (p. 12). All of these methodologies may be useful in getting at underlying meanings of the curbside consultation not revealed by traditional quantitative methods.

Emergent Design

Traditional inquiry requires the investigator to spell out, in advance of a study, an overall plan, the hypotheses to be proved or disproved, the variables and their expected relationships, and the methods used to collect and analyze data (Lincoln & Guba, 1985, p. 221). In contrast to traditional inquiry, a naturalistic inquiry approach makes it impossible for an inquirer to know all of that in advance of the study.

The goal of naturalistic inquiry is "understanding and reconstruction of the constructions that people (including the inquirer) initially hold, aiming toward consensus but still open to new interpretations as information and sophistication improve" (Guba & Lincoln, 1994, p. 113). In this inductive process, "the researcher builds abstractions,

concepts, hypotheses, and theories from details" (Creswell, 1994, p. 145). The term "grounded theory construction" is sometimes used to describe methods that facilitate emergent design (Tesch, 1990, pp. 22 – 23).

This inductive approach acknowledges that the multiple realities, "patterns of mutual shaping," and many value systems involved are largely unpredictable (Lincoln & Guba, 1985, p. 41). The field worker goes into the field with an understanding of the study's focus, the paradigm that fits that focus, the appropriateness of the theory used, the sources of data collection, the phases of the study, and the instrumentation; but the full design takes shape only as the study progresses (p. 248). Results of the research are not preordained, but rather unfold.

Ethnographic Methods

The goal of ethnographic methods is to study human life through strategies that reconstruct the understandings of participants, using techniques such as field research and participant observation (Tesch, 1990, pp. 46 – 47). Atkinson and Hammersley (1994) pointed out that controversy surrounds the definition of ethnography, but suggested the following elements as being generally applicable: (a) "a strong emphasis on exploring the nature of particular social phenomena," (b) "a tendency to work primarily with 'unstructured' data, that is, data that have not been coded at the point of data collection in terms of a closed set of analytic categories," (c) "investigation of a small number of cases," and (d) "analysis of data that involves explicit interpretation of human actions, the product of which mainly takes the form of verbal descriptions and explanations, with quantification and statistical analysis playing a subordinate role at most" (p. 248).

Forsythe (1998) advocated the use of ethnographic methods to study the information needs of physicians. She pointed out that anthropologists distinguish between "what people believe should occur, what they believe does occur, and what can be observed to occur in particular circumstances" (p. 405). This distinction relates directly to the previously cited differences between what physicians intend to accomplish with a curbside consultation and what they feel actually does occur. Forsythe also cited anthropological emphasis on the importance of context, both situationally and professionally (p. 405). She identified formal and informal interviewing and document analysis as ethnographic tools to be used alongside participant observation and asserted that these tools aid the investigator in getting at tacit participant knowledge (p. 405).

Grounded Theory

According to Strauss and Corbin (1994), "grounded theory is a general methodology for developing theory that is grounded in data systematically gathered and analyzed" (p. 273). The method by which that can be accomplished is called constant comparison (Tesch, 1990, p. 23).

Investigators using constant comparison bracket their biases toward any a priori hypotheses. They begin with either theories gathered from previous research or theories generated from initial fieldwork data. As the investigation progresses, new data is continuously cycled past generated theory in order to constantly refine theory development. Using grounded theory and constant comparison enables the investigator to understand the curbside consultation in terms of the data gathered, rather than by imposing pre-existing, possibly biased hypotheses.

Case Study Structure

A case study explores what Stake (1995) called "the particularity and complexity of a single case [or phenomenon], coming to understand its activity within important circumstances" (p. xi). The idea of "important circumstances" is particularly important in this study. The investigator wanted to examine curbside consultation within the context in which they occurred—something that quantitative studies of the practice could not do. Looking at the curbside consultation as a bounded system that occurred within a particular context focuses on the notion that it is a locally situated social system, an entity rather than an aggregate of unrelated elements.

The case study structure also lent itself to the research questions under investigation. It provided a way for the investigator to gather qualitative data that could convey something of the experience of doing curbside consultations—data that would allow the investigator to say something about why physicians take part in curbside consultations, what the rules are, and what happens when the rules are broken.

This section explained the rationale for using a naturalistic inquiry perspective, qualitative research methods, and a case study structure to explore underlying meanings of the curbside consultation. The next section describes the study sites and informants and explains the procedures used for data collection and analysis.

Design

Sites and Informants

In keeping with naturalistic inquiry, there was no attempt at random selection of study sites or informants (Lincoln & Guba, 1985, pp. 199 – 201). Instead, selection of both sites and informants was purposive and criterion-based (Maxwell, 1996, pp. 70 –

73). The investigator used a collegial network of physicians and health system colleagues that was developed during work as a medical librarian to locate primary care physicians for this study. The investigator looked for 1) a sufficient concentration of primary care physicians who were willing to be observed and interviewed, 2) physicians located in at least three distinct regions within one midwestern state so that study findings could be validated across multiple sites, and 3) physicians located close enough to the investigator's home base to be financially and physically feasible, but distant enough so that the investigator would not have worked closely with the Group 1 and Group 2 physicians as a medical librarian. The investigator did not want previous working relationships to bias the findings.

The study sites and representative informants are described in greater detail in Chapter 3. See Appendix B for additional details on the study sites. See Appendix C for details on the study informants.

Informants

The choice of primary care physicians as the central group of informants was deliberate. As a group, primary care physicians include those in general practice as well as specialists in family practice, pediatrics, geriatrics, and internal medicine. They usually act as personal physicians. As such, they form the front line of patient care medicine and are expected to recognize and address a wide range of patient concerns. Breadth, rather than depth, characterizes primary care medicine (Ebell, 1999, p. 234), and distinguishes it from the work of subspecialists like gastroenterologists and cardiologists. As front line physicians, primary care physicians often consult, formally and informally, with subspecialists. Therefore, it made sense to use primary care physicians as

informants in an investigation of the role and place that curbside consultations take in medical practice.

For the purposes of the study, physician informants were organized by the following three categories: (a) Group 1. Family practice and internal medicine physicians (eight physicians, seven of whom are board certified), (b) Group 2. Family practice and internal medicine physicians in the same practices as those in Group 1 (eight physicians, all board-certified), and (c) Group 3. Specialists and sub-specialists selected, consulted, and named by Group 1 and Group 2 informants (28 physicians).

For the purpose of maintaining informant confidentiality, the investigator assigned pseudonyms to the informants. Each of the physicians in Groups 1 and 2 was assigned the name of a specific color and use of that name continues throughout the dissertation. The letters X, Y, and Z were used to represent Group 3 physicians, with no attempt to assign specific designators to individual Group 3 informants.

Sites

The investigator studied the curbside consultation in six different clinics located in a midwestern state. Clinic 1 is a family practice group of six physicians located in a town of approximately 8,500 people. The 44-bed general acute care hospital in the town serves people from two counties. As an acute care facility, the hospital provides emergency treatment and critical care services to patients admitted there.

Clinics 2, 3, and 4 are located a city of approximately 24,000 people. Clinics 2 and 4 are internal medicine practice groups; Clinic 3 is a family practice group. The three clinics are part of a non-profit 200-member physician group practice serving 400,000 patients across the state. The 221-bed regional referral center located in the town serves

people in an eight county area. As a regional referral center, the hospital provides services for the treatment of patients with complex or complicated health needs. Sixty-one physicians representing 26 specialties and subspecialties serve on the hospital's medical staff.

Clinics 5 and 6 are parts of a health system that includes approximately 20 sites of care within a 70-mile radius. The clinics are close enough for the physicians to cover call for each other on occasion. That means that physicians who needed time off from their practice for social or professional reasons can count on each other to see each other's patients during those prearranged times. Clinic 5 is a one-physician practice located in a town of approximately 1,300 people. The internal medicine physician in this practice is clinic-based. For reasons of time and distance, the physician chose some time ago to discontinue hospital practice. Given the distance from his town to the closest hospital in a neighboring town or to the 350-bed health system medical center 45 miles away, he used to spend many hours on the road, traveling between hospitals and clinic. Now, he formally refers patients who require hospitalization to physician colleagues who have agreed to admit and care for them during that period of time.

Clinic 6 is a new two-physician family practice clinic in a small city of approximately 2,300 people. The clinic is located in temporary quarters in the basement of a hospital-owned building while permanent quarters on the first floor of the same building are constructed. The building housing the clinic is across the street from the city's 40-bed hospital.

Data Collection

Data collection took place over a period of 50 weeks. The investigator spent 69 days in the field and conducted 60 formal interviews. Additional data gathered included informal interviews documented in the fieldnotes, artifacts from the study sites, and conversations with peer review physicians. This section describes the procedures involved in addressing ethical concerns, conducting and documenting observation and interviews, and collecting additional data. The data collection process is represented in Figure 1.

Ethical Concerns

Ethical concerns related to data collection and management were addressed in the following ways: (a) a request for review was submitted to and approved by the Emporia State University (ESU) Institutional Review Board. The informed consent form approved by the review board and used with informants appears in Appendix D; (b) physician informants read and signed the informed consent forms at the beginning of the data collection process. The signed forms were handled according to Emporia State University Review Board guidelines; (c) to ensure confidentiality during discussion of study findings, the names of physician informants and study sites were assigned coded identities; (d) hospital administrators or the research review boards of the hospitals on site were contacted at the beginning of work at each site to assure their understanding and support for the observation carried on within hospital premises; and (e) issues related to patient confidentiality protocols at each site were reviewed with physician informants. Data collection did not include physician-patient interactions.
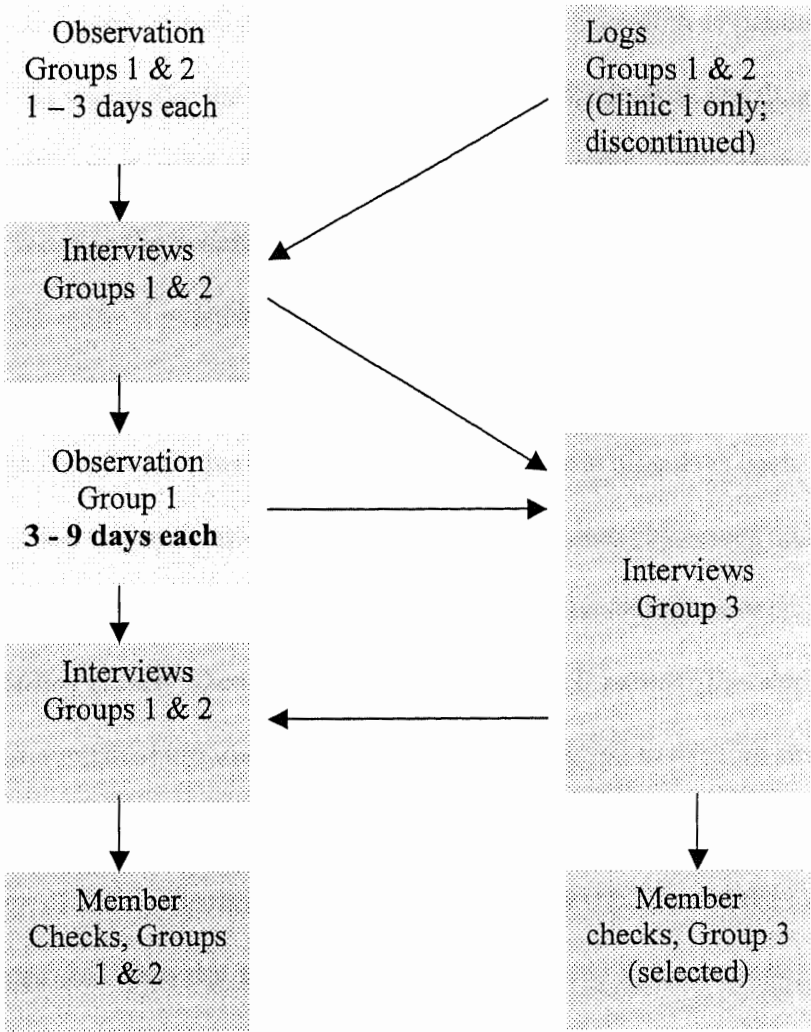
Figure 1. Data collection process in each of the six clinics studied.

Observation

During observation the investigator shadowed physician informants as they went about the normal course of their routine activities, with the exception of patient-physician interactions. This meant that the investigator watched and listened as physicians gathered for personal and professional conversations with their colleagues, walked hospital floors on rounds, ate lunch in the hospital cafeterias, and did their nursing home rounds. This close observation made it possible for the investigator to see and listen to physicians as they took part in curbside consultations during the course of their activities. Sixteen physicians were observed for periods ranging from one day to nine days each.

Again, observation did not include interactions between physicians and their patients. That meant that the observer stayed outside hospital and clinic examination rooms and absented herself when physicians spoke with their patients by telephone. During years as a medical librarian, the investigator had learned to observe strict protocols with regard to patient confidentiality. Physician informants were concerned with the privacy of their patients and the investigator's understanding of the importance of this issue reassured them that taking part in the study would not compromise their patients' rights.

Throughout observation, the investigator recorded fieldnotes by hand in a series of three notebooks organized for the purpose. Each of the 285 pages was coded to indicate the page number, the observation day, the date, and the physician observed. An additional notation indicated the number of the day in terms of the total number of days spent with a particular physician.

The notebook also served as a journal in which the investigator recorded administrative details, sketched models that seemed to reflect the data being gathered, made notes about reading done during the time physicians spent with patients, and asked questions that warranted a closer look. As suggested by Miles and Huberman (1994), margin notes were used for coding notations and highlighting areas that warranted further reflection (pp. 72 – 73). As will be discussed later in this section, the notebooks were also used to document informal interviews with physicians.

Whenever possible, the investigator transferred the notes to a word processor within 24 hours. This quick turnaround time made it possible for the investigator to expand on details and unpack cryptic notations that occurred as a natural part of taking notes quickly from a standing or walking position.

Three or four intense days of observation and interviews were followed by several days or weeks spent organizing and reflecting on the data collected, writing analytic memos, refining questions for informal and formal interviews, and transcribing interviews. The investigator used these periods as an opportunity for constant comparison, relating data gathered to existing theories and generating new theories.

The Interviews

Informal interviews. The content and structure of the informal interviews arose from the context of the physicians' activities. The investigator used the informal interviews to clarify her understanding of events, workplace procedures and processes, physician and clinical staff perspectives, and other situations that warranted explanation. Used in this way, the informal interviews served as ongoing "member checks" to substantiate credibility. That is, they offered opportunities for the investigator to share

some preliminary understandings about field observations and for informants to respond to those understandings. Were they valid? Were there other ways to think about the field observations? Informants had a chance to respond, to reflect, to explain their perceptions of events and situations, and to advance personal and professional viewpoints.

Formal interviews with Group 1 and Group 2 physicians. The investigator conducted two formal interviews with each of the 16 Group 1 and Group 2 physicians. Each interview began with an explanation of the study. The informant was then asked to review and sign the informed consent form. The interviews ranged from 20 to 45 minutes in length.

The original research plan called for the investigator to take handwritten notes during interviews. After a few interviews, this plan was revised and formal interviews were audiotaped whenever the situation permitted. Four Group 3 interviews were conducted by telephone and those interviews were not audiotaped. The investigator took written notes to provide backup data in case there were problems with the audiotape recorder or audiotape.

The investigator transcribed audiotapes as soon after the interviews as possible, using a transcription machine that facilitated the process. Margin notes and code notations were added to copies of the transcription notes throughout the observation period. As a member check, copies of the transcribed interviews were sent to all Group 1 and Group 2 physicians for them to review, revise if necessary, sign, and return in stamped, self-addressed envelopes.

As is consistent with the idea of emergent design, the interview questions emerged from initial data gathered in the field. Only one question was planned when the

investigator entered the field. That question used the critical incident technique

suggested by Flanagan (1954). The investigator asked informants to describe a curbside

consultation during which the other person's behavior was "especially helpful or

inadequate" (p. 328) and to describe the person's actions. The investigator based the

phrasing of this question on Flanagan's recommendation to obtain data on "critical

incidents" (p. 338) rather than ordinary incidents. He defined critical incidents as

"extreme behavior, either outstandingly effective or ineffective with respect to attaining

the general aims of the activity" (p. 338) and said that that "extreme incidents can be

more accurately identified than behavior which is more nearly average in character" (p.

338).

Guided by Rubin's and Rubin's (1995) guidelines on qualitative interviewing, the

investigator used data gathered from Clinic 1 physician responses to the critical incident

question as well as from observation and informal interviews to develop, revise, and

refine questions used during the remainder of the study. See Appendix E for the

interview questions used with Group 1 and Group 2 physicians.

Formal interviews with Group 3 physicians. During first round interviews, Group

1 and Group 2 physicians were asked to identify physicians with whom they had done

curbside consultations. During observation at each clinic, the investigator wrote to each

of the physicians named, using wording suggested by a Clinic 1 physician informant.

The letter asked for the physician's help in understanding the curbside consultation. A

one-page summary of the study and a response card with a stamped, self-addressed

envelope were included. Letters to 47 physicians were sent out and 28 agreed to

interviews. See Appendix F for a sample of the letter sent. It is important to note that

physicians who did agree to be interviewed might differ from those who did not.

Group 3 interviews were conducted in the same manner as the Group 1 and Group

2 interviews. Seven of the 28 Group 3 physicians were asked and agreed to provide

member checks. Copies of the transcribed interviews were sent to these physicians for

them to review, revise if necessary, sign, and return in stamped, self-addressed envelopes.

See Appendix G for the interview questions used with Group 3 physicians.

Additional Data Collected

Clinic 1 physician informants were asked to keep logs throughout the

investigator's observation period at that site. The investigator had anticipated that this

would be the most difficult data to collect, since clinic physicians routinely see between

27 and 30 patients per day and time is at a premium. In an attempt to improve

compliance, the investigator offered physician informants the options of either a pocket

size workbook to fill out or a dictation device and a cue card noting information needed.

Physicians were asked to log each curbside consultation they initiated during the study.

Information requested included date, time, physician consulted, general subject of the

consult, and any comments the informant chose to add. The workbooks and tapes were

to be collected every two to three weeks for transcription, coding, and compilation. In

spite of these efforts to make the procedure of completing logs less onerous, data

gathered from what log entries Clinic 1 informants did provide was sketchy at best and

the process was discontinued three weeks into observation at the clinic.

The investigator collected additional data in the form of artifacts from each site.

These artifacts included minutes of meetings that physician informants attended during

the observation period, journal articles that informants called to the investigator's

attention, promotional materials on the clinics, information about the populations served

by the clinics, call schedules, charts, and other clues to the nature of physician work.

These pieces of information helped the investigator understand how physicians in each

site worked—the constraints on their time, what they considered important, and the

community concerns that shaped their practice.

Data Analysis

The naturalistic inquiry approach and qualitative methods selected for this study

facilitated investigation of the curbside consultation in a natural setting with a human

instrument. This made it possible for investigator to identify key themes as they emerged

from the data. Ethnographic and grounded theory methods were used to shape

procedures for data collection and analysis.

Data analysis began during the first week of data collection and continued

throughout the 50 weeks spent in the field. During fieldwork, three or four days spent at

the study site were followed by several days or weeks spent organizing and reflecting on

the data collected. This section describes the data analysis process.

Organization of the Data

Fieldnotes, transcribed interviews, and data collection notebooks. The

investigator used word processing software to transfer handwritten fieldnotes and the

transcribed interviews to one word-processed document that could be searched and

enhanced with highlighted text, coding notations, and additional notes. Successive copies

of the word-processed document were printed, entered into a series of data collection

notebooks, and taken into the field for review and reflection. Fieldnote sketches and diagrams were either redrawn using the word processing software or enlarged and interspersed with pages of the printed document. A succession of printed copies of the word-processed document was entered into a series of data collection notebooks. These notebooks went with the investigator into the field, where the data could be coded and reflected upon. Artifacts from each clinic site, administrative records, schedules, and other information related to fieldwork augmented the word-processed fieldnotes and transcribed interviews.

Aggregated interview questions and responses. The investigator reorganized data from the interviews in order to look at it from other perspectives. A printed copy of the transcribed interviews was used to create a paper file that aggregated informant responses to specific questions. Interview responses from Group 1 and Group 2 physicians were printed on white paper. Interview responses from Group 3 physicians were printed on colored paper. The sheets of paper were cut apart, question-by-question. Finally, the slips of paper were grouped and filed by question. The paper file was particularly useful in comparing the responses from physicians in Groups 1 and 2 to those from physicians in Group 3.

Making Sense of the Data

Coding. During data collection at Clinic 1, words and themes that came up repeatedly during observation and conversations with physician informants were used to develop an initial coding system. The initial coding system was tested, added to, and refined as data collection continued at the remaining five clinics (see Appendix H for categories suggested during observation). The system evolved into a pattern code that

was used to identify repeating patterns, themes, and explanations (Miles & Huberman, 1994, p. 69). Coded data was displayed in matrices and networks in order to assist the investigator in recognizing regularities and relationships.

Direct interpretation. Once these regularities and relationships came to the surface, the investigator used Stake's ideas about direct interpretation to continue the process of data analysis. Stake (1995) said "the qualitative investigator concentrates on the instance, trying to pull it apart and put it back together again more meaningfully—analysis and synthesis in direct interpretation" (p. 75). He suggested that the case study investigator search the data "for patterns, for consistency, [and] for consistency within certain conditions" (p. 78) using long periods of reflection, triangulation, and skepticism of "first impressions and simple meanings" (p. 78).

Constant comparison. The parameters of the study ruled out observation of physician-patient interaction in the field. When physician informants were seeing patients, the investigator used the time available to reexamine existing theories in light of data being gathered. New data were continuously cycled past theories from Giddens (1979, 1996) and Goffman (1959, 1967), in particular, as well as theories generated from initial fieldwork data. The purpose of this constant comparison was to refine theory development in relation to the research questions under investigation. The results are reported in Chapter 4.

Trustworthiness criteria. Lincoln and Guba (1985) suggested four criteria for ensuring trustworthiness: credibility, transferability, dependability, and confirmability (p. 300). Issues related to credibility of the data gathered were addressed through prolonged engagement and observation in the clinical settings and triangulation of data sources and

data collection methods. In addition, member checks with physician informants took place, both formally and informally, throughout the data collection and analysis process. Informants from Group 1 and Group 2 were sent transcribed copies of the two interviews they had each provided. They were asked to review the contents, indicate revisions they believed appropriate, sign the document and return it in the stamped, self-addressed envelope provided. Seven of the 28 Group 3 informants were also asked to provide formal member checks on interview data. That is, they were each asked to review the transcribed notes to make sure that the notes accurately reflected their intent. One of the first Group 3 physicians interviewed reported significant disagreement with the content of the interview notes. As a result, the investigator made the decision to audiotape as many of the remaining interviews as possible.

Informal member checks took place in a number of venues. The investigator initiated conversations with physician informants and other people at the study sites to clarify understandings about puzzling situations and events. Credibility was also addressed by interaction with physician scholars external to the study. During data collection and analysis, the investigator used conversations with two physician-scholar colleagues unconnected with either site for peer debriefing. In addition, R. Brian Haynes, M.D., Ph.D., Professor of Clinical Epidemiology and Medicine and Chair, Department of Clinical Epidemiology & Biostatistics at McMaster University, served as external reader for the dissertation.

The issue of transferability was addressed through detailed description of the study sites and the context within which activity occurred. Dependability was addressed through ongoing attention to an audit trail, as suggested by Halpern (as cited in Lincoln &

Guba, 1985). The investigator organized and archived raw data, data analysis and reconstruction products, notes, and forms (pp. 319 – 320). Finally, confirmability was addressed through the audit trail, triangulation of data sources and methods, and reflections on the research process recorded in the fieldnotes (Lincoln & Guba, 1985, pp. 318 – 319).

This chapter described the rationale for using a naturalistic inquiry perspective, qualitative research methods, and case study structure. It provided an overview of the study sites and informants and explained the procedures for data collection and analysis. Chapter 3 provides detailed information about the context within which the investigation took place and Chapter 4 presents the results of the study.

CHAPTER 3
CONTEXT

Existing studies of the curbside consultation (Keating, Zaslavsky, & Ayanian,

1998; Kuo, Gifford, & Stein, 1998; Magnussen, 1992; Manian & McKinsey, 1996;

Myers, 1984) stripped away context to look at the curbside consultations from a

quantitative perspective. The naturalistic inquiry perspective employed in this study

provides a different view, one in which context is essential to meaning. From this

perspective, understanding the context within which activity takes place helps explain the

what goes on when physicians take part in curbside consultations. This chapter provides

expository description of context—the study sites and selected physician informants.

Sites

The investigator observed physician informants working in six clinics located in

three geographical areas of one midwestern state. The clinics shared a number of

common elements. Each of them provided primary care services in rural areas. The

clinic physicians observed were internal medicine or family practice physicians. With

the exception of one physician, all were board certified in their specialty. This meant that

all but one had pursued ongoing continuing education and evaluation certification by

accrediting boards in family practice medicine or internal medicine.

See Appendix B for more specific details about each clinic. These details are

offered to assist the reader in making decisions about applicability of the study findings

to other sites. Care has been taken, however, to safeguard confidentiality of study sites

and informants. In spite of a number of common elements, there were special features

that distinguished each clinic—features that can better be described than represented in a

table. The description that follows attempts to convey distinctive details noted during

observation at each clinic.

Area 1

The investigator studied one clinic in Area 1. Clinic 1 was a well-established

family practice group of six physicians located in a town of approximately 8,500 people.

The practice was established 30 years ago and was the only clinic in the study not aligned

with a larger health system. As the only physician group in the town, however, the

practice exerted significant influence in the 44-bed acute care hospital located next door.

The hospital was owned by the town but was managed under contract by a large health

system located approximately 100 miles away.

Clinic 1 was of particular interest because of the amount of communication that

took place among the physicians, physician extenders, nurses, office manager, and other

clinic personnel. This flow of communication also extended to the hospital across the

parking lot and appeared to include a number of the physicians who came in from the

surrounding area to provide surgical services and do specialty clinics.

Conversations with Dr. White shed light on the situation. Dr. White began the

current practice 30 years ago with a partner who has since left town. He was the senior

physician. Others at the clinic told the investigator that the clinic philosophy reflected

Dr. White's beliefs about how patients should be cared for. Dr. White talked frequently

about mission, a team concept, sincerity, and spirituality. He said that the clinic supports

the work of all the physicians in the clinic—putting the combined total of their expertise

at work for the patient. He emphasized the need for physicians to band together for

mutual good and criticized physicians in a neighboring city for what he perceived to be their failure to do so.

In keeping with his beliefs about teamwork, Dr. White emphasized the need for good communication among practice partners. When plans for the new clinic building were being made, he made sure that the spatial arrangement would facilitate communication flow. The result was a spatial arrangement distinctly different from the other clinic sites (see Figure 2 for a diagram).

The physicians shared one large office equipped with individual workstations. The patient examination rooms, physician-nurse workstations, procedure rooms, triage nurse room, laboratory, radiology area, and patient restrooms were arranged on either side of what might best be described as an oval racetrack bisected by a central hallway. The racetrack connected at the lower end to another wing of the building that contained the patient waiting room, reception area, and business offices.

Each physician-nurse team worked within a pod, a closely contained space that included three patient examination rooms and a workstation alcove. Each L-shaped workstation was equipped with a dictation device linked to a central receiving station, a networked computer used to track the flow of patients within the clinic as well as to perform other patient-care functions. In addition, the workstation was equipped with bulletin boards, a small refrigerator, top and bottom cabinets and bookshelves, a telephone, and a wall-mounted radiographic film light box. Some of the physicians used personal laptop computers at their high counters along the outside edge of the workstation. The nurses used a desk-height counter that housed the computer and the telephone.
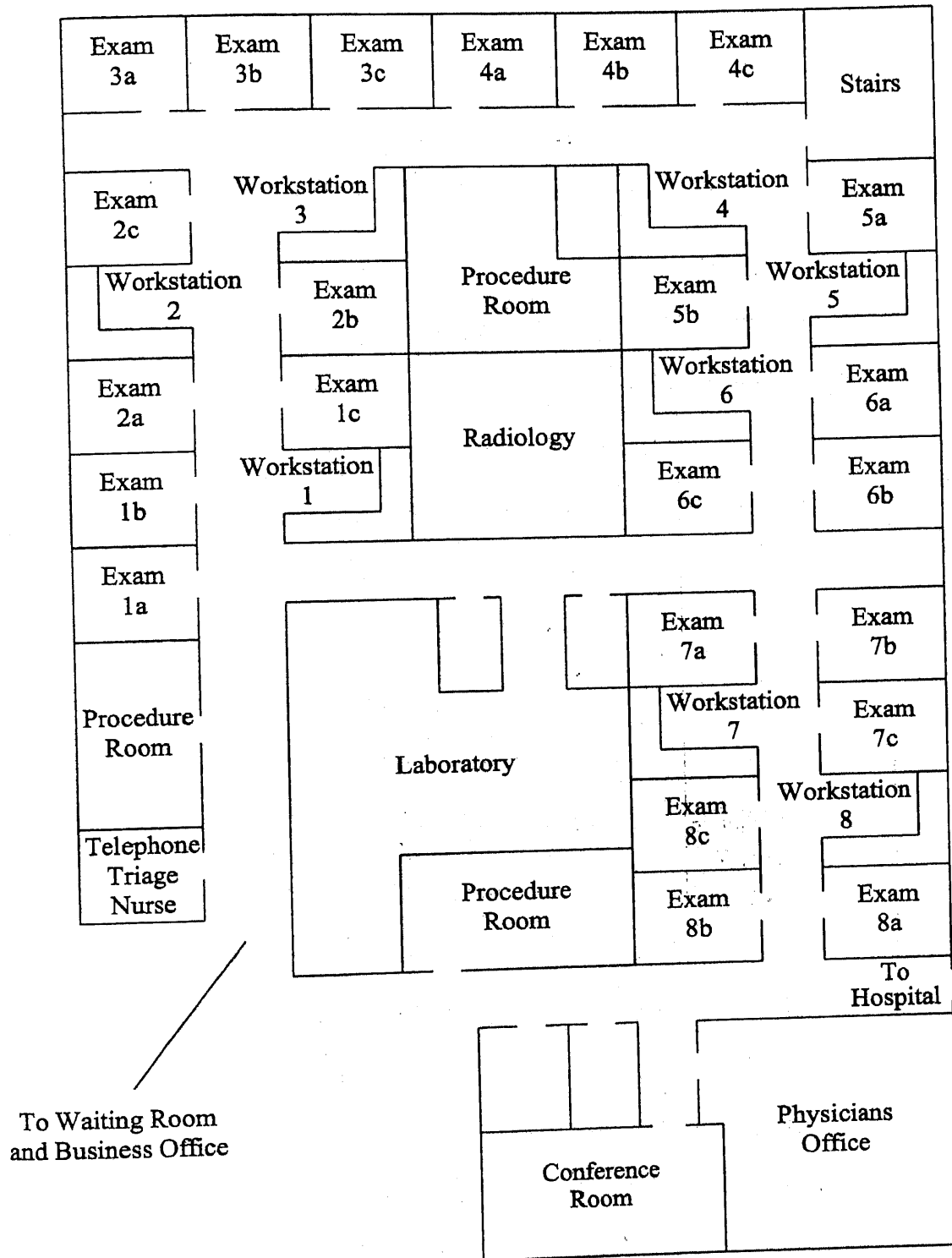
Figure 2. Clinic 1 Spatial Arrangement.

The physician-nurse teams worked very closely together. The investigator noted that each team had developed its own internal communication system. For example, when Dr. Green's nurse wanted to call his attention to test results or other situations requiring immediate action, she wrote post-it notes and tacked them to the Formica cabinet at eye level in the spot where Dr. Green stood to dictate. When Dr. Green came out of a patient examination room, he saw the notes, acted upon some of them, and tossed the notes related to those activities. With a quick glance at the notes remaining tacked to the cabinet, Dr. Green's nurse could track what he had and had not acted on.

The racetrack arrangement facilitated the movement of clinical staff around the building to the extent that it encouraged communication. For example, a physician who wanted another opinion on a radiographic film could take a few steps down the racetrack, stick the film in the light box, and ask the practice partner standing there to take a look. Physicians coming back from the hospital could relay critical information quickly. One day, for example, a helicopter was heard coming to and leaving the hospital. Within a few minutes, a physician returning from the hospital came down the hall and updated the physician-nurse teams on the status of the patient being flown out.

At this clinic, practice partners generally began their days with morning rounds at the hospital. The hospital provided a large doctors' lounge that also functioned as the physicians' communication center. The lounge was fitted out with transcription stations, a large television set, a kitchenette with coffee and a stocked refrigerator, a restroom, overstuffed sofas and chairs, and newspapers and medical journals. The six Clinic 1 physicians shared use of the lounge with some of the physicians who came from other towns to provide services at the hospital, the nurse anesthetist, the local podiatrist,

visiting medical students and residents, and the hospital administrator. Other hospital staff that stopped by the lounge to speak with a physician generally knocked for admittance and did not stay long.

The isolation and comfortable setting of the lounge facilitated the exchange of stories, both in terms of patient care matters and personal matters; provided a communication channel for the hospital administrator to speak informally with the physicians; served as dropping off point for stories brought in from outside by visiting physicians; and provided sanctuary for physicians who needed to let down their guard. For example, within the first fifteen minutes of the first day of fieldwork, the investigator listened to one of the younger physicians ask others in the room about possible medications useful with postpartum hemorrhage. He described the blood flowing from a patient during the previous evening's case, and then added, "It's always a bit unnerving when a patient asks, 'Am I going to die?'"

Area 2

Clinic 1 was distinctive for its high degree of deliberately fostered communication. Area 2 Clinics 2, 3, and 4 were decentralized and the physicians observed in those practices communicated much differently. Clinics 2, 3 and 4 were located a city of approximately 24,000 people. Clinics 2 and 4 were internal medicine practice groups; Clinic 3 was a family practice group. The three clinics were part of a non-profit 200-member physician group practice serving 400,000 patients across the state.

Clinic 2, the largest of the three clinics, was located in a large office building that adjoined the hospital. Clinic 3 was located several blocks down the street. Clinic 4 was

located in an older section of town that was across the river from the hospital and Clinic

2. Although the physicians had the opportunity to consolidate their practice in one

building, they chose not to because some of their elderly patients refused to drive across

the river.

A number of features distinguished Clinics 2, 3 and 4. First, the county

surrounding the town was said to be the oldest county in the state in terms of the average

age of its residents. One of the physician informants joked that he only saw patients aged

80 and above. As a result, the investigator spent many hours accompanying physicians

on nursing home rounds.

Second, in a state where there are areas with no internal medicine physicians, this

town had two internal medicine clinics and only one small, relatively new family practice

clinic, Clinic 3. According to one physician informant, the internal medicine practice had

purchased a retiring physician's practice for the purpose of creating the first family

practice clinic in town. Not long after recruiting the first physicians for the family

practice clinic, the internal medicine physicians aligned their practice with a large,

statewide group of physicians.

One of the internal medicine physicians in Clinic 2 served as medical director,

representing the three clinics in the large health system of which they are a part. The

medical director facilitated two weekly noon meetings held in the lunchroom of Clinic 2.

When asked about the purpose of the meetings, the medical director provided the

following explanation:

They're intended to be collegial—that's why we have them. The one on Monday

tends to be about practice-related issues, whether they're patient flow issues or

recruitment issues---I use that in my administrative job as a barometer of what

people are thinking. But it's partly to break bread together and maintain a feeling

of fellowship among the members of the group. Tuesday meeting is intended to

be more didactic. It's intended to be more directly clinical, related to patient

clinical problems or journal articles or information people bring back from

postgraduate conferences or discussing patient problems that are, like [sic] a

person who's in the hospital who's a difficult patient or somebody who's come to

the office and has an unusual problem—sharing that or just trying to get some

help.

Although practice partners from all three clinics were encouraged to attend the noon

meetings, the fact that they were located at Clinic 2 made them most convenient for the

physicians at that facility.

The family practice physicians from Clinic 3 attended less frequently than those at

Clinics 2 or 4. One of the family practice physicians explained that the discussions

tended to focus on internal medicine issues, rather than family practice issues. The same

physician said that the family practice physicians were supposed to hold their own

weekly meetings, but that they seldom found the time to do so.

The physical separation of the three clinics seemed to be reflected in different

ways of thinking about the business of the clinic. For example, several noon meeting

discussions involved Saturday clinic hours. Staff at the internal medicine practice rotated

through Saturday clinic hours, but staff at the family practice clinic had not been a part of

that rotation and had voiced resistance to this change. It appeared that the family practice

physicians were sympathetic to their staff members' position, but they were not present to

share their views at the noon meetings during which Saturday hours were discussed.

Other differences of perspective surfaced in regard to a new special care unit.

Soon after he joined the practice, one of the family practice physicians had worked with a

hospital administrator to introduce a new clinical service. Apparently, the decision to

introduce this new service was controversial. It required reallocating scarce hospital

resources and rethinking clinical procedures, both for staff and for physicians. As a

result, the process was highly political. Repercussions of this change surfaced throughout

the observation period. Physicians frequently debated appropriate use and management

of the new unit at noon clinic meetings and at hospital meetings.

Physicians observed in Clinics 2, 3, and 4 admitted or referred patients to three

area hospitals. A number of physician informants talked about having close relationships

with subspecialists at the university hospital approximately 100 miles away. Several had

gone through residency programs at the university. There were conversations, however,

about the need to shift some referrals to their new health system colleagues in a tertiary

care hospital equidistant to the university hospital but in the opposite direction.

The 221-bed hospital located in the town served people in an eight county area.

Sixty-one physicians representing 26 specialties and subspecialties served on the

hospital's medical staff. Unlike the physicians in Area 1, the physicians in this hospital

did not congregate in a doctors' lounge. The hospital provided a small, windowless

doctors' lounge that served primarily as a waiting area for surgeons. The investigator

saw only one of the physicians observed at this site enter the room. One physician

mentioned that he had not been in the doctors' lounge since his orientation two years ago.

Physicians met each other, instead, doing the circuit of hospital rounds. Most of the physicians observed did morning rounds. They visited each of their hospitalized patients at the beginning of the workday, going from floor to floor in the hospital. At the beginning and the end of work on each floor, they sat or stood at counters in the nursing station and updated patient records, discussed their orders with the nurses, and touched base with their physician colleagues. It was in this setting that most of the curbside consultations observed at this site took place, even among practice partners.

Area 3

The investigator studied two clinics in Area 3. Clinics 5 and 6 were parts of a health system that included approximately 20 sites of care within a 70-mile radius. The clinics were close enough for the physicians to cover call for each other on occasion. This was a significant benefit to the physicians involved, since it meant that they provided back up care for one another's patients when any one of them had to be away from town.

Clinic 5 was a solo physician practice located in a town of approximately 1,300 people. Dr. Red, the internal medicine physician in this practice, was clinic-based and did not admit patients either to the closest hospital in a neighboring town or to the 350-bed health system medical center 45 miles away. He formally referred patients that needed to be admitted to either of these hospitals.

Dr. Red grew up in the town, but left to attend medical school, do his residency, and complete a year-long subspecialty fellowship. He returned to his hometown to practice in a clinic owned by Health System X. There were conflicts among his practice partners and the health system, however, and Dr. Red left the clinic and joined their

competitors, Health System Y. Many of his hometown patients drove the 50 miles to see Dr. Red in the Health System Y clinic to which he moved. After several years, Dr. Red and Health System Y cooperated on the construction of a new clinic in Dr. Red's hometown and he reestablished his practice there.

During the course of Clinic 5 observation, the investigator visited with community members at local restaurants, gas stations, and public meeting places. During these conversations, community members were candid in acknowledging the schism that competition between Health System X and Health System Y had created in their small town. This tension was repeatedly demonstrated throughout the observation period. As a result, Dr. Red does not share call or collegial discussions with physicians in the competing clinic. He indicated several times that he welcomed the collegial support of the two new family practice physicians in Clinic 6. Like Dr. Red, they were associated with Health System Y.

Although several area subspecialists provided regularly scheduled clinics in the building, Dr. Red said that only two of them regularly walked over to his side to visit and share information about patients they were seeing. When asked if he went over to their side to visit, he replied that he did not.

Drug representatives were the most frequently observed non-patient visitors to the clinic. The frequency with which they appeared and interacted with Dr. Red was unusual, compared to the number of such interactions observed in the other clinics studied. Drug representatives often brought in candy or lunch for the staff and special gifts for Dr. Red. At times these gifts were welcomed, like a plastic tube that propelled ping-pong balls through the air. At other times, Dr. Red was vehement in refusing free

items. For example, he was angry about customized prescription pads that included his name and the investigator spent 15 minutes cutting each pad into bits. Members of the clinic staff voiced appreciation for the investigator's offer to do so, since one of them would have had to interrupt her already busy schedule to take care of this small task.

Clinic 6 was a new family practice clinic in a small city of approximately 2,300 people. The clinic was a joint venture between the town hospital and Health System Y, which was based in a city approximately 50 miles away. The two physicians who practiced at Clinic 6 met during their family practice residency program and found themselves "bouncing ideas off each other" as they worked rotations and moonlighted as emergency room physicians around the state. They were recruited for Clinic 6 at the end of their residency and moved their families to the town where the new clinic would be built.

During the investigator's observation, Clinic 6 was in temporary quarters in the walk-in basement of a building owned by the town hospital, which was across the street. A new wing was being added to the first floor of the building. When the new wing was finished, Clinic 6 would move into that space. Clinic staff members were excited about the new facility, but voiced concern about the fact that they would be sharing the building with a competing clinic. The general practice physicians who owned the competing clinic had lived and practiced in the town for some time. Some patients who had switched from the older clinic to Clinic 6 had expressed discomfort about being seen going into the new clinic.

The fact that Clinic 6 was new meant that the patient base was just beginning to grow. As a result, the physicians had large blocks of time available. When they were not

seeing patients, the physicians worked together and with the clinic staff to develop procedures, plan the arrangement of the new clinic being built above them, discuss ways to promote clinic services, and organize their workspaces.

The fact that that the Clinic 6 physicians were relatively new to the area also meant that they were developing or reshaping relationships with physicians in the health system and in surrounding areas. Since both physicians had moonlighted as emergency care physicians during their family practice residencies, they had some knowledge of local physicians and hospitals. Their new practice, however, required them to shift roles somewhat and to become knowledgeable about the way things were done within their new health system, within the hospital, and within the community.

Part of this shift involved new referral patterns. The Clinic 6 physicians still consulted with and referred patients to subspecialists they worked with during residency, but they were getting to know physicians on the town hospital medical staff as well as those connected with the health system's medical center. They expressed pleasure that a number of physicians had attended a health system reception held to introduce them to the medical staff community. They expressed particular pleasure that a subspecialist who provides a routine clinic at the town hospital had twice stopped by to visit them. They had begun to consult with this subspecialist and felt comfortable with his approach to patients and to the practice of medicine.

The Clinic 6 physicians were less comfortable with a specific treatment being provided by another physician at the town hospital. Apparently, this physician provided an alternative medicine therapy that drew people from around the United States. Patients came to town, spent money in the restaurants and motels, and had a procedure done at the

town hospital. This was good for the local economy, but the alternative therapy was outside standard of care. That is, it was not currently recognized as the best available treatment for the condition involved. So, while they expressed professional respect for their colleague, the Clinic 6 physicians were uncomfortable speaking about this alternative medicine therapy with patients who asked them about it.

In this section, the investigator provided special features that distinguished each of the six clinics studied. The six clinics described were located in three geographic areas of one midwestern state. Clinic 1 was in Area 1; Clinics 2, 3, and 4 were in Area 2; and Clinics 5 and 6 were in Area 3. The section that follows presents descriptive profiles of three informants, including one physician from each of the geographical areas.

Snapshots of Three Physician Informants

Sixteen Group 1 and Group 2 physicians were observed for periods ranging from one to nine days. All were primary care physicians practicing in primarily rural communities, but there were differences in terms of practice community, specialty, gender, age, and years of practice. For the purpose of enriching the reader's understanding of the context within which the study took place, the investigator used the following criteria to select three physicians for descriptive profiles: (a) one physician from each of the three geographic areas studied, (b) at least one family practice and one internal medicine physician, (c) at least one physician of each gender, and (d) a range of ages and years in practice.

Dr. Orange

Dr. Orange had practiced at Clinic 1 for just over three years and, as such, was the most recently added practice partner. She and her family had lived in the area for some

time, however. Her undergraduate degree, medical degree, and family residency program were completed at institutions less than 100 miles from Clinic 1.

Like her practice partners, Dr. Orange had one afternoon off a week, rotated through weekend call that included Saturday morning clinic hours, and drove to a nearby town one half-day a week to see patients at the satellite clinic there.

In a typical day, Dr. Orange started her day with an early morning visit to the hospital. She walked to the physician lounge to catch up with the news of the previous evening and to share patient "stories" with her practice partners, then went on to morning rounds. After rounds she walked across the parking lot to the clinic, discussed the day's work with the nurse that worked with her, and began seeing patients. On a busy day at the clinic, Dr. Orange saw 33 patients, 15 in the morning and 18 in the afternoon.

Dr. Orange's patients were primarily young—children and their parents. During one day of observation, Dr. Orange dealt with a range of patient problems that included lung cancer, a finger smacked with a hammer and showing signs of infection, urinary tract infection, strep throat, undiagnosed stomach problems, sinus problems, allergies, dry nose and nosebleeds, and an infected corn. When asked how many of her patients' problems relate to life choices, Dr. Orange exclaimed, "All of them!" and talked about the frustrations involved in trying to help patients when so many variables in their lives are outside a physician's purview.

Dr. Orange described herself as a coordinator of her patients' medical care. If the patient has several subspecialists, she said, "I'm the one who's supposed to coordinate them between going to the cardiologist and the pulmonologist. I'm kind of like the

go-between trying to explain to them what this person said and what it means to her or to him."

Dr. Orange moved quickly, talked out loud as she thought through a problem, chuckled frequently, gestured with her hands as she spoke, and used a full range of tonal inflections. She expressed considerable frustration with situations that kept her from focusing on the task at hand. At various times, those situations involved glossy materials that accompanied a drug company's fact sheet on a new drug, nurses that clouded key information with useless chatter, and Current Procedural Terminology (CPT) coding books required for keeping track of billable medications.

Dr. Orange said that she liked consulting physicians who were succinct and concise—"just telling you the way it is…because they don't want to be on that phone any longer than you want to be on that phone." She doesn't like consulting physicians that imply that she's asked a stupid question. On the other hand, she doesn't like "smooth operators who always give you strokes" like "this was an excellent question" or "oh, that sounds very interesting." Her unspoken response to those comments was, "I don't need to hear this!" but Dr. Orange said she talked frequently with one physician who made comments like that. She said that she accepted that behavior from him because "he's just such a nice person" all of the time.

Dr. Blue

Dr. Blue graduated from medical school in a nearby state and had practiced medicine in Area 2 for more than 25 years. Dr. Blue's office was at Clinic 4, but he also spent time at Clinic 2 interpreting test results for his practice partners. Dr. Blue said that a former practice partner had been drawn to a particular subspecialty and that the practice

had bought the equipment for him to interpret test results. Dr. Blue learned so that he could provide backup services, but inherited full responsibility when the partner left town. It was not bad, he said, but he did not like staring at a machine—he would much rather be talking to patients.

Dr. Blue said that he believed most physicians gravitate toward the clinical specialty where they find people who think like they do. That was how he chose internal medicine. He found pediatrics too emotionally involving—it was too difficult to understand what little patients wanted. On the other hand, he said that he enjoyed working with elderly patients. The average age of his patients was 80.

The parameters of the study ruled out observation of physician-patient interaction, but visits with nursing home patients were occasionally conducted in open areas and the investigator could see, if not hear, what was going on. On one such occasion, Dr. Blue demonstrated one of his ways of working with elderly patients. Several of his patients were eating breakfast in the dining room when Dr. Blue came to call on them, so he spoke with them where they sat at table. When he visited with each person, he knelt so that they were speaking face to face. Frequently, Dr. Blue had one hand on the patient's shoulder and the other hand poised over his own mouth, as if to keep from interrupting them. Later that morning he told the investigator that you have to "just shut up and listen" to what elderly patients say. Sometimes their words are not direct, but their roundabout stories were an attempt to tell you something. If you listen with that in mind, he said, a lot of times you could figure out what they are trying to say.

Dr. Blue described himself as being "on the geeky side." He said he rather enjoyed using technology. He appeared comfortable with using a computer to search the

Internet and used a downloaded drug software program on his personal digital assistant (PDA). On the other hand, he said, "I've got plenty of data... .The problem is, there's lots of data. You can go on the Internet and get lots of data. All my patients can get lots of data. But that doesn't give them answers. Data is not answers. Data is not how to do things right, it's data."

When the investigator asked how physicians remember so much, Dr. Blue replied, "You remember what excites you." He asked if the investigator had ever talked to a golfer about his game. The golfer, he said, can tell you what club he used on a hole and how it worked out in great detail. He asked if, when the investigator traveled, she remembered the kinds of food she had and where she ate them. Given an affirmative response, he said he never remembered that kind of thing but he did remember medical details. Dr. Blue said he had practiced medicine for over 25 years and still found it interesting.

Dr. Blue's remark prompted the investigator to ask about a comment made at a noon meeting earlier that day. The physicians had been discussing some problems with another group, problems that they appeared to attribute to physician burnout. One of the physicians at the meeting had summed up the group's attitude by saying that they "didn't have a fire in their belly—they have a pain in the ass." Dr. Blue said that was too bad. He said that the business of medicine and the "family stuff" could be rough, but that you could feel good about treating people and helping them get better.

Dr. Indigo

Dr. Indigo came from the East Coast. In between a bachelors degree in biology and medical school, he took a masters degree in physiology. His masters thesis required

lengthy observation of gerbils. He said that he really got tired of watching gerbils, but that his findings had been published in a few major biology journals.

"Being patient," Dr. Indigo said, was the most frustrating thing about starting a new clinic. At times, Dr. Indigo was fully occupied. He and his partner provided occupational medicine services at a local industry and saw as many as 30 patients in three hours. They also provided weekend coverage for the internal medicine physician at Clinic 5 and shared call at the town hospital. At one point in the observation period Dr. Indigo was on call at the hospital for 96 hours straight.

At other times, Dr. Indigo had unscheduled hours. He spent some of this time searching the Internet and organizing his workspace and his information resources. Even with the time he had available before the practice matured and was busier, Dr. Indigo said that he could not read all the journals relevant to family practice. He said that he paid special attention to resources that gave the best return for the time. Two resources he found particularly useful were *The Medical Letter* and *American Family Physician*.

Dr. Indigo had stacks of journals on his bookshelves and said that he often clipped articles of interest and filed them by subject so that he could retrieve them when necessary. He also made notes in what he called his "peripheral brain," a personal digital assistant (PDA). When he travels by air, for example, he said that he catches up on his reading and enters his notes in the PDA for eventual transfer to his office computer. Dr. Indigo talked enthusiastically about the use of PDAs for clinical purposes.

Dr. Indigo and his partner expressed admiration for a physician they had met during residency. This physician had practiced medicine for over 30 years but had kept up with current medical knowledge. Dr. Indigo's partner said that this physician had an

amazing memory—that he could recall exact details of cases from many years ago, recall journal articles that dealt with that type of condition, and make all kinds of links between the literature and current patients.

Dr. Indigo shared his plan for staying current with accepted medical practice. He said that he wanted to do a lecture series at the town hospital and to pursue "worthwhile" continuing medical education credits. In addition, he hoped that he and his partner could encourage medical students from their alma maters to do clinical rotations at the clinic. Working with students, he felt, would be both interesting and informative.

A situation involving the appropriate use of antibiotics illustrated Dr. Indigo's concern about the impact of outdated medical practice on the health of people in a community. When Dr. Indigo returned to his desk one day, he found a message from a patient who said that she had bronchitis and wanted him to prescribe an antibiotic. Dr. Indigo said that he "just hated" this situation. He talked about the long-term effects of indiscriminate use of antibiotics and about the need to educate his patients on their appropriate use. Hearing the medical evidence was effective about half the time, he said. He still heard "just give me the damn shot" or "just give me a pill" from people who remained unconvinced by the evidence.

Chapter 3 provided a description of context—the study sites and selected physician informants. Chapter 4 reports the study results, organized by research question.

CHAPTER 4
RESULTS

Chapter 3 provided a description of context—the study sites and selected physician informants. Chapter 4 continues with a report of the study results, organized by research question.

Research Question 1

Are there differences between what physicians say they want to accomplish in curbside consultations and what they report as the consequences of that activity? Data used to answer this question were drawn from a number of sources. During formal interviews, Group 1 and Group 2 physicians were asked, "What do you expect from a physician that you contact for a curbside consultation?" and, "How do you 'weigh' their response in terms of its accuracy and value to the particular patient case?" Group 3 physicians were asked, "What makes a good or a bad consultation?" Data gathered in response to these questions were augmented by data gathered during informal interviews recorded in the field notes.

Results of the study indicated that there are differences related to (a) a lack of consensus among physicians of what a curbside consultation is, (b) what a good curbside consultation looks like, (c) what constitutes responsible behavior with respect to medicolegal and financial issues, and (d) how the social nature of the curbside consultation impacts information transfer.

Research Sub-Question 1-A

What does the phrase curbside consultation mean to physicians? An unexpected finding that emerged from observation and conversation with physician informants was the absence of professional consensus on what a curbside consult is. When the

investigator discussed the proposal for this study with physicians, the word curbside drew

an immediate response: Replies like "Oh yes" and a nod of the head signaled their

recognition of the topic of the research, although many voiced surprise that such an

ordinary topic would warrant investigation.

As work on the research proposal progressed, the investigator drew an operational

definition of the curbside consultation from the medical literature (Keating, Zaslavsky, &

Ayanian,1998; Magnussen, 1992; Manian and McKinsey, 1996; and Myers, 1984). For

the purposes of the study, the curbside consultation was defined in the following two

sentences: The curbside consultation is an unofficial conference between physicians for

the ostensible purpose of managing a patient's case. As distinguished from the official

consultation, the curbside consultation is informal, not reimbursed by third party payers,

not documented in the patient record, and invisible to the patient.

The investigator was surprised at physician response to the definition. For

example, one physician who heard this definition early in the study took exception to the

word ostensible, feeling it implied ulterior and perhaps devious motives. After

consideration of the peer reviewer's advice, the investigator removed the word.

The revised operational definition was shared during initial meetings with groups

of informants at each site. At those meetings, informants seemed comfortable with the

words remaining in the first sentence, "an unofficial conference between physicians for

the purpose of managing a patient's case." They also accepted the descriptors "informal"

and "not reimbursed by third party payers." The investigator was surprised, however, by

the degree to which physicians were polarized by the two remaining descriptors, "not

documented in the patient record" and "invisible to the patient." Observation and

interviews with physicians in Groups 1, 2, and 3 confirmed that physicians do not agree

on these two points. At times, the two phrases prompted strong words during otherwise

"we all get along very well" interviews.

Another source of confusion about what counts as a curbside consultation

involved who was consulted—whether the consulted physician was a practice partner or a

physician from outside the practice. All but three of the 16 Group 1 and Group 2

physicians said that they consulted their own practice partners at least half of the time

that they requested informal consultations. It appeared that, for some physicians, being

part of a physician practice meant that informal consultations made with practice partners

were perceived as part of the collegial work relationship rather than as curbside

consultations. For them, curbside consultation implied consulting colleagues outside

their own practice. Of the three who said they did not consult their practice partners at

least half of the time that they requested informal consultations, two were senior

physicians in their practices. As senior physicians in their practices, they answered

questions rather than asked them. The other was a solo practitioner who had no practice

partners with whom to consult.

One possible explanation for this distinction was that questions asked of practice

partners were often asked quite informally—sometimes without words. For example, in

some practices, simply visiting a practice partner's area and sliding a radiographic film

into the viewer was responded to as if the question, "What do you think this is?" had been

voiced. Even when words were spoken, practice partners frequently reported that they

spoke to each other in a kind of shorthand. They shared a common knowledge base.

They saw each other's patients, knew each other's preferences and behaviors, and

observed common communication patterns. As a result, they could express what they

needed to with a minimum of time-consuming explication.

When asked how they had learned to do curbside consultations, not one physician

reported having been taught to do them. When pressed, informants talked about

watching others do them in medical school. Several likened the curbside consultation to

the case presentation, during which a physician describes a patient's case to other

physicians. The case presentation is a standard feature of a physician's clinical

education. Sinclair (1997) described medical student case presentations during hospital

rounds in the following way:

> On ward rounds, then, students 'present' their patients, standing to the left of the
>
> head of the patient's bed, and repeating out loud their formulaic
>
> narrative…[describing the patient case] to an audience that includes their fellow-
>
> students, as well as a doctor, and usually the patient too….
>
> So now, on ward rounds, they are still involved as an audience, but may
>
> also become the protagonist; students therefore become skilled at assessing
>
> others' performances as well as performing themselves. (p. 215)

In likening the curbside consultation to the case presentation, physician informants

reinforced the notion that the curbside consultation is, in part, a performance during

which participants assess their own skills as well as the skills of the other person.

Some physician informants likened the curbside consultation to the formal referral

or consultation. Unlike a curbside consultation, in a formal consultation the physician

referred to assumes a duty of care responsibility to the patient. That is, the second

physician formally accepts responsibility for the patient's proper care. In keeping with

the formal nature of the relationship, the second physician documents the care provided in the patient's medical record and is expected to share information with the primary care physician. Also in keeping with the formal nature of the relationship, the patient or the patient's third party payers reimburse the second physician for professional services. In likening the curbside consultation to the formal consultation, one senior internal medicine physician said he modeled his curbside consultation responses after recommendations made for physicians providing formal consultations. These comparisons will be discussed at greater length in results reported for Research Sub-Question 2-C.

As preliminary discussions with physicians indicated and field work experiences confirmed, physician informants universally recognized the concept underlying the curbside consultation. Many expressed surprise that something so ordinary as the curbside consultation could be the topic of a doctoral dissertation. As one young family practice physician exclaimed, "It [the curbside consultation] is just a question!"

As the physician's surprised exclamation indicated, physician informants seemed to take much about the curbside consultation for granted. However, study results indicate that there are rifts in informant understandings about this common practice. In the absence of explicit guidelines, there are differences of opinion about documenting the curbside consultation and questions about what counts as a curbside consultation.

Research Sub-Question 1-B

What do physicians say a good curbside consultation looks like? Although physicians may not agree on what a curbside consultation is, informants displayed little hesitation describing what constituted a good one. Some suggested models or formats for the curbside consultation. For example, a family practice physician offered the following

formula: "Say what you know and what you don't know, and then hope that you are treated with respect."

An internal medicine physician emphasized the value of expert interpretation in a good curbside consultation. He described a standard scenario in the following way:

I have specific care issues that I can't resolve. I find information about those issues that doesn't clarify it for me and I need someone to—not provide me with data—but provide me with analysis of data. I've got plenty of data. But I need someone who can put that data in the perspective of what needs to be done to take care of the patients right. So when I reviewed some information about my dilemma and I found some literature about it and I presented that area of dilemma and then we discussed what that information meant, he could—because of his expertise—he could analyze that for me and give me an answer. Not more data. He didn't give me data; he gave me an answer.

In this scenario, the "goodness" of the curbside consultation had to do with the outcome, which was to come up with an answer that had been filtered through the expertise of a respected colleague.

When asked to talk about good curbside consultations, subspecialists frequently talked about the quality of the patient presentation. One subspecialist provided the following criteria: "The data is presented adequately, there's been adequate questions and preparation and setup, if you will. Which gives us a reasonable amount of input to toss around in our head before we generate some consultation response." In other words, a good curbside consultation in this scenario was one that provided the consultant enough information to come up with a response.

Another subspecialist asserted that a good curbside consultation is written rather than spoken. He said, "I prefer to send a letter and x-rays when I have a question. I rarely just call on the phone and say 'Hey, I've got this patient who.' I don't think that is a very good way to obtain information." Although the suggestion to write letters rather than speak with people was unique to this subspecialist, his perspective does call attention to the fact that physicians expressed a wide range of views on what constituted a "good" curbside consultation. If there is no common understanding of the elements that mark a good curbside consultation, what effect does that have on its use?

Research Sub-Question 1-C

What do physicians believe constitutes responsible behavior with respect to medicolegal and financial issues? Results indicated that issues related to documentation and physician reimbursement for advice provided were sources of friction. For example, a number of informants voiced medicolegal concerns that documenting a curbside consultation by noting it in the patient's medical record might appear to establish, at least in civil court, a duty of care relationship between the patient and a physician who was informally consulted about that patient. In addition, informants voiced concerns about having their names mentioned in a conversation between a physician who had asked them for a curbside consultation and the physician's patient. It was one thing, they said, for a physician to say, "I have spoken to a cardiologist about your case and she feels this is an appropriate course of action." It was quite another, they said, to say, "I have spoken with Dr. X, who feels this is an appropriate course of action." One subspecialist pointed out, "It's a medicolegal quagmire because I don't view myself as having any responsibility

just because somebody calls me on the phone or catches me in the hallway and says 'I've got somebody with such-and-such, what do you think I should do?'"

One subspecialist reflected bitterly on a lawsuit that came about as the result of a curbside consultation that the primary care physician documented. He rejected the idea that a quick conversation transferred duty of care to him. This subspecialist still does curbside consultations, calling them a "necessary evil," but said there was "no upside" to doing them. Citing the possibility of getting involved in malpractice and the fact that he was not reimbursed for his advice in spite of this risk, he said there were only "downsides" for physicians who provided curbside consultations.

Medicolegal issues weren't the only source of contention. Some subspecialists talked about the inequity involved when physicians ask repeatedly for curbside consultations but never formally consult or refer patients. The requesting physicians "get something for nothing" in that they benefit from the advice but never pass patients for billable services. Other subspecialists were concerned that physicians asked for informal consultations when a formal consultation or patient referral was more appropriate. One of these subspecialists closed his interview by saying, "I think the most important thing to get out of this is, if you want to teach doctors anything, is to recognize when the curbside is not adequate and they need to look for formal advice, and also, to spare the doctor they're curbsiding any liability exposure." These differences in understanding and practice signal a significant lack of physician consensus on what the curbside is, one that should be acknowledged and discussed within the medical community.

Research Sub-Question 1-D

How does the social nature of the practice impact information transfer? Lack of consensus on what a curbside consultation is, what a good one looks like, and what the rules should be with regard to medicolegal and financial issues were not the only differences of opinion to emerge from the data. Observation and interviews also indicated that, although physicians asking for curbside consultations and physicians providing them said that their common goal was to improve patient outcomes, they were not always satisfied with how their interactions played out. In some cases, the source of their dissatisfaction seemed more to do with social factors than with cognitive ones. That is, although physicians were quite vocal about cognitive matters related to the curbside consultation, they appeared reticent or unaware when it came to behavioral matters that could also affect the transfer of information. As a result, some things went unseen and undiscussed, as in the case of an experienced subspecialist, Dr. E., and a younger primary care physician, Dr. Tan.

Dr. E. had recently moved to town and set up practice. A number of Group 1 and Group 2 physicians said they did curbside consultations with Dr. E., so he was invited to take part in the study as a Group 3 informant. During the small talk that concluded the interview, Dr. E. indicated that he particularly enjoyed doing curbside consultations with younger colleagues. He enjoyed their enthusiasm and dedication, as well as their willingness to learn. Conversations with some of these younger colleagues, however, indicated that they were not comfortable speaking with him. His competence was not questioned—that was not the issue. What they were uncomfortable with was his manner. He seemed distant and formal rather than collegial. They felt their informal questions

were unwelcome. They said that they often defaulted to a formal consultation as a result. That is, rather than ask him curbside consultation questions, they requested official, formal consultations.

In one sense, defaulting to a formal consultation cannot be considered a failure. Patients are being cared for and physicians are conducting themselves properly and professionally. In another sense, however, it may be considered a loss of opportunity. In this case, an experienced, knowledgeable subspecialist wants to share his expertise and particularly enjoys doing so with younger colleagues. He is willing to do this both formally and informally. The younger colleagues appreciate the value of the subspecialist's knowledge and would like to use it on behalf of their patients. They can and do so through formal channels, but the informal channel that could inform their practice and improve patient outcomes in the long term is clogged with unintended and unacknowledged obstacles.

Results reported in relation to Research Question 1 indicate that there are differences of physician opinion about what a curbside consultation is, what a good one looks like, what constitutes responsible behavior with respect to medicolegal and financial issues, and how the social nature of the practice impacts information transfer. Results reported in the second and third sections of this chapter address issues that also bear on these differences.

Research Question 2

How do physicians describe the purposes and rules for doing a curbside consultation? What happens if the rules are not followed? Physician informants

divulged a range of purposes and rules for doing a curbside consultation. They also described a number of consequences if the rules are not followed.

Research Sub-Question 2-A

For what purposes do physicians say they initiate curbside consultations? Data used to answer this question were drawn from formal interviews and the field notes. During formal interviews physicians in Groups 1, 2, and 3 were asked to recall a particular curbside consultation and to respond to questions about it. Group 1 and 2 physicians were asked, "What was the purpose of this curbside consultation?" Group 3 physicians were asked to talk about the curbside consultation they had in mind and their responses were analyzed to identify what they believed to be the purpose of the conversation they were describing. Other sources of data used to address this question include observations and informal interviews recorded in the field notes.

Physicians reported that they initiated curbside consultations to (a) confirm what they already knew, (b) get an answer to a quick question, (c) get educated on a topic of interest, (d) lead into a possible formal consultation, (e) negotiate an appropriate course of action in a particular patient case, (f) spread the emotional risk during a difficult case, (g) create or sustain camaraderie with physician colleagues, (h) find "like thinkers" among their physician colleagues, (i) monitor their own practice, and (j) get out of a difficult situation. The paragraphs following expand on those categories and provide representative examples.

Using the curbside consultation for confirmation. Physicians who reported that they used the curbside consultation to confirm what they already knew frequently used the verb "bounce." They bounced ideas off their practice partners, if they had them, or

other physicians who were close by. Dr. Indigo, for example, shared the following

observation:

Dr. Indigo: "I don't know anybody, really, that I can just bounce something off,

besides [his practice partner], in a very informal atmosphere. Almost like, 'Yeah I know

the answer. Just tell me that I know the answer.'"

Interviewer: "Why is that? Why do you need that?"

Dr. Indigo: "Because there's always—you build a differential. And your

differential is a rough odds-on favorite, you know. And you just want to make sure that

your quick assessment and evaluation and everything—do you have all the odds laid out?

And so they're standing about where they should as far as top ranking? Or is there

another one that I'm totally clueless about?"

Dr. Indigo and his practice partner reported that they had conferred with each

other during residency, even when they were on clinical rotations in different parts of the

state. There appeared to be a direct relationship between their comfort with one another

and the degree of support they provided one another when it came to validating a course

of action. They indicated that this comfort level with each other was a significant factor

in their decision to practice together.

Dr. Red, an internal medicine physician in a solo practice located in a town close

to Dr. Indigo and his partner, reported that he was pleased that they had come to the area.

He indicated that both had already covered for him at Clinic 5 and that patients and clinic

staff had said good things about their work. The investigator asked Dr. Red if he missed

having practice partners to confirm what he was thinking. Dr. Red responded in the

following way:

When I had other doctors as partners we did the same thing. We bounced things off of one another. A lot of times we solved the problem there before we had to call a specialist, because they had something that they had done or seen in their residency. Or, especially in my case, with pediatrics. That's probably one of my weakest areas. I just wasn't trained in that. So I could usually solve a problem before I had to call a pediatrician.

Dr. Red and his former practice partners had served as information resources for each other. It appeared that Dr. Red was looking forward to being able to do that again, now that Dr. Indigo and his partner had established their practice in a neighboring town.

Not having colleagues to confer with presented a significant problem. For example, Dr. Blue told a story about Dr. G, a subspecialist who began a new practice in town but didn't stay. According to Dr. Blue, Dr. G. "could write up a good plan but had no colleagues to bounce it off in order to confirm what he was thinking." Dr. G. ended up leaving town to join a practice that included other physicians in his subspecialty.

Although physician informants frequently consulted their own colleagues for confirmation, they also talked about consulting subspecialists outside the practice for this purpose. A number of subspecialists interviewed confirmed that this happens. One of them described a call from a physician who wanted confirmation that he was heading in the right direction with a patient. The subspecialist called this a "typical scenario."

Using the curbside consultation to get an answer to a quick question. Physician informants also reported that they used the curbside consultation to get a quick answer to a question. The nature of the question generally had to do with diagnostic or management issues. Questions reported or observed ranged from the relatively

straightforward (e.g. Could the soft tissue mass shown on this x-ray be cancer?) to exploration of differential diagnosis, treatment options, drug interactions, and other, more involved issues (e.g. "I have this 76 year old lady who came in with atrial fibrillation. She has a past history. She's already anticoagulated. And this is what I've been doing so far. I'm having a little trouble getting her rate under control.")

Sometimes physicians reported that they asked questions that they believed would elicit a relatively quick answer, only to discover from the physician consulted that the situation was more complex than it initially appeared. For example, during morning rounds Dr. Silver approached Dr. A., who was writing progress notes at the nurses' station. Dr. Silver sat down next to Dr. A. and told him about an elderly patient in the mental health unit. The patient had had a Foley catheter in for years. This presented a potential problem, since the presence of a foreign body increased the risk of infection. Dr. Silver responded to the situation by having the catheter removed, but now he was dealing with another problem. The patient was incontinent and Dr. Silver needed to factor the risks of having urea on the skin. He and Dr. A. discussed the relative risk of various courses of action. The conversation took several minutes. As Dr. Silver and the investigator moved down the hall following the conversation, Dr. Silver shook his head ruefully and said that, as usual, he had hoped for a simple answer when the problem was actually quite complex.

Subspecialists who were asked questions that required complex answers reported varying degrees of comfort in responding to them. Their degree of comfort appeared related to the accuracy and volume of relevant information that they received from the requesting physician, as well as what they knew about the manner in which the physician

practiced medicine. When they felt they had enough information to work with and that the requesting physician could be trusted to act on it properly, their comfort level rose.

Subspecialist Dr. O. talked about that comfort level. He emphasized that curbside consultations have to do with relationships and asserted, "You have to have a pretty good relationship. It's a trust thing. You have to know that information you give out will be used in an appropriate fashion." When asked if requesting physicians ever posed questions that he considered inappropriate, Dr. O responded, "No, because I think I don't let that happen." He said that if he picks up on information that doesn't seem right or inappropriate responses like fuzzy answers to his questions, he asks to see the patient. Asking to see the patient seemed the universal response to questions and requesting physician questions and behaviors that fell outside the consulting physician's comfort level. This consequence will be addressed again later in the chapter.

Using the curbside consultation to get educated on a topic of interest. Physicians also reported that they asked for curbside consultations to get educated on a topic of interest. For example, Dr. White said that in one such situation he had a patient with small vessel disease and was struck by the number of patients that he had seen recently with that condition. He thought of that when he bumped into a subspecialist who had come in from out of town to do a clinic and took the opportunity to ask him about ways of preventing small vessel disease.

Dr. White's interest in getting educational answers to curbside questions was echoed by Dr. Brown during an informal interview. After watching Dr. Brown consult with another physician, the investigator asked if the curbside consultation might be considered a continuing education activity. Dr. Brown said that, yes, a "good" curbside

consultation functions as a learning experience. He said that he was disappointed when he did not get "educated" at the same time that he gets an answer to a specific question, because he could apply that education the next time he had a similar patient case.

Continuing, Dr. Brown talked about typical and atypical cases. He said that he saw certain types of cases so often that he learned what was typical and what was atypical. Even though he saw typical cases over and over, he was aware that he needed to stay current with new ways of treating them. Asking a curbside consultation in relation to a typical case was one way of doing so. An atypical case—when a patient doesn't respond to treatment as expected—could also trigger a curbside consultation. In this situation, he got not only an answer to a specific patient case but also a learning experience that he could apply to later cases.

Using the curbside consultation to lead into a possible formal consultation. The notion that physicians request a curbside consultation to explore the possibility of getting an official consultation was supported by Group 1 and Group 2 responses to the question, "When you consult a subspecialist informally, how often do you do so with the intention of formally referring the patient?" All of the physicians asked that question said that they had that intention in mind at least 50% of the time. Some indicated that they intended to formally refer the patient following curbside consultations 90 % of the time. Informants said that they would not ask for a curbside consultation unless they were ready to refer the patient at the consulted physician's request.

An internal medicine physician expressed this perspective in the following way:

The fielder of the question should always be able to say, "I just don't feel comfortable tackling this in curbside fashion. Why don't you sign him up to see

me?" And so I'm always prepared for that answer, although there are times when I pretty much will ask, "Is this somebody you want to see or do you want me to just have them try a splint, or something for a while and see how it goes?" I think that's fine too. So I'd say I'm almost always open to that possibility.

Like this informant, Group 1 and Group 2 physicians appeared to believe that the possibility of a formal referral was an inherent characteristic of the curbside consultation. A number reported that they told a consulted physician up front that they were willing to send the patient if the subspecialist preferred a formal referral to a curbside consultation.

In Area 2, some subspecialists were so overbooked that they needed to ration their time carefully. In this setting, subspecialists acknowledged that other physicians sometimes asked them curbside questions that included either an implicit or explicit request to see the patient formally. They did so because normal channels for making a formal referral might take months. A Group 3 subspecialist pointed out, "And some of the curbside consultations have a tagalong: 'Do you think that you could really see this person?' That's the end-all question: 'Can you do me a favor?' So that's a different doorway—that the curbside entry provides." In other cases, when it was impossible to avoid a delay, the curbside consultation could provide temporary support until the patient could be formally seen. One family practice physician used the phrase "tide me over" to describe this type of support. In each of these instances, the curbside consultation provided an entry point to a possible formal consultation.

Using the curbside consultation to negotiate an appropriate course of action in a particular patient case. Yet another purpose for the curbside consultation arose during sustained conversations with Group 1 and 2 physicians during observation. That is,

Group 1 and Group 2 physicians talked about the curbside consultation as a collaborative enterprise—one they undertook for the purpose of negotiating an appropriate course of action in a patient case. In other words, they viewed the curbside consultation as a communication device that could be used in concert with subspecialists to triage patients. Through negotiation, the physicians involved in a curbside consultation could determine who needed to see the patient: either the primary care physician (acting on ongoing advice from the subspecialist in some cases) or the subspecialist (by formal referral of the patient). Physicians in all three groups emphasized that triage was particularly important in medically underserved areas where physicians in all specialties were hard-pressed to see all of the patients who needed to be seen.

It is essential to note at this point that Group 1 and Group 2 physicians saw themselves as equal partners with their subspecialist colleagues in a community-based health care system. Each group, they said, played a necessary role. The primary care physicians said their role was to provide broad-based, entry-level care that required a generalist's perspective. They also said that they coordinated patient care, helping their patients negotiate the subspecialists' realm. Finally, a number of primary care physicians said it was their particular responsibility to deal with the whole context of their patients' lives, including not only clinical but also social and economic issues.

Primary care physicians pointed out that they saw patients with undifferentiated problems. As one physician expressed it, "Patients come to primary care physicians because they don't feel good, not because they know what's wrong with them." Primary care physicians have to figure out what the problems are and how to approach them. One physician likened the situation to having a bunch of marbles dropped into one bin. The

primary care physician's task, he said, was to sort the marbles, first by problem and then by cases that he or she had the skills to handle versus those that should be passed on to a subspecialist.

According to the Group 1 and Group 2 physicians then, their role was to provide breadth. The role of the subspecialty physicians, as they expressed it, was to provide depth—state-of-the-art knowledge in narrowly focused subspecialty areas. The Group 1 and Group 2 physicians saw both roles as essential and complementary.

Within this system, the curbside consultation provided a vehicle for them to triage patients and to negotiate appropriate courses of action. As one family practice physician summed it up, doing a curbside consultation with a subspecialist was similar to working with a patient one-on-one, "sharing information and trying to come together as a unit to make a decision."

Using the curbside consultation to spread the emotional risk during a difficult case. Several physicians talked about another purpose for the curbside consultation. They said that a curbside consultation could be used to "spread the risk" during a particularly challenging case. The investigator first assumed this had to do with legal liability, but that original perception was incorrect. What the physicians were talking about was the emotional investment in a difficult patient case—a physician's personal response to the responsibility involved. For example, an internal medicine physician in practice for almost 30 years said, "Without a consult or a university setting where you've got senior physicians above you, when a patient dies it's just you, the patient, and the patient's family. The curbside consultation can soften the impact so it wasn't just you that cared for him or her." The point was not to spread the legal liability—physicians

made it clear that answering a curbside consultation does not establish a "duty of care" relationship—but to buttress an individual physician's feelings with collegial support in the event a case went bad: "It wasn't just you."

Using the curbside consultation to create or sustain camaraderie with physician colleagues. A number of physicians talked about curbside consultations done to create or sustain camaraderie or collegiality. The investigator observed this use of the curbside consultation in each of the areas studied. In Area 1, for example, the Clinic 1 physicians met every morning in the doctors' lounge of the hospital. They drank coffee, read the paper, talked about the local sports teams and other news of interest, and shared patient stories. Stories were offered and considered. Some stories were accompanied by explicit questions: "Did I do this right?" or "Was there something else that I should have done?" Exchanging stories in the doctors' lounge not only facilitated the asking and answering of questions, but also sustained the camaraderie Clinic 1 physicians said they valued.

The investigator observed similar settings that appeared to foster curbside consultations in each of the three areas studied. A subspecialist in Area 2 pointed out that, although the physicians there did not congregate in a doctors' lounge, they did do so in other locations. The custom in this area was to congregate at the various nursing stations on hospital rounds. Observation bore this out: most of the non-office curbside consultations observed in Area 2 took place as physicians updated progress notes at the nursing stations. Greetings, social exchanges, curbside consultation conversations, and requests for formal consultation happened here.

The internal medicine physicians from Clinics 2 and 4 had their own private enclave that nurtured camaraderie and informal consultations. Twice a week, practice

partners who were available sat down to lunch in the Clinic 2 conference room. The first

noon meeting of the week was formally designated as a business discussion; the second

was formally designated as a research update. For the second session each week, one of

the physicians summarized a recent medical research article and talked about its potential

for local application. These discussions frequently evolved into what might be described

as group curbside consultations.

One Clinic 2 physician talked about the noon meetings and doing curbside

consultations for what he called "social amusement" in the following way:

> I think there's a certain camaraderie that has to happen among doctors in a group,
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> and it enriches the experience a little bit to be able to sit down when you're eating
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> with somebody and say, 'I had an interesting case yesterday,' describe the
>
> features of it and say "This is what I think. What do you think?" And that's,
>
> partly that's just a way of people spending time together but I think it also
>
> enriches the day and can possibly add to the patient's care.

The low-key, social atmosphere of the noon meetings appeared to foster information

exchanges via the curbside consultation, albeit in a group fashion. As such, the noon

meeting both educated members of the practice and sustained collegiality.

Using the curbside consultation to find like thinkers among their physician

colleagues. Some physicians said that they asked for curbside consultations to find "like

thinkers," physicians who were similar to them in what they called style. The notion of

style came up frequently in conversations with physicians. It was used in reference to the

characteristic manner in which a physician practiced medicine, especially in regard to

behavior with patients. There appeared to be considerable tolerance for differences of

style. One physician explained this by relating the matter of style to the art of medicine, pointing out that art allows for many interpretations. Taken in that light, style seemed to cover a range of thoughts and behaviors that were different, but still within the parameters of acceptable practice.

During observation, the investigator heard several informants gloss over differences in thought and behavior with references to the art of medicine. It was rare, on the other hand, for informants to openly criticize their colleagues. The investigator seldom heard outright criticism of the manner in which another physician practiced medicine—an activity that the medicolegal literature calls jousting (i.e. LaCombe, 1997; Schussler, 1980). On the few occasions that the investigator heard one physician directly criticize another, the exchanges occurred in settings where the speakers could not be overheard. When the investigator heard such exchanges, they took place during confidential interviews with physicians or among practice partners in private settings. Physicians took care to make sure that unintended listeners did not overhear such conversations.

However differences of medical opinion might be explained, the curbside consultation offered a means for sorting out who, among the physicians available for questions, practiced in a similar way. This sorting process seemed particularly important for physicians who were new to an area. Dr. Indigo, for example, said that he used the curbside consultation as a way of getting to know other physicians in the area. After a few conversations with another physician, he not only had a social relationship, but he also knew whether or not the other person practiced medicine in a similar way. He felt very comfortable, for example, with a colleague in a nearby town. This physician had

impressive credentials and practiced to what Dr. Indigo considered current "standard of care." Conversely, he had gotten to know another group of physicians in town but would not do curbside consultations with them unless, he said, he was in the midst of a difficult delivery and Dr. F. was outside in the hall. His exchanges with these physicians had established that they were not like thinkers and this difference made it uncomfortable, if not impossible, for him to trust information received from them during a curbside consultation.

Using the curbside consultation to monitor their own practice. Many of the physicians observed talked about how they maintained confidence in their competence as physicians. One in particular, Dr. Black, used the phrase "check and balance system" in relation to the curbside consultation. He said he sometimes asked curbside consultations to make sure he stayed on course with mainstream medicine.

Dr. Black was a young primary care physician not long out of residency. He suggested that there were three general categories of physicians: (1) those who practiced substandard care, care that deviated widely from standard of care, was based on outdated or unscientific evidence, or that was just plain eccentric; (2) those who practiced according to standard of care, what mainstream medicine considered appropriate care based on the best medical evidence available at the time; and (3) those who practiced state-of-the-art care, as practiced by highly experienced physicians or those with advanced subspecialties and credentials.

Dr. Black said that he wanted to stay within "two standard deviations" of what was considered standard of care—the second category. He said that he used the curbside consultation as one way of doing that. He checked his own performance against the

opinions of those he consulted to make sure that he stayed within the mainstream. In that sense, he said, the curbside consultation provided a check and balance system to keep him on track. While no other informants used that particular phrase, several of the junior physicians voiced similar thoughts. Dr. Gold, for example, said that he believed that subspecialists—"the people that keep up on the latest, greatest, and that have evidence base behind them"—established the "standard of care" that he used to govern his own practice. He did his best to keep up with the professional literature, but used informal consultations with subspecialists to make sure that he was practicing good medicine.

Using the curbside consultation to get out of a difficult situation. Finally, some physicians said the curbside consultation provided an "out" in an untenable situation. In some cases, the word "dump" was used. One reason for wanting to dump a patient was because the physician was "over his head" (e.g. "I have this patient. I don't know what to do. What should I do? Do you want me to send them to you or do you want me to handle it here?")

In some cases, a physician did not want to deal with the patient for other reasons. For example, the investigator watched one family practice physician make a series of telephone calls in an unsuccessful attempt to pass along a non-compliant pregnant patient to social agencies that he felt were more appropriate to the young woman's situation. In another, a physician was leaving town to establish a practice elsewhere and did not want to take on a difficult case. He called another physician for a curbside consultation and used the opportunity to request a more formal transfer. In each of these situations, the physician did not want to take on a patient and attempted to use a curbside consultation to persuade another physician to take the case.

In another situation, a family practice physician who believed that he already knew what needed to be done with a difficult case did a curbside consultation to satisfy the patient's family. Apparently the young patient's parents lacked confidence in the community hospital and insisted that the physician contact an "expert" who might provide a more informed answer. The subspecialist contacted provided information in response to the curbside consultation question, but backed the family practice physician and did not request transfer of the patient. The investigator interviewed the subspecialist involved, who acknowledged that the situation was awkward but expressed confidence in the family practice physician's plan of action. In this case, both physicians negotiated a satisfactory outcome in spite of the awkwardness of the situation.

As the examples provided in this section illustrate, physician informants initiated curbside consultations for a number of purposes. Informants also explained why they responded to requests for curbside consultations.

Research Sub-Question 2-B

For what purposes do physicians say they provide curbside consultations? During formal interviews, Group 3 physicians were asked why they do curbside consultations. Their responses had to do with (a) providing good patient care, (b) fulfilling professional obligations, and (c) encouraging formal referrals.

Group 3 physicians said that doing curbside consultations helped patients in a number of ways. For one thing, they agreed with primary care physicians who said that the curbside consultation provided a way to triage patients, separating those who needed to be referred to a subspecialist from those who can be treated by the primary care physician with advice from the other physician. One Group 3 physician pointed out,

"From our [a consultant's] standpoint, it's better that they ask. And sort of come to a resolution or an answer without my getting involved at all in patient care. Because I don't have the half hour or whatever it takes to go see the patient, talk to the family, go through all that. And we can sort of work of work through things." This was viewed as particularly important in medically underserved areas where physician time was already stretched to the limit.

Physicians also pointed out that the curbside consultation could increase patient care options. A Group 3 physician explained this in the following way:

No physician ever wants to be thrust into the position of saying, "We've done all we can do for your condition." We always want to have additional options: "Well, maybe we can go back to this medication, or we can do this, or we can fine tune that, or we can throw in this little twist in your treatment." I think they always want to be able to continue to be able to treat the patient, to move the treatment ahead, and therefore two brains are better than one.

In other words, physicians believed that, by working together in challenging cases, they could improve patient outcomes.

Finally, in some situations the curbside consultation provided an opportunity for subspecialists to help patients by mentoring their physicians. One subspecialist admitted that he had watched another physician work and was hoping for an opportunity to provide information he felt was important for the other to know. If that physician would just ask him a question, he could provide some coaching without risk of offending the other physician—something he did not want to do. Another subspecialist said the curbside consultation was an opportunity to "clean up mistakes" (e.g. "This doesn't make sense,

can you look at this echo?"). In this sense, the curbside consultation was part of a check and balance system that could be used to avoid medical errors.

Group 3 physicians stressed yet another patient benefit in providing curbside consultations. They pointed out that if they could provide useful information without having to see the patient formally, the patient could save time and money, not to mention the difficulty involved in driving to yet another doctor's office and the stress that some felt in dealing with new physicians. All of these activities were viewed as beneficial to patients.

The second purpose Group 3 physicians identified for providing curbside consultations was to fulfill professional obligations to other physicians in the community. One subspecialist said, "I'm in a service profession. I'm serving not only the patients in [the area] but also the doctors who are managing those patients. I need to be of service, and I do that the best that I can, given some of the inadequacies of the curbside consult." Another displayed surprise at being asked why he provided curbside consultations, saying, "Because I'm asked, I guess. I mean, is it an optional thing? Would I walk away and say, 'No, I won't talk to you?' It would seem odd not to answer their question." Yet another talked about the fact that he knew the people who asked him questions. If he had information they needed, he said, it seemed only right to share it. In other words, there was an ongoing relationship, and part of that relationship entailed sharing what he knew. "I can't imagine not doing them," said another physician.

On a less positive note, one subspecialist who had been entangled in a malpractice lawsuit because he provided a quick curbside consultation called those conversations "a necessary evil." He used that phrase several times during the formal interview, but called

the investigator later to emphasize that his negative attitude did not include those physicians with whom he had formed strong ongoing relationships. He wanted to make that point very clear.

The third purpose Group 3 physicians identified for providing curbside consultations was to build rapport with other physicians. They pointed out that building and maintaining good relationships with their colleagues benefited them in a practical way. That is, physicians with whom they had good relationships would formally refer patients to them. One young Group 2 physician talked about that rapport the following way:

> You're ...friend to friend, buddy to buddy a lot of times. You befriend some specialist. Like if I have an [X] problem I can call [Dr. Y.] without him being on call and say, "[Dr. Y.'s first name], what should I do with this?" He's offered that to me and I've taken him up on it. You know what I mean? I don't know if he offers that to everybody, or just people that he likes or wants to maybe be available for the business or whatever.

In this case, Dr. Y. was the same subspecialist who had called curbside consultations "a necessary evil." He had gone out of his way, however, to get to know this Group 2 physician and to encourage him to consult, both formally and informally. It appeared from conversation with both physicians that there was mutual personal as well as professional regard. As a result, the Group 2 physician was both asking informal questions and establishing a referral pattern in the subspecialist's direction.

Research Sub-Question 2-C

What do physicians say about the rules for doing a curbside consultation? During interviews and observation, the investigator asked a number of physician informants how they had learned to do curbside consultations and what rules they had been given for doing them. Their response was generally a bemused shake of the head or a shrug of the shoulders. Most said that there were no rules—they just knew how to do them.

The investigator's use of the word "rules" may have initially implied rules that were written down somewhere. What the physicians meant, the investigator believes, is that there are no explicit, standard rules published in the medical literature or endorsed by their professional associations. Conversations with informants indicated that there are tacit rules that govern these interactions. When pressed or asked questions that got at the issue from different directions, physicians expressed quite specific beliefs about the way curbside consultations should be done. These beliefs surfaced during conversations about unwritten rules, what the curbside consultation was most like in terms of other work physicians did, and good and bad behaviors during curbside consultations.

One Group 2 physician talked about unwritten rules and provided the following explanation:

> Sometimes the rules are unwritten, very loose rules. It's just kind of – you have
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> to be very good at reading people's body language, the way they talk or sigh
>
> …[tells you] if you're imposing on them, if they're going to help you or not. So
>
> sometimes you have to say, "Well, I'm going to send them to you. I'd like to send
>
> them to you" to let them know that now I've crossed over from informal to

formal. Some doctors you can just tell that they don't mind that it's informal and they'll give you some direction.

This example calls attention to two caveats for requesting physicians: First, the person asking the question must be sensitive to non-verbal communication that indicates whether or not a potential consultant wants to provide information; and second, the person asking the question should signify willingness to send the patient if that is what the consultant prefers. In other words, both parties have to be willing to engage in a curbside consultation, and it is up to the requesting physician to ascertain this.

When asked what the curbside consultation was most like in terms of other work they do, physicians generally likened the practice to presenting a patient during clinical rounds. It appeared that, in the absence of a standard set of rules for doing curbside consultations, physicians generally defaulted to what they had learned about doing case presentations during rounds.

An internal medicine physician explained the process of learning to present a patient during a one-month internal medicine rotation in his third year of medical school. He described the experience in the following way:

That's exactly where, because we had to present a case every day, as a medical student. And I—something just flashed. The first day we met in the attending's office. There were three medical students and probably three interns and maybe two internal medicine residents. And when I went to present the case, I got creamed [he laughed], so to speak, you know, by the attending: "You do not present a case this way. Here's how you will present this case from now on so that I have some identifying markers." And you know, it was constructive

criticism. He was right. You don't take it as an insult; you take it as a learning experience.

In the context of medical school, getting "creamed" for presenting a patient incorrectly was seen as a constructive learning experience.

A third-year medical student on rotation at Clinic 1 described how she was learning to present patients. She said the process began during her first year as she worked with "paper" patients in small groups of 10 students and one faculty member. One of the key goals was to identify significant information about the patient. Once she learned something about selecting the right information, she learned how to present it by watching residents and her peers do so and observing the nonverbal and verbal feedback from other residents and the faculty. She said the most important lesson was to be concise. If you're not interesting them, she said, their eyes wander or they "move" the question to someone else. She also learned on subspecialty rotations to tailor what she said to what specific subspecialist wanted to hear. For example, "If surgeon X asks about gas and incision, you learn to use those keywords and not to provide non-interesting information."

As the previous examples illustrate, students learned through case presentations that it was not enough to know what the key information was and how to present it concisely. They also needed to know their superior well enough to know what that person would consider interesting.

A family practice physician summarized the process of learning to present cases and likened it to doing the curbside consultation in the following way: "Often, students drown listeners with minutiae rather than giving an impression or a "gut" feeling.

Eventually they learn to say what they've done, the lab results so far, their gut feeling,

what they plan to do. Then they should be able to say, 'What do you think I'm missing

here?'"

The model of a good curbside consultation, continued the family practice

physician, was to say what you know and what you don't know. Then you hope the

person you are consulting with will treat you with respect. The idea of being treated

with respect, in spite of the fact that you had just admitted that you did not know

something, was repeated consistently throughout data collection. It will be considered in

more depth later in this chapter, during a discussion of Goffman's ideas about the

performative aspects of role.

Physician beliefs about the rules for doing curbside consultations also surfaced

during formal interviews. The investigator asked physicians from Groups 1, 2, and 3 to

talk about good consultations and bad consultations. Their responses were aggregated

with responses to a number of related questions. Related questions asked of Group 1 and

2 physicians included the following: (a) "How do you decide who's competent?" (b)

"What does it mean to be a physician? More specifically, what are the obligations and

responsibilities of the profession with regard to other members of the profession?" (c)

"What do you expect from a physician that you contact for a curbside consultation?" and

(d) "How do you "weigh" their response in terms of its accuracy and value to the

particular patient case?" Group 3 physicians were asked, "Why do you think other

physicians choose to consult with you? Physician responses to all of these questions

were aggregated and coded to identify key themes.

A number these themes are contained in this account from Dr. Gold, a Group 2 physician. He described the format he used when requesting a curbside consultation in the following way:

Dr. Gold: "I kind of present it: 'Listen, do you mind if I run something by you?' That's how I always say it when I open up the conversation. And they always say, 'Sure, go ahead.' And then I give the age and sex of the person I'm talking about, kind of give a quick short medical history, concise, and say, 'This is the problem I have. Is this something you'd be willing to give me advice upon or is this someone you would like to see formally in your office?' I give them an out: 'Do you want to help me, yes or no? Do you want to just give me advice or do you want to see them in your office?'"

Interviewer: "Why do you do that?"

Dr. Gold: "Because I don't want to make them feel awkward or obligated that I'm just taking advantage of them. I mean, I understand that they have an expertise and they have to make a living, too, so I give them choices on how they want to help me."

Interviewer: "When you called this person, did you catch her at the office or in the hospital?"

Dr. Gold: "At the office."

Interviewer: "Did she come right out of the patient room? How long do you think you were on the phone, waiting?"

Dr. Gold: "She's very good about that. She came right out of the patient room and I didn't have to wait long at all."

Interviewer: "Is that usual?"

Dr. Gold: "Yes, most...or, sometimes if you identify yourself as a physician calling.... I don't think I've ever run into a situation where they never take your phone call."

Interviewer: "And if you had a physician calling you, would you come out of a patient room? What is your staff instructed to do?"

Dr. Gold: "Yes, if it's physician they let me know and I excuse myself from the patient. Usually because it has to do with patient care and it's just too hard to play phone tag. I think it's just courteous to take their call, because when you call them you expect the same thing. I don't know. I think it's kind of an unwritten rule: physicians take other physicians' phone calls. Unless they're in something they just can't get out of. Then I may tell my staff that I'm doing something important, or a procedure, and I'll call them right back."

Interviewer: "So that would be courtesy, then, if you weren't able to take the call, the staff would convey the message that you were busy with a procedure?"

Dr. Gold: "Right."

As responses from data gathered from physician interviews suggest and as this account from Dr. Gold illustrates, there are tacit rules for doing curbside consultations. Some rules apply to both parties, requesting physician and consulted physician. Others appear to be role specific.

Rules that seem to apply to both parties. Some rules appeared to apply to both requesting physicians and consulted physicians. The overarching need to demonstrate mutual respect seemed to govern how both parties should conduct themselves. As drawn from the data, these rules include the following: (a) Physician communication is

privileged; (b) respect each other's time, expertise, and right to make a living; (c) listen; (d) be friendly in a sincere way; (e) focus on the problem; (f) be concise; (g) stick to essential information; (h) display interest, both verbally and non-verbally; and, (i) use the conversation as an educational opportunity.

Dr. Gold's standard format incorporates a number of these rules. He began his conversation with a question, "Do you mind if I run something by you?" that acknowledged that he was asking for help but gave the other person an opportunity to decline or delay the conversation. He presented the patient, providing information relevant to the problem in a concise way, and stated a specific problem. Finally, Dr. Gold described how he and his staff dealt with an unwritten rule that "physicians take other physicians' phone calls." By each of these deliberate behaviors, Dr. Gold demonstrated that he respected the physician he was asking for assistance.

Rules for requesting physicians. Dr. Gold's account also illustrates some of the rules that appeared to apply specifically to requesting physicians. These rules included the following: (a) Whenever possible, contact people you know and trust—people with whom you have a relationship; (b) ask for help but be sensitive to the fact that the other person may not want or be able to talk at that time; (c) offer to formally refer the patient if the person contacted prefers that option; (d) be specific with all the necessary facts; (e) know what you do not know and acknowledge that; (f) speak with confidence; (g) ask a clear, focused question; (h) avoid defensive behavior; (i) do not wait too long to call; and (j) be willing to consider new ideas.

Rules for consulted physicians. The data also indicated that there are role-specific rules for physicians who were asked for curbside consultations. Issues related to

demonstrating respect surface here as well. The data indicate that physicians who present

their curbside consultation questions in a respectful manner expect to be treated with

respect by the physicians with whom they consult. More specifically, rules for consulted

physicians include the following: (a) Avoid the implication that the question asked is

stupid; (b) address the question asked; (c) educate in a tactful manner; (d) display interest

in the patient; (e) invite physicians from whom you want referrals to contact you for

informal consultations as well; and, (f) provide information that is not only clinically

correct but also practical, workable, and appropriate to the requesting physician.

None of the rules listed above deal with medicolegal issues—issues related to

professional duty of care and legal liability. This is not because physicians did not

address these issues directly, but because their responses were so contradictory that they

signaled a significant difference of opinion. Data that addresses this lack of consensus

will be reported later in this chapter.

Research Sub-Question 2-D

What do physicians say about the consequences of not following the rules? As

data presented in the preceding section indicated, physician informants reported that they

observe certain rules when they engage in curbside consultations. During observation

and interviews, physician informants also made it clear that there were negative

consequences to infractions of the rules. At times, they expressed strong feelings about

those instances.

Consultants who responded to requests for curbside consultations in a manner that

was perceived as unsatisfactory were ostracized, either from further curbside

consultations or, in the most dramatic cases, from formal patient referrals. Physicians

who could not present relevant information, frame a clear question, or answer consultant questions in a well-informed manner were generally asked to formally refer the patient. In the presence of those factors, consultants were not comfortable with informal consultations and wanted to formally see the patient. The trust was just not there.

To clarify, it may be useful to begin with two unusual cases—unusual because several people named the two consulting physicians and because they were both still practicing in the area. During interviews, the investigator asked Group 1 and Group 2 informants to provide the names of physicians they consulted with. The investigator asked permission to contact those physicians with invitations to participate in the study.

Although all of the Group 1 and Group 2 physicians provided names, the investigator discovered that they seldom provided the names of physicians with whom they did not care to consult. Most of the Group 3 physicians, therefore, were people who had formed and maintained good relationships with the Group 1 and Group 2 physicians. The omission points up a problem acknowledged in the literature: physicians are reluctant to explicitly critique their colleagues (Bosk, 1979).

When they did mention colleagues that they believed had broken curbside consultation rules in some way, physicians usually preceded their descriptions with "Well this happened before I came here." Only two local physicians, Dr. A. and Dr. B., were named and described in negative terms in connection with doing curbside consultations. These physicians were invited to take part in the study. Dr. A. agreed to be interviewed after he was contacted in person; Dr. B. did not respond to the invitation.

Group 1 and 2 physicians who mentioned Dr. B. were unanimous in their negative response to his behavior during past formal and informal consultations. When asked

directly about the reason for this response, one Group 1 physician said that the subspecialist had gone to medical school with one of the practice partners and that he (the Group 1 physician) had worked with him during residency but [long pause] "He doesn't make small talk." Group 1 and Group 2 physicians in the clinic refused to call the subspecialist or to refer patients to him. They sent patients who required his subspecialty treatment to a city 100 miles away.

Dr. A., the "unpopular" physician who did agree to an interview, came in from out of town on a regularly scheduled basis to present a subspecialty clinic at the local hospital. Group 1 and Group 2 physicians had uniformly expressed dislike for working with Dr. A. They said that they would not pursue a curbside consultation with him, but that they did still refer some patients to him. Like the subspecialist described in the paragraph above, Dr. A.'s competence was not questioned. He was, however, described as a "cold fish" with "no personality." During the interview, the subspecialist appeared surprised when reference was made to reports from primary care informants that at least 50 percent of the time their intention was to follow a curbside consultation with a formal referral. After some thought, Dr. A agreed that there might be a link between the two activities.

Reports from a number of Group 1 and Group 2 physicians reinforced the point that an unsatisfactory curbside consultation caused them to redirect not only curbside consultations but also formal referrals. In most cases, such statements were related to social behavior rather than competence issues. For example, a Group 2 physician stated, "If somebody's rude, I prefer not to work to work with them, because I get irritated with them and then I can't interact well with them. They may be very competent, they may be

very knowledgeable, but if they're extremely rude to me, I don't have, you know, it's something that I don't want to deal with."

A Group 1 family practice physician with many years of experience said with some irritation, "I expect the consultant to work with me. I don't appreciate a response like, 'Well, send the patient down and we'll see what's going on.' Because if he wants more referrals, he'll work with me to solve the patient's problem. Many times there's some additional testing we can do to uncover an answer and take care of the problem at home." In this area, family practice physicians expressed considerable interest in working with subspecialists to provide care. In some cases, being told that they should "just send the patient" was viewed with dissatisfaction.

A number of physicians reported that it took just one encounter to cause them to redirect their formal referrals. When physicians talked about these encounters, they used words that indicated that they had been insulted by the other physician's behavior. In one such case, a Group 1 physician talked about calling a physician who was on weekend call for his practice group. The other physician put him off in a way that the Group 1 physician felt was condescending to the point of rudeness. He described his response to that behavior in the following way: "And I said, 'OK. That's fine. I'm sorry to bother you.' But I was seething. And I have not used him since. And that's been two and a half years ago. That just—right there and then—I thought, if that's how you're going to be, then you just lost all my business…. If you bite the hand that feeds you, you'll get bit back." As these examples illustrate, Group 1 and Group 2 physicians "voted with their feet" in response to behavior that they felt broke the rules for consulted physicians.

Group 3 physicians reported another set of consequences when requesting physicians failed in some way to measure up to their expectations. They expressed discomfort with insufficient information; poorly framed, ill-informed, and unfocused questions; and fuzzy answers to their own questions. They said they were also wary when they did not know requesting physicians well or when previous experience with requesting physicians had led them to question their credibility in certain areas. These circumstances frequently led consultants to request a formal referral rather than a curbside consultation.

When Group 3 physicians were contacted for curbside consultations, they said, they wanted good information on the patient—information that was adequate, accurate, and specific. As one subspecialist pointed out, "good is when the data is presented adequately, there's been adequate questions and preparation and setup, if you will. Which gives us a reasonable amount of input to toss around in our head before we generate some consultation response."

Group 3 physicians also wanted to hear a well-formulated question that indicated that the requesting physician had thought through the situation before initiating the curbside consultation. The lack of good information or a poorly formulated question raised a red flag. One subspecialist asserted, "Framing questions is a real art. An important part of medicine is finding answers—I spend a lot of time answering the wrong questions." Another said that there were no rules for asking a question, but followed that with the suggestion: "If you're going to call a person for a curbside consultation, have your ducks in a row. Be specific with all the necessary facts. Have the chart in front of you." If he was asked a question that was too broad, he said that his response was to

keep drilling the requesting physician with more questions. When that happened, the requesting physician had "better be able to tell me what's going on. 'I don't know' is not a good response."

Not knowing was not only a negative factor in terms of physicians requesting curbside consultations. Group 3 physicians also voiced discomfort when they did not know requesting physicians well. What did it take for them to know these people? In the context of the Group 3 interviews, physician informants used the word "know" when they had professional and sometimes also personal relationships with requesting physicians— when they had seen them practice medicine, had talked to their patients and had read their charts. Some Group 3 informants reported that the physicians who requested curbside consultations from them are the same people they golf with, chitchat about boating with, or attend parties with. Others said that social relationships were not that important. Whatever the nature of the relationship, the important point is that there was one. Knowing each other—being involved in an ongoing relationship—laid the foundation for curbside consultations with which Group 3 physicians were comfortable.

On the other hand, sometimes knowledge gained through personal contact or via word of mouth from other physicians had a negative, rather than a positive effect on the professional relationship. That is, sometimes Group 3 informants learned things that caused them to question other physicians' credibility. When physicians whose credibility was suspect approached them for curbside consultations, Group 3 physicians reported that they either requested a formal referral or responded with more than usual caution. One, Dr. S., said that he sometimes provided a "cookbook response" in such cases. That

is, he spelled the whole thing out: do this, then this, then this. In doing so, Dr. S. said, "You make sure they do it right."

Sometimes physicians became known for acting outside their own professional sphere. One subspecialist used the term "cowboys" to talk about physicians who thought they could take care of everything and said that she resented being used for curbside consultations in these situations. Another subspecialist used the terms "Lone Ranger" and "Dr. Welby" to talk about concerns that primary care physicians sometimes stepped beyond their abilities in trying to handle a procedure that was part of his subspecialty area. Some primary care physicians in his area had demonstrated competence in this area, he said, but he felt that other physicians were more confident of their abilities than was warranted. As a result, he sometimes refused to answer curbside consultation questions that dealt with this particular procedure. He said, "That's probably the one area that I get on my high horse and don't want to be involved in curbsides at all." Not answering a curbside consultation question could be misinterpreted as self-serving behavior, the subspecialist said, but he took this chance because of the possible risk to patients.

The results reported in this section have addressed the first research question in this investigation of the curbside consultation. Physician informants articulated a number of purposes for which curbside consultations might be undertaken. Interviews and observation of physician informants revealed a set of spoken and unspoken rules for doing curbside consultations, together with the possible consequences of breaking those rules. The next section of this chapter reports data gathered in relation to the third

research question, which considers the curbside consultation as a performance during which a physician presents a certain image to self and to others.

Research Question 3

Do Goffman's ideas about the performative aspects of role appear in descriptions articulated by physicians? Goffman's ideas (1967) were used to look at the curbside consultation as a face-to-face social encounter during which participants demonstrate their clinical reasoning abilities and their understanding of the values and norms that distinguish medicine from other professions. These performances include not only the language appropriate to the social context but also the "the glances, gestures, positionings…that people feed into the situation, whether intended or not" (p. 1). In this investigation, Goffman's ideas about face-work, deference and demeanor were of particular interest.

Face-work

As discussed in Chapter 1, Goffman (1967) suggested that individuals and the groups they are a part of seek to align themselves with a set of "approved social attributes" (p. 5) that make up a positive image of self, or face. Each group stresses a characteristic set of practices that define face for that group, to the extent that maintaining that image takes on a normative quality. Failure to do so not only reflects on the individual, but also on the group of which he or she is a part. According to Goffman, face is "an image that others may share, as when a person makes a good showing for his profession or religion by making a good showing for himself" (p. 5).

Face-work can result in a good showing; it is also possible to make a bad showing by acting in a way that is inconsistent with the social attributes approved by a group. For

example, Dr. White shared the following story about what he considered loss of face by a surgeon and, by extension, the surgeon's colleagues: A family member of Dr. White lives in Town A. The family member saw a local family practice doctor, who referred her to a Town A surgeon for a tonsillectomy. When the surgeon came into the room, he started out with a description of the procedure by saying, "We'll go in through the vagina...." Obviously the surgeon had the wrong patient. The family member was neither happy nor impressed by being mistaken for another patient.

The "wrong patient" incident was indicative of a pattern of errors, asserted Dr. White, who added that the surgeon had just lost his license due to incompetence. This story, he said, reflected badly, not only on the surgeon, but also on the family practice doctor who referred patients to the surgeon and on the whole medical community in Town A for allowing an incompetent person to practice. These actions were inconsistent with the behavior Dr. White believed appropriate for the medical profession.

What are the "approved social attributes" that make it possible for physician participants to make a good showing for themselves and their profession? In particular, what image of themselves do physicians seek to present during curbside consultation interactions? To consider the practice from this perspective, the investigator analyzed field note observations as well as responses to a number of interview questions.

Data from Group 1 and Group 2 physicians included responses to the following questions: (a) "How do you decide who is competent?"; (b) "How do you weigh their response in terms of its accuracy and value to your particular patient case?"; (c) "What do you expect from a physician that you contact for a curbside consultation?"; and (d) "What does it mean to be a physician in terms of the obligations and responsibilities you owe to

others in your profession?" Data from Group 3 physician interviews included responses

to the question: "Why do you think other physicians choose to consult with you?" The

investigator also analyzed physician responses to iterative questions that arose during the

interviews.

Group 1 and Group 2 responses indicated that they wanted to present themselves

as competent, not only clinically but also in terms of their communication skills and their

knowledge of how things are done in the local physician community. In the following

excerpt, Dr. Brown reflected on his desire to be perceived as both competent and

collegial when he joined a new practice:

> I guess the first thing that comes to my mind when you say that, and I know, an
>
> awful lot when I first came here, being relatively new out of school, then coming
>
> and joining a group that was all internists—was the feeling, and I'm not sure how
>
> much of it is an obligation to them—it's just wanting to feel like you're
>
> competent. Like you can keep up with everybody else. You know, you want to
>
> look after people appropriately and be careful and safe with them. And you want
>
> to earn the respect of your colleagues. In a roundabout way, by wanting to do
>
> that, you show a side of you that wants to, if you're looking after someone else's
>
> patient, do a good job, so they're satisfied with how they're looked after.

One of Dr. Brown's concerns was that he was seen as caring about doing a good job.

This concern was echoed by a number of Group 1 and Group 2 physicians.

Informants also talked about showing that they kept current with clinical knowledge and

standards of care, that patients were satisfied with their care, and that they knew how to

sift through patient data to identify and present accurate, relevant information during a

curbside consultation. They wanted to be perceived as knowing what the right question was as well as how, when, and to whom it should be asked. They wanted to be perceived as competent--competent enough to be trusted by others in the physician community.

When asked why other physicians asked them for curbside consultations, Group 3 physicians talked about being seen as competent and collegial. A number talked about providing the right answers to curbside consultation questions. They talked about being able to process the information needed to consider a question quickly, based on in-depth clinical experience and knowledge of their specialty, and being able to provide accurate information that was practical and to the point.

They also wanted to be seen as collegial. They talked about behaving in ways that encouraged their colleagues to approach them with questions. Group 3 physicians linked approachability to returning calls as soon as possible, listening attentively, and treating requesting physicians and their questions with respect. One subspecialist said with a laugh that he is "the friendliest one in the middle of the night." He continued, "You consult with friends—people you golf with, people whose character you know. The greatest honor is having a colleague ask you to care for them. In the same way, it's an honor to be asked for a curbside consultation."

Deference and Demeanor

Two additional concepts drawn from Goffman (1967), deference and demeanor, were used to look at the symmetrical or asymmetrical nature of physician communication during the face-work involved in curbside consultations. In this context, deference relates to activity that conveys appreciation to a recipient (p. 56). Demeanor is "the element of the individual's ceremonial behavior typically conveyed through deportment,

dress, and bearing, which serves to express to those in his immediate presence that he is a person of certain desirable or undesirable qualities" (p. 77).

In terms of the curbside consultation, patterns of deference are carry-overs from medical school and clinical rotations. One subspecialist raised that point during a discussion of physician behaviors during curbside consultations. He pointed out that there was a certain school of thought that intimidation was motivational, and said that head residents and faculty teaching medical students and residents frequently used it during case presentations. He asserted, however, that there was a sudden shift when residents left a program. He described the shift in the following way:

> Now there's always a certain distance because there's a certain admiration on the part of the residents who trained under somebody. But at the same time there's a sudden shift—all of a sudden what was Doctor So-and-So is now on a first name basis and there's a certain other level of friendliness. If you could use that as a model on how you talk with other clinicians, that's more the way that it should probably be. And if it's done that way, then it really becomes much more palatable, even to be corrected.

In medical school and residency programs, there is an asymmetrical nature to the formal interactions between students and teachers. Students are expected to conduct themselves in ways that show respect for their superiors, in terms of both position and experience. What the subspecialist suggested during the conversation described above was that curbside consultations between full-fledged physicians should be marked by behaviors of mutual deference—that physicians should conduct themselves in ways that suggested parity of status. In this way, having to call someone for information and even

being corrected by that person loses its sting—it is less likely that either participant will lose face.

In the following exchange, a senior physician and a younger practice partner negotiated a difference of opinion about the effects of Drug X in a given situation—a difference that could have resulted in loss of face to one or both parties:

On his way out of the physicians' lounge, Dr. Green asked Dr. Beige about Patient A. Dr. Beige replied that he had put the patient on Drug X, which brought her heart rate down. Dr. Green paused and said, "I didn't know that Drug X did that. Doesn't it usually [affect the patient in a particular way]?" Dr. Beige indicated partial agreement, then added, "Used [in a particular way] it acts like a calcium channel blocker....I could be wrong, but..." Dr. Green responded, "Well, it will be interesting to see what happens" and walked out. Dr. Beige made one last response, his words trailing off as the door closed behind Dr. Green.

In this incident, it appeared that the physicians carefully negotiated an agreement to disagree. The younger physician responded to the senior physician's query about the drug with partial assent, then added a cautiously worded exception to Dr. Beige's remark, qualifying it with "I could be wrong." Dr. Beige ended the conversation rather summarily with a reference to the medical evidence—the patient outcome that would bear witness to the effects of Drug X—but they negotiated the difference of opinion without either playing a senior status or more recent clinical training card. When it was clear they disagreed, they did so with mutual deference to each other's collegial standing.

As these examples illustrate, physician informants voiced concern with matters of deference. They also articulated beliefs about how physicians should comport

themselves—matters of demeanor. Physicians repeatedly used the terms respect and courtesy during such discussions. They identified listening and making time as key in conveying respect and courtesy. For example, when the investigator asked Dr. White what kind of behaviors connoted respect during curbside consultation encounters, Dr. White replied succinctly, "Listening. Taking the time to discuss." During another conversation, Dr. Silver said, "If I'm asking for a consultation the physician has to be willing to take the time to listen, has to be willing to accept that it's a significant problem, and give it enough thought to give, to be able to say whether they think they can give an answer based on the information, or if it's too complicated."

The physicians observed routinely did several things at once. Listening attentively, maintaining eye contact, responding promptly to calls or taking time out from hospital rounds for face-to-face conversation were therefore significant, valued behaviors. Group 1 and Group 2 physicians frequently expressed the belief that the mutual presence of such behaviors marked good curbside consultations. Group 3 physicians frequently expressed their awareness of the importance of listening to and taking time for physicians requesting curbside consultations.

On the other hand, physicians also identified certain behaviors as inappropriate demeanor. Many Group 1 and Group 2 physicians objected to being treated as less competent than the Group 3 physicians they consulted. For example, Dr. Red said with disgust, ""I like being treated as a peer and not as some hillbilly doc out in the woods who doesn't know what he's doing. Because you get that perception a lot from some of the city docs, that country docs don't know anything."

Dr. Z. was one of the "city docs" Dr. Red might have been referring to.

Conversations with several Group 1 and Group 2 physicians identified Dr. Z. as a person

with whom they did not care to consult. During an interview, Dr. Z spent considerable

time talking about how little some primary care physicians knew about his area. He said

that when he is "really ticked off" he adds particular emphasis to the point that he needs

to see the patient, "so that in the future the doctor may remember that." Dr. Z's behavior

during interactions with requesting physicians seemed more like teacher to student rather

than colleague to colleague.

Physicians in all three groups decried a demeanor that implies a lack of concern

for the patient. Group 1 physician Dr. Indigo asserted that physicians who got "miffed"

at being asked for curbside consultations should keep in mind that all physicians work for

the patients' good. A Group 3 physician echoed his dislike for physicians who

apparently forgot this directive. In speaking about some of the primary care physicians

who contacted him for curbside consultations, he said, "It's the demeanor, the attitude of

'I don't really care' or 'I'm too busy' or 'I've done a few lab tests' but it's not a complete

history, that this person isn't doing a good job taking care of the patient." Both

requesting and consulting physicians considered displaying lack of concern for the

patient to be unacceptable behavior.

Thinking about the curbside consultation in terms of face-work, deference, and

demeanor helps us see what underlies those physician-to-physician interactions. The

perspective also helps us understand the nature of the consequences when either

participant in a curbside consultation breaks the rules.

Chapter 4 presented results gathered during the study. Chapter 5 acknowledges limitations of the study, interprets the study results, discusses the possible implications, and recommends areas for future study.

CHAPTER 5
DISCUSSION

The purpose of this study was to gain a better understanding of what goes on when physicians take part in curbside consultations. The investigator hoped to complement existing quantitative studies of the practice (e.g. Keating et al., 1998; Kuo et al., 1998; Magnussen, 1992; Manian & McKinsey, 1996; Myers, 1984) by conducting an investigation from the perspective provided by a naturalistic inquiry approach, qualitative research methods, and a case study structure.

Chapter 4 reported results gathered from observation and interviews with 16 physicians in six clinics as well as interviews with 28 additional physicians. Data provided by the physician informants indicated that the curbside consultation is more complex than its practitioners, who use it within the context of day-to-day actions and view it as a matter of common sense, understand it to be. They use it not only to share information but also to negotiate matters of competence and collegiality.

Chapter 5 begins with a discussion of possible limitations of the study. It continues with an interpretation of the study results, organized by research question. Finally, suggests implications for physicians and information professionals who work with physicians and recommends areas for future study.

Limitations

Certain limitations may be applied to this study. First, this research was designed to collect data from six sites in order to gain a better understanding of the curbside consultation as primary care physicians in the United States carry it out. There may be other ways of viewing and interpreting the data gathered. For example, a physician might

"see" the data in another way, as would an investigator examining it from a content analysis perspective.

Second, naturalistic inquiry does not attempt to arrive at sweeping, universal laws that can be applied regardless of setting. The findings of a naturalistic study can only be transferred to localities that are in some ways similar to the site of the study. To assist clinical audiences in judging transferability issues for themselves, the investigator provided detailed description of the study sites in Chapters 2 and 3.

Third, there was no attempt to randomly select sites or informants. Selection of clinical sites and Group 1 and Group 2 informants was purposive and criterion-based. The 28 Group 3 informants were recruited from a list of 47 physicians suggested by Group 1 and Group 2 informants. As a result, it is likely that physicians who agreed to participate in the study may sometimes differ in significant ways from others in the medical communities. In addition, the reticence of informants to identify physicians with whom they did not care to do curbside consultations limited the investigator's access to other informants who might otherwise have contributed useful data to the Group 3 interviews.

Fourth, the perceived value of the study is limited by what different audiences find new and therefore interesting. As Davis (1971) asserted, "Interesting theories are those which *deny* certain assumptions of their audience, while non-interesting theories are those which *affirm* certain assumptions" (p. 309). In a discussion of revelation, mutual knowledge, and common sense, Giddens (1979) advanced a similar point, suggesting that people resist findings that confirm their own beliefs "on the basis that they are already well known and familiar" (p. 249). It is only when common sense understandings are

invalidated that some people will accept research findings as revelatory (p. 249). It remains to be seen which of these finding a clinical audience will find revelatory and therefore interesting.

Fifth, this study did not verify the outcomes of curbside consultation interactions. There was no attempt to systematically match requesting physician's and consultant's versions of whether a given curbside consultation was good, bad, or indifferent. In addition, the investigation did not trace what happened to patients whose cases were discussed during curbside consultations.

Finally, this investigation was conducted in a natural setting with a human instrument. Hospitals and clinics are places where people sometimes suffer pain and loss. Patients and the people who care for them are exposed to personal and professional stress. Although the investigator did not enter patient rooms with physician informants, it was impossible not to be affected by the human drama that pervaded those settings. The investigator's perspective was also affected by the admiration with which she came to view physician informants and clinic staff. Over ten years as a medical librarian provided one perspective of physicians and clinic staff; observing their backstage professional and personal responses to their work provided quite another. As a result, the usefulness of the study must be considered in terms of the investigator's affective responses and personal history.

Interpretation

Research Question 1

Research Question 1 explored the possibility of differences between what physicians say they want to accomplish in curbside consultations and what they report as

consequences of that activity. As reported in Chapter 4, the data revealed that there are differences of opinion related to (a) a lack of consensus among physicians of what a curbside consultation is, (b) what a "good" curbside consultation looks like, (c) what constitutes responsible behavior with respect to medicolegal and financial issues, and (d) how the social nature of the practice impacts information transfer in clinical settings.

A common sense understanding of the physician curbside consultation says that the practice is a question asked and answered, the purpose of which is to manage a patient's case. On the surface, physicians seemed comfortable with this common sense understanding. As one informant exclaimed, "It's just a question!" Almost all of the informants volunteered their belief that the curbside consultation benefited their patients; and in a "good" one, informants said, the curbside consultation benefited physician participants as well. It provided opportunities for confirmation, validation, continuing education, and collegiality.

That physicians appeared to take the curbside consultation for granted was not surprising. Prolonged observation supported the notion that physicians have done curbside consultations for so long that they have become "just" one of those things that they do—tacit knowledge that is part of what Giddens (1979) referred to as "practical consciousness." They just ask and answer questions. The patients benefit and they benefit.

Investigation has revealed, however, that curbside consultations are not as simple as they may seem to those involved in them. Studies published in the medical literature by Keating et al. (1998), Magnussen (1992), Manian & McKinsey (1996), and Myers (1984) suggested that there are differences between what physicians said they wanted to

accomplish with the curbside consultation and what they actually did accomplish. The studies indicated that physicians who took part in curbside consultations were concerned about miscommunication. These concerns appeared to focus on inaccurate or insufficient information in the presentation—errors or omissions of fact that could adversely affect patient outcomes.

Observation and interviews with physician informants in this study yielded similar concerns; but the data revealed additional differences of opinion. First, physicians did not seem to agree on what a curbside consultation was. To illustrate where some of these problems occur, the investigator used the data to design a graphical representation that places the curbside consultation on a continuum of physician information exchanges (see Figure 4). In this representation, the curbside consultation is bounded on the left by general professional interaction (verbal and non-verbal) and on the right by the formal consultation.

The boundary between general professional interaction and the curbside consultation is a broken line. It was drawn that way to indicate the lack of consensus on what distinguished general physician talk from a curbside consultation. For example, the investigator focused on intent: some actions, like one practice partner's clipping a radiographic film into another's view box, conveyed information-seeking intent related to the management of a patient case. From that perspective, a nonverbal action might be considered a curbside consultation. Most physicians, however, said that a curbside consultation required putting voice to a question. Other physicians said that questions asked of practice partners did not count as curbside consultations. From their viewpoint, a curbside consultation was a question directed to a physician outside their own practice

General   The Curbside   The Formal

Professional   Consultation   Consultation

Interaction
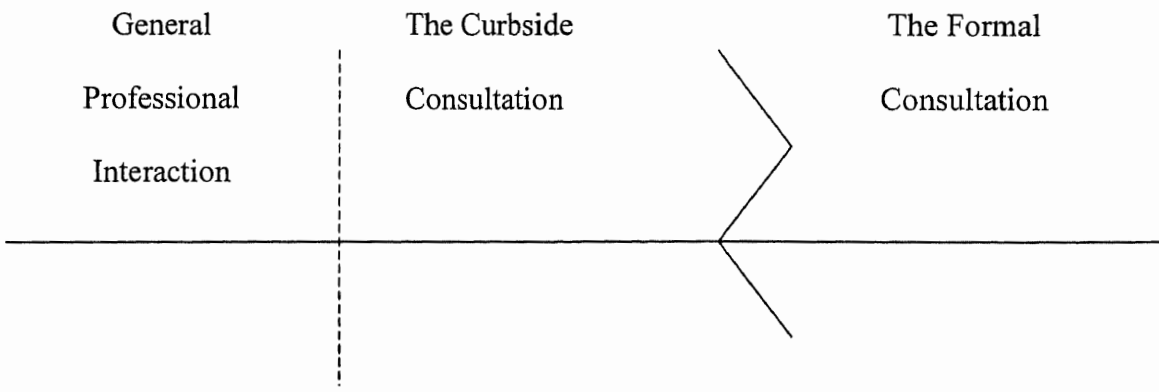
Figure 3. The curbside consultation on a continuum of physician talk.

group. Although the investigator found these variations interesting, they provoked no real controversy among physicians. When the investigator asked what might account for these types of variations, informants generally shrugged them off as insignificant.

On the other hand, the boundary between the curbside consultation and the formal consultation is subject to controversy. A jagged line drawn between the curbside consultation and the formal referral represents that controversy. As reported in Chapter 4, problems occurred when physicians chose, for whatever reason, to disregard the boundary between the two practices, particularly when medicolegal and financial issues were involved. To restate those issues briefly: some requesting physicians in the study documented their curbside consultations, either by noting them in the medical record or be telling their patients they spoke with a specific physician. This was a matter of considerable concern to the consulted physicians, who voiced the belief that doing so made them vulnerable to lawsuits. In addition, some consulted physicians expressed resentment about being asked to provide curbside consultations to physicians who never formally referred patients to them. In essence, they said, they were being asked to provide something for nothing.

In spite of these frustrations, all of the physicians interviewed chose to take part in curbside consultations. A number of informants reported that they did so because they did not see that they had a choice—they shared information with their colleagues because they were colleagues and because they shared a common goal, quality patient care. Informant comments like this emphasized that curbside consultations are inherently social. Negotiating them successfully requires social knowledge and social skill. As results reported in Chapter 4 indicated, physicians drew from social knowledge to

conduct curbside consultation interactions, but they were often unaware or reticent to talk about how their conduct per se affected the outcomes. This is not surprising, in view of Giddens's (1979) assertion that participants in social interactions can use tacit social knowledge without necessarily understanding or being able to articulate what they are doing. This notion can be used to understand why some physician informants were unaware of or perplexed by the unintended consequences of their curbside consultations. Discussion of Research Question 2 focuses on the social factors that may be involved in those outcomes.

Research Question 2

Interpretation of Research Question 1 results indicated that there were disagreements among physicians about what a curbside consultation is, what a "good" one looks like, what constitutes responsible behavior with respect to medicolegal and financial issues, and how the social nature of the practice impacts information transfer. Interpretation of Research Question 2 results focuses on the last of these issues. It suggests that social elements in the curbside consultation affect outcomes of the process, sometimes with unexpected or unintended results.

As results reported in Chapter 4 indicated, physician informants said they took part in curbside consultations for a number of reasons. Physicians requesting curbside consultations said they did so to (a) confirm what they already knew, (b) get an answer to a quick question, (c) get educated on a topic of interest, (d) conduct an introductory foray into a possible formal consultation, (e) negotiate an appropriate course of action in a particular case, (f) spread the emotional risk during a difficult case, (g) create or sustain camaraderie with physician colleagues, (h) find "like thinkers" among their physician

colleagues, (i) monitor their own practice, and (j) get out of a difficult situation. Physicians who responded to curbside consultation questions said they did so to (a) provide good patient care, (b) fulfill professional obligations, and (c) encourage formal referrals. As physicians articulated them, these purposes are in keeping with what Bosk (1979) called "the ideal network of professionals...one in which each member in turn is expected to defer to his more knowledgeable colleague in order that skills and problems are properly and speedily aligned" (p. 171).

Informants talked a great deal about their local professional networks. They said that primary care physicians and subspecialists worked together as a team to care for patients in their area. Primary care physicians had breadth—they took care of the patients that fell within their range of knowledge and experience and used the curbside consultation and formal consultations or referrals to draw on the knowledge and experience of the subspecialists when that was called for. Subspecialists had depth—they took care of advanced cases that fell within their subspecialty areas. When primary care physicians contacted them with questions, they drew upon their knowledge of current medical evidence in their subspecialty, their professional expertise, and their understanding of how medicine was practiced in that area to provide answers. In "good" consultations, this information was both appropriate to the particular patient case and useful in terms of educating the physician who asked the curbside consultation question. On the surface, at least, this professional network functioned as an equitable system governed by shared understandings and within which each member's contribution was mutually respected. Looking at the values and assumptions shared by informants reinforced that initial interpretation.

Shared Understandings

Data analysis revealed that the informants in the study shared a number of understandings about caring for patients, the usefulness of the curbside consultation as a part of patient care, and the obligations physicians shared as members of a professional community. Physicians who talked about reasons why they participated in curbside consultations generally began by talking about the benefits to patients. They talked about "two heads being better than one," saving patients the time and expense of having to see a second physician, making efficient use of limited medical resources, and other reasons related to quality patient care. Their words and actions expressed two assumptions that seemed to inform the behavior and thought of the physicians interviewed: first, that the bottom line for all physicians was providing quality patient care; and second, that the curbside consultation was a useful communication tool that physicians could wield on behalf of their patients.

Another assumption revealed by informant talk was that their profession required them to be of service to other physicians. Seen from that perspective, the curbside consultation might be considered a professional obligation. When asked about this, informants made statements like the following: "I'm in a service profession. I'm serving, not only the patients in [the area] but also the doctors who are managing those patients;" "I mean, is it [the curbside consultation] an optional thing? Would I walk away and say, 'No, I won't talk to you?' It would seem odd not to answer their question;" and, "I can't imagine not doing them." As these responses reveal, physician informants saw themselves as members of a professional community. They accepted that curbside consultations were a part of collegial work in that community.

Physician assumptions about being professionally obligated to take part in curbside consultations were particularly apparent when they involved colleagues in their own towns and cities. In the context of local practice, the word "know" was heard over and over again. In some cases, "knowing" referred to professional relationships. Physician knew their practice partners as well as the physicians they saw do medical procedures, speak out in medical staff meetings, and interact with patients. They watched colleagues work, watched them negotiate difficult cases, and listened to them describe cases. In the course of these activities they formed opinions about how they practiced medicine. They formed social relationships with them.

In many cases, the relationships informants talked about were not only professional but also personal. Often, but not always, these were practice partners. People who did curbside consultations with each other also attended school baseball games together, kibitzed on the golf course, and grilled out at each other's homes. They shared stories over lunch. They got along, both professionally and personally. These relationships seemed to be the richest breeding grounds for curbside consultations. When physicians talked about "knowing" these people, the words "trust" and "respect" were frequently used.

As these results indicate, informants shared a number of understandings about physician work. They said that all physicians share a common goal—the well being of their patients. They used curbside consultations because they helped physicians take care of patients. They assumed that curbside consultations were a professional obligation, especially when they involved people with whom they had both professional and personal

relationships. These shared understandings provided the basis upon which curbside consultations were negotiated.

Unexpected Consequences

Observation and talk with physicians indicated that they were generally satisfied with the outcome of their curbside consultations. Whether they were asking or answering curbside consultation questions, physicians wanted to improve the quality of healthcare provided to patients. However, as results reported in Chapter 4 indicated, there could be differences between what physicians said they wanted to accomplish and what they did accomplish in curbside consultations. There were also unintended consequences. In a few cases, the investigator talked separately with participants in curbside consultation exchanges and realized that one or both participants were unaware of such consequences. For example, one subspecialist who enjoyed working with younger colleagues behaved in such a way that they preferred not to approach him informally. It was apparent from the subspecialist's talk that he was unaware of the impression he conveyed. Another subspecialist hoped that sharp warnings to requesting physicians might motivate them to ask for advice earlier in their patient cases. He had no idea that the manner in which he administered the warnings was considered rude, and that he was not likely to receive any more curbside consultation requests from those physicians.

The consequences differed, depending on the rules that had been bent or broken. For example, requesting physicians who could not present relevant information, frame a clear question, or answer consultant questions in a clear manner were either provided "cookbook" answers that mentored them through a course of action or asked to formally refer the patient. There did seem to be a difference between the two types of responses.

Cookbook responses seemed to imply that the consultant felt the requesting physician needed coaching but could be trusted to proceed correctly. Being asked to refer a patient within the context of this consequence seemed to imply that the requesting physician had blundered to the extent that the consultant was not comfortable proceeding on an informal basis. Unexpected or unintended consequences were not limited to those requesting curbside consultations. For example, consultants who provided information that the requesting physician believed was not relevant to the case were generally not asked again. These types of errors seemed to irritate physicians or even frustrate them, but they did not provoke strong feelings. In a way, they paralleled Bosk's (1979) ideas about technical errors.

Bosk (1979) talked about the types of errors physicians can make when they attempt to perform as competent medical professionals. He asserted that there were two categories of errors, technical and moral. The first, technical errors have to do with the failure to correctly apply the knowledge base upon which physician work is based. In relation to this discussion, not knowing how to frame a curbside consultation question clearly and concisely or providing extraneous information in response to a question might be thought of as technical errors. Bosk's study indicated, however, that technical errors could be forgiven—so long as they did not establish a pattern. He drew the title of his study, *Forgive and Remember*, from this proviso. Data gathered during this investigation suggested that informants who detected patterns of technical error in the questions or responses of other physicians avoided future curbside consultations with them.

Bosk (1979) said that the second category was moral errors. Moral errors, he said, had to do with failure to follow the "code of action on which professional action

rests" (p. 168). They "undercut the fabric of client-professional and professional-

professional relationships" (p. 171). As such, moral errors were judged more harshly

than technical errors. Just one, Bosk said, was enough to end a person's medical practice

(p. 172).

None of the informants in this study questioned their colleagues' fitness for

medical practice. However, as reported in discussions of study results, some physicians

behaved in ways that earned the enmity of their professional colleagues and sometimes

lost them patients. Their behavior, rather than their competence, was the cause of such

consequences. Physicians offended by behavior they considered inappropriate had long

memories. They did not refer patients to offensive physicians, either because they did not

want to have to work with them or because they did not want their patients to have to put

up with them. In other words, some participants in curbside consultations behaved in

ways that undercut physician-to-physician relationships. Discussion of the third research

question talks about these behaviors from the framework provided by Goffman's ideas

about face-work.

Research Question 3

Many Americans seem to think physicians work in isolation. They see physicians

at work with patients in clinics and hospitals but do not realize that there is a backstage—

a place where physicians support each other's work. As results reported in Chapter 4

indicated, physicians interacted as they moved through hospital corridors, met during

medical staff meetings, talked by phone, and traveled back and forth from the parking lot.

They conducted curbside consultations in each of these venues, using their colleagues as

"walking medical libraries" (Nyce, personal communication, October 17, 2001) to

increase their understanding about how to proceed with patients. Medicine is a social enterprise.

The importance of this social interaction was underscored by a story reported in Chapter 4. Dr. G., a subspecialist, moved his practice to another area because he had no subspecialty colleagues with which to consult. According to the physician who recounted this story, Dr. G. felt it difficult to make decisions without being able to talk them through with colleagues who shared similar subspecialty expertise. But to admit such a need for information—for support from colleagues—is to place oneself in a vulnerable position. After all, who would want to return to the days of being a medical student? What would that say about one's right to be considered a competent, confident physician? As Dr. Gray pointed out, requesting physicians can only say what they know, say what they do not know, and hope that they are treated with respect.

Ideas about respect are key to understanding how physicians successfully negotiate curbside consultations. As an outsider looking in at the medical profession, the investigator suffered from a naïve tendency to assume that all physicians respected each other. But as fieldwork progressed, the word "respect" kept coming up. If the investigator's naïve belief were true, why did so many primary care physicians raise the issue of respect with such strong feelings? Why were the words "seething" and "treated like a country doc" occurring during such discussions?

The issue was raised so frequently that the investigator contacted George Bergus, M.D., Associate Professor of Family Medicine at the University of Iowa, to discuss issues related to hierarchy and mutual respect. Dr. Bergus (personal communication,

May 3, 2001) responded by electronic mail. He talked about these issues in the following way:

> I am not surprised that primary care docs that you interviewed reported that all docs had equal status. I would say the same...this is the ideal.... In reality we know differently. I also agree with your subjects that an effective curbside consultation is an exchange between mutually respecting equals. [It] May seem like a contradiction but I am not sure that it is. For the curbside consult to be effective both parties must trust and respect each other's expertise and knowledge. In the process of medicine, as it should work, people should be respected for their contribution to medical care. In fact this is the ideal of multidisciplinary teams but I think getting these teams to work is often very difficult since the hierarchical nature of health care professionals is pulling in the other direction.

Dr. Bergus continued by likening the situation to that of an army unit. Within that unit, he said, hierarchy was "carefully denoted by symbols on coats."

But to work as an effective unit, each member, regardless of rank, had to respect the professionalism of the others. Dr. Bergus (personal communication, May 3, 2001) pointed out that "a classic theme in war stories is the new officer who does not listen to his men and then does something incredibly stupid." These remarks helped the investigator understand that, while physicians may espouse the theory of equality across the medical profession, their theory-in-use (Argyris & Schön, 1996) is hierarchical. Good's (1995) study, *American Medicine: The Quest for Competence*, supports the understanding that physicians judge their own competence and the competence of others,

in part, on their ability to negotiate this hierarchy. Good talked about this in the following way:

> Embracing the medical profession entails not only the acquisition of knowledge and technique but the achievement of highly honed professional behavior that transcends the consciously managed performances of "staging and acting" during case presentations or in conferences and on rounds....Although students are frequently well rewarded with positive evaluations for exhibiting ebullience and aggressiveness, "professional civility" also becomes a training goal. Professional civility includes acknowledging one's place in the medical hierarchy and accepting a code of professional behavior in how one relates to one's peers and seniors, as well as to one's patients. (p. 156)

Other studies of physician socialization (Becker, 1961; Bosk, 1979; Good, 1995; Sinclair, 1997) support these ideas about hierarchy and judgments of competence. To make a curbside consultation work, then, physicians involved in curbside consultations must act in ways that support the ideal of "mutually respecting equals," as Bergus (personal communication, May 3, 2001) termed it. They can do so by demonstrating respect for each other's professional standing and knowledge.

But what does this type of behavior entail? By what behaviors or misbehaviors do physicians indicate respect or lack of respect for each other's professional standing? How might these behaviors affect the outcomes of curbside consultations? Goffman's ideas about face-work provide a framework from which to consider these questions. Results presented in Chapter 4 indicated that, within the context of the curbside consultation, informants wanted to present themselves as competent, caring physicians

who knew how to conduct themselves as members of the local physician community. For example, they talked about the importance of attentive listening, maintaining eye contact, and responding promptly to calls. They talked about acceptable parameters for contacting potential curbside consultants in ways that would show respect for their time.

Chapter 4 included a transcribed conversation with Dr. Gold, a young primary care physician, who described how he structured requests for curbside consultations. His comments provide a useful example of successful face-work. For example, Dr. Gold showed respect for the consultant by following the description of the patient case by an immediate offer to send the patient if the consultant preferred that to an informal consultation. He noted that he had instructed clinic staff to notify him immediately if another physician wanted to speak with him by telephone. Dr. Gold monitored his interactions with physicians to make sure that he behaved in appropriate ways.

Dr. Gold used curbside conversations to answer questions related to particular patient cases. He also used them to identify a community of potential consultants that he could use in the long term. Was the information he received medically sound and appropriate to the patient case? Did the person he contacted behave in a manner that Dr. Gold believed appropriate? That is, he monitored the face-work of the other physician. In each encounter, he had two questions: "Is this good information?" and "Is this physician someone I want to know?" Both of these questions and concerns, as requests, mutually informed the other. These are not seen as necessarily separate issues for physicians. What they do defines who they are—what their standing is in the medical community. Feelings of self-efficacy are necessarily tied to competence.

Results presented in Chapter 4 indicated that many physicians negotiated curbside

consultations in ways that affirmed self-efficacy. They used face-work to lend an aspect

of face-saving parity to the process of asking for information and giving information. In

direct contrast, two subspecialists, Dr. A. and Dr. B., managed to offend many of the

primary care physicians with whom they worked.

What caused this breakdown in professional relationship? Informants were very

cautious about their responses. At no time did they impugn the clinical competence—the

technical skills—of either subspecialist. Instead, they talked about presentation of self,

social interaction and professional behavior. Informants described Dr. A. as a "cold fish"

who had "no personality." They said that Dr. B. did not make "small talk." Both were

considered patronizing. It was clear that, in the minds of these informants, these failings

were more than just weak social skills. They represented an inability to negotiate

collegial relationships.

The investigator contacted both subspecialists to ask for their help in

understanding the curbside consultation. Neither physician replied, but the investigator

did encounter Dr. A. at the hospital, during a time when he had time to speak. Dr. A.

readily agreed to an interview and listened attentively to the questions asked. He

responded with interest. Dr. A. said that he was frequently frustrated when primary care

physicians contacted him too late to help the patient. Out of frustration and concern for

the next patient, he said that he sometimes responded rather sharply. He wanted the

requesting physician to remember this lesson.

During data analysis, Dr. A's response seemed very similar to the behavior of an

attending during a story told by Dr. Red. During his days as a student, Dr. Red presented

a patient case to his superior, an attending physician. The attending's sharp correction provided a lesson Dr. Red could still recite with clarity. Given the similarities between the attending's behavior and the behavior Dr. A. described, Dr. A. might have modeled his responses after what he saw of his superiors in medical school. As a result, his behavior emphasized, rather than smoothed over, the asymmetry that is a part of the curbside consultation. Informants interpreted his conduct as showing a lack of professional respect and they disliked having to deal with him.

The consequences of Dr. B.'s behavior were even more serious. Informants said two things about Dr. B.: he stole their patients and he did not make small talk. On the surface, these two indictments seemed unrelated. However, both were used to explain why some informants refused to send him patients. Upon reflection, it became clear that Dr. B.'s refusal to participate in small talk reflected the lack of trust that caused other doctors to divert their patients to other, more distant subspecialists. Bickmore and Cassell (2001) made the following point about the effectiveness of conversational strategies like small talk:

> Humans are able to use a variety of strategies to proactively establish and maintain social relationships with each other. Building rapport and common ground through small talk, intimacy through self-disclosure, credibility through the use of expert's jargon, social networks through gossip, and "face" through politeness are all examples of this phenomenon. (para. 1)

It appeared that informants interpreted Dr. B's refusal to take part in small talk as a lack of interest in establishing and maintaining a collegial relationship. It also appeared that they believed Dr. B felt he was "above" his peers—something most physicians wanted to

leave behind as soon as they finished medical school and their residencies. Even during

medical school, Good (1995) noted, rigidly enforcing hierarchical boundaries "in such a

way as to make students feel merely tolerated or disparaged created barriers to

apprenticeship, interfered with bonding, and assaulted students' self-efficacy"(p. 153). In

this case, Dr. B's lack of professional civility not only prevented collegial bonding, it also

carried with it the possible implication that informants were not full-fledged physicians.

He compounded this error by stealing patients who were formally referred to him. As a

result, informants neither liked nor trusted him.

As these examples illustrate, the asymmetrical nature of the curbside consultation

comes into focus when the rules of engagement (e. g. an aura of parity and respect) are

"broken." On the other hand, successful face-work smoothed the asymmetrical nature of

the curbside consultation. Physicians who placed themselves in the vulnerable position

of having to ask for advice took care to present themselves as both competent and

collegial. Consultants responded to them in ways that betokened professional respect

and signaled that they were indeed competent and collegial.

Implications and Recommendations for Future Study

Physicians

This investigation confirmed the findings of existing studies in the medical

literature (Fox, Siegel, & Weinstein, 1996; Keating, Zaslavsky, & Ayanian, 1998;

Manian & McKinsey, 1996; Myers, 1984) that curbside consultations take place routinely

in the practice of patient care medicine. Informants used the curbside consultation to

draw together medical evidence, local resources, and professional experience. According

to the informants, these ad hoc contingent negotiations led to successful problem solving.

Given that the curbside consultation crosses all specialty and subspecialty areas, it is surprising that the only resources physicians had to draw from to use it were tacit, common sense understandings based on behavior they had seen modeled in medical school. Study results suggested that the lack of explicit guidelines caused breakdowns in communication among practitioners. The medicolegal and financial concerns expressed were particularly visible. Less evident, but perhaps even more important, were problems related to social interaction.

Bringing tacit understandings to the surface so that they could be discussed could maximize the usefulness of the curbside consultation in medical problem solving. Further scholarly investigation, particularly with regard to the social nature of the practice, could complement existing studies in the medical literature. The results of these studies could inform curriculum design in medical school, residency programs and continuing medical education programs. Perhaps in these ways, physicians could arrive at a better understanding of what the curbside consultation is all about.

Library and Information Science

This investigation of the curbside consultation looked at how physicians used oral, informal exchanges to construct understandings about their patients, their colleagues, and their own competence and collegiality. Qualitative data to support study findings was gathered from prolonged observation of 16 physicians in six clinics as well as from the transcriptions of 60 formal interviews.

The approach used for this study differs in significant ways from many of the studies used by library and information professionals to understand physician information needs and use. Haug's (1997) meta-analytic study of physicians' preferences for

information sources provides a useful illustration of some of these differences. As discussed in Chapter 1, Haug looked at 12 studies of physician information preferences that were published between 1978 and 1992. Among selection criterion for inclusion in the meta-analysis was the requirement that that the studies contain "quantitative observational or survey data in the form of frequencies, proportions, or ranks of information sources used by physicians" (p. 224). The point was made in Chapter 1 that little has been reported on how physicians construct knowledge and clinical intervention through consultations and social exchange. In effect the idea that clinical knowledge has much to do with social interaction or how the self is presented has been missed in the literature. The results of this study suggest that those factors play a prominent role in physician work.

Understanding the importance of the oral construction of knowledge in the curbside consultation will give health sciences librarians insight into how physicians work and how they construct knowledge. It may also relieve concerns the investigator has heard voiced by health sciences librarians (rather than expressed in the literature) that physician predilections for consulting their colleagues mean that they are bypassing the best medical evidence.

The results of this study suggest that physicians who consult with the subspecialists they most respect are, in fact, using those conversations to identify and make use of the best medical evidence, sifted through the subspecialist's years of experience and knowledge of how medicine is practiced in that area. They want knowledge that they can trust—that bridges that particular body of knowledge that we call biomedicine and local conditions—provided by colleagues who know

instantaneously what diagnostic and treatment options are available in the community, given the resources, institutions, and available intellectual capital.

Acknowledging these possibilities and learning more about how physicians obtain and construct knowledge out of social practice may open the way to exploring new ways of working with physicians to disseminate information resources. It may also suggest new ways of thinking about the services medical libraries provide.

Design of Electronic Curbside Consultation Systems

Professionals involved in the design and implementation of electronic curbside consultation systems might benefit from some of the findings in this study. First, it was clear that informants relied on the curbside consultation to support their work. That finding suggests that the electronic curbside consultation could support the practice of physicians who are isolated geographically. It could provide professional support to the work of subspecialists who do not have local access colleagues in their subspecialty areas.

Second, it was also found that current professional practice of the curbside consultation rests on a foundation of social relationships, both professional and personal. Additional scholarly investigation of how physicians negotiate these social interactions could be used to develop electronic networks that build on, rather than attempt to replace, these social relationships. In this study, for example, physician informants used both face-to-face interactions and telephone conversations to conduct curbside consultations. Adding an additional option to those communication "channels" might encourage physicians to communicate more frequently when they have curbside consultation questions.

Finally, it is possible that these findings might be used to strengthen existing electronic curbside consultation systems. For example, an important study by Bergus, Sinift, Randall, and Rosenthal (1998) suggested the need to gain a better understanding of what prevented some family practice physicians from using an electronic curbside consultation service. Is it possible that social factors identified in this study might play a role? For example, would some primary care physicians be more likely to use an electronic curbside consultation system if they had an opportunity to meet and talk with the consultants available? Could the consultants provide more useful information if they understood more about the practices of the primary care physicians who presented questions? These possibilities raise again the issue of whether these developers and designers, again largely physicians, can extrapolate from immediate experience adequate, sufficient design criteria (Graves and Nyce 1999, Nyce and Timpka 1993). The issue of whether physicians can "design" best for themselves is one that the medical informatics literature really has not addressed.

Conclusion

The results of this study suggest that physicians perceive the curbside consultation to be an effective means of information transfer. To be effective, participants in those interactions must successfully negotiate both cognitive and social elements that underlie the practice. Although physicians found it relatively easy to voice the cognitive elements of those exchanges, they were less comfortable acknowledging that anything "social" governed these interactions. As a result, they sometimes achieved quite different results than they had intended. Professional conversations about what the curbside consultation

"is" and how it is "used" in everyday clinical practice could increase its usefulness as a means of physician information transfer.

The results of this study also suggest that there is much to be learned about how physicians construct and make use of clinical data. It is possible that increased attention to the role played by collegial, social interaction can inform the work of medical educators and information professionals designing electronic curbside consultation systems. It can also assist health sciences librarians who work with physicians. Rethinking library and information services based on increased understandings of how physicians construct knowledge could lead to benefits for physicians as well as the patients whose needs they serve.

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Appendix A

Search Strategy

One set of Dialog and PubMed searches employed what Harter (1986) called a "citation pearl growing" (p. 183) approach. In contrast with other standard search strategies, which begin with an initial high recall and move toward increasing the precision of the search, the citation pearl growing strategy begins with a single, precise term that is known to be pertinent to the topic under investigation. In essence, that precise term functions as a grain of sand. Beginning with the precise term, the search moves outward in layer after layer, increasing the recall with each iteration. During this "pearl growing" process," results of preliminary searches are analyzed to identify new facets to add to the search. These additional facets may be indexing terms, authors, new search terms, or any other element that leads to relevant documents. Combining these facets with the term "and" results in ever increasing recall. The search continues until no new facets can be identified.

For this group of searches, the precise term "curbside" was used as the grain of sand. Items retrieved from preliminary searches were studied to identify indexing terms that could be used to identify additional materials, thereby broadening the search to retrieve as many relevant articles as possible. As a result, the search identified articles that discussed the curbside consultation using other "aliases" like "backdoor" consultation as well as articles that talked more generally about how physicians sought out and used information in clinical practice.

Two broad searches, one in 1997 and one in 2001, were conducted in the 50 plus files included in Dialog's MEDICINE and ALLSOCIAL categories. The literatures of

medicine, library and information science, and the social sciences were represented in these categories. The following files in were searched:

File Number	File Name	Period Covered
1	ERIC	1966-2001/September 6
2	INSPEC	1969-2001/September
6	NTIS	1964-2001/September
7	Social SciSearch(R)	1972-2001/September
11	PsycINFO(R)	1887-2001/September
21	NCJRS	1972-2001/July
34	SciSearch(R) Cited Ref Sci	1990-2001/September
35	Dissertation Abstracts Online	1861-2001/July
37	Sociological Abstracts.	1963-2001/August
38	America: History & Life	1963-2001/Quarter 1
39	Historical Abstracts	1973-2001/Issue 2
47	Gale Group Magazine DB(TM)	1959-2001/September 12
49	PAIS INT.	1976-2001/July
61	LISA (LIBRARY&INFOSCI)	1969-2001/August
65	Inside Conferences	1993-2001/September
86	Mental Health Abstracts	1969-2000/June
88	Gale Group Business A.R.T.S.	1976-2001/September 13
94	JICST-Eplus	1985-2001/August
98	General Science Abstracts/Full-Text	1984-2001/July
121	Brit.Education Index	1976-2001/Quarter 3

141	Readers Guide	1983-2001/July
142	Social Sciences Abstracts	1983-2001/July
144	Pascal	1973-2001/September
148	Gale Group Trade & Industry DB	1976-2001/September 12
149	TGG Health&Wellness DB(SM)	1976-2001/September
163	Ageline(R)	1965-2001/August
171	Criminal Justice Periodical Index	1975-1998/December
180	Federal Register	1985-2001/September 12
202	Information Science Abstracts	1966-2001/Issue 7
434	SciSearch(R) Cited Ref Sci	1974-1989/December
436	Humanities Abstracts Full Text	1984-2001/July
437	Education Abstracts	1983-2001/July
438	Library Literature	1984-2001/July
439	Arts&Humanities Search(R)	1980-2001/September
468	Public Opinion	1940-2001/September
482	Newsweek	2000-2001/September 13
605	U.S. Newswire	1999-2001/September 13
660	Federal News Service	1991-2001/September 12
665	U.S. Newswire	1995-1999/April 29
5	Biosis Previews(R)	1969-2001/September
48	SPORTDiscus	1962-2001/August
71	ELSEVIER BIOBASE	1994-2001/August
73	EMBASE	1974-2001/September

77	Conference Papers Index	1973-2001/September
91	MANTIS(TM)	1880-2000/April
151	HealthSTAR	1975-2000/December
155	MEDLINE(R)	1966-2001/October
156	Toxline(R)	1965-2000/December
157	Aidsline(R)	1980-2000/December
159	Cancerlit	1975-2001/August
162	CAB HEALTH	1983-2001/August
266	FEDRIP	2001/August
369	New Scientist	1994-2001/August
370	Science	1996-1999/July
399	CA SEARCH(R)	1967-2001/UD=13511
442	AMA Journals	1982-2001/August
444	New England Journal of Medicine	1985-2001/September
457	The Lancet	1986-2000/October
467	ExtraMED(tm)	2000/December

These searches revealed articles related to the curbside consultation and broader topics like physician-to-physician communication and referral and consultation, but the articles were limited to the medical literature. No mention of the curbside consultation was found in the literature of library and information science.

A second set of citation pearl growing searches was carried out in PubMed. PubMed includes the MEDLINE database, which had already been searched via Dialog, so there was considerable duplication of search results. However, PubMed also includes

some items that are not available in MEDLINE. Given the importance of a thorough

search, the investigator chose to view the redundancy as a search reliability indicator.

The investigator used two pearl growing techniques in this set of PubMed searches. First,

the text word "curbside" was used to identify articles that used the specific term curbside

as well as to identify related but broader subject headings. Second, the investigator used

the Related Articles feature, which does its own kind of citation pearl growing based on a

predefined algorithm. That is, once a relevant article is identified, the Related Articles

retrieves a pre-calculated set of PubMed citations that are closely related to the selected

article.

The citation pearl growing strategy used in PubMed and Dialog MEDLINE

resulted in a number of articles that dealt with informal communication among

physicians, physician decision-making, library use, and other topics related to physician

information needs and use. On the other hand, the same strategy resulted in a null set in

databases that covered the literature of library and information science. This is not to say

that the phrase "curbside consultation" did not appear in the literature—what it does

mean is that the words in that phrase do not appear in the searchable fields of the library

and information science databases searched. Nonetheless, the null set raised the

possibility that the idea of the curbside consultation had gone unnoticed in the library and

information science literature.

Given these results, the investigator performed an additional set of searches in

three Dialog Databases, Information Science Abstracts, Library Literature, and Library

and Information Science Abstracts. The search statements "user (w) stud?" and

"physician? OR medic?" were combined with an "AND" to identify studies that

considered physician information needs and use. These searches returned a wide range of

relevant articles published in journals and serials like The Journal of Documentation, the

Bulletin of the Medical Library Association, and The Annual Review of Information

Science and Technology.

Appendix B

Sites

Area	1	2			3	
Clinic	1	2	3	4	5	6
Number of physicians	6	8	4	3	1	2
Primary specialty	Family practice	Internal medicine	Family practice	Internal medicine	Internal medicine	Family practice
Year established	1971	1949	1996	1988	1999	2000
Independent or part of a system	Independent	System	System	System	System	System
Population of city or town	8,500	24,000	24,000	24,000	1,300	2,300
Type of closest hospital	General acute care	Regional referral center	Regional referral center	Regional referral center	General acute care	General acute care
Number of beds in closest hospital	44	221	221	221	48	40

Appendix C

Informants

Site	Group	Informant/Specialty	Days Observed	Interviews
1	1	I1 M.D., Family Practice	4	2
1	1	I2 M.D., Family Practice	4	2
1	1	I3 D.O., Family Practice	4	2
1	1	I4 M.D., Family Practice	4	2
1	2	I5 M.D., Family Practice	1	2
1	2	I6 M.D., Family Practice	1	2
1	3	I7 M.D., Pulmonology		1
1	3	I8 M.D., Surgery		1
1	3	I9 M.D., General Surgery		1
1	3	I10 M.D., Urology		1
1	3	I11 M.D., Neurology		1
1	3	I12 M.D., General Surgery		1
1	3	I13 M.D., Cardiology		1
1	3	I14 M.D., Radiology		1
1	3	I15 M.D., Pediatrics		1
1	3	I16 M.D., Orthopedics		1
1	3	I17 M.D., Cardiology		1
1	3	I18 M.D., Pediatrics		1

(table continues)

Informants (continued)

Site	Group	Informant/Specialty	Days Observed	Interviews
1	3	I19 M.D., Obstetrics/Gynecology		1
1	3	I20 M.D., General Surgery		1
1	3	I21 M.D. Pediatric Hematology/Oncology		1
1	3	I22 M.D., Cardiology		1
2	1	I23 M.D., Internal Medicine	9	2
2	2	I24 M.D., Internal Medicine	3	2
2	3	I25 M.D., Internal Medicine		1
2	3	I26 M.D., Internal Medicine		1
2	3	I27 M.D., Dermatology		1
2	3	I28 D.O., Psychiatry		1
2	3	I29 M.D., Obstetrics/Gynecology		1
2	3	I30 M.D., Neurology		1
3	1	I31 M.D., Family Practice	9	2
3	2	I32 M.D., Family Practice	3	2
3	2	I33 M.D., Family Practice	3	2
3	2	I34 M.D., Family Practice	3	2
3	3	I35 M.D., Gastroenterology		1
3	3	I36 M.D., Dermatology		1

Informants (continued)

Site	Group	Informant/Specialty	Days Observed	Interviews
3	3	I37 M.D., Pulmonology		1
3	3	I38 M.D., Pathology		
4	2	I39 M.D., Internal Medicine		
5	1	I40 D. O., Internal Medicine	9	2
5	3	I41 M.D., Orthopedics		1
6	1	I42 M.D., Family Practice	9	2
6	2	I43 D.O., Family Practice		2
6	3	I44 M.D., Orthopedics		1

Appendix D

Informed Consent Form

EMPORIA STATE UNIVERSITY
INFORMED CONSENT DOCUMENT

The School of Library and Information Science at Emporia State University supports the practice of protection for human subjects participating in research and related activities. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time, and that if you do withdraw from the study, you will not be subjected to reprimand or any other form of reproach.

This study investigates a type of physician communication commonly referred to as a "curbside consultation." It is undertaken as partial fulfillment of the requirements for the researcher's doctoral degree in library and information management at Emporia State University in Emporia, Kansas. It is hoped that results of the study will yield new data of interest to physicians and those who work with them, including professionals in the fields of medical informatics, systems design, and health sciences librarianship.

There are no foreseeable risks associated with this research. If participants are concerned with any aspect of the study, they are invited to contact the investigator to discuss those concerns.

Participant observation in the field, informal and formal interviews, and physician logs will be used to gather data. The nature and extent of informant involvement in the study is designated as follows:

Group 1 Informants

- 4 – 18 days observation by the researcher, with informal interviews occurring within that period
- Two formal interviews with the researcher, each approximately 20 minutes long
- A written or audiotape log of curbside consultations carried out within the period of the pilot or primary study period (date, physician consulted, topic, optional additional comments)

Group 2 Informants

- 3 – 6 days observation by the researcher, with informal interviews occurring within that period
- Two formal interviews with the researcher, each approximately 20 minutes long
- A written or audio taped log of curbside consultations carried out within the period of the pilot or primary study period (date, physician consulted, topic, optional additional comments)

Group 3 Informants

- 1 – 2 formal interviews with the researcher

"I have been asked to participate in this study as a member of Group ____. I have read the above statement and have been fully advised of the procedures to be used in this project. I have been given sufficient opportunity to ask any questions I had concerning the procedures and possible risks involved. I understand the potential risks involved and I assume them voluntarily. I likewise understand that I can withdraw from the study at any time without being subjected to reproach."

_____   _____

Informant   Date

Appendix E

Group 1 and Group 2 Interview Questions

   Initial interview. Bring to mind, if you will, a specific incident during which

another physician contacted you for a curbside consultation.

1.   What was the purpose of this curbside consultation?

2.   Whom did you contact/call? Why that person?

3.   How and when did you make the contact/call?

4.   How did you format your question?

5.   Were you satisfied with the end result? Why or why not?

6.   How did you learn to do curbside consultations?

7.   What do you think makes a good consult? A bad consult?

8.   Whom do you contact/call? Is it all right to contact them, using your name?

   Exit Interview.

1.   How do you get the clinical information you need?

2.   How often do you search the medical literature for answers to specific clinical

      questions

3.   What proportion of your curbsides are done in-house (within the practice, not

      counting physicians who have clinics there)

4.   Do you record the curbside consult in the medical record or in your own notes?

      Tell the patient?

5.   How are the roles of family practice physicians and sub specialists similar?

      Different?

6.   How do you decide who's competent?

7. What does it mean to be a physician? More specifically, what are the obligations/responsibilities of the profession with regard to other members of the profession?

8. What do you expect from a physician that you contact for a curbside consultation?

9. When you consult a sub specialist informally, how often do you do so with the intention of referring the patient?

10. How do you "weigh" their response in terms of its accuracy and value to the particular patient case?

11. Under what circumstances do sub specialists ask to see the patient?

Appendix F

Letter to Group 3 Physicians

Investigator address
Date

Physician name
Physician address

Dear Dr. X:

I need your help. I've been working with Drs. X, Y, and Z at [name of clinic] on research for my doctoral dissertation on the type of informal consultation physicians frequently call a "curbside." I've enclosed a brief description of the project for your information. During the course of the study in [name of town in which clinic is located], your name came up as being one of the colleagues with whom these physicians consult.

Could you share five minutes of your time to discuss <u>your</u> views of the curbside consultation? Your perspective would add a critical component to the validity and usefulness of the research findings.

If you agree to participate in the study, I could meet you at [name of local hospital] or at your clinic any time between 7 AM and 7 PM weekdays, [dates available for interviews]. Please suggest a time and location that are convenient to you. I've included a stamped, self-addressed envelope and a card for your response. If you have questions, I can be reached at [investigator's telephone number] or by e-mail at [investigator's electronic mail address].

Thanks!

Sincerely,

Cathy Perley, M.A., AHIP

Appendix G

Group 3 Interview Questions

Critical incident questions. Bring to mind, if you will, a specific incident during which

another physician contacted you for a curbside consultation.

1.   How was the contact made?

2.   With what words did the other physician initiate the consultation?

3.   How did he or she phrase the actual question?

4.   How did you organize your response?

5.   Did you feel this was a satisfactory or an unsatisfactory consultation? Why?

6.   Please elaborate: What made this a good or a bad consultation?

Broader questions:

7.   Why do you do curbside consults?

8.   Why do you think other physicians choose to consult with you?

9.   Do you want or expect a follow-up call after a curbside consult?

10.   What else do you think is important to note about the curbside consultation?

Appendix H

Initial Coding Categories

Label	Category
R	Respect
K	Knowing
T	Trust
JSP	Just send the patient
L	Listening
S	Stories
PC	Privileged communication
Time	Time
TMI	Too much information
WGP	What is good for the patient
Solo	Solo doctors
Link	Link between the curbside consultation and the formal consultation
PT	Physician talk
Rel	Relationship
Ref	Referrals
Def	Definition of the curbside consultation
Info	Information need/seeking
Res	Researcher role
Ed	Education

I, Cathy M. Perley, hereby submit this dissertation to Emporia State University as partial

fulfillment of the requirements for a doctoral degree. I agree that the Library of the

University may make it available for use in accordance with its regulations governing

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Date

Underlying Meanings of the
Physician Curbside Consultation
Title of Dissertation

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