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"IT'S LIKE A GIANT GAME OF TELEPHONE": PHYSICIANS' PERCEPTIONS OF EFFECTIVE COMMUNICATION IN THE EMERGENCY DEPARTMENT CONTEXT

by

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B.A., COMMUNICATION, MICHIGAN STATE UNIVERSITY, 2009

M.A., COMMUNICATION, THE UNIVERSITY OF NEW MEXICO 2011

THESIS

Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts Communication

The University of New Mexico Albuquerque, New Mexico

DEDICATION

"Do one thing every day that scares you." \sim Eleanor Roosevelt

To those who challenge me to live these words and to those who have supported me in those actions.

ACKNOWLEDGEMENTS

I would like to begin by expressing my gratitude to the members of my committee: Dr. John Oetzel, Dr. Patricia Covarrubias, Dr. Virginia McDermott, and Dr. David Sklar. John, you are the best advisor and mentor a graduate student could ask for. Thank you for sharing your love for learning and research and guiding and challenging me as a student and scholar. Patricia, thank you for opening my eyes to new avenues of thinking and inspiring me to act in those ways. Ginny, thank you for your undying support and encouragement; you have made me a better instructor and researcher. Dr. Sklar, thank you for giving me the opportunity to learn by your side, which helped me discover my area of interest.

I would also like to thank the following individuals for their contributions to the completion of this study: Brandon Pettit, Carolina Ramos, Jack, Deborah, and Drew Dean and James Kruzel. Brandon, I greatly appreciate your time and effort in transcribing my thesis interviews. Caro, I would not have made it through without you. Your consistent and unwavering encouragement and support helped me in more ways than one. Thank you for your friendship. Finally, I want to thank my family, Jack, Deborah, and Drew Dean and my-soon-to-be husband James Kruzel—I would not be where I am today without any of you. Thank you!

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ABSTRACT OF THESIS

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Marleah Lynn Dean

B.A., Communication, Michigan State University, 2009 M.A., Communication, The University of New Mexico, 2011

ABSTRACT

"To say that meaning in communication is never totally the same for all communicators is not to say that communication is impossible or even difficult—only that it is imperfect."

~ Fisher, 1978, p. 257

Despite the growing number of emergency department visits, effective communication between patients and physicians are often overlooked because of the fast-paced nature of the emergency department (ED). As such, we do not know what is seen as effective communication within this particular context. Therefore, the goal of this study was to learn how emergency department physicians define effective communication and identify the barriers and facilitators to communicating in the ED. Seventeen semi-structured, open-ended interviews were conducted with ED physicians. Interviews were recorded and transcribed into a Word document. Data analysis included two steps—the constant comparison method (Lindlof & Taylor, 2002) and the Hymes' (1974) SPEAKING framework. The findings indicated a definition of effective communication as well as the following five dimensions of effective communication: efficiency, clarity/accuracy, relevance, comprehension, and rapport. Communication is efficient when the desired goals are met in a timely manner without expending too many

resources. Communication is clear and accurate when the message's state of clearness is evident and the state and quality of a message is true, correct, and precise.

Communication is relevant when the message is directly pertinent to the discussion at hand. Communication is comprehended when the physician and the patient both understand the information being communicated between each other and are both then able to act on that information, and lastly, communication builds rapport when the physician demonstrates sympathy/empathy, shows concern, and offers reassurance with the patient. Several individual and system barriers were identified for both the individual patient and physician and the system as an environment. Individual and system facilitators were discussed to help address these barriers. Overall, the findings suggest a contradiction in ED physicians' perceptions of effective communication and demonstrate The University of New Mexico Hospital ED has a culture of its own.

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CHAPTER 1

Introduction

Closed, ineffective, and poor communication between physicians and patients adds approximately \$73 billion dollars to providing health care in the United States (American Academy of Medical Administrators, 2003). Due to the recent discussion of health care and recent crises of emergency medicine, more attention has been given to emergency departments (Abelson, 2002; American College of Emergency Physicians, 1998, 1999; Mithers, 2001; Shute & Marcus, 2001). According to the National Center for Health Statistics, two recent, separate reports exclaim increased visits to the emergency department by 32%, an 18% rise between 1996 and 2006 (Center for Disease Control and Prevention, 2008) and a 23% rise between 1997 and 2007 (Tang, Stein, Hsia, Maselli, & Gonzales, 2010). In addition, emergency department are becoming people's primary care since individuals without health insurance can use the emergency department for such needs (Kilpatrick & Holsclaw, 1995; Steinhauer, 2000; U. S. General Accounting Office, 2001).

Broadly, emergency department medicine has been studied in many different fields over the years (e.g., medicine, sociology, medical anthropology, medical sociology, and communication), each focusing on different aspects of emergency department medicine (Eisenberg, Baglia, & Pynes, 2006). Yet because of the fast-paced nature of the emergency department, and as patient-provider interactions are short in this context, effective communication is often overlooked (Reever & Lyon, 2002).

Two attempts, however, have been made. For example, in 2006, The Joint Commission's National Patient Safety Goals (NPSGs) identified seven goals with 16

requirements to improve hospital quality and safety. Physicians, nurses, risk managers, pharmacists, and safety experts—who make up the Sentinel Event Advisory Group—alongside the Joint Commission staff created these goals. One of those goals was to "improve the effectiveness of communication among caregivers" (The Joint Commission, 2007, p. 34). Sadly, 58% of hospitals did not have consistent performance in implementing standards for increased effective communication, making it one of the top four compliance issues.

Communicating information in the emergency department can be limited because of its nature, continuity of care, physician engagement, and overall education (Reever & Lyon, 2002). As such, emergency department problems are warning signs of hospitals, families, and even societies in stress (Brewster, Rudell, & Lesser, 2001). It is thus important to continue to examine effective communication within the emergency department context, as it is not only crucial and sensitive but also understudied.

Rationale

Understanding the factors associated with effective patient-provider communication in the emergency department context is important for several reasons. First, the leading cause of medical errors among physicians is communication failures (Frank et al., 2005). This includes communicating ineffectively with patients. For instance, the Joint Commission on Accreditation of Healthcare Organizations report 60% of medical errors between 1995 and 2003 were due to miscommunication (Patterson, Cook, Woods, & Render, 2004). Such communication problems are often due to ineffective flow of information (Stewart, 1995).

Second, effective communication leads to better health outcomes among patients (Stewart, Meredith, Brown, & Galajade, 2000). Better health outcomes include emotional health; physiological health; and functional health, pain control, and symptom resolution (Stewart, 1995). Effective communication also heightens patient compliance to treatment, medical decisions, and outcomes (Wagner, Lentz, & Heslop, 2002) and produces higher patient satisfaction and health ratings (Spagnoletti et al., 2009). On the other hand, ineffective communication is associated with malpractice claims, lawsuits, and medical errors (Rider & Keefer, 2006). Although the problems associated with poor communication in healthcare setting are rampant, there is little research on improving the quality of information given to patients (Johnsen et al., 2007).

Finally, it is important to study physicians' perspectives about what effective communication is and how it is enacted because there is no definition of how physicians conceptualize effective communication with patients in healthcare settings. Because this term is undefined it can lead to different interpretations, and if physicians and patients have different interpretations of what effective communication means, this may be part of the problem. Also, physicians' perspectives of their own communication is lacking in health-related literature. It is important to understand emergency department physicians' perspectives specifically, as they know their own work environment. By learning their viewpoint on what is effective in this context, background understanding is gained regarding how communication can be improved within this context. Additionally, whatever ED physicians believe regarding effective communication is probably what they are enacting. So in order to improve communication within the emergency department context, it is necessary to learn and understand ED physicians' beliefs—a

necessary prerequisite to making suggestions on improving communication. It is then possible to move to assessing effective communication in the emergency department and making suggestions for improvement.

Key Definitions

This study examines effective communication in the emergency department context. It is important for the reader to understand the key terms that are used within this study. In this section, I explain two key definitions: (a) ED and (b) communication effectiveness.

ED stands for emergency department. This is the context of care for this study. Emergency departments provide 24-hour care and are, therefore, different from more traditional healthcare organizations (Redfern, Brown, & Vincent, 2009). EDs are busy, cramped, chaotic, fast-paced environments with a constant flow of admitting patients and are full of staff shortages, few resources, and never-ending patients (Eisenberg, Baglia, & Pynes, 2006). Because of these characteristics, emergency departments are susceptible to accidents (Institute of Medicine, 2001). Though emergency departments are often referred to as emergency rooms (ERs), ED or emergency department is used for the current study.

Though there is no specific definition for effective communication in the health-related literature, to help frame the present study, other definitions and components are important to include to provide some background. According to Hymes (1971), the term *communication effectiveness* is a skill in which the speaker and the listener use their shared knowledge about who, what, where, when, how, and to, yet Hymes (1971) conceptualizes communication effectiveness more as competence rather effectiveness

despite the term name. It is because of this distinction why it is important to learn ED physicians' definitions. In the health context, effective communicators understand individuals' needs (Slovis, 2008; Stewart, Meredith, Brown, and Galajade, 2000), endeavor to understand the patient as a whole (Stewart, 1995), and provide clear information or problem solving (Stewart, Meredith, Brown, and Galajade, 2000), while creating common ground (Stewart, 1995). Thus, communication effectiveness or effective communication seems to be the quality and quantity of communicating information between providers and patients that includes understanding of partners' needs and goals, conveying information and knowledge, and supporting emotional expression, resulting in shared understanding, positive health outcomes, and overall satisfaction.

Deficiency

Communication is an essential clinical skill (Rider & Keefer, 2006). Prior research in patient-provider communication has explored medical communication purposes, specific communicative behaviors, communication factors that influence patient outcomes, and variables that affect patient-provider communication generally (Ong, De Haes, Hoos, & Lammes, 1995). The important categories of patient-provider communication, most commonly studied, include the following: patient satisfaction, patient adherence or compliance, patient outcomes, and influential factors of patient-provider communication.

Within EDs communication, information exchange, interruptions, handoffs, and communication errors are commonly studied. EDs are all about efficiency and information transfer (Axley, 1984), and exchanging information is the most primary tool

for patient-provider interactions (Ong, De Haes, Hoos, & Lammes, 1995). Interviews are a way to seek and provide the necessary information. Researchers seek to identify interview goals and categorize types of information-seeking in these interviews (e.g., Schofield & Arntson, 1989 and Roter & Hall, 1988, 1992). Shift changes or handoffs are one of the most important aspects of emergency communication (Hamm, 2008). Losing information between shifts is a serious concern (Kovacs & Croskerry, 1999), and so it is a main focus. Interruptions are also common. Physicians and nurses are interrupted the most (Woloshynowych, 2007), while patients are interrupted every 18 seconds by their physicians when presenting their illness or problem (Stewart, 1995).

Communication error is thus a common occurrence in the EDs. For example, 70% of communication error is caused by miscommunication (Anon, 2005). As effective communication is a key factor in providing safe, efficient care (Hamm, 2008), studies include diagnostic work, treatment options, consent, and giving bad news to patients. Yet, most studies simply advocate the importance of effective communication (e.g., Redfern, Brown, & Vincent, 2009 and Stewart, Meredith, Brown, & Galajade, 2000), highlighting key principles of effective communication (e.g., Kurtz, 1989) or dimensions/categories (e.g., Stewart, 1995; Scherz, Edwards, & Kallail, 1995) and do not define what they mean by effective communication.

As seen above, patient-provider communication covers a broad spectrum of healthcare literature, yet little work has examined emergency department communication at the patient-provider level and definitions of effective communication. What is missing is examining the context of the medical encounter (Thorne & Paterson, 2001). This study seeks to do just that. The present study is applicable to emergency medical

administration, emergency department physicians, and emergency department communication scholars, as it focuses on how ED physicians define effective communication, the context of the emergency department, and the factors that influence effective communication in the ED.

Purpose and Preview

This exploratory study of communication in the emergency department involves interviews contextualized by participant observations to accomplish one primary and three specific purposes. The primary purpose of this project is to learn how emergency department physicians define effective communication and to determine dimensions of effective communication in the emergency department from their perspectives. The specific goals of this study include the following: (a) to determine how ED physicians define effective communication; (b) to determine dimensions of effective communication in the emergency department; and (c) to identify barriers and facilitators to communicating effectively in the ED. Ultimately, this study may assist emergency department physicians, administrators, and patients by providing a foundation for what effective communication looks like in the ED, assisting physicians in increasing quality care, patient satisfaction, and better patient health outcomes.

I strive for further understanding of effective communication in the emergency department environment since the majority of past research preaches effective communication is important, yet few define what it is. By applying health communication and medical literature to this specific medical context, I create a new path for enhancing communication effectiveness in emergency departments.

In this study, I explore the definitions and perceptions of effective communication among emergency department physicians. To do so, it is important to understand previous literature on communication in the emergency department context, effective communication in emergency department context, and factors that influence effective communication. This study provides (a) a review of aforementioned literature; (b) past observations in the ED and research questions to direct the study; (c) a detailed description of the exploratory interviews; (d) a presentation of findings; and (e) a discussion of the study's findings, implications, limitations, and directions for future research.

CHAPTER 2

Literature Review

This study is set in an emergency department (ED) hospital. By examining perceptions of effective communication from the perspective of ED physicians, new understanding and reasoning behind communicative behaviors arise in order to shed light on miscommunication and communication failures within the ED context. In the following literature review, I (a) discuss the nature of the emergency department, (b) consider effective communication in this context and explain an ED model for patient-provider communication that frames my study, and (c) explore physicians and patients' perspectives of effective communication.

The Emergency Department

It is important to understand the context of this study—the ED. This section describes the emergency department and its communication practices. First, a description of the ED is presented, then its main communication practices are explained, and finally, specific aspects of communication, information exchange, interruptions, and handoffs, in the emergency department are discussed.

Unique, complex, and dynamic are but a few adjectives that describe an emergency department (Yu & Green, 2009). Redfern, Brown, and Vincent (2009) state the emergency department is different from traditional healthcare organizations. It is unique because care is "unbounded," meaning patients are continually admitted without limit. Emergency departments offer 24 hours of clinical care (Cheun et al., 2010). They are cramped and chaotic environments. They are full of staff shortages, few resources, and never-ending in take of patients (Eisenberg, Baglia, & Pynes, 2006). Also, hospitals

cannot predict the admittance of patients to emergency departments, so there is often an unequal distribution of physicians to patients (Kovacs & Croskerry, 1999). Thus, emergency departments are susceptible to accidents (Institute of Medicine, 2001).

Emergency staff is trained mainly in treating acute illness and accidents; however, due to the rising influx of EDs as primary care facilities, staff must often treat parents and young children with pediatric and prenatal care, chronically ill, disabled individuals, those with HIV/AIDS, mentally ill, and the homeless (Eisenberg et al., 2006). Treating patients include a variety of activities. In regard to communication, emergency staff has two main activities: decision-making and communication in general (Redfern, Brown, & Vincent, 2009). Both activities are discussed next.

Decision-making

In the ED, decision-making is essential. Physicians must assess the situation, define the problem, and make decisions about managing the problem such as identifying diagnoses, treatments, and next steps. This is done through communication. Physicians interact with nurses, hospital staff, and patients, gathering information in order to make decisions. These decisions are made under time pressure and sometimes with incomplete information (Reason, 1990). For example, Gerson and Bassuk (1980) state, "For the troubled individual decisions made during emergency room visit determine the choice of a subsequent treatment plan and often influence the course of the problem or illness" (p. 1).

Decision-making in the ED is influenced by other variables. For instance, physicians' cognition, brain information and processes, influence their interactions with patients and ultimately their choices (Croskerry et al., 2004). Decision-making problems

are also influenced by demographic (e.g., age, sex, and race), clinical (e.g., diagnosis, dangerous ideation and behavior), clinician (e.g., experience), family (e.g., family, peers, and community), and system (e.g., hospital census, day/time admission, and referrals) variables (Marson, McGovern, & Pomp, 1988). Multitasking is a necessity that influences decision-making. Physicians must constantly assess their tasks at hand (Laxmisan, Hakimzada, Sayan, Green, Zhang, & Patel, 2007). One way to improve decision-making is to use information technology in EDs (Patel & Kaufman, 2006; Safran, Rind, Bush, Jones, Cytryn, & Patel, 1988) like alerts, reminders, and data mining. Yet overall, cognitive tasks for physicians can cause problems with patient safety (Laxmisan, Hakimzada, Sayan, Green, Zhang, & Patel, 2007). A positive for recent years is that patient-provider relationships are now moving toward shared responsibility in decision-making rather than physicians making all the decisions about the care and treatment (Ong, De Haes, Hoos, & Lammes, 1995).

Communication in General

The second main activity is communication. Spencer, Coiera, and Logan (2004) find 89% of physicians' time in the ED involves communication. The top three communication topics or needs are test result explanations, education on return visits to the ED, and everyday language use (Cooke et al., 2006). Verbal communication (e.g., face-to-face, phone, and radio), reading, and writing (e.g., charts, whiteboard, and computers) are all important aspects of the ED system (Fairbanks, Bisantz, & Sunm, 2007). Health information, in general, is difficult to communicate, understand, and is easily biased in interpreting (Briss et al., 2004). Most of this communication is verbal and in-person, but telephone, written notes, whiteboards, and computers are also used to

communicate information (Fairbanks, Bisantz, & Sunm, 2007; Spencer, 2004). The ED patient chart is the main means for the emergency staff to recall and note important patient information (Kovacs & Croskerry, 1999).

Physical and emotional constraints to effective communication and decision-making create problems in the ED. The staff is often physically scattered—frequently separated while working (Reever, Brown, & Vincent, 2009). Physicians also work in shifts (Cheun et al., 2010). An ED provider will encounter situations such as death, sexually transmitted disease, violence, rape, and disease, and these situations necessitate sensitive communication (Reever & Lyon, 1989).

Lastly, patients in the ED range in age and complaints (Graber, Randles, Ely, & Monnahan, 2008). Many patients of emergency rooms are homeless, without support, disenfranchised, mentally ill, abused, have limited or no insurance, and without other care options (Kelly, 2005). Not only are patients treated simultaneously, but also their issues vary greatly. With this array come limitations. Time is constricted due to the immense numbers of patients, which often result in limited transmission of information to patients (Redfern, Brown, & Vincent, 2009).

Emergency Department Communication

Decision-making and communication in general are necessary for emergency departments to function. Though an aspect of patient-provider communication, emergency department communication is specific to its context. In this way, there are specific aspects of communication in the emergency department—information exchange, interruptions, and handoffs. Because of said communication, multiple communication errors often occur.

As stated above, due to the fast-paced nature of the emergency department and short patient-provider interactions, researchers often overlook the study of good communication within the emergency department context (Reever & Lyon, 2002). However, emergency department communication is sensitive and crucial because of these very reasons. Effective communication must be a priority. One way to achieve this is through safe, efficient, quality patient care by health care providers. Yet again, little research examines such communication patterns within this context (Fairbanks, Bisantz, & Sunm, 2007). To understand the communication practices of the ED, information exchange, interruptions, handoffs, and communication errors are examined.

Information exchange. Information is exchanged between physicians and patients by communication, and it is thus the primary tool for such interactions (Ong, De Haes, Hoos, & Lammes, 1995). Within the ED, 95% of observed communication events can be categorized as information exchange (Coiera et al., 2002). This includes asking and being asked questions and giving and receiving information. Because of the diversity of reasons why individuals come to the ED, physicians provide information about death, sexually transmitted diseases, violence, and rape; thus, emergency information is sensitive and limited (Reever & Lyon, 2002), which can make the information exchange difficult. What is even more difficult for ED physicians although is they treat patients based on their first encounter (Graber, Randles, Ely, & Monnahan, 2008), unless that patient has visited that particular ED before. As such, ED physicians must try to learn enough information about the patients in order to determine their diagnosis and treat them. These issues create stress for physicians. So in order to try and relieve distress

caused by the ED environment, Quest and Bone (2009) state ED physicians should be explicit in their communication.

Further complicating information exchange is that fact that conversations between patients and physicians are different from natural, everyday conversations (Fisher, 1984; Shuy, 1983). So in order to provide information, ED physicians collect information through clear and concise questions.

A patient-provider interview attempts to do the following:

- 1) To define the reasons for the patient's attendance, including: the nature and history of the problem; their etiology [origin]; the patient's ideas, concerns, and expectations; and the effects of the problems.
- 2) To consider other, continuing problems and risk factors.
- 3) To choose with the patient an appropriate action for each problem.
- 4) To achieve a shared understanding of the problems with the patients.
- 5) To involve the patient in the management and encourage the patient to accept appropriate responsibility.
- 6) To use time and resources appropriately.
- 7) To establish or maintain a relationship with the patient which helps to achieve the other tasks (Schofield & Arntson, 1989, p. 140).

These interview goals guide the interaction between the physician and the patient. Yet even with these guidelines, Roter and Hall (1988) argue the physician's interviewing guidelines often fail in obtaining the necessary patient history and concerns. They state that though overall physician interviewing skills are mostly consistent, "a significant deterrent to the flow of information from the patient to the physician is an inadequate

flow of information from the physician to the patient" (p. 325). This lack of information leads to patient dissatisfaction and noncompliance (Waitzkin, 1985), two goals of patient-provider communication.

As interviews are an interaction between physicians and patients, patients also need information. Patient categories involve information giving (e.g., answering questions, following directions, and offering experience), information seeking (e.g., asking the physician for opinion, instruction, suggestions, etc.), social conversation (e.g., introductions, family/social talk), positive talk (e.g., laughing, friendliness, approval) and negative talk (antagonism, tension, and disapproval) (Roter & Hall, 1992). With information seeking, patients often use questions to obtain information. Graber, Randles, Ely, and Monnahan (2008), for instance, observe patient questions and how physicians respond in the emergency context. Through observations, the authors find emergency department physicians answer the most patient questions in regards to care. In fact, ED physicians answer more questions concerning care than do primary physicians; however, if there is no time, patients' questions are not answered. In an attempt to avoid this, physicians sometimes use Internet databases like Google, UpToDate, Harrison's Online, and PubMed to assist them in answering questions quickly. In addition, electronic resources and references for drug prescriptions are critical resources in answering patient questions, and electronic resources are preferred (Graber et al., 2008). Sometimes, though, patients still do not communicate essential information to health care providers during interviews because they fear judgment from their provider (Hamm, 2008) or fear looking ignorant (Barsky, 1981).

In the end, collecting patient information is important to the ED setting. If information is obtained systematically, the data are useful and of great value (Johnsen et al., 2007). There is no doubt interviewing skills are important to consultations, but communication skills involve more than teaching interview skills; it involves teaching medical students how to develop as a person in addition to a physician (Weston & Lipkin, 1989).

In sum, exchanging information is vital to interactions between ED providers and patients because of time constraints and the number of patients. By following specific goals for interviews, providers can focus their inquiry. Thus, physicians and patients can communicate in order to seek information, provide information, discuss social life, and express positive and negative talk.

Interruptions. According to Coiera et al. (2002), an interruption is "a communication event in which the subject [does] not initiate the conversation, and which [uses] a synchronous communication channel" (p. 416). Much of the research done has focused on interruptions in the ED during communication events (Hollingsworth et al., 1998; Jeanmonod, Boyd, Loewenthal, & Triner, 2010; Laxmisan et al., 2007). Interruptions in the ED are dynamic, prevalent, and diverse. The causes of interruptions vary in number based on activities of physicians.

On average, every hour, emergency department staff deals with 42 communication events (Fairbanks, Bisantz, & Sunm, 2007). Interruptions are numerous and disrupt the organization of emergency departments (Alvarez & Coiera, 2005; Brixey, Robinson, & Tang, 2005; Laxmisan et al., 2007; Coiera et al., 2002). Senior staff such as clinicians and nurses communicates the most and are interrupted the most

(Woloshynowych, 2007). Laxmisan et al. (2007) report that attending physicians are interrupted every nine minutes, and residents are interrupted every 14 minutes. Fifty-three percent of those interruptions occur when physicians are reviewing patient data, and 50% occur when physicians are reviewing ED charts (Jeanmonod, Boyd, Loewenthal, & Triner, 2010). It is not just physicians who are interrupted. When patients are presenting their illness or problem, physicians interrupt them on an average of every 18 seconds (Stewart, 1995). These interruptions are problematic in nature because they increase memory load, the amount of information one must remember, causing medical error increases (Woloshynowych, 2007).

Fairbanks, Bisantz, and Sunm (2007) examine communication roles in the ED (e.g., who communicates to whom, through what mode, and where). Physicians are interrupted more than nurses; attending physicians are interrupted more than residents; and charge nurses are interrupted more than bedside nurses. Also, most of the communication events take place at nurse-physician stations, and the most amount of time expended by attending physicians was with their medical students. Finally, nurses spend less time communicating with patients than physicians (Fairbanks et al., 2007).

In sum, interruptions are detrimental as they disrupt the memory process of the physician's current task (Altman & Trafton, 2007), which cause efficiency loss, slow progress, and reduced patient satisfaction (Jeanmonod, Boyd, Loewenthal, & Triner, 2010).

Handoffs. Another important aspect of ED communication is the handoff. In fact, one of the most important components of emergency medicine is handoffs due to shift changes (Hamm, 2008). An emergency medicine handoff is the communication between

nurses and physicians of shift changes and admitting teams. Handoffs occur many times a day in moderately busy EDs (Kovacs & Croskerry, 1999). Cheung et al. (2010) advocate that care must be seamless—"supporting the ability of interdependent people and technologies to perform a unified whole, especially at points of transitions between and among caregivers, across sites of care, and through time" (p. 171) in order for care to be safe.

There has not been enough study on effective communication handoffs in emergency department (Aroa et al., 2005; Jenkin, Abelson-Mitchell, & Cooper, 2007). Due to handoffs, ED physicians are unfamiliar with patients, and because of lack of communication, physicians often lose information between shift changes. This increases vulnerability with patient outcomes and possible litigation problems (Kovacs & Croskerry, 1999).

In addition to error in handoffs, crowding and lengthy evaluations in emergency departments are typical and problematic (Cheun et al., 2010). The Institute of Medicine (2000) reports that EDs are highly susceptible to error with serious consequences, and 70% of sentinel cases are due to communication errors (Penska et al., 2009; WHO, 2007). Moreover, 84% of delays in care are due to miscommunication (JCAHO, 2009). The Harvard Medical Practice reports that the majority of these errors are preventable (Leape et al., 1991). But as Woods, Johannesen, Cook, and Sarter (1994) point out, error is a result of the system—a system that is extremely dependent on perfect human functioning—so perhaps it is more than the physician. Clearly, communicating within the ED is complex and full of problems, and it is critical to assess this area (Coiera et al., 2002; Stiell, 2003).

In sum, communication problems include failure in channels of information exchange, misinterpretation, and inefficiency (Sutcliffe, 2004). Information is commonly lost when previous data is unavailable to the physician at the time he or she needs it (Stiell, 2003). Whether exchanging information through interviews or handoffs, seeking information, providing information, discussing social life, or expressing talk, information exchange is a component of communication between providers and patients. Interviews and handoffs are necessary foci of communication within the ED context, but error often results in both instances. For it is in the medical errors that defining effective communication becomes salient.

Exploring Effective Communication

With this understanding of the communication in the ED, in this next section, effective communication is explored. Although there are no specific definitions of effective communication, there are many related terms. Some of these terms include "good communication" and "communication competence." Further, there are theories that incorporate communication competence and effective communication as components (e.g., Gudykunst's 2005, theory of effective interpersonal and intergroup communication, Gudykunst's 2005, anxiety/uncertainty management theory of effective communication, and Oetzel's 2005, effective intercultural workgroup communication theory). This discussion provides a historical framework for effective communication (although not directly related to health communication in general or emergency department communication in specific).

Spitzberg and Cupach (1997) discuss communication quality. "Good" communication is evaluated "using standards such as: Is it clear? Is it supportive? Is it

eloquent?" (p. 23). "Good communication" may be more commonly conceptualized as "communication competence." As a theoretical term, research surrounding this term focuses on two different aspects. One aspect is how to define communicative competence. The other aspect is its lack of theoretical foundation. According to Hymes (1971), competence is the skill in which the speaker and the listener use their shared knowledge about who, what, where, when, how, and to whom. In general, communication competence is examined in a multitude of fields (e.g., communication, child development, psychology, education, sociolinguistics, marketing, speech disorders, human-computer interaction, management, social work, and medicine) (Greene & Burleson, 2003). Most scholars, do, however, agree that communication competence involves the "ability to interact effectively and appropriately with others" (Chen & Starosta, 1996, p. 358).

Different standards of communication competence may be applied depending on the context of communication, yet there are two main standards of "good" communication—effectiveness and appropriateness (Spitzberg & Cupach, 1984, 1989). Effectiveness is important for the present study. Effectiveness is demonstrated if the goals of both communicators are accomplished. In order to assess effectiveness, the motivation behind each goal must be known. Appropriateness is demonstrated if communicators, in pursuit of their own goals, also keep in mind their communication partner's expectations (Spitzberg & Cupach, 1989). A relationship exists between these standards because "getting what you want is often facilitated by getting along with others. Goals can be achieved efficiently because they are pursued within the limits of behavior defined by the rules" (p. 26). Finally, though effectiveness and appropriateness are the

most encompassing components of communication competence, there are other criteria that influence communication. These include dialogical criteria, clarity, understanding, efficiency, and satisfaction (Spitzberg, 2003).

Communication competence is a component to many communication theories (e.g., expectancy, attribution, goals-plans-actions, hierarchical, and relationship dialectic theories) (Wilson & Sabee, 2003). First, in expectancy theories, "competent communicators are responsive to expectations" (p. 14); this means individuals can identify and follow verbal and nonverbal behaviors for certain situations. With attribution theories, "competent individuals are optimistic yet realistic about factors that impact communicative success" (p. 17). In other words, communicators create goals and expectations that are realistic in order to heighten their success. Goals-plans-actions theories view communication competence as "possess[ing] an anticipatory mind-set" (p. 23). Here, individuals understand the consequences of their goals and actions and can thus adjust them. For hierarchical theories, "competent communicators implement action programs skillfully and gracefully" (p. 28). Through their procedural knowledge, communicators can recognize appropriate words, integrate successful programs, and be sensitive to the task at hand. Lastly, interactions are competent in relational dialectic theories when communicators "are sensitive to the demands and possibilities of contradictions" (p. 32). In this way, individuals are creative and flexible in acknowledging differences between relational partners.

As for effective communication as its own term, there are three theories that incorporate it. First, Gudykunst (1993) presents a theory of effective interpersonal and intergroup communication. He defines effective communication as minimizing

misunderstandings. This includes correctly predicting and explaining behaviors of self and others within the communication context. In fact, "effective communication does *not* imply clarity, intimacy, positiveness, or control...Effective communication can occur through univocal and/or ambiguous messages...It also can be intimate or nonintimate, positive or negative, controlling or noncontrolling" (p. 34). So in order to improve communication effectiveness, one must first understand how one communicates (Gudykunst, 1993).

The second theory is the anxiety/uncertainty management (AUM) theory of effective communication. In this theory, Gudykunst (2005) states "communication is effective to the extent that the person interpreting the message attaches a meaning to the message that is relatively similar to what was intended by the person transmitting it" (p. 289). This definition builds upon his previous definition that effective communication is demonstrated when understanding is maximized.

The last theory is the effective intercultural workgroup communication theory.

Oetzel (2005) defines effective communication as "equal participation, consensus decision making, cooperative conflict, and respectful communication" (p. 364). Here, effective communication is related to group outcomes: relational or task oriented.

So as seen above, effectiveness includes accomplishing goals and minimizing misunderstandings. These are important for emergency department physician communication. Analyzing effective communication is essential to medical care (Maguire, 2002; Quest & Bone, 2009; Scherz, Edwards, & Kallail, 1995; Simpson et al., 1991), and it is a key factor in providing safe and efficient care for patients (Hamm,

2008) and results in better health outcomes (Stewart, Meredith, Brown, & Galajade, 2000). Redfern, Brown, and Vincent (2009) exclaim,

Effective communication between staff is important in all areas of health care, but is particularly critical in ED because of time constraints, rapid turnover and the complexity of the task and the environment in which care is given (p. 653).

Effective communicators then understand the needs of the individual they are conversing with, conveying information, imparting knowledge, or problem solving, while also considering emotional needs (Slovis, 2008).

According to Kurtz (1989), there are five principles of effective communication.

- 1) Communication is a series of learned skills.
- 2) Effective communication is an interaction rather than a direct transmission.
- 3) Effective communication reduces uncertainty.
- 4) Effective communication is dynamic.
- 5) Effective communication requires planning and goal setting (p. 156).

These principles should set the foundation for medical interactions in relation to patient health outcomes and in avoidance of miscommunication. Yet, "effective communication and teamwork have been assumed, and formal training and assessment in these areas has been largely absent" (Leonard, Graham, & Bonacum, 2004, p. 185). However, in a review of MEDLINE articles published between 1983 and 1993, most of the studies express a correlation between effective communication patient/physician communication

and better patient health outcomes and reference the cause of communication problems to the flow of information (Stewart, 1995).

As scholars, it is necessary to understand multiple perspectives to these issues. The same is true for effective communication within patient-provider interactions.

Patient-provider interactions are approached from many different perspectives, yet there are no studies examining simultaneous, effective communicative behaviors within patient-provider interactions (Scherz, Edwards, & Kallail, 1995). To fill this, Scherz, Edwards, and Kallail (1995) assess simultaneous communication behaviors and find that in a natural conversation, a listener waits for the speaker to stop talking before responding; this is communicated by a head nod, verbal respond or a pause.

This is not true of patient-provider interactions. These authors find that patients—the listeners—would respond when the physicians—the speakers—provided a turn-taking cue. Further, patients allow the physicians to control the conversation. In other words, patients leave the responsibility of fixing a conversation to the physicians (Fisher, 1984; Shuy, 1983; West, 1984). To negotiate effectiveness, the listener (e.g., the patient) may nod; the speaker (e.g., the doctor) may change his or her voice; or the listener (e.g., the patient) may interrupt. So instead of viewing "the act of communicating…not [as] a series of isolated events (i.e., the orderly, sequential sharing of turns between speaker and listener)," physicians need to view it as an integrated whole (Scherz, Edwards, & Kallail, 1995, p. 165).

So, fruitful patient-provider relationships are founded upon open and effective communication (Teutsch, 2003). Nevertheless, often, patients do not understand the presented information and/or cannot remember it (Ong et al., 1995) even though their

physicians may think they have effectively communicated (Maguire & Pitceathly, 2002). Arford (2005) states that the breakdown of effective communication is caused by varying communication skills and styles of providers and can lead to bad outcomes for patients. Roland et al. (1986) explains that communicating effectively is influenced by consultation length, and consultation length affects the conversation topic or content rather than the communication style (Stewart et al., 1999). It is true physicians often fail in communicating, but patients do not always express their concerns or complaints (Silverman, Kurtz, & Draper, 1998). Clearly, this is a two-way relationship.

The use of effective communication heightens patient compliance.

Noncompliance is a significant challenge for providers. The patient-provider relationship, communication skills, and information exchange are factors that influence patient compliance. For instance, with therapeutic regimens, communication is vital to patient compliance (Cameron, 2008).

The communication gap can be partially attributed to level of physician training. In one study, Cramm and Dowd (2007) examined physician-parent communication in the pediatric emergency department during the waiting period. They reported that only one in five families knew why they were waiting. First year residents are more likely to have a patient's parent who does not know why they were waiting than senior residents. Another issue affecting poor communication is family education level. Often, physicians use medical jargon when speaking to patients and explaining medical information (Bourhis et al., 1989). Furthermore, newer residents tend to be overwhelmed by the complexity of the ED, causing them to not communicate effectively (Cramm & Dowd, 2007).

In sum, past research concerning effective communication is displayed as communication competence. Effectiveness is an aspect of communication competence, and some theories do define effective communication (e.g., Gudykunst, 1993, 2005; Oetzel, 2005); however, not in health or ED communication. Similar to how Spitzberg and Cupach (1984) argue theoretical explanations of communication competence are lacking, so is the term effective communication in the health context, especially in relation to the ED. Additionally, "the care of patients in the ED relies on effective communication when dealing with patients who present with undifferentiated conditions and when working under significant time pressure" (Reever, Brown, & Vincent, 2009, p. 656). Effective communication is important to study because it improves patients' health outcomes, and when communication is effective, patients' problems are more accurately assessed (Maguire & Pitceathly, 2002). Yet, studies simply highlight the importance of effective communication in the emergency department context, but they do not define what effective communication is. The current study fills this deficiency in the literature.

Factors that influence Effective Communication

With the background and understanding of effective communication, the factors that influence this construct can now be discussed. As described earlier, effective communication is a goal of patient-provider interactions. In addition to these, though, several specific factors affect communication effectiveness in the emergency room context. Personal attributes, stress, timing, and reliance on instruments are a few that affect effective, satisfactory patient-provider communication.

Personal Attributes

Emergency department physicians' needs, stereotypes, traditions, characteristics, and beliefs affect communication. First, ED physicians are influenced by their own needs. For example, exhaustion, lack of time for meals, overwhelming patients, and time constraints affect a physician's ability to communicate effectively. These factors also increase in affect as their shift continues (Slovis, 2008).

Historically, physicians interact with all patients in similar manners in order to prevent their stereotypes, traditions, and characteristics of the patient influencing the communication that occurs between them (Roter & Hall, 1992); in other words, physicians are expected to treat everyone the same way and to try not to allow their patients' characteristics or attributes (e.g., age, gender, class, and race/ethnicity) to dictate their interactions (Parsons, 1951). However, this is not always the case, and physicians need to be mindful of this (Roter & Hall, 1992).

Past studies have explored the role of these factors in medical interactions (e.g., Gerbert, 1984; Greene, Adelman, Charon, & Hoffman, 1986; Roter, Hall, & Katz, 1988). But even with this idea of universalism, physicians' behavior is still influenced by all of the above. Indeed, this may be unintentional, but ignorance of cultural and social norms, sociodemographic characteristics, and negative stereotypes of the patients can affect physicians (Roter & Hall, 1992). Common problems are due to a lack of cultural knowledge and language problems (Robinson, 2002). Practitioners often overlook pragmatic issues, and instead they focus on grammar and vocabulary difficulties of their patients (Pauwels, 1990; Rehbein, 1994), which ultimately lead to miscommunication.

In addition to patient characteristics, physician characteristics influence the communication between physicians and patients. Physicians' sociodemographic backgrounds, personalities, cultures, and medical experiences affect how they treat their patients and performing their medical duties (Roter & Hall, 1992). For example, characteristics of the physician like sex and social class, influence communication in the length of the patient's visit, the physician's amount of empathy, and the physician's ability to relate to patients. Attitudes and personality, grounded in cultural beliefs and values, also shape physician communication; these personal characteristics can determine how many patients physicians see a day, what attitudes physicians hold towards the caring system, and their interpersonal skills such as expressing emotion and engaging in nonverbal cues. Lastly, physicians' beliefs about practicing medicine guide their perceptions about their patients' particular problems (1992).

Stress

Stress is another factor that influences effective communication. Kirmeyer (1988) states unpredictable and uncontrollable environments generate stress. The number of patients and environment create stress. First, ED physicians are under great stress because of the constant and rapid flow of patients within the ED (Slovis, 2008). Second, stressful situations arise due to the nature of the environment. Physicians, especially ED physicians, understand that the ED is a dynamic, complex, and even a frustrating environment. They are responsible for individuals' lives, and their decisions can have profound consequences.

Because of similar levels of workplace stress, airline pilots and physicians are often researched together as they both work under stressful conditions. In order to

manage such tenuous circumstances, Crew Resource Management (CRM) is taught. It is a training procedure and system that focuses on communication and decision making to promote efficiency and safety in tenuous situations. This technique emphasizes the importance of teamwork and improving communication because miscommunication results from communication lapses and ineffective teamwork. In fact, 70% of accidents with commercial flights result from communication failures between and among crewmembers (Leonard, Graham, & Bonacum, 2004). Within medicine, for instance, CRM is applied to the surgical context—teaching and advocating equal work participation, reviews of performance, and conflict resolution (Awad et al., 2005; Oriol, 2006; Powell & Hill, 2006; Sundar, Sundar, Pawlowski, Blum, Feinstein, & Pratt, 2007).

In the end, however, physicians must be willing to deal with discomfort and uncertainty when interacting with patients (Kreps & Kunimoto, 1994). By being open, receptive, culturally sensitive, and understanding, effective communication can be an outcome.

Timing

Effective communication is also influenced by time. The literature on this factor is controversial. Some scholars have found the communication style of the physician and patient are not affected by consultation length (e.g., Arborelius & Bremberg, 1992; Clarke et al., 1998; Greenfield et al., 1988; Henbest & Fehrsen, 1992), while others have found the available time affected the conversation discussion (e.g., Ferris, 1998; Hornberger, Thorn, & MaCurdy, 1998; Howie, Porter, Heaney, & Hopton, 1991; Hull, 1984; Jacobson, 1994; Ridsdale, Morgan, & Morris, 1992; Marvel, 1993; Stewart et al., 1991; Verby, Holden, & Davis, 1979; Westcott, 1977). For instance, Greenfield et al.

(1988) reported no correlation between physicians and patients conversation volume and visitation length. On the other hand, Roland et al. (1986) state that communicating effectively may be correlated with the consultation length or time availability.

Hornberger, Thorn, & MaCurdy (1998) claim the real issue is about trading off between time and the physician's goals. In other words, the length of the visit is not the issue but rather the physician meeting the patient's needs, and this typically takes more time (Howie et al., 1991).

The mentality of GROP (getting rid of patients) also reduces and affects physician's time with patients. Bosk (1979) explains that medical education's goal, in addition to teaching medicine, is turning a person into a physician. Medical education tends to focus more on basic science, leaving out communication and relating to patients. Interestingly, with communication, medical students talk to their patients more in the beginning of their education rather than later in their practice. Internship, residency, and hospital experience training cause physicians to become distanced from their patients (Roter & Hall, 1992). Mizrahi (1986), in a three-year study observing residents and interns at a university medical center, found that individuals were specifically taught how to GROP. The main goal of this is to discharge one's patient quickly and thus dilute one's responsibility of the patient. This educational experience is structured against developing relationships between physicians and patients. In a follow-up study, Mizrahi found private practice physicians do not emphasize technical and academic expertise and do emphasize the idea of the patient as a whole, unlike academic medicine physicians (Mizrahi, 1986).

The above influencing factors can be labeled as barriers. According to Quill (1989), a barrier is "anything that blocks effective communication" (p. 51). There are several barriers to patient-provider communication. Environmental barriers are surrounding elements such as access to the patient room, privacy, noise, and body position. Pain or discomfort, fatigue, and biological brain problems are physical barriers. Psychological barriers include emotions, cognitive/interpersonal stages, personality, and mental problems. Other people involved in the interaction and conflict are sociocultural barriers; socioeconomic status, language, individual dress or appearance, stigmatizing problems, demographics, and cultural differences between patients and physicians are also labeled as sociocultural barriers (Quill, 1989). In addition, language/cultural differences and medical term usage are barriers to effective communication (Lerner, Jehle, Janicke, Moscati, 2000; SAEM, 1996).

Within the consultation phase, there are many problems that inhibit effective communication. One problem is that physicians enter a consultation with a physician-centered approach and interact with their patient in a standard, uniform manner (Byrne & Long, 1976). According to Platt and McMath (1979), physicians' demand for high control also creates inaccurate consultations. Another problem is physicians do not seek information about patients' beliefs about their illness (Tuckett et al., 1985). This discordance between physicians and patients causes low patient satisfaction, low adherence and bad management, and negative outcomes (Kleinman, Eisenberg, & Good, 1978). Finally, only asking questions that are closed, long, and repetitive is an ineffective way to collect patient information (Maguire & Rutter, 1976).

Though there are many barriers and problems, it is imperative to communicate effectively. When patient-provider interactions are effective, benefits result. One benefit is physicians are better able to identify the problems of their patients (Maguire, Fairbairn, & Fletcher, 1986; Maguire & Pitceathly, 2002). Another benefit is patients are more satisfied with their interaction. Third, patients adhere to physicians' advice and treatment options (Silverman, Kurtz, & Draper, 1998). Lastly, stress and anxiety/depression are decreased, while the physicians' wellbeing is heightened (Parle, Jones, & Maguire, 1995; Ramirez, Graham, Richards, Cull, & Gregory, 1995; Roter et al., 1995).

An ED Model of Effective, Patient-Provider Communication

With an understanding of an emergency department setting, its communication and effective communication, and its influencing factors, a model of effective, patient-provider communication can be posited. This understanding includes several of the components discussed above but restructures them into a model. A model is a comprehensive depiction because it incorporates multiple important factors to exemplify the influence overall on health outcomes.

This model guides the current study in its exploration of how ED physicians define effective communication. By visually synthesizing this review of literature, a better understanding of this medical encounter and its factors are seen. The following three main components make up this model (See Figure 1). Again, the setting for this model of communication is in the ED context.

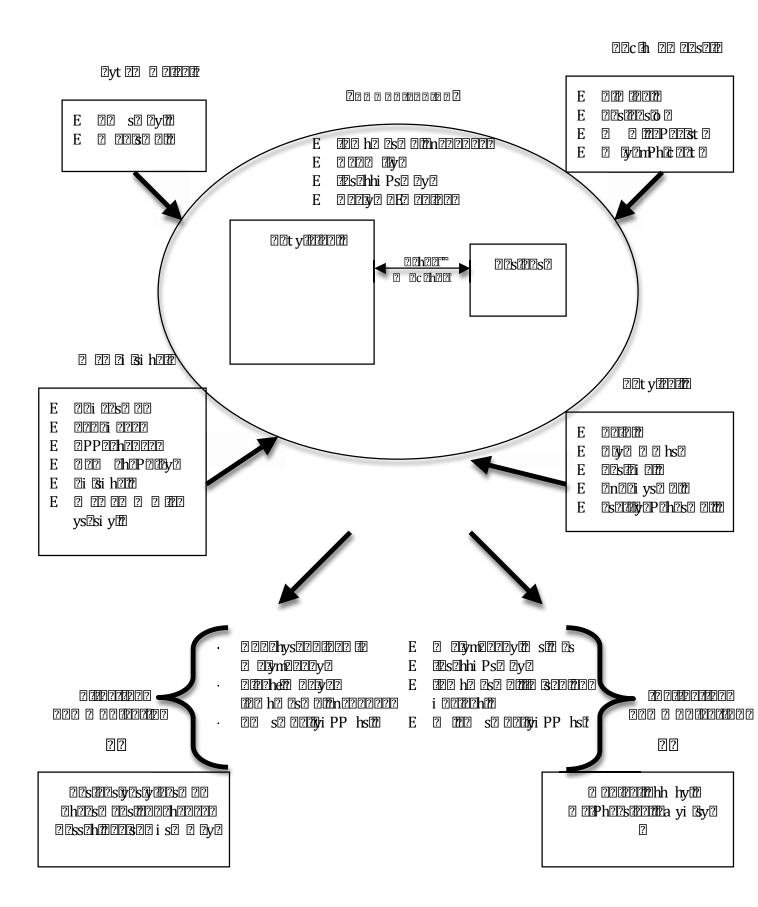
The first component is the interpersonal context. This includes the emergency department patient and physician. A patient is the individual seen and/or treated by a provider, that is, a person needing medical information, diagnosis, or treatment. A health

care provider is the one who works in a health care setting (e.g., hospitals, community, in home care, etc.) treating the patient (Schott & Henley, 1996). For this model, the health care provider is the emergency department physician. The second component is communication. This is the communication occurring between the ED physicians and patients. Communication can be verbal and nonverbal communication. Verbal communication can be face-to-face and on the phone. For the physician, verbal communication includes reading and writing on charts, whiteboards, and computers. For the patient, verbal communication includes providing information and seeking information. Nonverbal communication is also an aspect of communication between patients and physicians. For both the physician and patient, this includes facial expressions, gestures, and body movements/posture. The main communication events in the ED are information exchange, handoffs, interruptions, and decision-making. Information exchange is the content exchanged between the physician and the patient. This is usually done through interviews. A handoff is the process of giving and receiving the patients between staff due to shift changes. This communication occurs between physicians and physicians and nurses and nurses. Interruptions are communication events that disrupt the current conversation or task of a provider, with the physician as the most commonly interrupted. Lastly, decision-making is reviewing and picking choices of action for patient's care. The physician also enacts this.

The third component is attributing factors that influence the interpersonal context as a whole. The first is the psychological factor. Psychological factors are emotions and cognition of patients and physicians. The second factor is environmental. These are elements due to the setting of the interpersonal interaction in the ED like timing, patient

Figure 1. The Emergency Department Context

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numbers and room capacity, privacy, and noise. The third is the physical factor. Physical factors are pain, discomfort, fatigue, exhaustion, emotional overload, and physical staff separation. The last factor is sociocultural; this includes education, language, appearance, demographics, culture, and socioeconomic status.

All of these components influence and thus determine if the communication is effective or ineffective. When there is a mutual understanding of physician and patient's needs and goals, an exchange of clear, specific information and knowledge, and support of emotional expression with one's interactional partner, the medical encounter has been effective. As a result, patient satisfaction and treatment adherence are high, and better health outcomes are produced. On the other hand, when the goals and needs of the physician and patient are not equal and not met, the amount of information communicated is limited and unclear with frequent interruptions, and emotional expression is overlooked, the medical encounter is ineffective. In this scenario, the outcomes of patient-provider communication (e.g., patient satisfaction, treatment adherence, and health outcomes) do not happen, medical errors occur, and malpractice and lawsuits often result.

Summary: Physicians' Perspectives of Effective Communication

This ED communication model serves as a framework to examine physicians' perceptions of communication effectiveness. It will help structure the present study. It is important to study physicians' perspective about what communication effectiveness is and how it is enacted for three main reasons. First, and perhaps the most obvious reason, is it is difficult to find physicians' perspective in the literature. Second, it is important because whatever definition of effective communication ED physicians believe is

probably what they are practicing. Furthermore, if the goal is to improve communication within this context, it is necessary to understand what their beliefs are about effective communication as it is deeply ingrained beliefs that direct behavior. Lastly, on the other end, if physicians cannot articulate what effective communication is in this context, then how can they enact it appropriately?

It is, therefore, imperative to understand physicians' definitions, dimensions, and barriers/facilitators of effective communication before attempting to change behavior. In other words, as researchers, it is important to understand why before advocating for alternatives or improvements.

To summarize, for the ED physician, effective communication is a crucial skill set (Quest & Bone, 2009), yet perspectives of ED physicians in the literature are lacking, and there is even a greater lack of in-depth understanding for what is effective communication and how it is enacted. As stated previously, having communication skills are central to clinical practice (McManus, Vincent, Thom, & Kidd, 1993). Patient satisfaction, compliance, and medical decisions are enhanced as a result of effective communication (Wagner, Lentz, & Heslop, 2002). Malpractice suits and medical errors result from ineffective communication (Kohn, Corrigan, & Donaldson, 1999; Levinson, Roter, Mulloly, Dull, & Frankel, 1997). Ultimately, having communication skills improves clinical performance. Accuracy, efficiency, and supportiveness are necessary to produce effective communication because effective communication improves patients' health outcomes and connects patients to medicine (Silverman, Kurtz, & Draper, 1998). And, communication is effective when these three goals of medical communication are achieved (Riccardi & Kurtz, 1983). Yet again, most studies involving the ED only state

the importance of effective communication in the ED and the implications it has on health outcomes, patient satisfaction, and patient compliance (Cruz & Pincus, 1995; Korsch, Gozzi, & Francis, 1968; Francis, Korsch, & Morris, 1968). This study seeks to provide such opportunities for physicians to produce a definition of effective communication. Yes, "care of patients in the ED relies on effective communication" (Redfern, Brown, Vincent, 2009, p. 656), but how is it defined? How is it enacted?

CHAPTER 3

Preliminary Observations and Context

Before presenting the research questions of the current study, it is important to describe the study's context. This provides overall knowledge and understanding. The context of this study is The University of New Mexico Hospital's (UNMH) emergency department. For this study, the term "context" refers to UNMH's emergency department. It refers to the location of the ED as a setting and the conditions and circumstances that occur specific to this location. Prior to the current study, I spent one year becoming familiar with the ED and its communication interactants, and it has been through this time that my thesis topic arose. As such, in the following chapter, I (a) describe the setting and participants, (b) discuss communication observations of ED physicians and nurses, and (c) present the current study's research questions.

Setting and Participants

Within the last year, I have observed emergency department communication at The University of New Mexico Hospital's emergency department. I acted as an observer-as-participant (Hesse-Biber & Leavy, 2006). An *observer-as-participant* has some contact, engaging in some activities but is still primarily an observer. Here, researchers reveal their identity, while their interaction is limited. In this role, observation is still the main goal, but the researcher also has a more separated depiction.

For the 2010 spring semester, I observed ED physicians, shadowing two different ED attending physicians. For the 2011 fall semester, I observed ED nurses, shadowing three different nurses during this time. Each observation was between three to four hours every session. The purpose of these observation was to help me understand the culture of

the emergency department—the norms of interaction and interpretation—through attending to who said what, to whom, in what way, how, how often, and why. My observations were focused on the communication rules enacted between physicians, residents, nurses, technicians, interpreters, and patients and their families in the ED.

To guide and organize my observations, Hymes' (1974) ethnography of speaking framework was used. This analysis of discourse seeks to identify human behaviors through eight main categories: scene/setting; participants; end goal, purpose, or motive; active topic and sequence; key tone, manner or spirit; instrumentality (channel, medium, or code; norms of interaction and norms of interpretation; and genre (categories or types of speech). In other words, I attended to who said what, to whom, where, in what way, and for what purpose. After each observation, I transcribed my notes into a Word document.

The Hospital

The University of New Mexico's Hospital is a main component of UNM Health Sciences Center, which is a leader among institutions of health care. As a hospital, it is ranked in the top 100 hospitals of the United States and the top 10 academic medical centers in the U.S. UNM Hospital is the only Academic Medical Center and the only Level 1 Trauma Center for the state of New Mexico. This means the hospital treats approximately 450,000 hospital outpatients and 90,000 emergency patients per year ("UNM Hospital," n. d.).

This hospital functions as the primary teaching hospital for The University of New Mexico's School of Medicine. In addition to this, UNM Hospital system includes a

Children's Hospital, Cancer Center, Carrie Tingley Hospital, Children's Psychiatric Center, and an adult Psychiatric Center ("Department of Emergency Medicine," n. d.).

The Emergency Department

UNMH's ED serves emergent or urgent care patients. In any given emergency department shift, there are approximately 12 employees working. This is comprised of two teams of six, three physicians and three nurses per team. The hospital ED is separated into sections. First, there is an adult ED and a pediatric ED. Both of these function as separate EDs. For each ED, a waiting room for the both. This lobby area has a front desk and a nurses' station that check individuals in. One enters the ED going through locked doors and passing a security guard. The next room is another lobby designated for transferring patients to the correct sides of the ED facility, also called triage. Once passing through the next locked doors, one arrives in the interior of the ED that is divided into two main sides or units—Manzano and Sandia. Each side has a station for the physicians and the nurses. These stations are on opposite sides of the long room and are separated by a wall. Lastly, there are two other main units—Observation (Obs) and Trauma.

In the observation unit, there are six patient beds. Patients are often kept in this unit for up to 24 hours due to therapeutic and diagnostic interventions. Nurses, technicians, and ED physicians are included in patient care. Two thousand patients are seen each year in observation. In the trauma unit, trauma care is provided through the teamwork of the trauma team and emergency department physicians ("Department of Emergency Medicine," n. d.).

Attending physicians, physicians, resident physicians, physician assistants, nurses, technicians, interpreters, and social workers work together to provide care in the ED. They can be separated, however, into three main categories: UNM employees (e.g., physicians and residents); the hospital staff (e.g., nurses, technicians, interpreters, etc.); and patients and their families. There are also residents from Internal Medicine, Family Medicine, Ob/Gyn, Anesthesiology, Surgery and Neurosurgery. Occasionally, a couple medical students are also present in the ED. Shifts are typically 10 hours. The staff is supervised by the faculty of UNM's medical school. The patient population is diverse for this ED because it is a county and university hospital, a center for referral center, and the ED for the hospital of Indian Health Service ("Department of Emergency Medicine," n. d.).

Finally, according to an annual report, during the year of 2009-2010, 71,444 patients were seen at UNMH's ED. 46% were females, and 54% were males. 11% identified as American Indian. .88 identified as Asian. 4% identified as African-American. 44% identified as Hispanic, and 27% identified as White/Anglo. Lastly, 13% identified as other, while .21% declined to answer. The average age of patients was 40 years old.

Communication Observations of ED Physicians and Nurses

The following observations were collected according to the protocols of Hymes (1974), to bring to light the communicative practices of the emergency department.

During the past year, I observed many different types of communication observations of ED physicians and nurses. First, physicians and nurses use particular language in the emergency department. Second, physicians and nurses interact in particular

communication events. Third, physician and nurse communication in the ED is unique with interruptions, miscommunication, and lack of communication. In this section, I discuss present such observations to provide contextual information for the present study.

Physician and Nurse Language

To begin, physicians use particular language to perform their roles in the emergency department. To begin, physicians use key terms for labeling patients. This is done in two ways. First, the physicians refer to the patients by their room number. I heard references like the following: "Is 43 new?" "Where is 25's chart?" "Who is going to examine 18?" "Is that 18?" "Who has 18?" "Has anybody seen 47's chart?" "Do you have 7?" "10 and 6, correct?" "52 is going home." "53 is going to mental health." "40 has chicken pox." "Are you familiar with 50?" "Tell me about 47." "37 is a dehydrated, overweigh woman" or "Move 34 to the fast track."

In addition to using numbers, some physicians categorize patients by their symptoms. One example was when discussing "Dominique," an attending physician and resident referred to their patient as "Weezer." "Weezer" was a 20 year-old, unemployed mother who came into the ED for respiratory issues. During the examination, the physician asked many questions, "Weezer" would respond, and the physician would write up her responses. Another example occurred when the attending physician told the physician's assistant he was going to go talk to "Cellulitis." Then after returning from his examination, he told the physician's assistant they needed to reevaluate "Cellulitis" because he did not think that was the correct diagnosis. Finally, "Cocaine guy" was also used to reference a patient who had come into the ED. These descriptive labels could be used because ED physicians, in compliance with Health Insurance Portability and

Accountability Act (HIPAA), are not supposed to use patient's names in public places.

Overall, though, these encounters reveal a normative rule that guides the hospital staff's communication.

Nurse communication is also distinct. Nurses engage in positive talk, calm the patient, and ask about feelings. I would often hear things like the following: "How are you doing?" "Are you doing OK?" "You're OK." "Everything is going to be fine." "You are doing good." "We are going to take good care of you." "Good. Good job."

Additionally, nurse communication is informative but courteous. Nurses tell the patient what they are doing before or during the actions they perform. Language like this includes the following: "Let's sit forward." "Now I am going to give you the pain medication. You will feel a slight prick." "So we are going to help you sit up." "I am going to put this over your head and into your nose." "So I have some morphine for you." "I am going to wipe you now. My hands are a bit cold just to let you know." "I am putting the hospital band on you." "So we are waiting on the results from x-ray to determine the next step." "I am going to draw blood from your IV." "I'll be back shortly." "I'm going to turn off the light." This type of communication is not posed as if asking for the patient's permission but rather as a courtesy message.

Finally, several references to the computer system can be heard in the ED. I heard a variety of language, but some included things like "This computer will drive you crazy" "Where do I send for a test?" "You really got the short end of the stick with this one." "How do I read this?" These phrases came from not only the physicians but also the nurses and interpreters. Physicians also often needed help sending for a test. It is important to mention that even when the physicians were entering information into the

system after talking to one of their patients, they were usually interrupted multiple times by other physicians or people needing advice, assistance, or a signature.

Physician and Nurse Interaction

Second, physicians and nurses interact in particular communication events, the particular context where the communication is occurring. Physicians engage in *handoffs* to change shifts. This norm occurs multiple times a day for both physicians and nurses. It is the process where the previous shift of physicians and nurses has a meeting to inform the new shift of physicians and nurses about the patients still in the ED. Each patient's physician informs the new group about the patient's situation and the interaction thus far and then suggests what still needs to be done. This is a "walking meeting;" the physicians talk about their patients right in front of their rooms, and the doors are usually open a little less than half way. The nurses are not included in this interaction but have their own handoff. Physician and nurse handoffs do not occur at the same time. Unfortunately, such handoffs generate problems.

For example, one attending physician commented on this subject after seeing one patient and hearing responses from his residents on staff about two other patients. He exclaimed, "All sign-offs went screwy. Handoffs shouldn't turn out this way, and it is not good for the patient because it causes the new shift to have to start from scratch." This, however, is exactly what did happen. For all three of those patients, the new shift's staff had to order repetition of tests because they were not given clear and enough information to determine how to treat the patients.

Physicians communicate to each other in meetings, which I have labeled, *sit down* conferences. The purpose of this norm allows the residents and/or physician's assistants

to sit down with their attending physician and discuss their patients, check their diagnoses, and receive advice on how to treat the patient. This is also performed in order to check the patient's safety. Interactions like these involve the resident physician telling the attending physician who their patient is, what their symptoms are, and what they are thinking the prescribed diagnosis should be. Further, while the resident is explaining their patient, the attending physician jots down his own notes on the patient's clipboard in the attending physician's box. After each conversation about the patient, the attending physician signs the bottom of the patient's chart.

This consulting happens at the physicians' station. To exemplify this norm, I provide the following example that occurred in the pediatrics (PEDS) side of the ED. Sitting on chairs in the middle of the doctor's station, the resident described his new patient and his symptoms. "Thomas" is a five month old male, who has had surgery before, and he fell head first from a three foot high bed. There is currently a three centimeter bruise on his temple; however, his vitals are currently good." The attending physician interrupted clarifying what specific physical features influenced his condition. After responding to the question, the resident told the attending that he told Thomas' parents the attending physician would be in to say hello before they could leave. Since the attending physician had more time, the resident then explained his next two patients. "This is a 15 year-old, male, previously healthy, was at a karate tournament and heard a pop. He has had swelling in his hand since it happened, and the site is tender and pink." The attending then suggested having a CT done, and then said "give all of the information" to his parents, including the risks and benefits of taking him home. The conversation between the resident and physician continued as he explained his last

patient. "This is a 10 month-old, male, who spent two months in the incubator when he was born. He has had a fever for one day, been crying, coughing, and has right-ear discharge. He is not taking any medication." The attending physician asked a couple questions and then signed the resident's three charts. This concluded the conversation.

Attending physicians communicate frequently with their resident physicians. I have entitled this meeting as "teaching moments." This norm is enacted by attending physicians and occurs when residents or physician assistants are not sure what to do for their patient. After expressing this uncertainty, the attending physician will respond with the phrase: "What do you think?" It is only then that the residents would go into their specific diagnosis and/or treatment options. The attending physician would respond by either agreeing or disagreeing, ending with the clarifying question "And are you comfortable with that?"

Unique Physician and Nurse Communication

Third, physician and nurse communication in the emergency department is unique. This includes interruptions, miscommunication, and lack of communication. One way ED communication is distinctive is its susceptibility to interruptions. *Interruptions* can be from patients using the room's call button, staff calling the phone, technicians asking questions, nurses, and other department staff. In the past year, I noticed many individuals using different types of mediums to interrupt the ED physicians and nurses. In one instance, while sitting at a desk entering patient information, a nurse was interrupted in three ways. First, the phone rang; the conversation lasted about twelve seconds.

Second, the clerk turned to the nurse and said, "There aren't a lot of patients in the waiting room." Third, the mother of a patient walked to the nurses' station and asked for

information regarding her daughter's boyfriend, who was in the ED. This conversational exchange lasted about four minutes. With each of these interruptions, the nurse stops entering information and turns her attention to the individual. It was only after all of these that she completed her entry. It is important to note that this data entry was completed by memory without any notes. Clearly, nurses still work to perform their duties regardless of frequency of interruptions.

Moreover, a *lack and/or miscommunication* often occurs between physicians and nurses. A patterned norm procedure dictates this as it controls possible interactions between nurses and physicians. Specifically, the nurse sees the patient first. After this examination, the nurse enters the information into the computer on their station side. The nurse then prints out the results and places it on the clipboard, labeling it with the patient's room number. The nurse walks the clipboard to the physicians' box at their station side. The physicians pick up the clipboards without consulting or talking to the nurses. In my observations, the only time the nurses talk to the physicians is when the nurses need to send a test or get an order for a prescription for their patients since the physicians are only allowed to do these things.

In contrast, nurses talk with other hospital staff. Such individuals include other nurses, technicians, EMTs, and interpreters. Nurses talk to each other about their patients, updating each other on their status and venting about the interactions with them. In addition, nurses and technicians communicate a lot, as the technicians perform certain procedures for the nurses (e.g., inserting IVs, giving shots, watching runaway patients, etc.). Emergency medicine technicians (EMTs) and nurses also communicate. A specific example occurred in the trauma recess room of the ED. A patient was brought in on a

stretcher. Two physicians were standing talking to each other. After about 5 minutes of the EMT standing there, the nurse responded, "What's the story?" The nurse performed her care, while listening to the EMT. The nurse asked a couple more questions to clarify, and before leaving the EMT said, "Do you have all the information you need then?" The nurse nodded saying thank you. In general, communication between these individuals is diverse and continuous and occurs much more than communication between nurses and physicians.

Not only is there lack of communication between physicians and nurses, but there is also lack of communication between physicians and nurses themselves and between physicians and patients. For instance, physicians do not seem to know each other's patients. This caused several delays because the physicians and nurses would repeatedly ask, for example, "Who has 18?" I also heard the phrase "I didn't even know I had that patient" several times. Sometimes this lack of knowledge led to long waiting periods for tests and the patient because the physicians did not know who needed to order a test or that the patient had been waiting for a long period of time. One patient waited for almost one hour while staff searched for her chart, discussed whose patient she was, and argued over who should go and discharge her. The physicians simply did not know who is supposed to be taking care of some patients.

Another example of lack/miscommunication between nurses occurred when one nurse tried to order a test for another nurse's patient. While walking away, the patient's nurse, Rebecca, briefly mentioned something about a C spine test. The nurse helping, Marni, went to send for the test in the computer. Upon returning, the Rebecca noticed a T spine test had been ordered. She was confused. So, she double-checked with the

physician. The physician had actually wanted a C and T spine test done to this particular patient. Not only was this a miscommunication between the two nurses and Rebecca and the physician, but Marni had also entered the test under another patient rather than the patient who really needed it.

Finally, lack of communication also occurs between the physicians and the patients. For instance, the previous shift did not notify "53" that he was being transferred to a different unit. So, when the incoming shift took over this patient's case, they had to inform him. He became extremely upset that he did not know where he was going and why.

Conclusions

In conclusion, these observations provide contextual background for the present study. Interruptions, lack of communication, and miscommunication characterizes the ED as a different healthcare environment, susceptible to distractions, time constraints, and limited resources, as previous research discusses. In order to maximize on the available time physicians and nurses do have they engage in structured handoffs, sit down conferences, and teaching moments to maximize on the resources they do have in available to them in the ED. Moreover, these conferences and teaching moments with residents and attending physicians demonstrate a commitment to learning as an academic medical center.

These observations point to the ways physicians and nurses function within the emergency department. First, the use of numbers and conditions to name ED patients reveal that individuals are users of symbols for particular purposes. Physicians use this method in order to help remember and distinguish their patients, which is important as

oftentimes they do not have the opportunity to communicate with their fellow physicians or even the nurses. Second, nurses' language of encouragement and information demonstrates nurses' mentality of care. This act is performed to provide the patient with information on their care yet in a positive and courteous manner. Further, because physicians do not express these types of phrases, it is clear nursing providers only uses this language. Finally, the phrase references to the computer system show an overall dislike for the physician and nurse order entry and its complexity. This structural change was implemented a short while ago, and most of the physicians and nurses are still getting used to the system. Overall, physician communication is direct, informative, and strategic to maximize on the complexity and time limitations of the emergency department, while nurse communication is positive, encouraging, and informative to express care and still be productive.

Research Questions

With this descriptive, contextual information about The University of New Mexico Hospital's Emergency Department, the current study's research questions are presented. There are two research questions based upon the main goals of the study. Each question highlights a specific goal and supports the overall goal to learn how emergency department physicians define effective communication and see how they enact communication behaviors reflective of their perspective.

RQ1: How do emergency department physicians of UNMH's emergency department define effective communication, and what are the main dimensions of their definitions?

RQ2: What are the barriers and facilitators of effective communication from a UNMH emergency department physician perspective?

CHAPTER 4

Methods

The primary purpose of the current study is to explore how emergency department physicians define effective communication within the emergency department context. In order to gain such insight, I conducted semi-structured, exploratory interviews with ED physicians through open-ended questions. Using a created ED model about patient-provider communication as my overall framework, I interviewed emergency department physicians to learn how they define effective communication. I asked physicians to define what effective communication in an emergency department setting means to them and asked them to identify barriers and facilitators to communicating effective in the ED. In this section, I describe this study's methods in detail, explaining the justification of qualitative methods, data collection, participants, the role of the researcher, and data analysis.

Justification of Qualitative Research Methods

Research inquiry should direct the research method. In light of the goals of my study, I use qualitative research methods. Since this study seeks to understand definitions and perceptions of effective communication, my first two research questions are inductive in nature. I pose "what" questions, using Gubrium and Holstein's (1997) term. "What" questions "address the content of meaning as articulated through social interaction and as mediated by culture" (p. 14). These types of questions look for meanings that emerge based on particular settings and individuals. Further, interviews are exploratory, as I sought to discover and generate a definition of effective communication because no such definition exists. Interview questions were open-ended questions,

allowing the story and context of each participant. As such, for this study, qualitative research methods are appropriate.

It is important to use a qualitative research method for this study for two main reasons. First, as a method, qualitative research provides the researcher with the ability to explore, describe, and understand a phenomenon (Lindlof & Taylor, 2002). Taking an interpretive approach, the goal of the researcher is to explore and understand social life. Nieslen (1990) explains that the interpretive perspective believes social meaning is constructed through and in interactions. This is important as the present study seeks to understand how ED physicians' social life context creates their definitions of effective communication. Second, qualitative research identifies patterns and variations of multiple realities (Streubert & Carpenter, 1999). It provides the researcher with the ability to learn about a particular concept or community (Lindlof, 1995). This approach enabled me to extract not only the definitions but also the reasoning behind the enactment of communicative behaviors for ED physicians.

Interviews

Semi-structured interviews are appropriate to learn ED physicians' perceptions of effective communication as they help to create in-depth understanding and cultivate a natural and comfortable face-to-face interaction with participants. According to Kvale (1996), the use of interviews is helpful in understanding the meanings of participants' world, describing participants' experience, and elaborating on participants' specific perspective. This is important to the overall goals of the current study—understanding interaction and meaning (Lindlof & Taylor, 2002). I employed the method of interviewing for two main reasons. First, I could investigate the phenomenon without

removing the context (Rubin & Rubin, 2005). Semi-structured interviews, or open-ended questions, thus allow for the interviewee's perspectives to be express based on their particular context. Second, interview methods also reveal participants' and community's norms and assumptions (Rubin & Rubin, 2005). According to Goffman (1971), because meaning is historically and socially constructed based on culture, individuals' talk brings to light their worldview. This is important for the current study.

Participant Observation

Participant observation is appropriate as it helps contextualize the interview findings since the emergency department is a unique medical context. According to Hymes (1974), participant observation enables more refined understanding than other qualitative methods. It provides the full extent of the communication interaction. It not only focuses on communication constructs but also uses the enacted communication to understand the particular culture's context. For it is through systems of shared beliefs and values and communication that people construct everyday social structures. I employed this additional method for two reasons. First, as an analysis tool, the Hymes (1974) SPEAKING framework enabled me to make specific conclusions about UNMH's emergency department physicians and the culture of the ED. Second, this approach directed me to pay particular attention to certain terms and phrases used by ED physicians during the interviews, so I could then understand the cultural meaning behind ED physicians' perception about effective communication (Carbaugh, 2007; Covarrubias, 2008; Hymes, 1962). In sum, participant observation helped make sociocultural comparisons and identify the beliefs and values behind interactants' perceptions about communication.

Data Collection

Protocol

For the present study, semi-structured interviews were conducted. Interview questions were open-ended questions, enabling a more comprehensive story of each participant. Briefly, I asked physicians to define what effective communication means to them in an emergency department setting, explain dimensions of effective communication, and identify any facilitators and barriers of effective communication in the emergency department (See Appendix A).

Semi-structured interviews use a set of prewritten questions to guide the conversation. "Open-ended interview research explores people's views or reality and allows the researcher to generate theory" (Reinharz, 1992, p. 18). This style of interviewing provides the interviewee with some degree of freedom to talk about what seems important to them based on the subject topic, while ensuring all participants discuss the same topics; it also creates a more natural conversation between the interviewer and the interviewee.

I used semi-structured interviews for two reasons. First, I wanted interviewees to be able to respond to questions in their own words and in ways they felt comfortable. Second, interviewees could have had additional or different information than I originally thought of, as they are members of the community I am interested in. Overall, this approach enabled me to direct the interview yet also give control to the interviewee (Fontana & Frey, 1994). This is essential as the goal of this study is to understand the perspectives of emergency department physicians. My interview questions thus probed

participants to describe their own opinions about effective communication—including a definition and its dimensions.

There were three main sections of the interview. First, I asked participants to tell me about their experiences in the emergency department in general. Second, participants discussed effective communication specifically, and finally, I asked participants to identify barriers and facilitators to communicating in the ED. These questions assisted in constructing the definition and main dimensions of effective communication from the ED physician's perspective and identifying the barriers and facilitators. Question 2, 3, and 4 helped answer my RQ1. RQ2 was answered in questions 6 and 7.

Question 1 served as an icebreaker in order to assist participants to begin thinking about their experiences within the emergency department setting. This question was designed to ease physicians into discussing their personal experiences in the ED setting.

Question 2, 3, and 4 were designed to learn physicians' opinions and perspectives about effective communication. Question 2 asked, from a general communication perspective, what is effective communication. I then followed this question asking, from an ED perspective, what does effective communication in the ED mean. This question eased the physician into question 3. Question 3 asked physicians how they define effective communication with a patient. By breaking up these questions, I was able to identify the key dimensions of effective communication through physicians' repetition of particular terms and descriptions. Questions 4 and 5 served as a continuation of this question to further probe participants to reflect on components of effective communication. Question 4 asked, "how do you know when you have had effective

communication with a patient." Question 5 asked, "what are some behaviors that reflect effective communication."

Question 6 and 7 discussed barriers and facilitators to communication in the emergency department. Question 6 inquired about barriers to communicating. Then as a follow-up to question 6 and to lead into question 7, I asked how the physicians overcome these barriers. This assisted in helping physicians begin to think about possible things—facilitators—that help communication in the ED, which was question 7. I also followed question 7 by asking if the facilitators helped the physicians overcome the barriers they had identified previously. This method allowed me to make connections regarding communication barriers and facilitators.

Question 8 and 9 served as a beginning to conclude the interview. Question 8 asked the ED physicians to define ineffective communication. Similar to the question for effective communication, they were then asked about how they knew when their communication had been ineffective. Finally, the purpose of question 9 was to identify negative cases about effective communication. Participants were asked given their definition of effective communication, if there was ever a time where they or another provider purposefully did not communicate effectively, and if so, why. This allowed me to identify situations in which ED physicians would not use effective communication and why which shed light on the meaning behind their particular communication in this context.

The last question provided participants with the opportunity to add, correct, or change any of their responses to their previous interview answers. I asked if there was anything else they would like to say about communication in the emergency department.

This was important because participants occasionally came up with additional comments or insights I did not think of and/or reiterated critical points and aspects of effective communication, barriers, and facilitators.

Finally, I recorded demographics of each participant including sex, ethnicity, and age. I also asked how many years each has been an ED physician to assess if years in the ED were associated participants' perceptions of effective communication. Demographic factors were not a main point in the current study, but it was still helpful to understand the participants' background information.

I purposefully did not create more interview questions because I wanted my participants to provide their own definitions and identify their own dimensions of effective communication. I assumed there were some underlying aspects of effective communication, but I did not want to lead my participants. In addition, because I conducted semi-structured interviews, additional probes were occasionally added in order to further understanding my participants' responses. This also meant the order of the questions varied sometimes depending on the respondents' discussion, but all the proposed questions were asked during the interview.

Procedures

First, IRB approval was sought and approved. Second, to obtain participants, interviewees were recruited through the help of Dr. David Sklar, the Associate Dean of Medical Education and an emergency department physician at The University of New Mexico's Hospital (UNMH). As such, this approach was a convenience/snowball sample. A convenience sample consists of participants who have specialized knowledge in the researcher's area of interest and who are willing to participate. This type of sampling

often occurs because access to informants can be limited, especially with particular groups (Hesser-Biber & Levy, 2006).

It is also a snowball sample because I asked Dr. Sklar's contacts to then seek other potential respondents. A snowball sample means finding individuals who are willing to help in providing the researcher with referrals (Hesser-Biber & Levy, 2006). I used this sampling technique because ED physicians are a hard-to-reach population.

Dr. Sklar invited me to present my research project at the Emergency

Department's monthly "Noon Conference." This conference is held on Tuesdays at noon.

At January's meeting, I explained my interests in learning about emergency department effective communication. I stated my overall goals, rationale, and requested participation.

I answered participants' questions to the best of my ability without tainting their future interview answers. After my presenting, I passed around a sign up sheet for physicians.

Possible participants were asked to write down their name, phone number, and email for contact purposes. I also asked these ED physicians to pass along my study's information to other ED physicians. As a follow-up to this presentation, I then sent emails to potential interviewees.

Participation was voluntary and anonymous. Interviews were anywhere between 30 minutes to an hour, depending on how in-depth participants choose to speak. These interviews were face-to-face, except for three interviews where physicians requested to talk on the phone instead due to their time schedules. The interviews were conducted in a location comfortable and convenient for the particular participant. These locations included the cafe outside the emergency department at UNMH, faculty physicians'

offices, and coffee shops. Interviews were recorded and then transcribed into a Word document.

Participants

Exploratory, semi-structured interviews with emergency department physicians were conducted. A total of 17 interviews were completed which enabled the extraction of true patterns. Hesse-Biber and Levy (2006) explain the logic behind smaller samples by stating, "The goal is to look at a 'process' or the 'meaning' individuals attribute to their given social situation" (p. 70).

There was one criterion for participants. Participants had to be emergency department physicians. This criterion was necessary because I am interested in how ED physicians define and perceive effective communication.

The sample comprises of 12 males and 5 females. Participants identified as the following ethnicities: 15 Caucasian, 1 Hispanic/Mexican/Latino, and 1 other who identified as German and Jewish. 14 participants were between the ages of 26 and 40 years old, and three were 40-65 years old. Finally, 12 participants have been physicians for 1-5 years; two have been physicians for 6-10 years; two have been physicians for 11-20 years; and one participant has been a physician for 21 plus years. In other words, 11 of the participants are resident physicians and 6 are physicians. Lastly, two of the participants are also educators, and three are attending physicians.

The Role of the Researcher

As the findings for this paper were generated by analysis and interpretation of the researcher, I make the following statements about my role as the researcher. This is

central to note because several scholars believe that the role of the researcher influences the narratives expressed by the participants (Lindlof & Taylor, 2002; Riessman, 1993).

I write as the daughter of a 13-year, breast cancer survivor. These experiences sparked my early interest in health communication. My experiences include attending some of my mother's numerous doctor appointments, observing several interactions with nurses, doctors, experts, specialists, etc., and dealing with personal attitudes toward health and the health care system. In addition, this summer we had a scare. Physicians found two spots in my mother's lung. We were, once again, thrown into this process.

Since I was nine, breast cancer has been a part of my life, and it will continue to be, as I engage in individual preventative measures. Since college, I have tried to be proactive in my fight against breast cancer. And, one way to confront my fears is to help others in their own health interactions. My mother is a survivor; but it seems my personal and family life will always include some aspect of health, and so, I choose to have it be part of my academic life as well.

I write not as an expert on emergency medicine, but, rather, as an aspiring researcher interested in contributing to the literature and helping ED physicians and patients enhance their success, quality care, safety, and satisfaction before, during, and after interactions. Lives are at stake. I want my chance to make a difference.

Additionally, it is important to mention my own perspective about effective communication. I believe effective communication is a two-way relationship. In other words, it is both the responsibility of the emergency department physician and patient to co-create communication. Physicians must be dedicated to understanding patients as a whole, not merely their physical needs; being culturally-sensitive by learning about their

cultural background; and providing clear information about the patient's illness, procedure, treatment, recovery, etc. In this way, the physician must make sure the patient does indeed understand the information he or she provided. This can be done by asking the patient to repeat the instructions or information previously explained and allowing the patient to ask additional questions.

On the other end, the patient is also responsible. Because of medical jargon and the fast-paced nature of the ED, patients must take part in their own health and healing. The patient must first understand the natural complexity of the ED and its implications for physicians and hospital staff. The patient needs to ask questions when he or she does not understand the provided information regarding illness, treatment, next steps, etc. Finally, patients must communicate their own personal information that is important for the physician to know; for example, if he or she uses herbal remedies, gets nervous in medical environments, or has past history with a certain medical issue, these needs to be expressed.

Effective communication is not easy. Effective communication is not simple. It is my goal to bring to light the perspectives of emergency department physicians to begin to help decrease medical errors, increase patient satisfaction and safety, and create better overall health outcomes.

Data Analysis

These open-ended interviews were analyzed to create a working definition of effective communication from ED physicians. Primary categories include effective communication definitions and dimensions. Secondary categories include facilitators and barriers of communication effectiveness in the emergency department. After the

interviews, I reviewed the data, looking for common definitions, dimensions, and facilitators and barriers of effective communication.

Data analysis included two steps. The method of constant comparison (Glaser & Strauss, 1967; Lindlof & Taylor, 2002) and Hymes' SPEAKING framework (Hymes, 1974) were used to code the data from my interviews. Many scholars (e.g., Glaser & Strauss, 1967; Lindlof & Taylor, 2002) argue constant comparison is the best tool to code qualitative data. In addition, Hymes' SPEAKING framework provided contextual understanding for participants' responses and revealed norms of emergency department communication (Hymes, 1974).

First, through constant comparison, *open coding* was initially implemented. According to Lindlof and Taylor (2002), open coding is "the initial and unrestricted coding of data" (p. 219). This first stage of coding sought to begin categorizing data (Strauss, 1987; Lindlof & Taylor, 2002). Data adequacy, more commonly known as theoretical saturation, is when the researcher finds repeating, similar results from their participants—data is adequate in representation (Lindloff & Taylor, 2002). Data collection continued until theoretical saturation—no new categories or themes emerging from the data—was reached. Morse (1995) states it is when the researcher does not learn anything new that saturation has been fulfilled. Interview transcripts were read sentence by sentence in order to keep the context when identifying themes. The themes within the interviews were the unit of analysis. Themes from the ED physician interviews were sorted, compared, and generated with the group themselves. *Integrating* was the next step. By writing memos about the themes' relationships, categories and properties were integrated (Glaser & Strauss, 1967). After this step, analysis was taken to a higher

abstract level by *delimiting* the identified categories and relationships in order to develop the key themes. Lastly, themes were *written*, attending to credibility, with clear description. This process enabled me to extract not only the definitions of effective communication but also the reasoning behind the enactment of communicative behaviors for both ED physicians.

Second, the Hymes (1974) SPEAKING framework served as an additional guide to analyze interview data. The SPEAKING framework is comprised of eight components that help structure and explain what is occurring and the meanings behind it. SPEAKING includes the following eight social units: (a) scene or setting, (b) participants, (c) ends, (d) acts, (e) key, (f) instruments, (g) norms of interaction, (h) norms of interpretation, and (i) genre (See Appendix B). As a methodological tool, it assisted in making sociocultural comparisons. The scene or setting is the environmental (e.g., physical) and/or psychological situation of study. Participants are the individuals of the interaction that also includes the relationships between each other. The purpose or goal of the interaction is the ends. Acts are the content being discussed by participants and the pattern of speaking. The instrument is the communication channel or code. Rules for behavior are norms of interaction, while rules for understanding behavior are norms of interpretation. Finally, genre is the category or speech act/event types. This additional step allowed me to understand the meaning behind participants' discussion of effective communication and barriers and facilitators to communicating in the emergency department.

Using the SPEAKING framework, interview data was analyzed and interpreted from an ethnographic standpoint according to a combination of protocols by Hymes (1962), Carbaugh (2007), and Covarrubias (2008). Themes were extracted from interview

transcriptions and contextualized by observations to then interpret this particular hospital's ED community culture (Emerson et al., 1995). By attending to specific communicative events and communicative acts, the role of communication in the ED's specific context was extracted. By examining line-by-line and isolating units of meaning (Lincoln & Guba, 1985), core-themed communication inferences were identified (Strauss & Corbin, 1990). This inductive, systematic approach to data analysis enabled a close depiction of ED physicians' perceptions about communication. Finally, to ensure maximum identification and confirmation of patterned communication throughout analysis and writing phases, there was continual reference to field observation notes when analyzing interview data.

RQ1 and RQ2 sought to identify themes of effective communication, barriers to communicating, and facilitators to communicating in the emergency department, so it was important to note the definition of a theme, dimension, and criteria for theme identification. According to Owen (1984), a theme is "set of cognitive schema [rather] than a limited range of interpretation that are used to conceptualize and constitute relationships" (p. 274). Themes were identified based on the following three criteria: recurrence, repetition, and forcefulness. Recurrence is when there is a minimum of two mentions of a particular idea that represents the same meaning, regardless of the words used. Extending recurrence, repetition is defined, however, as repeated words, phrases, or sentences. The difference between these two criteria is the repetition of specific wording (i.e., repetition) rather the general idea (i.e., recurrence). The last criterion is forcefulness—"vocal inflection, volume, or dramatic pauses which serve to stress and subordinate some utterances from other locutions in the oral reports; it also refers to underlying of

words and phrases, the increased size of print or use of colored marks circling or otherwise focusing on passages in written reports" (p. 276).

With any study, it is important to assess reliability and validity. Qualitative reliability differs from quantitative reliability (Brixey et al., 2007). Reliability includes internal and external consistency. According to Neuman (2003), internal consistency is whether or not gathered data is reasonable, fits together, and makes sense in the specific context, whereas external consistency is verifying data results with other sources of data. Marshall and Rossman (1999) state that reliability is achieved in qualitative research by recording notes on the design rationale, procedures, protocols, decisions, and data throughout the entire study. As such, throughout my interviews, I kept and recorded all my steps and continually reflected on my interactions.

Validity in qualitative research is the researcher's ability to create confidence and trust in the reader that the findings are indeed correct (Guba & Lincoln, 1989). To assess this, I performed member checks—taking analysis findings back to the community members so they can review it. Kvale (1996) defines validity as craftsmanship, communication, and action. "Validity as craftsmanship" is at the individual level. I assessed the credibility of my research by checking the data for negative cases—outside cases that contradict the majority of the data—and following them. In addition, I looked for alternative arguments to my original research conclusion. "Communicative validity" is presenting one's research to the research community. I presented my findings to my advisor and my committee members, and hopefully will also do so with the larger communication community. Last, "pragmatic validity" is determining how research findings affect the wider world. To fulfill this in the future, I hope that my interview

findings promote better communication, patient satisfaction, and health outcomes within the emergency department context. Thus, under the guidance of Dr. Sklar, five key "helpful hints" were created based on my findings. These hints will be written up, placed on a note card, and distributed to each UNMH ED physician to help them in their communication within the emergency department.

Summary

In sum, I used semi-structured, exploratory interviews as data to learn about effective communication in the emergency department context. This method allowed me to capture the perspectives of each individual ED physician and examine common themes within this group (Lindloff, 1995; Streubert & Carpenter, 1999). Themes were identified for definitions of effective communication and dimensions of effective communication. Interviews were then transcribed and analyzed.

CHAPTER 5

Findings

Through the method of interviews, two research questions were explored. This section presents a definition of effective communication and its dimensions and discusses the barriers and facilitators to communication in the emergency department context. The findings are organized by research question. Specific excerpts from the interviews conducted are included to support the claims made about communication in the emergency department.

Research Question 1

The first research question asks the following: "How do emergency department physicians of UNMH's emergency department define effective communication, and what are the main dimensions of their definitions?" Through interviews with ED physicians, a definition of effective communication is conceptualized and dimensions of effective communication are identified. Together, these key dimensions provide a look into emergency department physicians' perspective on effective communication. The following discussion provides excerpts from discussions with ED physicians to support claims about effective communication in the emergency department.

Dimensions

From the data I abstracted five main dimensions of effective communication in the emergency department. I labeled themes as follows: efficiency, clarity/accuracy, relevance, comprehension, and rapport (See Table 1). To perform effective communication, ED physicians engage in certain strategies. These dimensions and strategies are discussed in this section.

 Table 1 Effective Communication Themes and Descriptions

Theme	Description	Example Quotation
Efficiency	Communication must be efficient.	"You feel like there's more
	There is a time pressure in the ED	people to see, and you
	that guides physicians to work as	need to" (N-16, p. 5).
C1 /A	quickly as possible.	((T) : 1 , T) , (1 : 1 :
Clarity/Accuracy	Communication must be clear and	"This is what I'm thinking.
	accurate. Messages from both the	This is what we are going
	patient and physician should be	to do. This is what you can
D 1	clear and accurate.	expect" (N-4, p. 10).
Relevance	Communication must be relevant.	"Oftentimes, a lot of the
	There should not be any extraneous information.	time in the ED is spent on
	information.	things that are not at all relevant to their chief
		complaint, which then
		clouds the picture for both
		parties and takes up a lot of
		time" (N-6, p. 2).
Comprehension	Communication must be	"It's that I'm
Comprehension	understood. Both the physician and	understanding what the
	the patient must understand what is	patient is trying to tell me,
	being communicated.	even though they might not
		understand it themselves"
		(N-4, p. 3).
		"Often heard that the
		biggest part's listening and
		not talking" (N-7, p. 12).
Rapport	Communication must include	"Where they feel like
	relationship building. The	you're on their side, you're
	physician should be	their advocate when you
	sympathetic/empathetic, show	come in to a room,
	concern, and offer reassurances to	showing your concern,
	the patient.	showing that you enjoy
		your job, and you're there
		to be their helper (N-14, p.
		5).

Efficiency. *In order for communication to be effective in the emergency department, it must be efficient.* This is the first dimension of effective communication in the emergency department. Communication is efficient when the desired goals are met in

a timely manner without expending too many resources (e.g., materials, technology, etc.). Almost every physician remarked on the time pressure within the emergency department explaining, "You feel like there's more people to see, and you need to" (N-16, p. 5). In other words, this efficiency in the emergency department is "intimately involved in how we [physicians] go about care" (N-5, p. 9). Participants assert that they must perform their role as physicians within an appropriate time frame or else their overall communication is ineffective.

Participants also state it is necessary to communicate with their specific patients while keeping in mind the whole of the ED. This includes obtaining the necessary amount of information from the patient without spending too much time. One participant describes the time constraint this way,

I think one quick example is during my shift, I feel like I'm very succinct, but I try and give as much information in a way that's appropriate for [the patient]. But then when I'm off the clock, and I do no longer have to take on new patients or new responsibilities, I'm just cleaning up the patients and duties that I already have, when the other residents take over. I find I'm much more relaxed, and I'll spend much more time with my patient, either updating, catching up where I hoped I would have been able to explain in the first place or just taking my time to thoroughly answer all their questions. Whereas before, it's like, I know my pager is going to go off any second, or it does go off. So I'm interrupted, and there's things outside of my control, but I hand that pager over, I hand that phone off at the end of the shift, I feel like I turn into a much better doctor at that point from a communication perspective (N-14, p. 2-3).

In this excerpt, this ED physician acknowledges the time constraint of the ED, so much so that his perception of the quality of his communication is influenced. He also acknowledges that other aspects of effective communication (e.g., rapport building) sometimes have to be done off the clock.

When probed on what is an "appropriate amount of time," the majority of physicians could not provide a specific answer. Rather, they simply said they know, when they are in the ED, how much time should be allotted to their specific patients in order to keep the ED functioning as a whole. Only one physician mentioned a specific amount of time and indicated that by carving out about 15 minutes to devote to one patient, the physician is able to

almost wrap up the entire encounter in those fifteen. You ask the questions; you get an idea; you communicate what you're thinking and what's going to happen with the patient; you go out...And then you can almost tuck that whole encounter back into another part of your brain and focus on the next patient (N-4, p. 11).

In sum, communication in the ED is effective when it is efficient. As one physician states, "I think, you know, an excessive amount of time would also make it very ineffective in the Emergency Department" (N-3, p. 6). To communicate efficiently, physicians can engage in particular strategies. For one, physicians can kindly redirect their patients when they get off track. This is viewed as a necessary strategy because of the time constraints of the ED. Physicians can also use checklists and templates. Though this is a debatable strategy, resident physicians state this strategy is more helpful than more experienced physicians (e.g., attending physicians, senior physicians, and physicians who are also educators).

Clarity/Accuracy. In order for communication to be effective in the emergency department, clear and accurate information must be communicated. Clarity is defined as the message's state of clearness or the perception of the message's state of clearness.

Accuracy is defined as the state and quality of a message being true, correct, and precise.

Physicians must communicate information about diagnoses, treatments, procedures, medications, discharge, etc. Oftentimes information is provided in the form of instructions and orders. Also, information includes explanations of what is going on with the patient currently and what are next steps for the patient. For the information to be communicated effectively, physicians may have to reiterate their points several times and/or focus on getting the main points across (N-15, p. 4-5).

Information must be clear and specific in order to maximize on the time limitations of the ED. For instance, a physician might say to a patient, "This is what I'm thinking. This is what we are going to do. This is what you can expect" (N-4, p. 10). Another participant supports this idea when she explains,

Anything that's vague in the Emergency Department is not helpful and dangerous really. It seems to me it needs to be really specific and concrete. When it's not clear to whom you're communicating, that's also ineffective...And then as far as ineffective with the patient, I think also being vague either overly or overly technical...Again, not vague things. Very specific concrete things (N-16, p. 5-6). This passage stresses the importance of specific communication messages in the ED. The physician explains that if recipient thinks the message is unclear, it is ineffective.

Vagueness should be also to be avoided. This is because such messages can create misunderstanding and error.

Additionally, information must be accurate in order for the physician to make a correct diagnosis, and the information must be gained within appropriate time. This means the patient must provide accurate information about their prior history, current condition, and background. Misunderstanding and incorrect diagnosis can result if patients do not provide accurate information regarding their past history and current condition. What happens "a lot of times, [is physicians] try to pigeonhole someone and can ask them questions to try and push them in that direction. And then [patients] start saying the stuff that we want them to say, but they're not really communicating with us because they're not saying what they really feel" (N-4, p. 8-9).

In sum, information must be clear and accurate for it to be effective in the emergency department. "It's a balance of like asking questions to get [patients] to give information without pushing them to give information [physicians] want to hear" (N-4, p. 8-9). In order to do this, physicians can use questions in order to gain needed information like: "How do you feel about this plan? Does this plan make sense to you? Do you feel good about it? Do you have any questions about it?" (N-13, p. 3). In addition, physicians should not use medical jargon (terms) and instead use more conventional language when talking to patients (N-10, p. 2). This is important because it enhances the likelihood of patient comprehension.

Relevance. In order for communication to be effective in the emergency department, relevant information must be communicated. Relevance is defined as communication that has direct bearing on the discussion at hand. Physicians say patients often provide "extraneous information" (N-6, p. 2) or "go off on a tangent" (N-12, p. 5).

In other words, communication is ineffective if patients discuss irrelevant information to their patient-provider interview and examination.

One physician exemplifies this mentality when he says effective communication is when "it's understood. There's no extraneous information" (N-6, p. 2). "Extraneous information" is information that is not pertinent to the discussion of the patient's condition, illness, or treatment. This participant reveals a connection to the previous dimension, efficiency, when he continues by saying,

Oftentimes, a lot of the time in the ED is spent on things that are not at all relevant to their chief complaint, which then clouds the picture for both parties and takes up a lot of time. And it influences your opinion of the person and maybe clouds your judgment with regard to their condition. If they complain about a ton of minor things, and they also happen to throw in chest pain, you care about the chest pain but you might discount it because they're also complaining about tooth itching or stupid crap that doesn't make sense...I think it tempers your interpretation of one problem if there's other really minor problems thrown in on top of it. So if you say, "I have chest pain", well let's work up a heart attack, but if you say, "I have chest pain and a cough," it's like, maybe you just have a cold. You discount like real complaint having gone over stuff that maybe didn't matter (N-6, p. 2).

This ED physician states that focusing in on all the patient's symptoms is time consuming. Physicians must sift threw their patient's story to find the symptom that is presently most critical to their health. As such, minor symptoms of patients are frequently

dismissed/categorized as extraneous information, and discounting these minor symptoms saves time.

Equally, another participant says,

So really listening to what a patient is saying, allowing them to go off on a lot of the, you know, they may go off on something that seems like a tangent, but what they're often doing is telling you something that's very important. Often they're really going out on a tangent, and you need to filter that out. But you need to explore more of, well OK, they're saying that they felt like, you know, for example, they were having as sense of dizziness or their heart was sort of fluttering in their chest, and rather than just using one or two modifiers to try and put it into a category that puts it into dizziness is vertigo, dizziness is presyncopy, rather trying to get a sense of really what were you experiencing, so what was going on in your head, was everything going around, did you feel like your vision was blacking out, what was the sensation to you? And then what happened? And getting as real sense of what was going on with the patient (N-12, p. 5).

The idea of letting patients "go off on a tangent" is not popular in general with ED physicians due to the time pressure and busyness of the emergency department. However, a few more experienced physicians encourage that this is important because it assists in comprehending the patient's perspective. This distinction demonstrates two separate mentalities with regards to what is important to determining comprehension, the next dimension. Resident physicians express the time pressure as dictating if they let their patients go off on a tangent, whereas more experienced physicians are used to the time

pressures and thus understand the importance of side stories to their health. This is yet another connection between the dimensions of effective communication.

In sum, communication in the ED is effective when it is relevant. Patient information is irrelevant when it does not focus on the prior medical history, diagnosis, or treatment of the patient. To communicate efficiently, physicians can engage in particular strategies. For one, physicians can kindly stop the patient from discussing irrelevant information and redirect them. Physicians can also continue to ask the questions to make sure they receive the necessary information to make a diagnosis. These strategies assist physicians in maximizing on the ED's time constraints.

Comprehension. In order for communication to be effective in the emergency department, both the physician and the patient must comprehend the message content being communicated between the two of them. Comprehension is the next important dimension of effective communication. Comprehension implies the physician and the patient both comprehend the information being communicated between each other and are both then able to act on that information. Comprehension involves two main components—listening and responding. First, comprehension is defined, and then listening and responding are discussed.

Like efficiency, comprehension was also heavily emphasized and discussed in depth.

It's understanding. It's that I'm understanding what the patient is trying to tell me, even though they might not understand it themselves. That's the reason why we slave away all these years. It's to try to decode what they're saying in a sense.

And so I think that a huge skill and something that I'm still trying to figure out is

how to ask questions in a way that the patient can give me the information that I need. And still there's a ton of different barriers to that. Just because patients have different understandings of what's going on with their own body, and so you might ask a question and then get a different answer than what you're looking for, and so then you have to kind of have to rephrase things without pushing the patient in the direction that they think, because you can't push them in the direction of the diagnosis that might not be correct. So they need to be able to tell you things that they're really feeling and have you interpret them correctly (N-4, p. 3).

So, both parties (e.g., physician and patient) need to understand "what's being said and what is wanted" (N-4, p. 1) or that "the two parties have a sense that they are being understood" (N-2, p. 1).

When probed on what "understanding" or "understandable" means, the majority of physicians could not provide an explanation. One physician commented:

I guess that it, that in terms of language and like verbalizing, so I guess, like if you, if someone mumbles or someone has an accent or something like that, you want to make sure that there's nothing lost there. That there is no concern about what somebody meant or if they said this versus that, that that's clearly understood (N-16, p. 2).

Additionally, for the physician, it is vitally important the patient comprehends what the physician is saying:

Communication is understanding that the patient knows what your expectations are of them, as far as helping them get to the proper diagnosis and prior history,

and then especially with common, big complaints that you may not be able to treat or address in the emergency department, giving the patient and the family expectations that you may not be able to diagnosis every issue in the emergency department, and make sure that this is clear, and then it's important at the end for the patient to know all of their diagnoses after being admitted (to the hospital) or going home, and then also the family is on the same page with the diagnosis, with follow-up instructions, and outcomes (N-15, p. 2).

Clearly, it is important "that they [the patient] know what you're talking about," but also the physician must comprehend what the patient is saying—"that when they [the patient] convey information to me [the physician], I'm hearing it, I know what you mean" (N-2, p. 2).

Comprehension also includes getting a sense of what is going on with the patient. Effective communication means "complete understanding of each other's perspectives" (N-1, p. 2). In other words, both the patient and the physician need to comprehend each other's view. This includes the physician comprehending what is wrong with the patient's body and their experiences outside the ED. The following excerpt discusses what understanding their patient's perspective means.

If you have a better sense of what's wrong with them I think effective communication is them leaving with a sense of what's wrong. And when I say a sense, that means sort of what the name of the problem is, what's wrong with their body, and why it's important or why it's causing their symptoms, and I think that's where the breakdown often occurs from sort of the medically educated doctor's choice of words or explanation to the patient's more naive understanding

of things or if you don't know where certain parts of your body are, certain organs are, or what they do, it may make no sense (N-17, p. 2).

The physician explains that it is necessary to get a sense of what the patient is feeling and going through. Interestingly, this was mostly expressed by more experienced physicians (e.g., not resident physicians). More experienced physicians state this approach to medicine is important and easy because their experience has helped them learn how to be concerned for the total well-being of their patient, while also managing the time pressures of the ED. They also have recognized getting a sense of the patient helps build their rapport, the last dimension.

Getting a "sense" of what is going on with the patient also means:

Get[ting] a good sense of what they are feeling without you putting words in their mouth or sort of giving them the answer that you feel that they should have I think is important (N-16, p. 2).

In both of these passages, physicians emphasize the importance of knowing and comprehending their patients. To do this, physicians may say things like, "So, it seems that this is what's going on, it seems that this is the most important thing you're trying to tell me, it seems this is what you came in for, is that right? Am I dealing with the issue here that is of concern?" (N-12, p. 8). Whether this means trying to understand where the patient is coming from, how he or she views their health, or the feelings associated with their patient experience, effective communication should include seeking to recognize, learn, appreciate, and grasp the patient's perspective.

This is done to ensure comprehension but also checking that the message was communicated clearly and accurately—that what was heard is indeed what was meant. This is another connection between the dimensions of effective communication.

In sum, comprehension is essential to effective communication in the ED. This includes both the physician and the patient comprehending the messages communicated between them, and the physician "getting a sense" of where the patient is coming from.

To do this, emergency department physicians and patients must listen and respond.

Listening. Listening is the first prerequisite to comprehension. One interaction with a participant exemplifies what most ED physicians think about the idea of listening. The following interview dialogue displays this.

I: Ok. So excluding, don't think about the Emergency Department and your experiences there, and I just want you to kind of give me an idea of, if you had to explain what you thought effective communication was, what would that be?

R: Effective communication. I mean, I have a thought and how well I convey it into your brain. That's the short form. I'm not sure if I have a long form either.

I: No, that's fine. So then if you think about it in the Emergency Department context, would you say it's the same thing? Having a thought and communicating that to your patient?

R: Oh, well, so I guess, I mean communication includes listening too, so they [the patient] have a thought, how well I'm picking it up too. Yeah, those are the two sides of it. The give and take.

I: Ok. So listening is involved?

R: Yes, it's a collaboration...I guess my mind went straight to how well do I convey a message to somebody. But that's not really...I correct my answer to that. It includes the listening and the reception (N-1, p. 2-3).

Through this, an interesting finding is revealed. It may be said that ED physicians see communication as more of a linear procession. The importance of conveying clear, concise, and accurate information to patients, for example, oftentimes masks the component of listening. Physicians acknowledge listening as a prerequisite of comprehending; however, they equally place emphasis on the message's clarity and accuracy. For instance, one participant explains it this way:

Well I think there's two big parts to communication. Often heard that the biggest part's listening and not talking, but I think you need both, but you need to be able to pass information along, you need to be able to listen to people (N-7, p. 2).

He does suggest listening is an important part of communication, but he makes sure he includes that it is both listening in order to provide information. This is consistent with the emphasis the other participants place on message clarity/accuracy as a key aspect of effective communication.

The term "hearing" is discussed occasionally. When mentioned, participants combine it with other components of effective communication such as comprehension (e.g., "hear and understood," "hear and paraphrase," and "hear and watch to see if actions demonstrate that understand"). Thus, listening and being heard are prerequisites to comprehension. A physician explains it this way, "...the person doing the listening needs to really understand what the person communicating is saying" (N-14, p. 2).

In sum, listening is one of the first prerequisite to comprehension, and when discussing listening ED physicians often use the term hearing. Physicians do state the importance of listening, yet it is usually mentioned in association with providing information as well. In this way, listening is a component of comprehension, yet it is not the only one.

Responding. Talking/responding is the second prerequisite of comprehension. Here, for effective communication, messages must be conveyed and received. This is a give and take process. There is a "give" of conveying and a "take" of responding. Participants state the sender sends communication messages, and the receiver receives the messages that were sent. As such, this communication process includes decoding or interpreting. In other words, physicians often have to "decode their patient's story" and "[interpret] patient's words" (N-11, p. 3; N-17, p. 4). One participant discusses this process as the "sender describing feelings, agenda, or message and the receiver understands by restating" (N-4, p. 3). Interestingly, emphasis is placed on the fact that the message, whatever message, must be received. However, when probed about how physicians determine if their message is received and ultimately comprehended correctly, they said they usually do not know if their messages are properly comprehended but rather just that they are received.

Offering feedback is also an important part of this prerequisite. Feedback is necessary because when patients do not respond the physician does not receive confirmation the information has been received and comprehended. Physicians explain, "when I'm able to get feedback from the patient as to, whether them repeating the plan to me or them saying, 'Ok, then I will call my doctor and ask about this specifically" (N-

16, p. 3), the "interactive feedback, both with patients and with staff and with other colleagues, is a huge thing that a lot of times I think gets lost, especially when it's busy" (N-10, p. 2). This feedback is essential in checking comprehension. Unfortunately, time constraints tend to inhibit maximum patient and physician feedback.

In sum, talking or responding is the other prerequisite of comprehension. ED physicians must first listen, receive, and then respond to the provided message. Yet, this idea of responding or feedback is not as heavily discussed in relation to comprehension; it is merely a side note some physicians discuss. Emphasis is rather placed on physicians to manage the feedback patients provide in order to determine their comprehension.

Actions. Comprehension can be demonstrated through verbal communication like verbal consent or affirmation, nonverbal communication like body language and facial expressions, or actions such as the patient taking the correct dosage of medication or returning to the ED if their condition becomes worse. For instance, an ED physician commented, "communication that is effective fosters a genuine understanding on the part of the receiver of that communication—and that they can demonstrate that understanding—whether that's with a nod of the head or body language or verbal consent or affirmation" (N-5, p. 2). Examples include but are not limited to the following:

If they're nodding, you know, their body language, they're nodding that they understand, while we're talking and that in generally speaking they tend to kind of repeat back. "So I am gonna get the results of the CT before I leave correct?" or "I will have a follow up appointment then before I leave here. Is that right?" And that kind of thing, and I can confirm it for them so there's usually some confirmatory back and forth that occurs (N-13, p. 3).

Through verbal and nonverbal communication, communicative partners can know that their communication has been comprehended—"that it's received by the receiver, as well the giver of the communication" (N-5, p. 2), but if it is not, the physician should not leave the interaction until the patient has comprehended.

The dimension of comprehension is an integrated aspect of effective communication. In general, ED physicians focus more on the aspect of communicating information rather than the aspect of listening. The more experienced physicians explain it is the process of give and take.

Well I think there's two big parts to communication. Often heard that the biggest part's listening and not talking, but I think you need both. You need to be able to pass information along, and you need to be able to listen to people, so I mean so you can communicate obviously without talking" (N-7, p. 1).

There is a give and take of listening, and a give and take of conveying and responding. These components are good, even encouraged yet are often forgotten in the process of communicating with patients. Because ED physicians place emphasis on their messages being received by their patients rather than their messages being comprehended by their patients, ideal understanding is often not achieved. In other words, the process of communicating (e.g., talking and responding) and listening are necessary but not always enough to have ideal understanding.

In sum, a key component of effective communication is that both people must understand. Each communicative partner needs to listen and respond; otherwise, the communication is ineffective because "one party thinks the other has understood and the other party hasn't" (N-3, p. 6). Several strategies are implemented to achieve

comprehension. First, physicians seek to recognize patient behavior patterns and react accordingly to them. This strategy deals with the medical or scientific side of communicating, as identifying patients' conditions is the first step to communicating with the patient. Second, physicians can rephrase, paraphrase, or repeat back and direct the patient without tainting the patient's communication and thus misleading them.

Rapport. In order for communication to be effective in the emergency department, communication must demonstrate rapport, or relationship-building aspects. Rapport is the last dimension of effective communication. Rapport includes the following: being sympathetic/empathetic, showing concern, and offering reassurance. It is important for physicians to establish good rapport in the beginning of interaction with patients.

The following excerpt demonstrates this idea and encapsulates the components of relationship building.

So, I think that establishing a very good rapport from the get-go, the first impression you get with your patient helps quite a bit. Where they feel like you're on their side, you're their advocate when you come in to a room, showing your concern, showing that you enjoy your job, and you're there to be their helper (N-14, p. 5).

One goal of effective communication is building rapport in order to make the patient feel like the physician is one their side. This is essential because the ED physician is asking the patient to disclose detailed, personal information regarding their condition. Another physician participant comments on the why establishing that relationship is important,

while also explaining how she determines if the patient does indeed feel like she is acting in solidarity.

You're establishing a relationship with them early on so you sort of have this sense of whether or not a trust has been built, and I think I can assess whether trust is there—if they're making good eye contact, based on their body language; if they seem open and not angry or closed; if they are feeling very comfortable and free, asking questions, and asking for updates; if they're nodding, you know, their body language, they're nodding that they're understanding while we're talking and that in generally speaking they tend to kind of repeat back...Yes, so between the body language, the trust, and the confirmatory exchange at the end, those are the key things (N-13, p. 3).

Thus another part of rapport is being an advocate for the patient. It is important for the patient to also feel like the physician is on their side. One physician emphasizes, "So, I strongly believe that you have to be their advocate, even when, if they were your friend, maybe they weren't deserving of it, you still need to give that" (N-14, p. 5). This advocating builds the relationship as well.

This goal of establishing a relationship with patients is essential yet difficult. It is difficult to establish rapport with ED patients for many reasons. For example, patients are in the ED for long periods of time without pain medication, food, comfort, attention, and many other things. These factors often cause anger and resentment among the physicians' patients.

They're angry at their disease; they're angry at their pain; they're angry at the wait time; they're angry at their hunger; they're angry at whatever, but it can

often be directed at you, and if you take that personally then that will destroy your ability to communicate with people...You'll lose your rapport with them and your ability to communicate. (N-7, p. 6).

Nonetheless, physicians still seek to gain the trust and comfort of their patient and display sympathy, concern, and reassurance. This mentality is demonstrated in that some ED physicians express that their "favorite" time during their shift is after it has ended. This is because they have more time to dedicate to their patient, communicating more with them, and making sure they do not have any additional questions. The following excerpt discusses this.

My intent is always to have the most effective interaction that I can. And that's the most effective interaction that I can with respect to the individual patient, but also with respect to the global functioning of the Emergency Department.

Sometimes the effectiveness of a given interaction with a patient is going to suffer because there's a whole ED full of patients that need to have attention. Yeah, and I guess from that standpoint, at times, my interaction with an individual patient is definitely less effective than it could or should be because I have to spread out my effectiveness to other places. And one place that this manifests itself is the time that I like the most in my shift is the two hours after it ends. And a lot of my colleagues think that I'm crazy or stupid or whatever because they see me there two hours after the shift is over. They say, "What are you doing here? Go home. You know, you shouldn't be here." But those are the times when I can actually communicate with a patient without feeling like, none of the patients in the waiting room are my responsibility, none of the people who are in recess waiting

to be seen are my responsibility. In fact, none of the patients in the ED are my responsibility because I've turned over their care to the next shift, but I will stay there and often try to [inaudible] my patients or talk to my patients or inform my patients or get them to where they need to go without that pressure. And then I'm not taking away from other patients while I'm able to have communication with that individual patient. And that's, that tells me that communication in emergency medicine is broken, when my best two hours of my shift are the two hours after it's over (N-12, p. 14).

It is clear from this passage emergency department physicians experience a tension when attempting to communicate effectively in the ED. For one, physicians understand they must function in a manner that benefits the ED collectively; visiting as many patients as possible during their shift fulfills this (e.g., efficiency). On the other hand, physicians also understand the importance of establishing a relationship with their patients because of the level of disclosure the patients are being asked to reveal; being sympathetic, showing concern, and offering reassurance fills this. However, doing these things takes time. Physicians need time for rapport but do not necessarily have time. In other words, these two dimensions are intertwined yet opposing.

In sum, rapport is an important dimension of effective communication. Being sympathetic/empathetic, showing concern, and offering reassurance helps build relationships with patients. In order to do this, one strategy is physicians can use questions in order to gain needed information. Physicians say things like "How do you feel about this plan? Does this plan make sense to you? Do you feel good about it? Do you have any questions about it?" (N-13, p. 3).

Summary. Using the above themes, a definition of effective communication is presented. According to ED physicians, *effective communication is the process of conveying and receiving clear, concise, timely, and relevant messages with patients with the end goal being to have both partners comprehend the message and to act on the provided information, while respecting the emergency department's fast-paced, busy, time crunched nature.*

It is important to note that participants distinguish a difference between idealized effective communication and realistic effective communication in the ED. This is because of the busy nature of the ED; communication ends up being rationed. One physician says it this way:

Well it's basically that the idealized communication with a patient, the idealized situation in which you really can focus on an individual patient or an individual problem that a patient is presenting with, really work through it, and talk to the patient about, it's you know, it's nice to even be able to do those things in tandem, but when the environment is chaotic enough, then it's hard to do these things in tandem without doing them badly (N-12, p. 2).

He later continues describing the ideal world as one where "we would not have to do that, if we had enough doctors, if we had enough rooms, if we had enough nurses, if the consultants had enough time, then a lot of things would not come up as issues" (N-12, p. 10).

Despite the emphasis of effective communication's importance in medical encounters, like the emergency department, physicians do not often know if their communication has indeed been effective. In fact,

a lot of times unfortunately you don't, and emergency doctors assume that they have. I think more due to time constraints than anything. "Ok, I have one minute, and I'm going to run through what I think is wrong with you and what we're doing, and we're going to send you home, and you're going to take this medicine and hopefully it will make you better and go see you regular doctor." I mean that's often the extent of how it goes. But how do you, how does one or how do I assess it? (N-17, p. 3).

Because of this, problems arise in the emergency department. The next research question addresses these barriers to communicating and then focuses on facilitators that help communicating.

Research Question 2

The second research question asks the following: "What are the barriers and facilitators of effective communication from an UNMH emergency department physician perspective?" To answer this question, participants discuss the barriers to communicating and the facilitators that help communication in the emergency department. This section provides a glimpse into ED physicians' most critical concerns and strategies in regards to communication in the ED. Through interview excerpts barriers are first discussed, and then facilitators that address these barriers are discussed.

The barriers to communicating effectively in the emergency department are categorized in two ways. First, they are categorized based on the barrier categories presented in the literature review—psychological, environmental, physical, and sociocultural (Quill, 1989). This is appropriate as the barriers identified by ED physicians are all components of each of these categories. Second, barriers are categorized by

communicative partner and level indicated during member checks (See Table 2). The individual aspects of the patient and the provider are barriers, and the system of the emergency department is also a barrier to effective communication.

Table 2 Barriers to Communicating Effectively in the Emergency Department

Indiv	idual	System
Patient	Provider	Environmental Barriers
Psychological BarriersMood/AttitudeCommunication style	Psychological BarriersMood/AttitudeCommunication style	 Timing Interruptions Noise Handoffs Lack of previous relationship
		 No chair in the patient's room
 Physical Barriers Stress Fatigue Patient pain, disease, and/or condition 	Physical BarriersStressFatigue	
Sociocultural BarriersLanguageCultureEducation	Sociocultural BarriersLanguageCultureEducation	

Individual Barriers

Psychological barriers. The first category of barriers is psychological factors. According to Quill (1989), psychological factors are emotions and cognition of patients and physicians. In the present study, ED physicians identified two *psychological* factors—mood/attitude and communication style. Mood/attitude is defined as a state of being and feeling at a particular time. Communication style is defined as the way of expressing one's individual communication and self-presentational manner.

The first psychological barrier is mood/attitude. Mood/attitude can be a barrier to communicating effectively in the ED, as there are "strong personalities in people that work in emergency medicine" (N-4, p. 7). One's individual personality influences their

daily mood and attitude. Furthermore, these moods/attitudes are influenced by emotions. For example, physicians are supposed to control their emotions (N-2, p. 5). The patient, physician, attending physician, nurse, and other hospital staff's attitude, during any given shift, has the potential to either impede or facilitate effective communication. However, participants discuss the importance of the attending physician's attitude as being the most influential. The following excerpt exemplifies this.

I think another barrier is attitude...Oh yeah, certainly your attitude when you're coming on [to your shift], your attending physicians' attitude when they're coming on, nurses attitude, but I think a lot of it comes from whatever the attending physician's attitude is coming on. I think they have a lot of say in how things go. But I think when people have a bad attitude in things the communication starts to unravel really fast (N-10, p. 4).

This is a barrier because sometimes physicians do not like their patients and/or are annoyed or frustrated with them, which can influence how effective their communication is with their patients. Another ED physician describes this barrier by explaining, "I think [it is] just the kind of your persona that you put on" (N-4, p. 7). By putting on particular personas, one can portray different types of attitudes. These different personas then influence communication style. Participants do not discuss patient mood/attitude and communication styles.

The second psychological factor is the individual's communication style. Whether it is communication differences between physicians and patients, physicians and nurses, or within physicians themselves, one's approach to communication (e.g., perspective, content, delivery, etc.) differs (N-12, p. 11). Because of these differences, something

might be communicated multiple times because it is not clear on whether or not it has indeed been communicated. Another problem, as this participant explains, is "different people communicat[e] in different ways and may not communicat[e] with each other in terms of what has already been communicated with a patient" (N-8, p. 3). In other words, because physicians communicate in slightly different ways, the patient can become confused, frustrated, and even interpret the different physicians' messages incorrectly.

To summarize, one barrier to effective communication in the ED is the individual patient and provider's psychological barriers. Moods/attitudes can influence the ED physicians' feelings about the patient and other hospital staff. This can be dangerous as such attitudes can also influence the individual's communication style. The patient and provider's mannerism in communicating has the ability to create confusion. Additionally, when communication styles are opposing message information can get lost and/or misinterpreted.

Physical barriers. The second barrier category is physical factors. Physical factors are separated into two groups—physical barriers of the patient and physical barriers of the provider. Physical factors include pain, discomfort, fatigue, and exhaustion (Quill, 1989). Out of these physical factors, ED physicians assert stress, fatigue, and patient pain, disease, and/or condition are potential barriers. First, stress can include the patient and the physician. The patient may be worried about their condition, treatment, side effects, etc. Yet it is the physician's stress level that is more commonly mentioned. As one participant explains, when you are stressed, it is difficult to communicate and to "get things done" (N-9 p. 4); she then clarifies though that, as the physician, it is still necessary to do whatever needs to be done regardless of how she feels.

Fatigue is another barrier. Like stress, fatigue can also be on the part of the patient and the physician. Due to the long waits for patients, they become exhausted, and due to the physicians' long shifts, they also become tired N-6, p. 4). Another ED physician expresses this: "Because we're there twenty four hours a day, certainly fatigue, especially on the patient's part, I think, more than the physicians, can really play a factor, because they get so tired, and then they're not understanding things" (N-3, p. 4).

Finally, the patient's pain, disease, and condition affects effective communication. Patient's pain or perceived pain can "impede their ability to kind of hear or understand" what is going on and what the next steps are for them (N-8, p. 4). Those who are critically ill (e.g., a trauma patient or unconscious patient) can also be a barrier in that they may not be able to describe what happened to them or respond to the physician (N-15, p. 3). In this particular ED, this often includes intoxicated patients (N-6, p. 6). In one interview, a physician describes when he was venting to another physician about his patient. He exclaims,

I was lamenting about this patient who was just you know rambling on but she had a lot of comorbidities and it was difficult to do an exam and she was on a lot of medications and I was like, "This lady's hard to understand but I think she's really sick", and one of the residents was like, "That's our patient population: crazy and sick." And so when you're dealing with crazy, sick people it's hard to get all the information you need to really figure it out. And when you're doing that then you have to be able to collect stuff because then there are people like that are the ones that refuse to get their blood drawn or refuse certain exams or their allergic to certain medications. You know they've been through the ringer so

many times that it makes a lot of complications for their ultimate treatment. And, umm, and so yeah I mean not just communication breakdown, but difficulty in everything (N-4, p. 7).

Overall, people's disease can be a barrier. Patient conditions vary from acute illnesses to medication refills to dying. "They're in pain; they're crying; they're distraught, and those all can be distracters for effective communication (N-7, p. 3).

In sum, physical barriers such as patient and provider's stress and fatigue and the patient's disease or condition often impedes effective communication in the emergency department. Stress arises because of fear, anxiety, and trauma. Patients become exhausted as they wait for longs to see a physician; physicians are exhausted from their long hour shifts. Lastly, patient's disease, side effects, and current status create problems when communicating with them.

Sociocultural barriers. The third category of barriers is sociocultural factors. Sociocultural barriers are part of the individual aspect of barriers. In other words, there are sociocultural barriers of the patient and sociocultural barriers of the provider that impede effective communication; however, ED physicians only discuss sociocultural barriers of the patient that influence effective communication. Sociocultural includes education, language, appearance, demographics, culture, and socioeconomic status (Quill, 1989). Language, culture, and education are the three sociocultural factors identified by ED physicians. The first sociocultural barrier is language. Not speaking the same language as the patient and/or the patient's family or friends can block effective communication because detail and meaning can be lost (N-2, p. 5; N-6, p. 5; N-8, p. 4). For example, there are large Native American/American Indian and

Mexican/Hispanic/Latino populations in New Mexico. Yet, as one physician states, "Albuquerque is [also] kinda of a melting pot, and there are a lot of foreign languages (N-15, p. 3). To help this language barrier between physicians and patients, UNMH's ED has interpreter services; however, having an interpreter adds "a whole new dynamic to effective communication. Communicating well with translators is so much more difficult" (N-7, p. 3). Because of this added difficulty, patients who need interpreter services are oftentimes seen after English-speaking patients. This quotation describes this pattern and the reasoning behind it.

Spanish interpreters are here now, which is good that we have interpreters, but it takes more time, so that's the time and efficiency thing. And a lot of times Spanish-speaking people, if the person speak[s] Spanish, gets put at the back of the rack, and so they don't get seen as fast, and the same thing happens in the hospital because they don't want to deal with the interpreter, because you have to call the interpreter, and you have to wait and you have to time everything so that is a big problem. For Vietnamese, we have one interpreter, but I've never personally used it (sic). It's only been at night when you have to use it, so you have to use the phone. And same thing with that—that gets pushed back to the rack because people don't want to; it's not a patient you can see really quickly. So I think that's a barrier because that, for a lot of reasons. One, the most, the one being time. And then the second is that there's just a lot of times dealing with an interpreter, it takes more time, but then there's also just complexity with that whole interaction (N-10, p. 4).

Here, the idea of time is discussed in relation to communication. It is used as an explanation for why non-English speaking patients are not seen faster. Furthermore, the physician mentions the complexity the interpreter services add to a patient-provider interaction.

Another sociocultural barrier is culture (N-6, p. 5; N-8, p. 4). Cultural characteristics influence communication. For example,

With the Navajo, for instance, you really have to talk in a third person about the person who is there; otherwise they get really offended, and they don't really have a concept of letting someone go sometimes, and so, or that some illnesses are not curable. And so you have to take into account the culture, because otherwise you really won't be effective. They'll just shut down and not listen (N-3, p. 4).

This excerpt depicts yet another complexity to communication in the ED. Cultural characteristics influence how individuals express not only their perspective but also how they express what is going on with their body. However, ED physicians only mention the patients' cultural characteristics as possible barriers. As a different physician explains, if a patient did not learn about biology and health education, he or she may not be able to express certain things in the way that physicians expect. He continues by saying,

So then that is a big barrier because then it takes a lot longer to be able to talk to the patient and figure out what's going on and they may express their symptoms in a much different way that doesn't really compute with us. And so then it takes us a lot longer to be able to have an interaction or you stop having interaction and just go off of the laboratory and the physical diagnosis, which is bad because you're not going to be able to get a full history...[With a] different health belief

system, and they also, they're also less likely to report pain symptoms, and that's very hard because in the Emergency Department we're all about pain, and "Where's your pain?" And that leads our physical exam and the workup for whatever problem they may have. But I think that's certainly a barrier for effective communication in the Emergency Department (N-10, p. 5).

The last sociocultural barrier to effective communication in the ED is education level. The education level of the patient can also be a hindrance in that the patient may not quite understand the physician's language and terminology. This limits patient care (N-3, p. 4). Education also includes education about health.

I think that the education, the health education of a patient population that you're seeing is certainly a barrier to language, because people that are more fluent with their health education are able to communicate easier about what their symptoms are (N-10, p. 5).

If the education about health and thus understanding of the patient is limited, then it is oftentimes difficult for the physician to explain what it going on with the patient and what the next steps are for their care. Physicians work to adapt to their patients' level, yet this adds complexity and difficulty to the communication interaction.

In sum, ED patients and physicians' individual language, culture, and education influence that ability for effective communication between them. The physician may not speak Spanish. The patient may be from India and have different cultural beliefs about health. Or the physician may speak formally when educating their patient using medical jargon, causing the patient not to understand their diagnosis or treatment.

System Barriers

Environmental barriers. Finally, a factor that inhibits effective communication is environmental barriers. These barriers are system factors rather than individual factors like the previous three. These barriers include timing, patient numbers, and room capacity, privacy, and noise (Quill, 1989). For ED physicians in this study, timing, interruptions, noise, handoffs, lack of previous relationship, and no chair in the patient's room are the most detrimental barriers to communicating effectively in this context.

First, and not surprisingly, given the importance of efficiency discussed as a component of effective communication, "General time efficiency is the biggest one for patients" (N-10, p. 4). This is because of the large volume of patients admitted to UNMH's emergency department. Because of this, it is hard to "balance sitting down with a patient and talking to them versus going and seeing the next patient" (N-10, p. 4). For instance, on physician states,

I mean, you know, you might have ten other patients, and each patient, you know, are telling you about their granddaughter's graduation party or something like that. So, I guess, basically being engaged with the patient and sort of directing the conversation not to the point where you're cutting them off about certain key history details but after four or five minutes of talking about their granddaughter, you're like, "So have you had shortness of breath in the past?" Or whatever. Steering the conversation effectively. Which can be a challenge because patients especially don't really know what's relevant in medical history and stuff" (N-9, p. 4).

In this excerpt, the physician describes the importance of guiding the conversation with the patient because of the time pressure of the ED. A different physician explains this intense time pressure when he comments,

I think there's a lot of time pressure just to see patients and kind of get through with one to go on to another, and it seems like patients oftentimes get hung up with like, "Well, I think you should call my neurologist to better understand all this," and they don't want to go on with the interview until you've spoken with their neurologist, which is a pain in the ass because some answering service is going to take forty-five minutes, and I didn't want to talk to the neurologist in the first place. And you know they're kind of hung up on that so you can't really move pat it to discuss anything else beyond calling their neurologist (N-6, p. 4).

Although this is the nature of the ED—expediting patients' care in and out of the ED—"the feeling of time constraints, can be a barrier I think because it is the nature of the specialty to make the quick diagnosis, the quick treatment, and the quick disposition of a patient. This can be a detrimental thing" (N-15, p. 3).

Moreover, physicians feel as though they never have enough time to state, describe, and explain the important ideas to their patients (N-8, p. 3) because of the time constraints.

You can always reduce it to time constraint—maybe getting extra information from other people which would help your understanding of the situation or help you know how to talk to the patient or understand what's going on with them if they're not communicating it. And like the kid that says, "Well, I had to drag [my mom] in here. She doesn't think anything's wrong with her. She doesn't think

anything's wrong, but this is what I'm worried about." That kind of stuff...You don't always have time to call five different family members (N-17, p. 4).

Yet, this decision has impact on the ED as a whole, and therefore, physicians often do not take this route.

Interruptions, also labeled as distractions by some physicians, are the next environmental barrier to effective communication. ED interruptions include pagers, people wandering around asking for things, patient machines beeping (N-3, p. 4), patient TVs, and cell phones (N-8, p. 3). One physician in particular was extremely forceful in explaining this barrier. He says,

...All you have to do is spend about fifteen minutes in the Emergency Department to recognize the interruptions. Interruptions happen at a frequency of every thirty seconds, every forty-five seconds, whatever it is. It is an environment unlike any other where interruptions and just being interrupted is the rule, *not* the exception to the rule. It seems that in the Emergency Department the kind of social norms of waiting until someone finishes speaking or finishes a task before you start another task or another stream of thought doesn't seem to apply. Sometimes it makes sense and sometimes it doesn't seem to make sense. But it's definitely an environment plagued by continuous interruptions. I really can't overstate that enough. Even holding a phone to your ear and talking on the phone is not a cue that you should wait to talk. And it seems like in any other walk of life you wouldn't just start speaking to someone when they're in midsentence on the phone but for some reason in the Emergency Department environment that's acceptable. You know and sometimes it's absolutely necessary because a patient

is deteriorating and that has to trump whatever conversation you're on the phone, and sometimes it isn't necessary and it just worked its way to be acceptable in this culture and so you know, but interruptions are probably the biggest barrier to effective communication. You can't finish a real conversation—finish it like you'd like to. I mean if you were having a serious conversation...and I would say that any health care conversation with a family or a patient is considered a serious or an important conversation...If you were at home with a loved one, family or friend, you wouldn't just get up and start making eggs is the middle of that conversation. This is an important conversation, which demands your attention right, but yet these all-important conversations that we have in the Emergency Department are continuously interrupted. So that's one barrier, probably the biggest I think (N-5, p. 4-5).

This description demonstrates the frequency and intensity of interruptions. He states more than twice that interruptions are "probably the biggest barrier to effective communication." What is interesting is that he then continues stating this is the norm, not the exception, in the emergency department. Clearly, ED physicians acknowledge that interruptions are a hindrance to effective communication in the ED, but they also understand that is the setting's nature. This is, however, dangerous because these interruptions have effects on patient safety:

So you're ready to go in to explain something to a patient, and you go do something else, and then you're a little bit distracted by the time you go back in to actually say it to them, and you say half of what you were thinking or were going to tell them before because somebody comes in (N-17, p. 4).

The third environmental factor is noise. The emergency department has a high volume of noise (N-1, p. 10). The ED's busyness is illustrated in its noise like pagers and phones ringing, monitors in the trauma and recess room, and pre hospital and hospital personnel talking and working as they deliver, transport, and care for patients (N-13, p. 4). Additionally, oftentimes patients who are actively psychotic are screaming for one reason or another (N-7, p. 3).

Handoffs are another environmental barrier. Emergency medicine handoffs are meetings between the admitting physician team and the present physician team. During this time, the resident physicians and attending physicians tell the new shift which patients are still in the ED, explain those patients' current condition, and state what needs to be done next. These meetings, nevertheless, present several problems. For one, physicians often leave out important information. Another problem is miscommunication—a physician might explain something to the new physician in a way that is confusing, causing misinterpretation to the other physician. Lastly, this misinterpretation and lack of important information can cause the admitting physician to not understand what is going on with the patient and perform inaccurate next steps in their care. This excerpt depicts these issues.

One of the things that is terrible about the ED right now is that there's such a long wait for patients to be admitted that, and the patients sit for so many shifts, two shifts, three shifts, or more in the ED. We have like that old game of telephone, where you tell a message to somebody, they whisper it to the next person, they whisper it to the next person, and within ten people it's completely different. Or even within three or four people. And we play that game in the ED all the time.

We tell a little story to the doctor that's coming on, and they tell; or we tell a story to the admitting physician on internal medicine, and they don't get to it within their shift; they give it to the next shift. And often we see that when we approach a patient that we've been told about, and we say, "So I understand this is what's going on," and they're like, "Where did you get that idea? That's not at all what's going on." So that's something that really, I think, changes, impedes effective communication (N-12, p. 9).

In fact, during these shifts changes, physicians and nurses are staggered, meaning each change shifts at different times. This can be a problem because either party cannot talk to the other because they are conducting their handoffs, or rounds (N-12, p. 10). Such factor is a barrier to communication.

The physician's lack of a previous relationship with the patient is also a barrier. Because the ED serves individuals in crisis and those with no insurance, many of the patients admitted have not been to the ED before. As such, there is a "lack of a continuing relationship with your patient. And like you're not really going to see them again" (N-6, p. 6). Furthermore, this factor can place the physician in a difficult situation.

Well, first of all, specifically with patients, the barrier is potentially not knowing the patient on a regular basis, which is, you know, if you're a primary care doctor you have more opportunities to establish good communication. You have more background on which to make adjustments to your communication style. You may have tried things with the patient. So you sort of have, unless they're repeat visitors, sort of limited opportunities to maybe refine or improve your communication (N-17, p. 4).

As seen here, the physician's lack of knowledge of the patient and lack of a prior relationship affects the potential success of communication between the physician and patient.

The last environmental factor that can hinder effective communication in the ED is not having a chair in the patient's room. This may seem like a minimal barrier, as one participant expressed, but interestingly, every participant in the current study mentioned this issue as a barrier. Specifically, not having a place to sit affects the communication between the physician and the patient because it creates a power dynamic. A participant describes this problem:

Not having a place to sit, so you have to stand, [is a barrier] because when you're standing over a patient, and they're lying on a bed that creates like a power relationship, kind of intimidating. So not having a chair. And you'd be amazed how often you don't have a chair. I know it sounds stupid (N-2, p. 5).

To summarize, the system of the ED, its environment, can impede effective communication. Environmental problems to communicating in the ED include the following: timing, interruptions, noise, handoffs, lack of a previous relationship, and lack of a chair in the patient's room. Physicians feel pressured to see as many patients as possible. There are multiple interruptions during patient-provider interviews. The noise of the ED makes it hard for patients and provider to communicate and concentrate. Multiple handoffs during a patient's stay in the ED increases the likelihood of error. The lack of the physician and patient having a previous relationship influences the level of comfort and self-disclosure, and finally, not having a chair in each patient's room or having a

patient's family member or friend occupying the only chair creates a power dynamic and does assist in establishing a trusting relationship.

Facilitators

In attempt to overcome these ED communication barriers, there are facilitators—things that help ED physicians communicate effectively—ED physicians use. These facilitators are particular strategies that providers use (See Table 3). They did not express facilitators from the patient perspective. Like the barriers, the facilitators are organized to address the barriers according to Quill (1989) and member check information.

Table 3 Facilitators to Communicating Effectively in the Emergency Department

Individual	System
Facilitators to address psychological	Facilitators to address environmental
barriers	barriers
 Have a good attitude 	 Use templates/Look for buzz words
Prepare mind	 Prioritize tasks
 Have a balanced life 	Steer patient's conversation
Facilitators to address physical barriers	Limit/control noise
Be cognizant of tiredness	Have a leader
Use private rooms	 Use body language and visual cues
 Employ the help of nurses, ED 	 Do not allow biases
pharmacists, and social workers	Walk on rounds
Facilitators to address sociocultural	Establish good rapport
barriers	
 Interpreter services 	
 Be aware and be willing to work 	
• Use nurses	
Devote time	

Individual Facilitators

Psychological facilitators. ED physicians deal with psychological barriers, mood/attitude and communication style, individually or internally. Though some physicians provide some ways to overcome these barriers, on the whole, participants did not discuss them frequently. The biggest way to control these psychological factors is the

having a good attitude. Two different physicians stress this strategy; one saying, "maintaining a positive attitude is really, really important because it's so easy to fall out of groove (N-12, p. 9). Another strategy is to "prepare that in your mind and not think that you're going to get out of there [the ED] super fast" (N-10, p. 6). In other words, physicians can manage such barriers by being aware and thus creating and adapting their own expectations depending on the situation. A third approach is taking personal care of oneself and maintaining a balanced life. A participant explains,

So internally, being well-rested, taking good care of yourself outside of the Emergency Department, feeling like your life is in balance and that you're happy to show up for each shift and not overly distracted by outside things helps you be more present for each patient (N-13, p. 5).

Physical facilitators. Emergency department physicians also use certain tactics to deal with the physical barriers of stress, fatigue, and patient condition/care/treatment.

Physicians did not provide any strategies for dealing with their own personal stress.

Fatigue is discussed though. A participant describes how difficult it is to remain conscious when working the night shift:

You know I find that some times when I'm working a night shift, and its 3:00 AM, I'm stifling a lot of yawns, and you just kind of got to be careful because the patients are cognizant of that, and they've been waiting ten hours to talk to a doctor, and then you're there falling asleep in the chair. Just kind of got to be conscious of what you're doing yourself, and you know all the different ways you're communicating with the patient (N-4, p. 8).

He says the best strategy is to be as cognizant as possible when working at this hour, and it is disrespectful to the patient to not do one's best since he or she has been waiting for a long time to speak to a doctor. This is clearly an individual tactic.

Another physical barrier is the patient. This can include a difficult patient, the patient's treatment, and care in general. One way to approach an agitated patient is to bring them to a private, designated area so they do not disrupt the rest of the ED. Unfortunately, this space is not always available. Yet, as one physician says, "You really have to have a private space so to have effective communication; they have to feel like they're able to talk privately (N-13, p. 6). Other hospital staff is also most helpful in overcoming this particular barrier. For instance, some of the nurses are

much better than others and are kind of vigilant about making sure that there is, that the patient is kind of on the same page as the doctors and will often come up and say, "Hey, this patient doesn't have any idea that they're waiting for a CT scan", or whatever it is. "Would you mind going to talk to them? Or "This patient has a lot questions about where we are in the work up, can you come talk to this patient?" I really appreciate that, because often it's, we don't realize what they know and don't know. And so I think the nurses act as good advocates for the patients in that case. (N-8, p. 6).

Additionally, ED pharmacists are also helpful when dealing with patient's questions and concerns about medication. Physicians do not have time to always explain every detail, so these pharmacists are a great resource to the physicians. The act as a "filter they'll always get back to me about the core issue, kind of nice and succinctly, and they've figured it all out, and then they can communicate that back to the patient" N-8, p.

6). Finally, social workers help with determining any problems the patient may have broadly.

Sociocultural facilitators. The third category of barriers is sociocultural factors—language, culture, and education. ED physicians mostly discuss strategies for dealing with culture. A couple physicians do mention that the interpreters who do work for the hospital are a great resource. One expresses her gratitude saying "I am really, really happy to have them" (N-8, p. 6). To deal with the cultural backgrounds of patients when communicating with patients, ED physicians discuss the importance of simply being aware and willing to work with it.

You kind of just have to assess it and be aware of it and recognize it and be willing to kind of work with it and around it. Usually that involves kind of engaging family members and altering the phrasing that you're using, making sure you're not using a lot of jargon and you're kind of coming more down to their level or at their level (N-13, p. 5).

Emergency department physicians also rely on nurses. Nurses, as a physician explains, seem to be "very cued into the cultural things" (N-3, p. 6). She continues stating, "And you learn about the cultures and how to interact with them even if people don't explicitly tell you. So I do think they kind of help you overcome those barriers. I think (N-3, p. 6). Overall though, it is important to "realiz[e] that patients that may have language or cultural issues or low health literacy are gonna take longer, and you shouldn't get frustrated by that" (N-10, p. 6). Devoting time to these patients with unique characteristics is necessary and important.

System Facilitators

Environmental facilitators. Finally, to address environmental barriers, physicians discuss some environmental facilitator strategies. Physicians discuss these the most when asked in general about things that assist them in communicating effectively in the ED. As a participant put it, the environment of the emergency department has "the ability to either facilitate or impede effective communication" (N-12, p. 8). The first environmental factor discussed is timing. Physicians take individual approaches to dealing with said barrier; these include using templates, looking for "buzzwords," prioritizing tasks, and steering conversations. Though ED physicians are taught to use open-ended questions, they oftentimes do not engage in these behaviors due to the ED's time constraint/pressure. For example, a physician explains,

We're told to do these open-ended questions, but I really start[ed] limiting that. It takes forever...There's certain buzz words in medicine and like once someone says something like that you then have to work it out, and it likely or often has nothing to do with why they came...(N-6, p. 7).

In this excerpt, the physician acknowledges that medical school and training teaches physicians to use these strategies (e.g., looking for buzzwords), but he chooses not to because the process takes such a long time. Later in the conversation, he describes an example of an individual who, in response to an open-ended question, said he had "the worst headache of his life." This patient's particular choice of language (e.g., the buzzword "worst headache") caused the physician to have to then perform two CT scans and a lumbar puncture, a spinal tap; however, in the end, it turned out the patient was not having "the worst headache of his life" because he did not want to have a "huge needle

stuck in his back." In other words, because of the physician focus on the buzzword "worst headache," he performed unnecessary tests, which took up a lot of time. This example demonstrates that even following buzzwords often results in additional time and energy expended on the part of the physician. The idea is buzzwords assist in helping the physician understand the patient more clearly; however, this was not the case in this instance.

One way to try and avoid this is to use templates for each symptom. The same physician explains that asking the same questions each time is "a lot more efficient than having them rattle off their story of their illness necessarily and then trying to pick those things out" (N-6, p. 6). The physician concludes saying, "I just try to control the conversation in some way such that you're not stuck in those positions having someone said something that they doesn't necessarily mean...I don't know how else to describe that. It's a nightmare" (N-6, p. 7).

Prioritizing is another strategy. Physicians state it is important and necessary to prioritize one's own tasks but also those in the team. There is a balance, though, between not enough prioritizing and too much prioritizing. A physician clarifies, "If you do it too often and you make it too much of a routine it becomes burdensome and then there's a resistance to it (N-12, p. 9).

The final strategy for dealing with timing in the ED is steering conversations. This is especially crucial in patient interviews. The following quote describes this, its importance, and how to tactfully perform this strategy.

So I guess I mentioned earlier like, when you're talking with a patient, steering the conversation is one thing you definitely [need to be good at]. Not doing it in a

way that makes them feel like, "Oh, they're just trying to interrupt me or shut me up." You know, tactfully trying to get them to give you the information that you want to make your medical decisions...[Through] questions or it can be like, "Oh wow, that sounds really nice. So tell me more about whatever"—sort of interjecting and kind of steering it that way because it's an issue especially when you don't have much time. You have to get pertinent stuff, and you know, we do miss stuff and it happens and who knows if they might have told you that or if they might not have but you have to narrow your focus down (N-9, p. 4-5).

The third environmental barrier is noise. Physicians talk about how much ambient noise there is in the ED. In order to address this barrier, physicians engage in several personal strategies. For example, some physicians change the sound of their pager to something more calming and to make it not as intrusive when it goes off. Turning down the volume on their phones is another tactic. Then to handle the busy, noisy trauma room, ED physicians comment it is important for the person leading the trauma room to take charge of the noise level. This physician depicts what this strategy would look like in the following passage.

So I think also whoever is leading that trauma is usually charged with doing that, and so good leadership goes a long way toward effective communication.

Keeping everybody on the same page and keeping everyone quieter...Basic culture of not yelling across the hallway to get someone's attention but actually walking over there and getting their attention that way, so that's helpful to kind of keep the noise down (N-13, p. 6).

Interruptions are another environmental barrier that causes communication problems. ED physicians acknowledge that "there are always going to be interruptions," and as a physician, "you're always going to feel pulled elsewhere" (N-13, p. 5). As such, they try to minimize the interruptions and to create the illusion of having more time. For example, it can be a visual cue like when on the phone with the lab technician about a patient's results, the physician will not make eye contact with the EKG technician until they have finished their conversation "because if I make eye contact with that person, the expectation is that I have to take the EKG out of their hands" (N-5, p. 12). In addition,

I think what goes a really long way in that area is creating the illusion that you're less busy than you really are for the patient's sake and for your own, so that you have to, even if you don't actually spend more time in the room. I think it is very important that you sit while you're in there. I think it's very important that you clear your mind for the moment of other things that's going on. Make very good eye contact with the patient. Make some body contact is nice. A hand on their back or something that indicates that you're present, that you're there, and making sure that you are truly asking the questions that you wanna ask, and you're not doing it by just leaning in the doorway and kind of calling across the room kind of thing—that you're truly there. And so in a sense you may not actually be able to spend more time in that room because you really do have other things to do but I think it's important that the patient get the sense that for that moment in time you're there, that they are the most important thing to you, not all the other things going on in the Emergency Department (N-13, p. 5).

By engaging in these behaviors, interruptions can be managed.

To address the fourth environmental barrier, handoffs, ED physicians engage in individual and system based strategies. One way to improve handoff communication is the physician not allowing oneself to be biased by the previous ED shift physicians. In other words, skepticism can be beneficial. This is important because a lot of times patients are "packaged and all you have to do is this just check this one lab and they can go home. [But] maybe [they are] not—Go take another look, find out for yourself" (N-9, p. 5). There are also system strategies that assist in overcoming the barrier of handoffs. For example, a strategy that has recently been implemented in the emergency department is, during these rounds, walking around to each patient's room. This is helpful because now you're also seeing the visual of seeing the patient, makes you remember more things, what the patient is waiting for, if you're in front of the patient's room. The patient or the family member may interrupt you and ask a question, which helps kind of bring some things to light that you may have forgotten to talk about (N-5, p. 11).

This strategy of discussing the patients and their care is important because it gives the residents and attending physicians a chance to provide details to their admitting team, and by having both the resident and attending there together, it is easier to catch mistakes and ask questions.

This is yet another strategy—asking questions. A physician comments,

So and you know I think one part of effective communication is asking quizzing
your residents and attendings on rounds like, "Well did you check this? Did you
do that?" Other things that you might be thinking about, and that's one of the

huge benefits of rounds is that you have a second set of eyes, more than a second set (N-9, p. 5).

These designed communication tools are indeed helpful. And though sometimes frustrating to ED physicians, the computer tools for shift sign out is also useful. Overall, having structured approaches to performing handoffs assist in decreasing miscommunication and enhances effective communication.

The lack of having a previous relationship with the patient is also a barrier to effective communication. Strategies here are individually based. First, ED physicians will force themselves to sit down in the room and collect as much information as possible to make up for this beginning lack of knowledge (N-5, p. 12). Second, they will try and establish good rapport with their patient by "introduc[ing] myself—who I am, and what my title is, and what my role in their care is" (N-15, p. 4). Shaking the patients hand, sitting next to them, engaging in physical contact, and making eye contact with the patient and the family are also helpful. Physicians believe these behaviors help in creating a good first impression with their patients. This is essential because "They feel like you're on their side; that you're their advocate when you come in to a room, showing your concern, showing that you enjoy your job and you're there to be their helper (N-14, p. 4)."

As seen above, the idea of having a chair to sit down and discuss matters with the patient is very important. Unfortunately, chairs are not always available for the physician because the room is lacking one or a family member or friend is using it. ED physicians state it takes up too much time to go look for another chair, so oftentimes this is a barrier

that is not addressed. The one solution a physician mentions is the department purchasing stools for each room; yet, he also acknowledges the necessity of funding for this solution.

To summarize, there are several barriers to effective communication in the ED. These include psychological, physical, sociocultural, and environmental. Yet ED physicians engage in particular strategies in order to help them overcome these barriers, and thus facilitate effective communication in this context. Overall, to address environmental barriers when communicating with patients, choosing appropriate terminology, using analogies, providing written instructions, and drawing pictures and graphs assist the physician in providing the patient with the best care as possible. Explaining things to family members and friends is also a good practice (N-17, p. 5). These strategies assist the physician in providing clear, accurate information, in addition to making sure multiple individuals understand the information.

Summary

This chapter discusses the findings from semi-structured interviews with emergency department physicians. The first research question asked: "How do emergency department physicians of UNMH's emergency department define effective communication, and what are the main dimensions of their definitions?" Effective communication is the process of conveying and receiving clear, concise, timely, accurate, and relevant messages with patients with the end goal being to have both partners comprehend the message and to act on the provided information, while respecting the emergency department's fast-paced, busy, time crunched nature. This definition exemplifies the main dimensions of this definition, and they are as follows: efficiency, clarity/accuracy, relevance, comprehension and rapport.

The second research question asked: "What are the barriers and facilitators of effective communication from a UNMH emergency department physician perspective?" Barriers include mood/attitude, communication style, stress, fatigue, patient's disease, language, culture, education, timing, interruptions, noise, handoffs, lack of a previous relationship, lack of chair in patient's room. Facilitators that serve as strategies to overcome these barriers are having a good attitude, preparing one's mind, having a balanced life, being cognizant, using private patient rooms, employing hospital staff help, utilizing interpreter services, be willing to work, using nurses' knowledge, devoting time, using templates/looking for buzzwords, prioritizing tasks, steering patient's conversations, limiting/controlling noise, designating a leader, using body language/visual cues, not allowing biases, walking during handoffs, and establishing good rapport. These findings provide an avenue into emergency department physicians' perceptions about effective communication, barriers, and facilitators in the ED. With these findings, I now move to explain what these findings mean, discussing the study's implications and conclusions.

CHAPTER 6

Discussion

"We grapple with this delicate balance of delivering effective communication but not sinking in the mire of overcommunicating every detail. This communication ultimately determines efficient care and safety of patients...and our ever-present duties to our current ED patients" (Gibson et al., 2010, p. 182).

The purpose of this study is to learn how emergency department physicians define effective communication and the barriers and facilitators of effective communication in the ED. Semi-structured, exploratory interviews were conducted with emergency department physicians. In response to research question one, dimensions of effective communication, according to ED physicians at The University of New Mexico Hospital's ED, include efficiency, clarity/accuracy, relevance, comprehension, and rapport. In addition, a definition of effective communication is created. According to research question two, psychological, environmental, physical, and sociocultural barriers and facilitators to effective communication are identified. This chapter discusses the definition of effective communication and its dimensions, barriers, and facilitators evident as well as the study's implications, limitations, future research, and final conclusions.

Research Questions

Research Question 1

Research question one identified five dimensions of effective communication and an overall definition of effective communication specific to the emergency department.

These dimensions are not mutually exclusive but rather represent the key components for idealized effective communication in this particular context. Each conceptualizes a core manifestation of ED physicians' perceptions about effective communication.

According to ED physicians, effective communication is the process of conveying and receiving clear, concise, timely, and relevant messages with patients with the end goal being to have both partners comprehend the message and to act on the provided information, while respecting the emergency department's fast-paced, busy, time crunched nature. The five dimensions of effective communication are efficiency, clarity/accuracy, relevance, comprehension, and rapport.

The first dimension of effective communication is efficiency. In order for communication to be effective in the ED, it must be efficient. According to the physicians, communication is efficient when the desired goals are met in a timely manner without expending too many resources. Efficiency is important because of the nature of the emergency department. The time pressure in the ED (Slovis, 2008) guides physicians to work quickly, gathering patient information and seeing as many patients as possible. In fact, Eisenberg et al. (2005) state a unique characteristic of the ED care is its requirement to provide care under heavy time constraints, which can cause physicians to narrow their focus and make quick judgments. Further, according to Knopp, Rosenzweig, Berstein, and Totten (1996), the first objective of effective communication in the ED is to gather information. Specifically, it is the "efficient gathering of timely, accurate information [that] enables the physician to determine whether a life-threatening situation exists" (Knopp et al., p. 1066). Here, Knopp et al. acknowledge time is limited within the ED which influences patient care. Yet "effective communication is not a function of time but rather one of skill," (p. 1067). What this means is although communicating clearly, concisely, and accurately, checking comprehension, and establishing rapport are important, the length of time it takes to complete these key tasks is still the primary focus, and this dictates ED physicians' communicative behavior. In short, the ED is pressured to function under technical prudence and efficiency (Eisenberg et al., 2005).

The second dimension is clarity/accuracy. In order for communication to be effective in the emergency department, clear and accurate information must be communicated. A message is clear when its content is distinctly apparent. A message is accurate when its content is truthful and exact. This dimension is important because the content of messages within the ED often hold life and death consequences. If a physician's message is not transparent and specific, the patient may become confused and incorrectly treat himself or herself. If a patient's message about their prior history is not accurately represented, the physician may prescribe a medication or treatment that is detrimental (Burdick & Escovitz, 1990). In fact, The Joint Commission of Accreditation, Health Care, and Certification (JCAHO) states one-way to improve patient-provider communication is to create clear messages and explicit orders (Eisenberg et al., 2005). Additionally, Riccardi and Kurtz (1983) affirm the importance of providing clear information messages during the discussion of the patient's plan. This finding is supported by Gudykunst's (1993) theory of effective interpersonal and intergroup communication and Gudykunst's (2005) anxiety/uncertainty management (AUM) theory of effective communication. According to Gudykunst, communication is effective when it is accurate and interpreted as the speaker intended by the intended receiver. In other words, effective communication minimizes misunderstandings because the messages are clear, concise, and accurate.

The third dimension is relevance. In order for communication to be effective in the ED, relevant information must be communicated. Relevance means the

communication between the patient and physician should focus on only the information that is specific to the patient's health issue. This finding is consistent with Schofield and Arntson (1989) who state a goal of the patient-provider interview is "To define the reasons for the patient's attendance, including: the nature and history of the problem; their etiology [origin]; the patient's ideas, concerns, and expectations; and the effects of the problems" (p. 140). In addition, Maguire and Pitceathly (2002) argue one of the key tasks for physicians when communicating with patients is to extract information regarding the patient's main problem and their perceptions of the problem. In other words, other information is not as important to the patient-provider interaction. This is a potential problem as it is the physician who is then controlling what information is relevant and irrelevant to the patient's condition, and this can lead to miscommunication and misinterpretation.

The fourth dimension is comprehension. In order for communication to be effective in the ED, both the physician and the patient must comprehend the message content being communicated between the two of them. Comprehension encompasses the physician and the patient both comprehending the message information being communicated between each other and being able to then act on that information. Thus, comprehension includes listening and responding. This dimension is also essential to the patient-provider interaction (Reever & Lyon, 2002). If the physician does not comprehend what the patient is saying regarding their past medical history or current symptoms, they cannot act. The same is true for the patient. If the patient does not comprehend what the physician is saying regarding their present condition, correct next steps are not taken and incorrect ones may be. This finding is consistent with Frankel

(2000) who states it is essential to comprehend who the information is intended for, to ensure comprehension has taken place, and to confirm that comprehension. It is important to determine comprehension because patients' satisfaction and willingness to return to the ED is contingent upon their comprehension of problem causes (Sun et al., 2000).

The last dimension of effective ED communication is rapport, or relationship-building aspects. In order for communication to be effective, rapport must be built.

Building rapport means being sympathetic or empathetic, showing concern, and offering reassurance. It is important to establish rapport in the beginning of interaction with patients because the encounter requires patients to open up and disclose personal information. What makes this difficult is that most of patient-provider encounters in the ED are first time meetings (Knopp et al, 1996), and because relationship building is something that develops overtime through multiple interactions, this is not fully possible in the ED. As a consequence, ED physicians must work fast and strategically to create such a feeling (1996). Rhodes et al. (2004) explain it is the components of rapport (e.g., the introduction, greeting, and style of communication) that create or destroy rapport. In addition, relationship building develops if physicians allow their patients to express their main complaint.

In sum, the overall definition of effective communication constructed by ED physicians reflects their perceptions about ED communication. ED physicians include the aspects of comprehension and rapport, while emphasizing the aspects of clarity/accuracy, relevance, and efficiency. These five dimensions provide a beginning conceptualization for effective communication in the emergency department.

Research Question 2

Research question two identified barriers and facilitators of effective communication in the emergency department. Barriers and facilitators were separated into two levels—individual and system—and were organized into psychological, physical, sociocultural, and environmental factors. Individual barriers include psychological, physical, and sociocultural, and system barriers include environmental barriers. These are obstacles for the patient and the provider. Barriers affect effective communication, while facilitators seek to overcome these barriers and help cultivate effective communication between patients and providers.

The present study highlights that communicating within the ED is difficult. The nature of the emergency department creates these barriers. Its "unbounded," continuous care, cramped and chaotic environment, and limited resources and staff makes the ED susceptible to accidents (Institute of Medicine, 2001). Because of these unique characteristics, ED communication is specific to its context. ED physicians engage in information exchange interviews with patients and handoffs with fellow staff members, while continually being interrupted. Because of these communicative events, multiple communication errors often occur.

Despite the ED's unique context and communication, there is a lack of research assessing barriers to patient-provider communication (Knopp et al., 1996). This is a serious flaw. If indeed a goal of patient-provider research is to improve communication, it is first necessary to learn, acknowledge, and understand the barriers that hinder communication. In exploration of barriers to effective communication, ED physicians identify psychological, physical, sociocultural, and environmental barriers. Despite the

discussed barriers to communicating effectively in the ED, it is still imperative to communicate effectively. To overcome these barriers, ED physicians discuss facilitators or strategies that can be used to assist in dealing with these potential obstacles.

The first category of barriers is psychological. Psychological barriers are mood/attitude and communication style. Mood/attitude is a barrier to effective communication because it is constantly changing. Physicians' moods/attitudes during their shift can be influenced by their own emotions and each other's emotions. Even though physicians are expected to interact and treat their patients the same way (Roter & Hall, 1992), they are also human. ED physicians have bad days, and they have a life outside of the ED. Communication style—an individual's way of expressing communication in a self-presentational manner—is also a barrier to effective communication. A physician's perspective, content, and delivery can create problems for patient-provider relationships. Consequences may include frustration, confusion, and misinterpretation for the patient but also the provider. Overall, physician and patient characteristics or attributes dictate their interactions (Parsons, 1951; Roter & Hall, 1992). Attitudes are grounded in cultural beliefs and values and thus shape physician communication (Covarrubias, 2009). This can determine how many patients physicians see a day, what attitudes physicians hold towards the caring system, and physicians' interpersonal skills such as expressing emotion and engaging in nonverbal cues (Roter & Hall, 1992). The findings of this study do not provide information regarding patient's mood/attitude and communication style as barriers to effective communication although it is likely that these moods can also be barriers.

Individual-based interventions are strategies or changes performed by an individual staff member that can improve communication with other patients, other staff, and patients' family and friends (Cameron, in press). To overcome the psychological barriers of mood/attitude and communication style, ED physicians report the possibility of engaging in three individual strategies. One strategy is physicians can work on having a good attitude. Remaining positive and productive helps stay focused and happy.

Another strategy is preparing one's mind for the shift. By being conscious (Reever & Lyon, 2002), acknowledging the stressful encounters (Kreps & Kunimoto, 1994), and realizing time will be violated (Knopp et al., 1996), physicians can overcome bad moods/attitudes and tailor their communication styles. The last strategy is keeping a balanced life outside of the emergency department.

The second individual category is physical. Physical barriers are stress, fatigue (Leonard, Graham, & Bonacum, 2004), and patient's pain, disease, and/or condition. For the patient, stress arises from their long wait and their worry about their condition, treatment, and side effects. For the physician, stress arises from the ED's unpredictable and uncontrollable environment (Babitsch, Braun, Borde, & David, 2008; Kirmeyer, 1988). Physicians are under stress because of the constant and continuous flow of admitting patients (Roter et al., 1995; Slovis, 2008). Exhaustion is another barrier (2008). Patients become exhausted during their long wait to see a physician, while physicians become fatigued due to their long shifts. Unfortunately, these factors only also increase in their effect as physicians' shift continues (Slovis, 2008). Finally, patients' physical pain, disease, or condition impacts the communication interaction between ED patients and physicians. Whether actual or perceived discomfort, these barriers can impede patients

from hearing and understanding their condition and next steps for their treatment. In general, these factors distract patients and physicians from effective communication.

To overcome these physical barriers, ED physicians recommend four strategies. The first strategy deals with stress and patient pain. Emergency department physicians should employ the help of their coworkers like the nurses, pharmacists, and social workers (Knopp et al., 1996; Reever & Lyon, 2002). Each is trained to assist with particular aspects of patient care. Nurses are able to give the physician updates about their patient's pain level and treatment stage, mediating communication between the physician and patient (Williams & Gossett, 2001). Pharmacists are able to answer patient's questions and concerns about medication (Kosits & Jones, 2010), which alleviates some stress with regards to time, and social workers help with the wellbeing and home life of the patient. Last, in order to deal with fatigue and discomfort, ED physicians should be cognizant of their tiredness; this means being responsible in identifying one's ability to work or not to work (Kreps & Kunimoto, 1994).

The third individual barrier category is sociocultural. Sociocultural barriers are language, culture (Leonard, Graham, & Bonacum, 2004), and education. Common problems are due to a lack of cultural knowledge and language problems (Robinson, 2002). This is because practitioners often overlook pragmatic issues, and instead they focus on grammar and vocabulary difficulties of their patients (Pauwels, 1990; Rehbein, 1994). If the patient and physician do not speak the same language, contextual meaning and specific details can be lost. If the patient and the physician do not understand each other's cultural background, stereotyping, negative imaging, and cultural insensitivity can arise (Lerner, Jehle, Janicke, Moscati, 2000; SAEM, 1996). Education level about health

is another barrier. For the physician, the use of medical jargon limits patient care and comprehension, yet equally problematic is the patient's ability to describe his or her own symptoms and past medical history. All of these barriers ultimately lead to miscommunication.

To overcome sociocultural barriers, ED physicians can use interpreter services, be aware, use nurses, and devote time. Because there is often a language barrier between patients and physicians, interpreter services should be utilized (Hudelson, 2005). Though interpreters assist in translation, cultural differences are still a potential problem (Karliner, Perez-Stable, & Gildengorin, 2004). ED physicians say that being aware that patients might have different cultural beliefs, values, and attitudes, and being willing to work with those patients, assists in overcoming this obstacle. Fernandez et al. (2004) states patients' perceptions of their physicians are more positive when the physician speaks their language. Relying on nurses can also help, and the last strategy to overcome culture and education barriers is to devote time to these patients. Though it should be noted ED physicians do recognize this is a tricky facilitator since one of the biggest barriers to ED communication is time. This is discussed next.

The last barrier is a system barrier—environment. Environmental barriers include timing, interruptions, noise, handoffs, lack of a previous relationship, and no chair in the patient's room. To begin, time constraints affect a physician's ability to communicate effectively (Slovis, 2008). Timing as a barrier is a difficult subject because of the nature of the ED. In general, efficiency is one of the most important things in the ED (Eisenberg et al., 2005). Because of this time constraint, physicians feel pressured and oftentimes are not able to sit down with their patient, discussing and answering all their questions. Some

scholars suggest perhaps the time constraints for patient visits are really not the issue but rather the physician having the time to meet their own goals (Hornberger, Thorn, & MaCurdy, 1998) and their patient's expectations (Howie et al., 1991). The problem is, however, meeting goals and expectations typically this takes time. Interruptions are another barrier to effective communication (Leonard, Graham, & Bonacum, 2004). Even when ED physicians have time to sit down and talk with their patients, they are continually interrupted. Attending physicians' pagers will buzz indicating a trauma emergency; nurses will enter the patient's room with a question or concern; and patient's machines, TVs, and cell phones will occasionally interrupt the conversation. According to Woloshynowych (2007), these interruptions are problematic because they increase memory load, which disrupts the physicians' memory process (Altman & Trafton, 2007) and causes efficiency loss, slow progress, and reduced patient satisfaction (Jeanmonod, Boyd, Loewenthal, & Triner, 2010). A third environmental barrier is handoffs. Handoffs involve communication between physicians of the present shift and admitting shift. Due to daily handoffs, ED physicians are first unfamiliar with patients, and second, they often lose critical information about their patients between shift changes. This is a problem because it increases vulnerability with patient outcomes and possible litigation problems (Kovacs & Croskerry, 1999). Noise is another barrier, as it serves as a distracter (Cameron et al., in press; Leonard Graham, & Bonacum, 2004). It can be difficult to hear a patient in a busy trauma room or focus on enter patient data into the computer with pagers and phones ringing and hospital staff and patients talking. A fifth barrier is a lack of having a previous relationship with the patient (Knopp et al., 1996). Because of this, information is often missing for the current physician treating the patient, and without

prior history, physicians and patients must establish a relationship quickly because physicians must build rapport with their patients. The lack of knowledge about each other makes this difficult. Finally, not having a chair is the last environmental barrier. This is a problem because the physician standing creates a power dynamic. Patients can feel intimated and unimportant because it portrays the physician in a hurry. It is important to sit down because rapport is created and maintained by the physician's ability to demonstrate care nonverbally (DiMatteo, Taranta, Friedman, & Prince, 1980; Reever & Lyon, 2002).

In attempt to overcome environmental barriers, ED physicians use a variety of strategies. System-based interventions are changes or strategies that occur at the department level that can assist facilitating effective communication among ED individuals (Cameron, in press). One facilitator is to use templates and look for buzzwords within a patient-provider interview. Steering a patient's conversation can also be helpful because it still acknowledges the patient's full story by extracting the important medical information. Yet, sometimes there simply is not enough time, so ED physicians will have to prioritize their tasks (Knopp et al., 1996). In order to overcome interruptions, physicians can first acknowledge interruptions are a part of the ED. Then they can try to minimize the interruptions and create the illusion of time with their patients by sitting down and not making eye contact with other hospital staff. This way the essential communication can take place without interruption (Kosits & Jones, 2010). To deal with the constant, loud noise of the emergency department, physicians use individual facilitators. One strategy is to limit the excessive noise around them like muting their pager and putting their phone on vibrate. Another strategy is to turn off

patient's monitor when conducting the patient-provider interview. Limiting these distracters assists in physicians being able to listen better (Cheng et al., 2010). To deal with a trauma room noise, one physician should take charge, keeping everyone on track and quiet. One way to deal with the handoff barrier is to not let the previous shift influence the incoming shift's perspectives about the ED patients. Walking around to each of the patients' room during this interaction is also helpful, as it provides a face and the possibility to visit the patient briefly, which often answers any additional questions or concerns the new shift may have (Eisenberg et al., 2005). The computer-based sign out tool also helps to create structure and consistency in handoff communication (Apker et al., 2010). To assist in the lack of having a prior relationship, ED physicians can force themselves to take the time to collect as much information as possible and work on establishing good rapport. Finally, the hospital needs to buy more chairs or provide stools to alleviate the problem of physicians standing in the patients' room. As Knopp et al. (1996) explain "getting at eye level with head and torso oriented to the patient is part of the listening process" (p. 1068). ED physician strengthen their rapport by sitting down and thus "mirroring" the patient's position. In short, most of the facilitators for these environmental barriers lay in the system's solution, ED physicians say.

In sum, psychological, physical, sociocultural, and environmental barriers inhibit communication. These barriers make it difficult for physicians to give and take clear, concise, timely, relevant messages with patients, while checking comprehension, respecting the ED, and building a relationship. So by implementing the above facilitators, ED physicians can try to overcome the barriers and have effective communication.

The Culture of the University of New Mexico's Hospital Emergency Department

Because the goal of the current study is to understand the perspectives of emergency department physicians at The University of New Mexico's Hospital ED, an additional analysis step was taken to supplement the research questions. With the Hymes' (1974) SPEAKING framework as a tool for furthering analysis, the combination of observations and interview data indicate The University of New Mexico Hospital emergency department has its own culture. Contextual observations guide the uncovering of descriptive communicative patterns within the emergency department. Interview data provide culturally specific understanding of emergency department physicians' perceptions about effective communication and its barriers and facilitators.

This additional step is important because the SPEAKING framework allows access to more refined understanding. It enabled me to make context-specific conclusions about UNMH's emergency department. By attending to who said what, to whom, where, in what way, and for what purpose and by paying attention to what was not said, to whom, where, in what way, and for what purpose, the meaning behind observational and interview data is revealed. Furthermore, this approach pointed me to pay particular attention to terms and phrases used by ED physicians, as these are reflections of cultural meaning (Carbaugh, 2007; Covarrubias, 2008; Hymes, 1962). In short, the Hymes (1974) SPEAKING framework helped me particularize my study in relation to communication, thus allowing me to make overall conclusions about this ED's cultural context regarding effective communication.

Through the analysis of both ED physicians enacted communication patterns and perceptions of effective communication in this context, communication norms are revealed. This would not have been possible with other analysis tools. These norms guide how ED physicians perform communication and interact with ED patients. In this way, the emergency department culture is manifested and reflected by ED physicians' own communicative behaviors and language. Additionally, these norms are created, shared, and maintained by each member because of the commonalities between expressed opinions about effective communication and barriers and facilitators to communicating in the ED.

In examining the contextual observations of physician and nurse communication and the present study's interview findings, an overarching cultural meaning of effective communication among emergency department physicians is identified. This belief is in order for communication to be effective in the ED (a) the intended message must be direct, specific, and relevant, (b) the message must be received and comprehended, (c) actions must be taken based on the provided information, and finally, (d) this process must be performed within an appropriate amount of time.

In light of this overall conceptualization of effective communication, the following conclusions about effective communication in the emergency department are proposed. Because these conclusions are taken from interview findings and contextualized based on participant observations, they represent the cultural context of physicians' ED communication.

Conclusion 1: Emergency department physicians acknowledge and understand the emergency department is on a time crunch.

The ED is a fast-paced environment. There is a continual flow of admitting patients, and there are not enough beds. ED physicians know that hospital staff members are constantly busy. They also recognize that part of the nature of the ED is simply to be backed up and over-stressed. Because of this, an understood goal of ED physicians is to see the most amounts of patients as possible during their shift. In other words, ED physicians are always trying to expedite patient care. To do this, care must be efficient. This means members must fracture roles, responsibilities, and of course, communication. It is essential to the success of the ED that everyone understands this approach, performing his or her roles efficiently.

Conclusion 2: Emergency department physicians communicate with patients in ways that respect the time constraints of the emergency department.

Because of the nature of the ED, physicians communicate with their patients in particular ways. First, ED physicians use questions to get necessary information from patients. Through the use of a checklist, physicians get a prior history. One way to speed this process is by categorizing patients based on buzzwords the physicians hear. Second, ED physicians steer their patients' conversations when they get off track. By kindly redirecting patients, physicians obtain necessary information. Both of these techniques can help diagnosis patients more quickly. To demonstrate—because the ED is susceptible to distractions, time constraints, and limited resources—interruptions, lack of communication, and miscommunication are common in this context. So in order to maximize on the available time ED physicians do have, they engage in structured handoffs, sit down conferences, and teaching moments to maximize on the time that is

available. It is clear ED physicians strategically manage their communication to maximize on what time they do have to communicate.

Upon examining ED physicians' perceptions about effective communication and identifying barriers and facilitators, ED physicians communicate with their patients based on their perceptions of the ED as a unique context. That said, perhaps it would be beneficial to study ED communication through a system's lens perspective rather than patient-provider lens. For example, Redfern, Brown, and Vincent (2009) find, when making possible solutions for improving ED communication, ED health care staff focus on the improvement of the system in order to improve communication, efficiency, and safety for patients (Redfern, Brown, & Vincent, 2009) rather than the patient-provider relationship.

Conclusion 3: Emergency department physicians use particular language that reflects their perceptions about effective communication.

Emergency department physicians' communication is tailored in such a way that reflects their perceptions regarding effective communication in the ED. This language uncovers the ways in which ED physicians function in this communicative context. First, the use of numbers and conditions to name ED patients reveal that physicians are users of symbols for particular purposes. Physicians use this method in order to help remember and distinguish their patients, which is important, as oftentimes they do not have the opportunity to communicate with their fellow physicians or even the nurses. Second, through questions and rephrased statements, these communicative acts expose that physician communication is patterned, distinctive, and strategic. It is patterned because all ED physicians use questions and rephrased statements to obtain and give information

to patients. It is distinctive because these communicative acts elicit certain responses from patients, a place to inquire about patients' past and current medical history. Finally, it is strategic because these verbal acts are used to achieve and transform patients' information. Overall, these communicative events and acts are unique to this particular communicative situation and thus shed light on its cultural community. Physician communication is direct, informative, and intentional to maximize on the complexity and time limitations of the ED.

So, what does this mean for emergency department communicative culture? The findings of the present study point out an interesting contradiction. ED physicians see communication as both a linear procession and a "give and take" (N-1). Throughout their discussion of effective communication they emphasis the importance of conveying clear, concise, accurate, and relevant information to their patients; so much so, that the idea of listening and providing feedback is often lost. For the sake of time, physicians will collect and give information more often than they will listen and provide feedback, and more often than they will let the patient provide feedback as well. This idea is demonstrated by the finding that ED physicians are more concerned that their message is received rather than comprehended/understood. On the other end, listening is deemed a prerequisite of comprehension, and comprehension is stated as a huge aspect of effective communication. However, ED physicians explain it is the clear, concise, accurate, and relevant information that is more pivotal to the patient-provider encounter. Lastly, in the present study, ED physicians did not talk about the system, nonverbal behaviors, or nurses—other important components of ED communication—but instead focus mainly on information dissemination. ED physicians discuss effective communication as

something that occurs between the patient and the physician rather than in relation to the system as a whole. ED physicians do not emphasize the importance of nonverbal communication behaviors when discussing the definitions or dimensions of effective communication, though a couple physicians do mention some nonverbal behaviors as facilitators to help overcome ED communication barriers, and finally, other hospital staff members like the nurses are not mentioned either as a component of effective communication, just as occasionally being a helpful facilitator.

In other words, The University of New Mexico Hospital ED physicians seem to follow Shannon and Weaver's (1949) communication model because they view communication more as linear. Shannon and Weaver's model (1949) views communication as an act where information flows from a starting point to an end point. There are five main components of this model—the sender, the receiver, the message, the channel, and noise. The sender is the one who sends the message; the receiver is the person whom the message is intended for. The message is the content information transmitted. The channel is the conduit that transmits the message from the start point to the end point. Finally, noise incorporates the factors that can inhibit the message being received. Similarly, ED physicians also view communication as an act where information flows from a starting point to an end point. The physician, the sender, is the one who sends the message; the patient, the receiver, is the person whom the message is intended for. The health messages are the content information transmitted. The channel, usually verbal in patient-provider interactions, is the conduit that transmits the message from the start point to the end point. Finally, noise (e.g., barriers) is the factors that can inhibit the message being received rather than understood as the speaker intended.

Emergency department physicians acknowledge and understand effective communication is a complex term, and they recognize this view of communication is limiting, but because of the nature of the ED, they argue an alternative viewpoint is not always possible. This is evident in their depiction of idealized and realistic effective communication. Effective communication is idealized as the "process of give and take" (N-1), yet effective communication must often be realistic and is thus linear.

This difference between idealized effective communication and realistic effective communication in the emergency department is essential to the present study. Because of the busy, time pressured nature of the emergency department communication is rationed. There should be simultaneous communication between interactants (Cappella, 1987; Miller & Steinberg, 1975)—a give and take of listening and a give and take of conveying and responding. There should be feedback, verbal or nonverbal, because it indicates that the recipient has indeed received the intended message. There should be acknowledgement of both interactants field of experience—beliefs, values, attitudes, and experiences that influence any communication occurrence (Schramm, 1954). There is little mention of nonverbal behaviors and mention of the system when discussing communication with patients. Yet although ED physicians discuss these components as important to effective communication, even encouraged, they state the components are often forgotten when communicating with patients. This is because ED physicians place emphasis on their messages being received by their patients rather than their messages being comprehended by their patients. As such, their view of effective communication is more linear and individualistic. Because of this, ideal understanding is often not

achieved. In other words, the process of communicating (e.g., talking and responding) and listening are necessary but not always enough to have ideal understanding.

Past research supports this claim. On a broad scale, the majority of research surrounding ED communication also assumes a linear model of communication (Eisenberg et al., 2005). Recommendations to improve ED communication focus on improving information transfer rather than communication as a whole (Redfern, Brown, & Vincent, 2009). Additionally, physicians do not focus on communication as a whole or as a conversation. Physicians do not focus on the perceptions of their patients' problems and the physical, emotional, and social impact of those problems; physicians provide information in an inflexible way, not allowing for them to respond or ask questions; and physicians do not focus on checking comprehension with their patients (Maguire & Pitceathly, 2002). Furthermore, Hulsman, Ros, Winnubst, & Bensing (1999) find physicians are in need of training regarding interpersonal and affective behaviors (e.g., relationship building, empathy, expressing concern and emotions) and do not need as much training in information behaviors (e.g., providing information). Not only does this support the linear view of communication, but this also supports the finding that physicians are more concerned about efficiency, clarity/accuracy, and relevance than comprehension and rapport. In short, as Eisenberg et al. (2005) explains, "An exclusive focus on information transfer leaves out much of what is most (and most challenging) about health communication practice" (p. 393).

The conclusions presented above suggest ED physicians hold certain perceptions about effective communication and thus engage in particular communicative behaviors that regulate the communication culture within this context. A proscription is a norm a

community member should not enact, while a prescription is a norm a community member should enact. These norms can be phrased as follows:

Proscription: In The University of New Mexico's Hospital Emergency

Department, communication is ineffective if (a) the intended message is not direct,

specific, and relevant, (b) the message is not received and comprehended, (c) actions are

not taken based on the provided information, and (d) if this process is not performed

within an appropriate amount of time.

Prescription: In The University of New Mexico's Hospital Emergency

Department, communication is effective if (a) the intended message is direct, specific,

and relevant, (b) the message is received and comprehended, (c) actions are taken based

on the provided information, and (d) if this process is performed within an appropriate

amount of time.

In a perfect world, as one participant states, ED physicians would have an adequate amount of time with their patients, first listening, then responding, and finally checking for comprehension. However, according to ED physicians, the context of the ED does not always allow for this. Thus, ED physicians adapt, and through their lived experiences, cultivate their own perspectives of what effective communication is and can be in the ED to the best of their ability.

In sum, the overall purpose of this study is to first demonstrate The University of New Mexico's Hospital ED has its own culture. Second, it is to reveal the perceptions about effective communication among emergency department physicians is intrinsically tied to the cultural conceptions of what is "effective" in this particular context. Finally, it is to depict that these cultural notions guide ED physicians' communicative behaviors. In

short, the discussed norms shape ED physicians' notions of what is and what is not effective communication in the emergency department, and adherence to such norms demonstrates the cultural meaning and understanding behind effective communication.

Implications

By studying ED physicians' perspective about effective communication, three things are accomplished. First, the viewpoints and experiences of ED physicians are represented. Second, by identifying dimensions of effective communication, ED physicians are cognizant of the communication beliefs they hold and behaviors they enact. Last, through the discussion of effective communication, ED physicians identify barriers to performing effective communication and possible facilitators to help overcome these barriers.

There are important implications for the current study. In this section, I not only offer my own implications but also present implications discussed by UNMH's emergency department physicians. First, this study adds to patient-provider communication research as it takes a qualitative approach. Qualitative studies regarding patient-provider communication are particularly helpful as the process of communication is interactive (Roter, 1995). Broadly, this study offers a culturally rich perspective of ED physicians' perceptions about effective communication. Unlike results from surveys, interviewing and observing the community members of this cultural context reflect not only their beliefs but also contextualize their beliefs. As a result, there is a better depiction of the communication within the emergency department. More specifically, by using Hymes (1974) SPEAKING framework for additional analysis, more refined understanding about ED communication is derived. Context-specific conclusions about

UNMH's emergency department from UNMH's ED physicians are discussed. Interview data and observations indicate emergency department physicians' hold specific perceptions about effective communication and enact communicative behaviors that reflect these beliefs. By examining dimensions, barriers, and facilitators of communication and contextualizing these findings in observational data, this study highlights the particular nuances of communicative behavior and the meaning behind those nuances. By particularizing the study in relation to communication, overall conclusions about this particular ED's cultural context regarding effective communication are identified. This would not have been possible with other analysis tools. Eisenberg et al. (2005) points out thinking about the ED as a communication environment focuses the researcher on how ED culture is socially constructed and maintained by and through interaction processes. It is through understanding how individuals, in the words of Hymes, "speak" or "communicate" that researchers can learn their beliefs, values, and attitudes. And this approach can be used for decreasing communication errors and improving patient-provider interactions.

Second, this study has implications for ED physicians. For one, ED physicians discuss the importance of learning how to communicate effectively. As mentioned in the findings chapter, most physicians do not know if they are communicating effectively or not. For instance, at the end of one interview, a physician talks about how she wishes she knew the "right model that actually facilitates good communication" (N-14, p. 7). She goes on to say she would like to know how to teach it and then implement it. This implication is interesting because of the contradiction ED physicians express regarding effective communication. Physicians want to know and learn how to practice ideal

effective communication—"the give and take"—yet also understand that communication must oftentimes be performed realistically—linearly. Despite this contradiction, ED physicians still want education regarding what is effective communication in the ED. Cramm and Dowd (2008) suggest effective communication education should start with first-year residents. By targeting at this level, ED physicians can begin to put to practice what they learn. Otherwise, without training on communication, communication skills decline during the course of medical training (Preven, Kachur, Kupter, & Waters, 1986). Future work should include developing training for teaching effective communication.

Third, this study has implications for ED communication. Specifically, perhaps a new model of communication needs to be created and implemented in emergency department medical training. Suchman (1987) points out medical error are almost never a black and white matter but rather a matter of context. Emergency department staff members, hospital administrators, and communication scholars need to sit down and discuss effective communication in this context. This way not only are ED physicians' perspectives represented in regards to patient care but also the system aspect is represented. As Eisenberg et al. (2005) state

Recommendations cannot focus on the ED as primarily (or even mainly) an 'information transfer' environment. Simply trying to eliminate error by increasing the amount or clarity of communication will not impact the cultural and behavior aspects of the E.R., which are constituted and maintained through communication (p. 409).

And currently, ED physicians view communication as primarily an 'information transfer.'

For example, there is lack of discussion regarding the importance of nonverbal

communication behaviors with communicating with patients and a lack of explicit discussion about how effectiveness, not efficiency, is a team effort.

As such, this type of model needs to focus more on communication as a transactional process that is socially constructed and maintained by the culture of the ED. The model needs to include feedback. Feedback is important because it indicates that the recipient has not only received the intended message but also understood it; messages can be through verbal and nonverbal messages. The model also needs to include each participant's field of experience. Field of experience is a person's beliefs, values, attitudes, and experiences that influence any communication occurrence (Schramm, 1954). In other words, ED physicians need to acknowledge their own views on health as well as their patients. Finally, the model needs to account for simultaneous communication between interactants (Cappella, 1987; Miller & Steinberg, 1975). This means each participant, physician and patient, is collaboratively and consistently exchanging both verbal and nonverbal messages (Streek, 1980). By doing this, it may assist in identifying what interaction patterns lead to ineffective communication and medical errors. This model then should be taught to medical students and residents.

Fourth, an emergency department physician requested a checklist for improving their communication with patients in the ED (See Appendix C). This 5 Step Checklist brings together physicians' comments and communication expertise. The following steps should be implemented during patient-provider interviews.

(1) Opening and Sit Down. In the beginning, an ED physician should shake his or her patient's hand and introduce who he or she is including name and role in the patient's care. The physicians should sit down for the interview. The physician should sit down and be eye level with the patient. If there is no chair in the room, he or she should look for one or kneel if time constrains.

- (2) Do Not Interrupt. The physician should not interrupt the patient during their first response. This includes active listening—responding to cues about particular problems and stress and then clarify by exploring them through asking further questions—which allows the patient to explain symptoms and the situation.
- (3) Follow Up. The ED physician should check for comprehension of the conversational topic before moving onto the next topic (e.g., check comprehension of diagnosis before discussing treatment options). The physician should have the patient repeat back the provided information if he or she believes the patient is confused or may not have completely comprehended. This provides feedback to the patient (e.g., "You say you understand, but you look concerned still."). The physician should ask if the patient would like additional information regarding any of the discussion.
- (4) Check In. The ED physician should check in on patient to provide updates on the patient's care. This will decrease the patient's anxiety and frustration.
- (5) Wrap Up. Before leaving the room, the ED physician should wrap up the conversation with the patient—reviewing information, reemphasizing what the future plan/next steps are in the patient's care, and attending to final concerns. The physician should answer any other additional questions the patient may have at this time.

Finally, this study has implications for the patient population. An implication of emergency department physicians' definition of effective communication is that it

privileges an individualistic, Western, male perspective of communication (Hofstede & Hofstede, 2010). This is because of the focus on directness, clarity, conciseness, accuracy, relevance, and overall efficiency. This is potential problem because of the demographics of New Mexico and Albuquerque. Given the diversity of New Mexico and thus cultural differences, this linear approach can potentially negatively effect patients' health outcomes. Future work should examine this.

Limitations, Future Directions, and Conclusions

There are two main limitations to the present study. The first limitation is the sample. Because this was a convenience/snowball sample, generalizations could not be made regarding differences in perspectives between resident physicians and more experienced physicians like attending physicians. However, there appear to be some differences between the two groups. The resident physicians strongly emphasis the time pressures/constraints of the ED, explaining comprehension and rapport are often lost in patient care. On the other hand, the physicians with more experience acknowledge this difficult, yet still encourage a more holistic approach for patient care—establishing rapport and checking comprehension but still maintaining efficiency, clarity, conciseness, accuracy, and relevance. In addition, two of the participants are also educators, and three are attending physicians. This also may have influenced some of the conclusions, as certain physicians focus on patient education and ED management. Overall though, because of the disparity in numbers and a different purpose for this thesis, generalizations cannot be made. A better distribution between these groups would have allowed for more understanding of the perceptions of effective communication in the beginning and of a physician's career and later on.

The second limitation is social desirability bias. Because of the stress on communication in medical encounters, participants may have discussed effective communication in a better light or not discussed certain examples of what is actually enacted in the moment. A good way to check this would be to conduct participant observations after the semi-structured interviews. A few observations during the past year do exemplify this enactment, but there is not enough evidence to make evidence-based conclusions. Because of this, it may be useful for examine other emergency departments, especially as UNMH is the only Level 1 Trauma in the state of New Mexico.

Future research should include two steps. First, interviews should be conducted with other ED providers like nurses. In addition, interviews should also be conducted with ED patients to understand their perceptions of effective communication in this context. By doing this, the full picture of ED communication will be represented, as ED physicians discuss communication being influenced by the whole. Second, a scale should be created assess ED communication. Qualitative data from nurse and patient interviews would assist in understanding different perceptions of effective and thus creating tools to measure said variable. This would include both qualitative and quantitative research methods in order to generate a community of working knowledge of what emergency department providers like physicians and patients believe is effective communication and how to enact it. This way research could actually address how the definition and dimensions effective communication in the ED is correlated to patient health outcomes like patient satisfaction, patient adherence, and overall health outcomes. All in all, communication and ED researchers and health care administrators and professional organizations like the Accreditation Council of Graduate Medical Education (ACGME)

needs to encourage the enactment effective communication behaviors rather than simply advocating.

In conclusion, the current study explores effective communication in the emergency department. Data were collected through semi-structured interviews and contextualized through observations. Five key dimensions, a definition of effective communication, and dimensions and facilitators of effective communication are identified in the interview transcriptions. The five dimensions are efficiency, clarity/accuracy, relevance, comprehension, and rapport. Effective communication is defined as the act of conveying clear, concise, accurate, and relevant messages with patients with the end goal being to have both partners comprehend the message and to act on the provided information, while respecting the emergency department's fast-paced, busy, time crunched nature. Finally, barriers include psychological (e.g., emotions, personality, communication style, and attitude), environmental (e.g., timing, interruptions, noise, handoffs, lack of previous relationship, and no chair, physical (e.g., stress, fatigue, patient's condition), and sociocultural (e.g., language, culture, and education), while facilitators such as address said barriers.

The purpose of this research is to gain insight for ED physicians on their perceptions of effective communication. The goal of this project is to then improve communication in this context in the hopes of increasing patient satisfaction, decreasing miscommunication, and creating better health outcomes. This research contributes to the current literature as it provides a definition and understanding of effective communication from emergency department physicians' perspectives. However, more

studies should be conducted with this population in order to improve understandings of perceptions of care and to enhance communication practices.

References

- Abelson, R. (2002), March 28 [Late ed.]). Patients surge and hospital hunt for beds. *The New York Times*, p. C5.
- Accreditation Council of Graduate Medical Education Outcome project website. General competencies. Available at http://www.acgme.org/outcome/comp/compFull.asp.

 Accessed July 12, 2010.
- American College of Emergency Physicians. (1998). *The future of emergency medicine*. Dallas, TX: Author.
- Anon. (2005). The Joint Commission's Sentinel Event Policy: Ten years of improving the quality and safety of health care. *The Joint Commissions Perspectives*, 25, 3-5.
- Altman, E. M., & Trafton, G. T. (2007). Time course of recovery from task interruption:

 Data and a model. *Psychonomic Bulletin & Review*, *14*, 1079-1084.
- Babitsch, B., Braun, T., Borde, T., & David, M. (2008). Doctor's perception of doctor-patient relationships in emergency departments: What roles do gender and ethnicity play? *BMC Health Services Research*, 8, 82-92. doi: 10.1186/1472-6963-8-82.
- Barr, D. A. (2004). Race/ethnicity and patient satisfaction: Using the appropriate method to test for perceived differences in care. *Journal of General Internal Medicine*, 19, 937-943.
- Binstadt, E. S., Walls, R. M., White, B. A., Nadel, E. S., Takayesu, J. K., Barker, T. D., Nelson, S. J., & Pozner, C. N. (2006). A comprehensive medical simulation education curriculum for emergency medicine residents. *Annals of Emergency Medicine*, 49, 495-504.

- Blanquicett, C., Amsbary, J. H., Mills, C., & Powell, L. (2007). Examining the perceptions of doctor-patient communication. *Human Communication*, 10, 421-436. Retrieved from Communication & Mass Media Complete database.
- Brewster, L., Rudell, L., & Lesser, C. (2001). *Emergency room diversions: A symptom of hospitals under stress* (Issue Brief No. 38, pp. 1-4). Washington, DC: Center for Studying Health System Change.
- Brixey, J. J., Robinson, D. J., Johnson, C. W., Johnson, T. R., Turley, J. P., Patel, V. L., & Zhang, J. (2007). Towards a hybrid method to categorize interruptions and activities in healthcare. *International Journal of Medical Informatics*, 76, 812-820.
- Brixey, J. J., Robinson, Z., Tang, T. R., Turley, J. P., & Zhang, J. (2005). Interruptions in the workplace for RNs in a level one-trauma center. Journal of the American Medical Informatics Association, Washington.
- Bryne, P. S., & Long, B. E. L. (1976) *Doctors talking to patients*. London: Her Majesty's Stationery Office.
- Burdick, W. P., & Escovitz, E. S. (1990). Use of standardized patients in freshman emergency medicine course. *The Journal of Emergency Medicine*, *10*, 627-629.
- Cameron, C. (2008). Patient compliance: recognition of factors involved and suggestions for promoting compliance with therapeutic regimens. *Journal of Advanced*Nursing, 24, 244-250. doi: 10.1046/j.1365-2648.1996.01993.x
- Cameron et al. (in press). Examining emergency department communication through a staff-based participatory research method: Identifying barriers and solutions to

- meaningful change. *Annals of Emergency Medicine*. doi: 10.1016/j.annemergmed.2010.03.017
- Center for Disease Control and Prevention (2008). Press Release: Americans Made Over

 1 Billion Hospital and Doctor Visits in 2006.

 http://www.cdc.gov/media/pressrel/2008/r080806.htm
- Chen, G. M., & Starosta, W. J. (1996). Intercultural communication competence: A synthesis. In B. R. Burleson (Ed.), *Communication yearbook 19* (pp. 353-383). Thousand Oaks, CA: Sage.
- Chisholm, C. D., Collison, E. K., Nelson, D. R., & Cordell, W. H. (2000). Emergency department workplace interruptions: Are emergency physicians interrupt-driven and multitasking? *Academic Emergency Medicine*, 7(11), 1239-1243.
- Coiera, E., Jayasuria, R. A., Hardy, J., Bannan, A., & Thorpe, M. (2002). Communication loads on clinical staff in the emergency department. *Medical Journal of Australia*, 176(9), 415-418.
- Coombs, R. H. (1978). *Mastering medicine—Professional socialization in medical school*. New York: Free Press.
- Cooper-Patrick, L., Gallo, J. J., Gonzales, J. J., Vu, H. T., Powe, N. R., Nelson, C., & Ford, D. E. (1999). Race, gender, and partnership in the patient-physician relationship. *Journal of American Medical Association*, 282(6), 583-589.
- Conlee, C., & Olvera, J. (1993). The relationships among physician nonverbal immediacy and measures of patient satisfaction with physician care. *Communication Reports*, 6, 25-33. Retrieved from Communication & Mass Media Complete database

- Cousins, N. (1985). How patients appraise physicians. *New England Journal of Medicine*, 313, 1420-1424. Retrieved from http://jag.sagepub.com
- Crossing the quality chasm: A new health system for the 21st century. (2001).

 Washington, DC: Institute of Medicine (US), Committee on Quality of Health
 Care in America.
- Croskerry, P., Shapiro, M., Campbell, S. LeBlanc, C., Sinclair, D., Wren, P. et al. (2004).

 Profiles in patient safety: Medication errors in the emergency department.

 Academic Emergency Medicine, 11(3), 289-299.
- Cupach, W. R., & Canary, D. J. (1997). *Competence in interpersonal conflict*. Long Grove, IL: Waveland Press.
- DeVellis, R. F. (1991). *Scale development: Theory and application*. Newbury Park, CA: Sage.
- DiMatteo, M. R., Taranta, A., Friedman, H. S., & Prince, L. M. (1980). Predicting patient satisfaction from physicians' nonverbal behavior. *Medical Care*, *18*, 376-387.
- Eisenberg, E. M., Baglia, J., & Pynes, J. E. (2006). Transforming emergency medicine through narrative: Qualitative action research at a community hospital. *Health Communication*, *19*, 197-208.
- Faulkner, A., Argent, J., & Jones, A. (2001). Effective communication in health care: Exploring the skills of teachers. *Patient Education & Counseling*, 45, 227-232.
- Frank, G., Lawless, S. T. et al. (2005). Improving physician communication through an automated, integrated sign-out system. *Journal of Healthcare Information*Management, 19, 68-74. Retrieved from http://www.himss.org

- Frankel, R. M. (2000). "Captain, I was trying earlier to tell you that you made a mistake": Deference and demeanor at 30, 000 feet. In J. K. Peyton, P. Griffin, W. Wolfram, and R. Fasold. (Eds.), *Language in Action: New Studies of Language in Society* (pp. 289-299). Cresskill, NJ. Hampton Press.
- Fisher, B. A. (1978). *Perspectives on human communication*. New York: John Wiley.
- Fernandez, A. Schillinger, D., Grumbach, K., Rosenthal, R., Stewart, A. L., Wang, F., & Perez-Stable, E. (2004). Physician language ability and cultural competence. An exploratory study of communication with Spanish-speaking patients. *Journal of General Internal Medicine*, 19, 167-174.
- Frey, J. H., & Fontana, A. (1991). The group interview in social research. *The Social Science Journal*, 28(2), 175-187.
- Frymier, A. B., & Thompson, C. A. (1995). Using student reports to measure immediacy in the classroom: Is it a valid methodology? *Communication Research Reports*, 12, 85-93.
- Gerbert, B. (1984). Perceived likeability and competence of simulated patients: Influence on physicians' management plans. *Social Science & Medicine*, *18*, 1053-1060.
- Giles, H., & Street, R. L. Jr. (1994). Communicator characteristics and behavior. In G. R. Miller & M. Knapp (Eds.), *Handbook of interpersonal communication* (2nd ed., pp. 103-161). Newbury Park, CA: Sage.
- Good, B., & Good, M. (1994). In the subjunctive mode: Epilepsy narratives in Turkey. Social Science and Medicine, 38, 835-842.

- Greene, M., Adelman, R., Charon, R., & Hoffman, S. (1986). Ageism in the medical encounter: An exploratory study of the language and behavior of doctors with their old and young patients. *Language and Communication*, 6, 113-124.
- Guba, E. G., & Lincoln, Y. S. (1989). *The new language of qualitative method*. New York: Oxford University Press.
- Gubrium, J. F., & Holstein, J. (1997). *The new language of qualitative method*. New York: Oxford University Press.
- Gudykunst, W. B. (2005). An anxiety/uncertainty management (AUM) theory of effective communication: Making a mesh of the net finer. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 351-371). Thousand Oaks, CA: Sage.
- Harmsen, J. A. M., Bernsen, R. M. D., Bruijnzeels, M. A., & Meeuwesen, L. (2008).

 Patients' evaluation of quality of care in general practice: What are the cultural and linguistic barriers? *Patient Education and Counseling*, 72, 155-162.
- Harmsen, H., Meeuwesen, L., van Wieringen, J., Bernsen, R., & Bruijnzeel, M. (2003).

 When cultures meet in general practice: Intercultural differences between GPs and parents of child patients, *Patient Education and Counseling*, *51*, 99-106.
- Hollingsworth, J. C., Chisholm, C. D., Giles, B. K., Cordell, W. H., & Nelson, D. R. (1998). How do physicians and nurses spend their time in the emergency department? *Annals of Emergency Medicine*, *31*, 87-91.
- Hofstede, G., & Hofstede, G. J. (2010). *Cultures and Organizations: Software of the Mind* (3rd ed.). New York: McGraw-Hill USA.

- Hudelson, P. (2005). Improving patient-provider communication: Insights from interpreters. *Family Practice*, 22, 311-316.
- Huslman, R. L., Ros, W. J. G., Winnubst, J. A. M., & Bensing, J. M. (1999). Teaching clinically experienced physicians communication skills. A review of evaluation studies. *Medical Education*, *33*, 655-668.
- Hyden, L-C., & Mishler, E. (1999). Language and medicine. *Annual Review of Applied Linguistics*, 19, 174-192.
- Hymes, D. (1971). Competence and performance in linguistic theory. In R. Huxley & E. Ingram (Eds.), *Language acquisition: Models and methods* (pp. 3-24). New York: Academic.
- Improving America's hospitals: The Joint Commission annual report on quality and safety, 2007. (2008). Oakbrook Terrace, IL: The Joint Commission.
- Jeanmonod, R., Boyd, M. Loewenthal, M., & Triner, W. (2010). The nature of emergency department interruptions and their impact on patient satisfaction. *Emergency Medicine Journal*, 27, 376-379. doi: 10.1136/emj.2008.071134.
- Kahn, G. S., Cohen, B., & Jason, H. (1979). The teaching of interpersonal skills in U.S. medical schools. *Journal of Medical Education*, *54*, 29.
- Karliner, L., Perez-Stable, E., & Gildengorin, G. (2004). The language divide. The importance of training in the use of interpreters for outpatient practice. *Journal of General Internal Medicine*, 19, 175-183.
- Kleinman, A., Eisenberg, L., & Good, B. (1978). Culture, illness, and care: Clinical lessons from anthropologic and cross-cultural research. *Annals of Internal Medicine*, 88, 251-258.

- Kilpatrick, A. O., & Holsclaw, P. W. (1995). Health care in the new millennium:

 Implications for executives and managers. *Public Administration Quarterly*, 19, 365-380.
- Kirmeyer, K. (1988). Coping with competing demands: Interruption and the type A pattern. *Journal of Applied Psychology*, 73, 621-629.
- Klitzman, R. (2006). Improving education on doctor-patient relationships and communication: Lessons from doctors who become patients. *Academic Medicine*, 81(5), 447-453.
- Kovacs, G., & Croskerry, P. (1999). Clinical decision making: An emergency medicine perspective. *Academic Emergency Medicine*, *9*, 947-952.
- Kreps, G. L., & Kunimoto, E. N. (1994). *Effective communication in multicultural health care settings*. Thousand Oaks, CA: Sage Publications.
- Kurtz, S. M. (1989). Curriculum structuring to enhance communication skills development. In M. Stewart & D. Roter (Eds.), *Communicating with medical patients* (pp 153-166). Thousand Oaks, CA: Sage Publications.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*.

 Thousand Oaks, CA: Sage.
- Laxmisan, A., Hakimazada, F., Sayan, O. R., Green, R. A., Zhang, J., & Patel, V. L. (2007). The multitasking clinician: Decision-making and cognitive demand during and after team handoffs in emergency care. International Journal of Medical Infomatics, 76, 801-811.

- Lavesit, T. A., & Nuru-Jeter, A. (2002). Is doctor-patient race concordance associated with greater satisfaction with care? *Journal of Health and Social Behavior*, 4, 296-306.
- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: The critical importance of effective teamwork and communication in providing safe care.

 *Quality and Safety in Health Care, 13(1), i85-i90. doi: 10.1136/qshc.2004.010033
- Lindlof, T.R., & Taylor B.C. (2002). *Qualitative communication research methods* (2nd. Ed.). Thousand Oaks, CA: Sage.
- Lipkin, M. Jr., Sisyphus, or Pegasus (1996). The physician interviewer in the era of corporatization of care, *Annals of Internal Medical*, 124, 511-513.
- Lupton, D. (1994). Toward the development of critical health communication praxis.

 Health Communication, 6, 55-67.
- Maguire, P. (2002). Key communication skills and how to acquire them. *British Medical Journal*, 325, 697-700.
- Maguire, P., & Rutter, D. (1976). History-taking for medical students. 1. Deficiencies in performance. *Lancet*, 2, 556-558.
- Marson, D. C., McGovern, M. P., & Pomp, H. C. (1988). Psychiatric decision-making in the emergency room: A research overview. *American Journal of Psychiatry*, 148(8), 918-925.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (3rd edition). Thousands Oaks, CA: SAGE Publications.
- Mithers, C. L. (2001, July). The ER crisis. Ladies' Home Journal, 118(7), 70-79.

- Mizrahi, T. (1986). *Getting rid of patients: Contradictions in the socialization of physicians*. New Brunswick, N. J.: Rutgers University Press.
- Morgan, E. R., & Winter, R. J. (1996). Teaching communication skills: An essential part of residency training. *Archives of Pediatrics & Adolescent Medicine*, 150, 638-642.
- Murray-Garcia, J. L., Selby, J. V., Schmittdiel, J., Grumbach, K., & Quesenberry, C. (2003). Racial and ethnic differences in a patient survey: Patients' values, ratings, and reports regarding physician primary care performance in a large health maintenance organization. *Medical Care*, *38*, 300-310.
- n.d. "UNM Hospital." Retrieved from http://hospitals.unm.edu/hospitals/unmh.shtml

 n.d. "Department of Emergency Medicine." Retrieved from

 http://hsc.unm.edu/emermed/UNMStudentWebsite/UNMStudentWebsite2009.sht

 ml
- Nelson, C., & McLemore, T. (1988). National Center for Health Statistics. The National Ambulatory Medical Care Survey: U.S. 1975-1981, and 1985 trends. Vital and Health Statistics, series 13, no. 93, DHHS pub. no. (PHS) 88-1754. Washington, D. C.: U. S. Government Printing Office.
- Netemeyer, R. G., Beauden, W. O., & Sharma, S. (2003). *Scale procedures: Issues and applications*. Thousand Oaks, CA: Sage.
- Neuman, W. (2003). Social research methods: Qualitative and quantitative methods, (5th ed.). Boston: Allyn & Bacon.

- Oetzel, J. G. (2005). Effective intercultural workgroup communication theory. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 351-371). Thousand Oaks, CA: Sage.
- O'Neil, J. D. (1989). The cultural and political context of patient dissatisfaction in cross-cultural clinical encounters: A Canadian Inuit study. *Medical Anthropology Quarterly*, 3, 325-344.
- Ong, L. M., De Haes, J. C. J. M., Hoos, A. M., & Lammes, F. B. (1995). Doctor-patient communication: A review of the literature. *Social Science Medicine*, 40, 903-918.
- Ostrum, C. M. 2004. Good medicine begins with good doctor-patient relationship. *The Seattle Times*. Retrieved 11/30/09 from http://archives.seattletimes.nwsource.com
- Parker, J., & Coiera, E. (2000). Improving clinical communication: A view from psychology. *Journal of American Medical Informatics Association*, 7, 453-461.
- Parsons, T. (1951). The social system. Glencoe, Ill.: The Free Press.
- Patel, V. L., & Kaufman, D. (2004). Cognitive science and biomedical informatics. In E.
 H., Shortliffe and J. J. Cimino (Eds.), *Biomedical informatics: Computer*applications in health care and biomedicine. Springer-Verlag, NY: 2006.
- Patterson, E. S., Cook, R. I., Woods, D. D., & Render, M. L. (2004). Examining the complexity behind a medication error: Generic patterns in communication. *IEEE Transactions on Systems, Man, and Cybernetics—Part A: Systems and Humans*, 34, 749-756. doi: 10.1109/TSMCA.2004.836807.
- Platt, F. W., & McMath, J. C. (1979). Clinical hypocompetence: The interview. *Annals of Internal Medicine*, 91, 898-902.

- Perloff, R. M., Bonder, B., Ray, G. B., Ray, E. B., & Siminoff, L. A. (2006). Doctor-patient communication, cultural competence, and minority health: Theoretical and empirical perspectives. *American Behavioral Scientist*, *49*, 835-852. doi: 10.1177/0002764205283804
- Pett, M. A., Lackey, N. R., & Sullivan, J. L. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research.*Thousand Oaks, CA: Sage.
- Penn, N.E., Kar, A., Kramer, J., Skinner, J., & Zambrana, R. E. (1995). Panel VI: Ethnic minorities, health care systems, and behavior. *Health Psychology*, *14*, 641-646.
- Preven, D. W., Kachur E. K., Kupter, R. B., & Waters, J. A. (1986). Interviewing skills of first year medical students. *Journal of Medical Education*, 61, 842-844.
- Ramirez, A. G. (2003). Consumer-provider communication research with special populations. *Patient Education and Counseling*, *50*, 51-54.
- Ray, E. B., & Donohew, L. (1990). *Communication and health: Systems and Applications*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. Publishers.
- Reason, J. T. (1990). *Human Error*. Cambridge, England: Cambridge University Press.
- Redfern, E., Brown, R., & Vincent, C. A. (2009). Identifying vulnerabilities in communication in the emergency department. *Emergency Medicine Journal*, 26, 653-657.
- Reever, M. M., & Lyon, D. S. (2002). Emergency room communication issues: Dealing with crisis. *Topics in Emergency Medicine*, 24(4), 62-66.
- Riccardi, V. M., & Kurtz, S. M. (1983). *Communication and counseling in health care*. Springfield, IL: Charles C. Thomas.

- Rider, E. A., & Keefer, C. H. (2006). Communication skills competencies: Definitions and a teaching toolbox. *Medical Education*, 40, 624-629. doi: 10.1111/j.1365-2929.2006.0250.x
- Riessman, C. (1993). Narrative Analysis. Newbury Park, CA: Sage.
- Robinson, M. (2002). *Communication and health in a multi-ethnic society*. Great Britain, UK: The Policy Press.
- Roland, M. O., Bartholowmew, J., Courtney, M. J. F., Morris, R. W., & Morrell, D. C. (1986). The "five minute" conversation: Effect of time constraint on verbal communication. *Biomedical Journal*, 292, 874-876.
- Roter, D. L., & Hall, J. A. (1992). Doctors talking with patients/patients talking with doctors: Improving communication in medical visits. Westport, CT: Auburn House.
- Roter, D., & Hall, J. (1989). Studies of doctor-patient interaction, *Annual Review of Public Health*, 10, 163-180.
- Roter, D. L., Hall, J. A., & Katz, N. R. (1988). Patient-physician communication: A descriptive summary of the literature. *Patient Education and Counseling*, *12*, 99-119.
- Roter, D. (1989). Which facets of communication have strong effects on outcome—A meta-analysis. In M. Stewart & D. Roter (Eds.), *Communicating with medical patients* (pp. 43-63). Thousand Oaks, CA: Sage Publications.
- Safran, C., Rind, D., Bush, B., Jones, P., Cytryn, K. N., & Patel, V. L. (1998). Electronic communication and collaboration in a health care practice. Distributed and

- collaborative cognition, and the emergency new systems. *Artificial Intelligence Medicine*, *12*(2), 139-153.
- Saha, S., Komaromy, M., Koepsell, T. D., & Bindman, A. B. (1999). Patient-physician racial concordance and the perceived quality and use of health care. *Archives of Internal Medicine*, *159*, 997-1004.
- Schofield, T., & Arntson, P. (1989). A model of teaching doctor-patient communication during residency. In M. Stewart & D. Roter (Eds.), *Communicating with medical patients* (pp. 138-152). Thousand Oaks, CA: Sage Publications.
- Scherz, J. W., Edwards, H. T., & Kallail, K. J. (1995). Communication effectiveness of doctor-patient interactions. *Health Communication*, 7, 163-177.
- Schott, J. & Henley, A. (1996). *Culture, religion, and childbearing in a multiracial* society: A handbook for health professionals. Oxford, England: Butterworth-Heinemann.
- Schouten, B. C., & Meeuwesen, L. (2006). Cultural differences in medical communication: A review of the literature. *Patient Education and Counseling*, 64, 21-34. doi: 10.1016/j.pec.2005.11.014
- Schouten, B. C., Meeuwesen, L., Tromp, F., & Harmsen, H. A. M. (2007). Cultural diversity in patient participation: The influence of patients' characteristics and doctors' communicative behavior. *Patient Education and Counseling*, 67, 214-223. doi: 10.1016/j.pec.2007.03.018
- Shute, N., & Marcus, M. (2001, September 10). Code blue crisis in the ER. U.S. News & World Report, 131(9), 54-61.

- Silverman, J., Kurtz, S., & Draper, J. (1998). *Skills for communicating with patients*.

 Abingdon, Oxon: Radcliff Medical Press.
- Slovis, T. L. (2008). The art of communication: Strategies to improve patient and information flow. *Pediatric Radiology*, *38*, S651-S654.
- Spagnoletti, C. L., Bui, T., Fischer, G. S., Gonzaga, A. M. R., Rubio, D. M., & Arnold,
 R. M. (2009). Implementation and evaluation of a web-based communication
 skills learning tool for internal medicine interns in patient-doctor communication.
 Journal of Communication in Healthcare, 2, 159-172.
- Spitzberg, B. H., & Cupach, W. R. (1984). *Interpersonal communication competence*.

 Beverly Hills, CA: Sage.
- Spitzberg, B. H., & Cupach, W. R. (1989). *Handbook of interpersonal competence* research. New York: Springer-Verlag.
- Spitzberg, B. H. (2003). Methods of interpersonal skills assessment. In J. O. Greene & B.
 R. Burleson (Eds.), *Handbook of communication and social interaction skills* (pp. 3-50). Mahwah, NJ: Lawrence Erlbaum Associates.
- Spencer, R., Coiera, E. W., & Logan, P. Variations in communication loads on clinical staff in the emergency department. *Annals of Emergency Medicine*, 44, 268-273.
- Steinhauer, J. (2000, October 25 [Late ed.]). Emergency room, to many, remains the doctor's office. *The New York Times*, pp. A1, A20.
- Stewart, M. (1995). Effective physician-patient communication and health outcomes: A review. *Canadian Medical Association Journal*, *152*, 1423-1433. Retrieved from http://www.cmaj.ca/cgi/content/short/152/9/1423

- Stewart, M., Meredith, L., Brown, J., & Galajda, J. (2000). The influence of olderpatient-physician communication on health and health-related outcomes. *Clinics* of Geriatric Medicine, 16, 25-36. doi:10.1016/S0749-0690(05)70005-7
- Street. R. L. Jr. (2003). Communication in medical encounters: An ecological perspective. In T. L. Thompson, A. Dorsey, K. I. Miller, & P. Parrott (Eds.)., *Handbook of health communication*. New York: Routledge.
- Suchman, L. (1987). *Plans and situation actions*. Cambridge, UK: Cambridge University Press.
- Sun, B. C., Adams, J., Orav, E. A. et al. (2000). Determinants of patient satisfaction and willingness to return with emergency care. *Annals of Emergency Medicine*, *35*, 426-434.
- Tang, N., Stein, J., Hsia, R. Y., Maselli, J. H., & Gonzales, R. (2010). Trends and characteristics of US emergency department visits, 1997-2007. The Journal of the American Medical Association, 304, 664-670. doi: 10.1001/jama.2010.1112
- Thorne, S. E., & Paterson, B. L. (2001). Health care professional support for self-care management in chronic illness: Insights from diabetes research. *Patient Education and Counseling*, 42, 81-90.
- Tuckett, D., Boulton, M., Olson, C. et al. (1985). *Meetings between experts: An approach to sharing ideas in medical consultations*. London: Tavistock.
- Ulrey, K. L. & Amason, P. (2001). Intercultural communication between patients and health care providers: An exploration of intercultural communication effectiveness, cultural sensitivity, stress, and anxiety. *Health Communication*, 13, 449-463. Retrieved from Communication & Mass Media Complete database.

- U. S. General Accounting Office. (2001, July). Nursing workforce: Emerging nurse shortages due to multiple factors (GAO Report No. GAO-01-944). Washington, DC: Author.
- Wanzer, M. B., Booth-Butterfield, M., & Gruber, K. (2004). Perceptions of health care providers' communication: Relationships between patient-centered communication and satisfaction. *Health Communication*, *16*, 363-384. Retrieved from Communication & Mass Media Complete database.
- Wartman, S. A., Morlock, L. L., Malitz, F. E., & Palm, E. A. (1983). Patient understanding and satisfaction as predictors of compliance. *Medical Care*, 21(9), 886-891.
- Weston, W. W., & Lipkin, M. Jr. (1989). Doctors learning communication skills:

 Developmental issues. In M. Stewart & D. Roter (Eds.), *Communicating with medical patients* (pp. 43-63). Thousand Oaks, CA: Sage Publications.
- Williams, C. A., & Gossett, M. T. (2001). Nursing communication: Advocacy for the patient or physician? *Clinical Nursing Research*, *10*, 332-340.
- Wilson, S. R., & Sabee, C. M. (2003). Explicating communicative competence as a theoretical term. In J. O. Greene & B. R. Burleson (Eds.), *Handbook of communication and social interaction skills* (pp. 3-50). Mahwah, NJ: Lawrence Erlbaum Associates.
- Woloshynowych, M., Davis, R., Brown, R. et al. (2007). Communication patterns in a UK emergency department. *Annals of Emergency Medicine*, *50*, 407-413.
- Woods, D. D., Johannesen, L., Cook, R. I., & Sarter, N. (1994). *Human error: Cognitive systems ergonomic information and analysis center*. Dayton, Ohio: WPAFB.

Yu, K. T., & Green, R. A. (2009). Critical aspects of emergency department documentation and communication. Emergency Medicine Clinical North America, 27, 641-654. doi: 10.1016/j.emc.2009.07.008

Appendix A

Interview Guide

General Experience

1. Tell me about your experience in the ED.

Effective Communication- Definitions, Behaviors, and Dimensions

- 2. From a general communication perspective, what is effective communication?
 - a. Follow-up: From a ED physician perspective, what does effective communication in the ED mean to you?
- 3. How do you define effective communication with a patient?
- 4. How do you know when you have had effective communication with a patient? Example: Patient compliance; patient satisfaction; patient understanding, etc.
- 5. What are some behaviors that reflect effective communication?

Effective Communication- Barriers and Facilitators

- 6. What are some barriers to communicating effectively in the ED?
 - a. Follow-up: How do you overcome these barriers?
- 7. What are some things that help you communicate effectively in the ED?
 - a. Follow-up: Do these facilitators help you overcome the barriers? If so, how?
- 8. How do you define ineffective communication in the ED?
 - a. Follow-up: How do you know when communication has been ineffective?
- 9. Given your definition of effective communication, can you think of a time when you or someone else might not use effective communication?
- 10. Is there anything else you would like to say?

Demographics: Please specify.

1. What is your sex?

	Male Female Other (please specify)	
2.	What is your ethnicity? Caucasian African-American Hispanic/Latino/Mexican Asian Native Americans/American Other (please specify)	n Indian
3.	What is your age? 18-25 years old 26-40 years old	40-65 years old 65+ years old
4.	How many years have you been an ED physician?	

1-5 years6-10 years

11-20 years 21- more

Appendix B

Hymes (1974) SPEAKING framework with questions for fieldwork

Type	Description
Scene	Environmental/physical and psychological situation
	Where did the interaction take place?
	What was everyone doing?
	Was this a routine or special event?
	What were the circumstances surrounding the interaction?
	Formal or informal?
Participants	Individuals in the scene; relationships between each other
1	Who was there? Were they peers?
	Were superiors present?
	What did you notice about how participants interacted together?
	Who talked to whom? Who talked the most?
	Was there an explicit reason for the pattern in turn-taking?
	Is there any significance to the gender of the speaker(s)?
	Was organizational rank a significant factor?
Ends	Purpose of end goal of the interaction
21145	What motives, goals, purposes for meeting/interacting?
Act	Act topic: the content being discussed by participants
1100	What kinds of things were discussed?
	What kinds of explanations did participants give for the kinds of events
	that occurred? What themes did you hear come up repeatedly?
	Act sequence: the pattern or turn-taking of who speaks in the interaction
	What did you notice about the sequence of speaking turns? When X
	spoke, who spoke next? Was there a pattern here? Was this pattern
	significant?
Key	Tone, manner, or spirit
Rey	What did you notice about the tone of the interaction?
	What was the spirit in which the act was performed?
Instrumentalities	Communication channel (e.g., face-to-face, online, chart, email, phone, etc.)
msu umentanties	What kind of language or dialect did you hear?
	Was the interaction face-to-face? Mediated? Written? Spoken?
	Nonverbal?
Norms	Norms of interaction: rules for behavior
INOTHIS	
	Was the language used particular to these participants? Were the particular terms and phrases that came up often in interaction?
	What rules of speaking did you notice?
	Norms of interpretation: rules for understanding said behavior? Did these key terms and phrases have special meaning for the speakers?
	Did you see/hear anyone's behavior challenged?
	Did anyone violate any explicit or unspoken rules of communicative
Commo	Cotagony or speech cot/event types
Genre	Category or speech act/event types
	What genres or classes of talk did you hear?
	What does the telling of jokes, stories, etc. tell about the relationships of
	the interactants? About the group?

Appendix C

5 Step Checklist for Emergency Department Physicians

Step	Description
0 1 10. 0	
Opening and Sit Down	Shake patient and family/friend's hand, introducing self
	including name and role in patient's care
	Sit down in a chair or stool
Do not Interrupt	Do not interrupt the patient's first response to what brings
	he or she to the ED
Follow Up	Follow up each conversational topic with additional
	questions and/or have patients repeat back information,
	ensuring comprehension is mutually reached
Check In	Check in on the patient when convenient, updating them
	on their care
Wrap Up	Wrap up the interview with stating what the future plan/
	next steps