

**“Let’s sit forward:” Investigating Interprofessional Communication, Collaboration,  
Professional Roles, and Physical Space at EmergiCare**

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### **Abstract**

Communication is key to hospital emergency department (ED) caregiving. Interventions in ED processes (and healthcare organizing in general) have struggled when they have ignored the professional role expectations that enable and constrain providers' with patients and each other. Informed by a communication as design (CAD) approach, this study explored the intersections of professional roles, physical space, and communication at EmergiCare—an Academic Medical Center and Level-1 Trauma Center hospital. Based on an ethnographic analysis of fieldnotes from 70 hours of shadowing at the EmergiCare ED, this study identified two specific communication patterns, “case talk” and “comfort talk,” that reflect different logics for communication in healthcare organizing. The findings indicate that case and comfort talk have (a) different status and therefore different influence in EmergiCare ED interprofessional communication and (b) that the arrangement of physical space at EmergiCare ED reflects the requirements of case talk more so than comfort talk. These findings have important implications for theory and practice, including the importance of considering the macro-discursive construction of professional roles reified in the arrangement of work space.

*Keywords:* emergency departments, interprofessional communication, professional roles, physical space, physicians, nurses

The mix of multiple professions, complex problems of uncertainty and information management, pressing resource constraints, and high stakes outcomes make hospital emergency departments (EDs) particularly important settings for study (Eisenberg, Baglia, & Pynes, 2006; Eisenberg et al., 2005). Communication is key to caregiving in EDs and key to the change management and safety processes important for the continuous improvement of caregiving in EDs (Dean & Oetzel, 2014; Real, 2010). ED providers engage in knowledge-intensive, interprofessional conversations that are important for patient care and safety (Barbour, 2010). These conversations involve competing frameworks for sense-making and decision making that are complicated by the presence of multiple administrative and professional hierarchies, expertise diversity, and the physical settings of EDs (Ulrich et al., 2008). This study considers how professional roles and space arrangement interact in communication among ED providers.

Drawing on evidence gathered from ethnographic shadowing of nurses and physicians' working with each other to care for patients in an ED, the piece provides resources for intervening in interprofessional communication in EDs. Examining physical space in healthcare is important. It limits and facilitates healthcare organizing (Barbour, Gill, & Dean, forthcoming; Harrison et al., 2011), and more effective hospital design can support the work of providers improving patient outcomes (Hilligoss & Vogus, 2015; Ulrich et al., 2008, p. 145). We contend though that intervention in healthcare spaces requires an approach cognizant of how the arrangement of physical space reflects established, macro-discursive constructions of what it means to be a healthcare professional. We transition now to a more extensive framing of the importance of communication in EDs, emphasizing the need for such an approach.

### **The Importance of EDs and ED Communication**

EDs are a critical component of healthcare infrastructure in the United States. ED visits

are becoming more frequent, with a 32% increase between 1999 and 2009 (McCraig & Burt, 2001; National Center for Health Statistics, 2009). Moreover, the Affordable Care Act's expansion of insurance coverage "will directly affect both demand for ED care and expectations for its role in providing coordinated care" (McClelland et al., 2014, p. 8). EDs differ from other healthcare organizations in that they provide 24-hour care where managing the admittance of patients is particularly difficult (Redfern, Brown, & Vincent, 2009). EDs are "unbounded" in the sense that they offer 24 hours of clinical care where patients are continually admitted and providers have little control over limits (Cheung et al., 2010; Eisenberg et al., 2005). EDs are high-traffic, intensely physical spaces (Ulrich et al., 2008) that tend to be cramped and chaotic, and, not surprisingly, susceptible to accidents and error (Eisenberg, Baglia, & Pynes, 2006).

The study of healthcare organizing and interprofessional communication in EDs in particular is especially poignant now as healthcare organizations increasingly turn to collaborative, team-based care (Nordquist et al., 2013; Uhlig et al., 2002). The increasingly emergent and team-based character of medical work necessitates a new kind of thinking about space. Hospitals are adjusting as medical professionals renegotiate what they know, how they act, and their identity as workers (Bleakley, 2013). This orientation toward collaboration includes work among providers *and* patients and their families. Indeed, a nurse observed in the study uttered the phrase "Let's sit forward," explaining later that she tried to work with not on patients, which became a shorthand in our analysis for this emphasis on collaboration.

Existing research has well-established the communication problems and expectations relevant to EDs (e.g., Casanova, et al., 2007; Dean & Oetzel, 2014; Eisenberg et al., 2005), while also identifying the need for research focusing on situated, real-time ED communication. Agenda-setting scholarship has called for acknowledging how context—symbolic as well as

physical—influences meaning and perceptions in healthcare settings (Byrne & Heyman, 1997). Apker and Eggly (2004) criticized the tendency to overlook medical ideology as a contextual factor in healthcare, and “scholars still lack a complete understanding of how in situ discourse of medical socialization creates the ideology of medicine and develops professional identity (p. 412).” Yet, the negotiation of medical ideology is integral to the development of interprofessional communication and the adoption of healthcare innovations (Barbour, 2010; McNeil, Mitchell, & Parker, 2013).

We address these practical and theoretical exigencies by taking a problem-centered approach to interprofessional communication situated in the physical spaces of “EmergiCare” (a pseudonym). The study reports our analysis of the communication in the ED of EmergiCare—an Academic Medical Center and Level-1 Trauma Center hospital located in the Southwestern US. Informed by a communication as design (CAD) approach, we sought to understand and enrich communication among ED professionals, particularly physicians and nurses, by exploring the intersection of professional roles and the physical space in which communication occurs. In this way, this study answers calls to consider macro-discursive constructions of work alongside its material conditions (Ashcraft, 2007; Ashcraft, Kuhn, & Cooren, 2009), and the need to mirror medical innovations with innovative interprofessional communication (Barbour, 2010). Next, we explicate our CAD approach to the communication challenges in EDs.

### **The Design of Communication at EmergiCare**

To center communication in the challenges of EDs, this study draws on a CAD approach, which enables researchers to theorize, examine, and address communication problems by treating communicative phenomena as objects of design (Aakhus, 2007). Despite the complex nature of the ED care and communication described above, extant research on ED care tends to

assume a linear model of communication, where communication flows from a starting to an end point (Dean & Oetzel, 2014; Dean, Oetzel, & Sklar, 2014; Eisenberg et al., 2005). Accordingly, most recommendations to improve ED communication center on improving information transfer and accuracy rather than viewing communication as a whole (Redfern, Brown, & Vincent, 2009). Eisenberg et al. (2005) argued, “an exclusive focus on information transfer leaves out much of what is most important (and most challenging) about health communication practice” (p. 393). Thus, recommendations should consider communication choices made by healthcare professionals to solve communication problems and the logics and implications of those choices (Aakhus, 2007; Barbour & Gill, 2014).

Previous research applying a CAD approach has generated insights relevant to health communication campaigns (Harrison, 2014), interaction in healthcare settings (Barbour, Gill, & Dean, forthcoming), and the complex communication in EDs in particular (Dean, Oetzel, & Sklar, 2014). CAD research illuminates how people, “intentionally or not, craft a particular kind of communication (and avoid other kinds) with each other” (Aakhus & Rumsey, 2010, p. 68), by surfacing the lay and formal ideas about how communication ought to function that are at the core of social processes and interactions (Aakhus, 2007). In the collective design of communication processes, these ideas comprise circulating logics of communication design (Aakhus & Bzdak, 2015; Barbour & Gill, 2014).

Our present study seeks to integrate concern for EmergiCare communication among physicians and nurses and the physical space in which their interprofessional communication unfolds. We contend that communicative choices including the material arrangement and use of space embody entrenched interprofessional roles and dynamics, including a focus on the “technical, economic, institutional, and physical factors driving organizational identities and

goals” (Ashcraft, Kuhn, & Cooren, 2009, p. 24). Put another way, local healthcare organizing is not the only source of logics for communication, but these are moored to extra-organizational, macro-discursive constructions of the medical work (Barbour, 2010). We now explicate these moorings by focusing on providers’ expectations related to interprofessional communication.

### **Interprofessional Communication and Collaboration**

Zwarenstein et al. (2013) cited deficient interprofessional communication as responsible for routine errors, harm to patients, and increased costs to hospitals. Multiple professional groups (physicians, nurses, technicians, social workers, and so forth) work together in the typical ED shift (Rose, 2011), and these groups bring different professional identities and different agendas for the conduct of medical work (Barbour, 2010). Differences in training and socialization affiliated with distinct medical disciplines shape perceptions of patients and clinical settings (Rose, 2011). By interprofessional communication, in this case, we mean to focus on the mostly face-to-face interaction between and among mainly physicians and nurses that occurs in the conduct of their work. The application of CAD to interprofessional communication must stretch to accommodate the established, extra-organizational character of professions.

Interventions into how providers communicate in hospitals and EDs are complicated by interprofessional dynamics or “faultlines” (McNeil et al., 2013) that cannot be addressed using straightforward models of communication (Uhlig et al., 2002). Such interventions should consider the entrenched, discursive histories of medical work and occupations. Medical professionals navigate the powerful images often attached to their role in the day-to-day enactments of their work (Apker & Eggly, 2004; Ashcraft, 2007), where “gender, cultural and social stereotypes that influence power relationships continue to exist” (Rose, 2011, p. 6). For example, interprofessional communication involves established hierarchies between and among

physicians and nurses (Rice et al., 2010). The implicated professional identities influence how professionals, like healthcare providers, make sense of, interpret, and navigate their work (Ashcraft, 2007; Barbour & Lammers, 2015; McNeil et al., 2013). In other words, the historically grounded, macro-discursive constructions of the professions—what it has meant and therefore means to occupy a particular profession—inform professional role expectations. And because such discourses are entwined with assumptions associated with gender, ethnicity, class or other social identities, occupations come to possess their own social identity built on and (re)productive of the historical underpinnings of the occupation (Ashcraft, 2013).

These assumptions persist despite changes in the particular demographics of those actually in the occupation (Ashcraft, 2013). Although “different” people may enter medical professions, the enduring associations of gender, class, and ethnicity of these professions support an overlap, for instance, in the image of the physician and characteristics of hegemonic masculinity such as autonomy and authority, and an overlap in the image of the nurse and characteristics of traditional femininity, such as assisting and caring for others. The meanings attached to these professions are reflected too in, for example, physician resistance to collaborative and “unscheduled” communication with other medical professionals (Zwarenstein et al., 2013), and in assumptions that collaborative communication work is the responsibility of nursing or social work staff (e.g., Curtis et al., 2012). Against this theoretical backdrop, we know unpack the specific professional role expectations of nurses and physicians.

### **Macro-Discursive Constructions of Being a Physician and a Nurse**

Professional role expectations for physician communication privilege analysis and judgment (Dean & Oetzel, 2014; Knopp et al., 1996), where physicians interact with a patient so as to obtain the information necessary for diagnosis (Apker & Eggly, 2004; Knopp, et al., 1996).



Within emergency medicine, important tasks for physicians when communicating with patients include gathering information, giving information, providing comfort, establishing rapport, and collaborating. However, most of their time spent communicating focuses on information transfer, gathering and giving information through interview type questions, which typically includes information about tests and treatments (Pytel, Fielden, Meyer, & Albert, 2009). Rhodes et al. (2004) found that physicians often forget to introduce themselves, and the information they give is usually in the form of discharge instructions and last minute opportunities to answer questions.

In contrast, professional role expectations for nurse communication are more encompassing. For example, they involve caregiving along five dimensions: care as a human state, as a moral imperative, as an affect, as an interpersonal relationship, and as an invention (Morse, Solberg, Neander, Bottorff, & Johnson, 1990). This list suggests the need for nurses to perform care as a deeply felt and core aspect of themselves. Nurses are also expected to demonstrate “professional care,” which includes enacting collaboration, credibility, compassion, and coordination (Apker, Propp, & Ford, 2006).

So although nurses and physicians both provide care, expectations for their roles are different as are the perceptions and priorities of each. The stereotypical physician adopts isolated and elitist attitudes to patient care decisions, preferring to limit consultation *intraprofessionally* to other physicians. The stereotypical nurse operates more collectively, relying on a constellation of *intra* and *inter*professional communication in the pursuit of patient care (Zwarenstein et al., 2013). As a result, physicians may conceptualize nurses as an extension of themselves, a means to accomplish their work (Casanova et. al., 2007), and a primary concern for nurses is often to ensure, overall, that the ED runs smoothly. However, the discourses surrounding these professions and the concomitant expectations for communication act only as moorings for

medical professionals that influence, but do not determine professional identity and communication (Barbour, 2010). Our focus is the enactment and resistance of these expectations in and through ED spaces. We now consider EDs as physical spaces and professional caregiving.

### **The Physical Layout of Emergency Departments**

Biomedical innovations proliferate quickly compared to the pace of change in healthcare organizing (Barbour, 2010). This slow pace of change reflects the entrenched character of professions generally but also the importance of large physical plants in healthcare. Hospitals as physical spaces are big, expensive, and slow to change, and the implications for patient outcomes are important but as yet unclear (Ulrich et al., 2008). By physical space, we mean how the positioning and use of various rooms, offices, and hallways convey particular patterns of movement and sensibilities that are themselves involved in facilitating the identities and goals of professionals in the organization, and the organization itself. The layout of an office can facilitate, shape, and may even “fix” interprofessional communication in ways that align with, or perhaps disrupt, broader associations with an occupation. Choices about the arrangement of work space reflect underlying logics of how that work ought to be conducted (Elsbach & Pratt, 2007).

Moreover, space and movement can confer and indicate status. For example, Ashcraft (2007) argued that the space of commercial airplanes (where pilots are secluded in the “cockpit” and attendants are accessible in the “cabin”) reflects and (re)produces the gendered occupational identities of those in commercial airline work. In medicine, physicians are more likely to be “still—the thinker—or walking purposefully toward a goal—the doer” and have freedom of movement given the exigencies of the moment (Halford & Leonard, 2006, p. 93). Nurses, on the other hand, tend to be tethered even though they are continuously moving; nurses “[buzz] around repetitive spatial patterns” (Halford & Leonard, 2006, p. 93). Meanwhile, spaces such as hospital

corridors have been suggested as sites “owned” by neither nurses nor physicians, and so (re)present the possibility of “breaking up formal hierarchies” (Nordquist et al., 2013, p. 77).

Thus far, we have characterized the ED as a site where professional roles and physical space intersect. Because of the importance of ED communication, our goal is to understand and enrich communication by exploring the patterns and professional role enactment of nurses and physicians at EmergiCare and underlying logics of communication, as well as how these patterns “map” out within the physical space. Therefore, we ask the following questions: what were the patterns of communication among and between providers as they cared for patients (RQ1a), *how did the communication of nurses and physicians at the EmergiCare ED with each other and with patients reflect established professional role expectations (if at all)* (RQ1b), *and how did their interprofessional communication intersect with the spatial arrangement of the EmergiCare ED* (RQ2)? We turn now to the methods employed to address these questions.

### **Methods**

In the fall of 2009, the Associate Dean of Medical Education of a Southwestern U.S. hospital approached the Department of Communication at the associated University regarding communication in their ED. To protect the participants, identifying details have been obscured. EmergiCare is a bustling hospital located in a densely populated city. It ranks among the top 100 hospitals in the U.S., and it is an Academic Medical Center and a Level 1 Trauma Center (see Figure 1). The ED is divided into two sides, Manzia and Sundano, and each side has a nurse’s station and a physician’s station, which are “flipped” from one side to the other. Enclosed patient rooms are located along the perimeter. The sides are separated within and between by walls.

### **Data Collection**

To understand interprofessional communication, professional roles, and physical space,

we adopted an interpretive-critical approach to communication design—focusing on how communication shapes meaning and examining how such interaction and meaning (re)produces broader power inequalities (Dutta & Zoller, 2008). After receiving IRB approval and spending some time getting to know the Associate Dean and the medical program, the first author undertook a mix of interviewing and organizational shadowing as a part of a larger research project (Dean & Oetzel, 2014; Gill, Barbour, & Dean, 2014). Over eight months in 2010, the first author observed roughly 15 shifts, spending about 70 hours in the ED. Most observations focused on physicians and nurses interacting to care for patients. Any given shift included two healthcare teams of six (three nurses and three physicians per team). During the observations, nurses were all female, except in the case of a single male charge nurse (i.e., the nurse in charge of the ED), and physicians were mostly male, though there was one female attending and two resident physicians. For each observation, the first author followed one provider, each overseeing four to five patients at a time and observed them engage with each other, patients, families.

To collect observational data, the first author drew on the ethnography of communication (EOC), which posits that communication and culture are interrelated—meaning that culture is constructed by the communication enacted by the community. The first author adopted Hymes' (1974) SPEAKING framework to focus her observations on the communication choices enacted by physicians, nurses, patients, and so forth. She kept detailed notes attending to who said what, to whom, where, in what way, and for what purpose. Using this perspective as a data collection tactic enabled the first author to generate insight into nurse and physician communication. After each observation, she reviewed her notes and wrote reflections, thus constructing the research data (Emerson, Fretz, & Shaw, 1995). EOC integrated well with our CAD approach. Aakhus and Bzdak (2015) argued that “the logic of design practice can be reconstructed and analyzed by

observing practitioners doing their work, investigating the tools with which they do their work, and examining the way practitioners discuss how to do their work” (p. 192).

### **Data Analysis**

We first analyzed the data according to EOC protocols, paying attention to communicative events and acts to organize our observations of participants’ and their own reflections on their work. A *communicative event* is a particular occurrence of communication (i.e., a conversation between a physician and patient). A *communicative act* is the language used to do or perform something (i.e., communicative acts in a conversation might include questions, instructions, and warnings). We examined the notes and generated codes to identify events and acts, continually referring back to the fieldnotes (Emerson et al., 1995).

Guided by the research questions, we considered the events and acts against the literature on medical professional roles and physical workspace. Through an iterative process, we clustered the events and acts emergent in the analysis. First, the first author coded the notes (using EOC as described above), which included a focus where communication took place, and the second author interrogated these codes decisions by highlighting events and acts that may have been overlooked (RQ1a). Second, the first and second authors clustered the emergent events and acts as they related to the principal professional roles (differences and similarities in nurse and physician interaction with patients and with each other about patients, RQ1a&b) and the spaces of EmergiCare (where the events and acts tended to take place, RQ2). To increase credibility and consistency of the findings, the first author checked and followed negative cases to ensure validity and explored alternative arguments to the original conclusions. The third author reviewed the findings independent of these processes to question interpretations and ask for additional examples. Throughout the data analysis process, the first author referenced her

fieldnotes to ensure maximum identification and confirmation.

We also performed member checks with the Associate Dean of Medical Education the study's findings to practitioners. The first author presented her findings at EmergiCare's research fair for residents at EmergiCare. She shared study results with all of the residents in the program, and not only study participants. The first author also presented her findings along with recommendations at the program's graduate education and patient safety retreat. In collaboration with the Associate Dean of Medical Education, we created a communication checklist for EmergiCare physicians to improve their communication with patients. These interventions and participants' reactions to them provided opportunities for the research team to reflect on the underlying ideas about communication circulating at EmergiCare (Barbour & Gill, 2014).

### **Communication at EmergiCare**

In summary, we first sought to understand how the communication of nurses and physicians with patients and with each other reflected established professional role expectations (RQ1). Consistent with previous research, we found that physicians tended to enact what we termed, "case talk," and nurses, "comfort talk." Although physicians, at times, adopted comfort talk and nurses adopted case talk, it was most often the case that their communication reflected the discursive histories and professional role expectations of each profession. Further, participants' own accounts of what their communication *should* include reflected this overlap of professional role expectations and communication. Second, we *sought to understand how interprofessional communication intersected with the spatial arrangement of the EmergiCare ED* (RQ2)? The findings indicated that the physical spaces of EmergiCare reflected established hierarchies of professional dominance by orienting to the accomplishment of case talk. Participants' ideas about how to change communication and space at EmergiCare also oriented

to established professional roles expectations. We now turn to a more detailed description of the interprofessional communication patterns (RQ1a) followed by explications of their intersections with the interprofessional and spatial at EmergiCare.

### **Case and Comfort Talk**

In *case talk*, (a) physicians diagnosed and interpreted patient symptoms, (b) sought the confirmation of other physicians, (c) gave directions to physicians and nurses, and (d) informed patients of the problem. Case talk was more common among physicians, although nurses also engaged in case talk at times. One attending, for instance, entered a patient's room and introduced himself. He asked about the patient's pain and swelling, and examined the patient, questioning, "if I push here, does it hurt?" After hearing the patient's answer, he remarked that the patient would need an X-ray, and that it "shouldn't take very long." The attending then left the room. At another time, an attending physician called several doctors into the room of a patient with a rare lung disease. He wanted the doctors to hear the boy's lungs, remarking, "not often do you get to see this!" The other physicians confirm this, commenting "yes, very impressive," "amazing," and "very interesting problem."

Through case talk, physicians gathered information from patients in lists, to guide diagnoses. They also referred to patients by their room number or symptoms rather than by their name. Physicians commonly (and nurses too though less so) asked questions such as, "is 43 new?", "where is 25's chart?", and "40 has chicken pox," thereby mapping patient status onto the physical layout. Medical staff also categorized patients by their symptoms—a common "backstage" communicative act (Ellingson, 2003). An attending and resident referred to one patient with respiratory issues as "Weezer." Another patient was "Cocaine Guy." An attending informed a physician's assistant that he was on his way to examine "Cellulite." Though it is

likely that these abbreviations were *intended* to expedite caregiving and cope with stress, these examples underscore how case talk focuses on expediting the task-oriented requirements of diagnosis and intervention. It also dehumanizes patients and may limit the adopting of more holistic understandings of patients.

*Comfort talk* was more often enacted in nurse communication. In comfort talk, nurses (a) made encouraging statements, (b) asked about feelings, and (c) provided context for the patient. Nurses made remarks like, “are you doing OK?” and “everything is going to be fine,” “good. Good job.” Whereas in case talk physicians gave orders, in comfort talk nurses discussed the “next steps” unpacking what those orders would mean for patients in practical terms. In one instance, a nurse was working with a patient who asked when the physicians were coming by. The nurse replied that she did not know, but that “they know that they’re supposed to.” She then volunteered additional context for the patient, explaining, “the docs just changed shifts, so they need to give each other their reports.” Instead of denying access to the ED backstage, this contextual information offered a sense of the ongoing processes.

Comfort talk was also informative but courteous, where nurses informed the patient about what they were doing or going to do, as in the phrases, “now I am going to give you the pain medication. You will feel a slight prick” and “I am going to wipe you now. My hands are a bit cold just to let you know.” In one situation, a nurse sought to make a patient physically comfortable after moving the patient from resuscitation. The nurse opened the door, turned on the light, and closed the door. She explained what she was leaving to do, identifying the call button. Before leaving, she touched the patient on the arm, asking, “are you cold? Do you need a blanket?” Here, nurses were not necessarily asking for permission, but extending a courtesy. These comments also indicated a sense of collaboration, where the nurse and patient were



working together, as in nurses' comments to patients like "let's sit forward," or other providers such as "we are waiting on x-ray results."

These two talk categories imply different communication design logics: different ideas about how communication processes should work to achieve particular ends and different rubrics for evaluating its effectiveness (Aakhus & Bzdak, 2015; Barbour & Gill, 2014). In case talk, communication was a vehicle for solving medical puzzles. In case talk, providers (mostly physicians) made diagnoses drawing information from patients and nurses. Case talk emphasized a careful, rational fitting of patient symptoms into medical frameworks. In comfort talk, communication was a vehicle for helping patients make sense, tell their story, and wait—making the medical treatment bearable. Providers (mostly nurses) engaged in comfort talk to listen for the sake of listening as well as helping with diagnosis and treatment.

### **Case and Comfort Talk in Interprofessional Communication at EmergiCare**

Turning now to consider the operation of these logics in their interprofessional communication (RQ1b), we found that the separation of case talk and comfort talk also reflected the key finding that nurses and physicians at EmergiCare operated in fairly distinct circles. To be sure, case talk was in part meant to provide care if not always comfort, and comfort talk was meant in part to support the diagnosis and management of information about patients. The aim of our analysis is not to oversimplify these patterns. We seek to highlight what these patterns of interaction suggest about the communication expectations for these professionals. However, though nurses and physicians technically worked together, we observed little evidence of collaboration and cross-pollination of ideas and effort.

For example, this division of labor was evident in the procedure for seeing patients. This process typically followed this arrangement summarized from fieldnotes: (a) nurse examines

new patient; (b) nurse enters patient's history and information into the computer at the nurses' station; (c) nurse prints out the information, places it on a clipboard, and labels the clipboard with the patient's room number; (d) nurse walks to the clipboard at the physicians' station and places it into a box on the desk; (e) nurse does not talk to the physician when s/he does this, and the physician picks up the clipboard without consulting or talking to the nurse.

Providers' comments during observations about the role of each profession reflected this separation as well. For example, in diagnosing a patient, an attending and resident had to track down a nurse for information. The attending explained, "we are the doctors, so we don't deal with properties. We get that information from the nurses." Here "properties" referred to the details about the patient's symptoms contained in the medical records. Although physicians had access to "properties," they would typically ask nurses rather than getting the information from the records themselves. The statement positioned nurses as in service to the requirements of case talk, gathering the information needed to make medical decisions. Nurses typically only talked to the physicians when nurses needed permission to send a test or an order for a prescription for their patients. In contrast, however, nurses talked regularly with others. They updated each other regarding patient status and vented about their interactions with patients. Nurses also communicated extensively with technicians, as the technicians performed procedures for the nurses (e.g., inserting IVs, giving shots, watching runaway patients).

### **EmergiCare's Communicative Spaces**

Building on these insights so far, the following analysis considers the enactment of these interprofessional communication patterns in the spaces of EmergiCare (RQ2). We argue that (a) *the physical arrangement of and use of space at the EmergiCare reflected and served case and comfort talk differently, and (b) case and comfort talk were arrayed hierarchically via the*

*physical layout*. That is, the space reflected the needs and logics of case talk *more* than comfort talk, where the needs and model of appropriate communication for one occupational group (nurses) were organized to serve another (physicians).

A wall divided the nurses' and physicians' stations (see Figure 1). The *physician's station* represented "home base" for physicians, where most of the interaction occurred between physicians through case talk. The physicians' stations were the loci of medical expertise. Information management for diagnosis and prognosis, medical decisions, and the generation of medial orders occurred there—all through case talk. Teaching consultations, a key communicative activity for case talk, were also common: Attending and resident physicians gathered around charts or computers, exchanged information, and shared interpretations. For example, during one observation an attending taught an EMT student about EKG machines by diagramming one. At another moment, a medical student explained a case to a resident, who in turn, filled out the patient's chart and explained the case to the attending physician.

Physicians also gave orders and drew boundaries around their responsibilities that helped to establish their expertise at this station and the primacy of case talk. Physicians commonly left patient rooms, walked to the physician station, and ordered medications or tests for that patient. Nurses entered the physician's space, but typically for specific and bounded work-related purposes. Nurses often dropped off forms without talking with the physicians. If nurses engaged in case talk, it tended to occur at or around the physicians' stations. When nurses did talk with physicians in these spaces, it was to provide or obtain information. At the physician's stations, nurses provided data or requested orders. In one exchange at the physician station, a nurse approached a physician and informed him, "you know that the guy in 47 is diabetic?" and the physician's response was, "Yes. Well, no I didn't. And he's my patient." In a different exchange,

a nurse approached the physician's station to ask, "what am I doing with 42?"

The *nurse's station* was "home base" for the nurses, though nurses were more often moving between their station and patients' rooms rather than remaining at the station (cf., Halford & Leonard, 2006). Physicians rarely entered this area even though the nurse's station had more permeable boundaries in general than did the physician's station, particularly in the case of the nurse's station positioned closest to the ED walk-in entrance (bottom left on Figure 1). Nurses met with technicians and patients and their families here. During exchanges with patients and families, nurses provided information but also engaged in comfort talk. In the following example, a nurse engages in comfort talk with a family member who was inquiring about a patient at the entrance to the ED.

Nurse: Who are you?

Mother: The mother – the boy who got in an accident with my daughter. He's her boyfriend. I want to talk with him.

Nurse: I can't have you in there at the moment.

Mother: I understand. He was driving and I want to find out the logistics.

Nurse: I'll have to have you wait. You can wait in the waiting room, and we will have you notified.

Mother: How long will that be?

Nurse: Probably one hour. Let me take down your name and number.

Mother: He's no relation to me.

Nurse: [gives a "side hug" to the mother]

This interaction is emblematic of the sorts of communicative action common in nurse's spaces where they answered questions and provided information exchange, but also offered reassurance.

The permeability of the nursing spaces meant that nurses juggled multiple communicative activities at once. For example, at one point, a nurse was talking to a technician at the same time she was using the computer and talking on the phone. Although not always assigned to answer the phones, nurses were nonetheless expected to answer them. Once a nurse expressed frustration with this and exclaimed, “I am not answering any more phones today!”

This sort of coordinating work of the ED tended to cluster at nurses’ spaces. The nurse’s station featured a whiteboard that listed the patient rooms with the assigned nurse, date, technician, and charge nurse on duty. Nurses also communicated amongst themselves to organize and confirm care. In doing so, they did at times engage in case talk, especially when carrying out physicians’ orders. In one exchange, a nurse informed another, “I just put 52 on 3 liters of oxygen. The second nurse responded, “Okay, thanks. I see he came for shortness of breath.” The nurses were aware of these coordinating functions as only part of their responsibilities though. Regarding the management of these coordinating tasks, two nurses in our study independently suggested the creation of a patient status board or whiteboard to be located in central to the nurses’ *and* physicians’ stations. One called it “a central communication board” or “CCB.”

The subdivision of workspace for each group, accentuated by a physical wall, emphasized and fostered the overlap between the communicative distinctions and professional roles. By virtue of the wall, the station layout did not allow for immediate or improvisational communication among nurses and physicians. Moreover, although corridors and patient rooms could conceivably foster improvisation (Nordquist et al., 2013), the participants in our study did not make use of them in this way.

The final spaces that emerged as significant for interaction among nurses and physicians at EmergiCare were the *patient rooms* and *corridors*. In patient rooms, nurses and physicians

maintained communication norms for each profession. Nurses explained “next steps” for patients, administered medicine, delivered food and blankets, dimmed lights, and so forth. Physicians gathered information, gave orders, and minimized the time spent in these spaces.

In the corridors outside of patient rooms, traditional occupational roles were further enacted, such as during handoffs. Handoffs, themselves extensively discussed in the academic literature (Hilligoss & Vogus, 2015), occurred when the outgoing shift “handed off” the ED to the incoming shift. At EmergiCare, handoffs were asynchronous, with physicians’ handoffs typically occurring at 7:00 AM and nurses’ handoffs at 9:00 AM, and they tended to be “walking meetings”—where the respective groups walked along the perimeter of the ED, stopped in front of each occupied room, and updated each other on the patient’s situation, interaction thus far, and suggested next steps. The timing and spacing of the handoffs meant further separated the work of physicians and nurses. During one handoff, for instance, a nurse was in a room with a patient when the physicians stopped outside. The nurse and patient had this following exchange:

Nurse: I think they are talking about you.

Patient: You should have warned me.

Nurse: Sorry.

Patient: I was surprised.

In this exchange, the role of the nurse as confidant (“I think they are talking about you”) and as courteous (“sorry”) is external to and played out against that of the physicians, the disengaged experts. In another instance, ten physicians entered a patient room. They talked with each other seemingly unaware of the nurse in the room. A resident explained the symptoms, and the outgoing and incoming attending physicians asked questions. As the space filled up, the nurse was forced to quietly vacate.

Participants' own accounts of the EmergiCare's spaces reflected frustration with the physical divides. For example, an attending described his ideas for an ED redesign after complaining about being interrupted by intrusions at the open desk. As he described the rearrangement, the first author sketched his ideas in her fieldnotes: First, the walls would go. He exclaimed, "you have to have space to walk around. Right now it's just these big walls." The attending physician argued further that nurses "get hung up on administrative stuff" because of the open stations. He also wanted a private work space to limit interruptions from family, visitors, and other staff. The private work space, he explained, would be outfitted with computers so the providers could reference online materials in their diagnostic efforts. Notice that in this vision of reorganization the shared space for nurses and physicians exists *to further case work*. However, not all boundaries, they argued, ought to be dissolved. Providers were proud of the patient rooms. They indicated that these rooms enhanced patient privacy and comfort but also (and especially) and allowed them to focus case talk on one patient at a time.

### **Implications for Theory and Practice**

Although the communicative activity in EmergiCare was highly formatted (e.g., scheduled handoffs, patient intake procedures), it was also in flux. Regardless, nurse and physician communication intertwined with the layout, where the work of the occupational groups were linked to spaces that assisted in the (re)production of these professions and the communication expected of them. At a basic level, the separation of the stations and the kinds of communication enacted around these stations reflected this distinction. Through case talk, physicians established themselves as experts, and nurses remained as assistants and go-betweens. Moreover, nurses tended to be viewed as "data points," as though they themselves were walking computers, continuously collecting and processing information for physicians.

The physical layout reflected the preeminence of case talk, with the implication that communication in the ED is for diagnosis and medical treatment. When at the physicians' stations, nurse communication reflected an understanding of communication consistent with case talk. Comfort talk occurred at the multifunctional nurse's station and in patient rooms. Where nurses and physicians most often came together was in and around patient rooms, which were neither the explicit domain of physicians nor nurses, and yet were spaces to play out relations of hierarchy around the "object" of the patient. When case and comfort talk overlapped, the interaction shifted to case talk (e.g., the nurse leaving the patient room occupied by the group of physicians). Participants' accounts of changes to their communication and space (the CCB, the rearrangement) reflected the preeminence of case talk as well.

First and foremost, these findings make contributions to our understanding of how professional roles and physical space intersect in interprofessional communication. The findings make clear (a) two important communication logics in providers' interaction with patients and each other, case and comfort talk, (b) the alignment of case and comfort talk with professional role expectations that have a foundation in discursive constructions of medical occupations beyond EmergiCare, and (c) the orientation of the space at EmergiCare to the accomplishment of the case and comfort talk. The starkest finding, the physical as well as professional separation of physical and nurse work at EmergiCare, highlights what may be most problematic about the established forms of interprofessional interaction at EmergiCare, which is ascribed in the very space in which the work takes place. The existing patterns limited improvisation even in the ED setting where it maybe particularly useful.

The arrangement of space to serve professional role expectations concurs with work that makes clear how professions are embodied and therefore gendered (Ashcraft, 2013). It is worth



noting that in our observations most of the nurses (except for the charge nurse) were women and most of the physicians male. The ascribing of professional roles expectations in spaces and bodies (Ashcraft, Kuhn, & Cooren, 2009) contributes to the enduring character of the professions (Barbour, 2010; Barbour & Lammers, 2015).

Second, these findings make clear the complexity of communication design choices in EDs in that these choices must address multiple and at times contradictory goals, the meanings of which are themselves negotiated (Barbour & Gill, 2014). For example, the attending's situated reimagining of the space tackled multiple issues including the balance of open and closed space (Elsbach & Pratt, 2007) and the exigencies of front- and backstage (Ellingson, 2003). However, the attending's vision still reflected the impetuses of case talk. By orienting the arrangement of work and space to the goals of a particular form of interaction, case talk, may require tradeoffs against other goals including but not limited to comfort talk.

Likewise, the nurses' recommendation to create a "central communication board" reflected to an effort to support their coordinating role and especially their support of case talk. They conceived of the board as more about the straightforward support of information transmission where the goal is to get the right message to the right person at the right time, and a patient status board or whiteboard is a common recommendation for enhancing interprofessional communication (Uhlig et al., 2002). A whiteboard that is accessible to the entire ED (rather than only positioned at the nurse's station) that displays patient admission, assigned staff members, discharge, and transfer could serve as a resource in support of transparent and de-segregated communication. However, the board might also support collaboration and separation in caregiving to the extent that it shows who currently "owns" the patient, which would also shift the burden of coordinating work that fell solely to the nurses at EmergiCare in our observations.

Although it may seem more efficient for one group to take on the bulk of the organizing, we contended that the other group should at least be involved in the day-to-day organizing, because the success of their caregiving is interdependent. Yet, in practice the introduction of the CCB might only reinforce existing interprofessional dynamics if moving it only shifts the location but not the role associated with the work. Subservient professional roles may be made more so.

Third, these findings underscore the importance of reimagining of communication tools and spaces hand in hand with a reimagining of the professional work implicated in them. For example, responsibility for organizing the ED on a daily basis could manifest in a rotating position involving both nurses and physicians. An ED organizer (EDO) would be responsible for tracking patient status, facilitating visitors, and managing the communication between patient, nurse, and physician. Doing so would provide nurses and physicians alike with a more holistic understanding of the work performed by others in and across the ED, shifting the concern from communicative efficiency to robustness (Eisenberg et al., 2005). When sharing this suggestion with participants, though providers thought this role may alleviate organizing responsibilities from providers, they were also concerned with costs for such a position and time needed to train an individual to perform the tasks. Making this change may begin to challenge the entrenched character of medical professions, encouraging physicians to engage in more comfort talk, and nurses in more case talk; however, future research is needed to provide an evidence base for that sort of role to justify the cost.

Handoffs that include nurses and physicians may nonetheless provide a structured but also improvisational zone for collaboration, supporting impromptu brainstorming and teaching/learning moments across professions (Hilligoss & Vogus, 2015). At the same time, at EmergiCare, space would be needed to support such changes. For instance, shift handoffs could

be combined to involve nurses and physicians located in a larger backstage area than provided by either nurses' or physicians' stations. Even more fundamentally though, the creation of such a space would need to be coupled to a reimagining of the communicative logic of such a space. The findings provide evidence that such a reimagining will be complicated by the fact that professional role expectations moor ideas about how the providers at EmergiCare should communicate in EDs. Professional role expectations echo in these spaces *and* the bodies in them (Ashcraft, 2013).

These insights are especially important for scholars of CAD, because these data make clear that the circulating ideas about how communication should work were (a) hierarchically arrayed and (b) associated with the representation and performance of medical occupations. A redesign of EmergiCare practice and space must engage questions of what will work (e.g., fit, function, and fragmentation in Barbour & Gill, 2014), but also questions of who is empowered to make judgments about the effectiveness and arrangement of communicative work and what and who underlying logics of communication interventions serve.

### **Conclusion**

In conclusion, we want to express the extent to which we hope that our findings and analysis will be of use to practitioners and scholars in understanding and improving the ED experience for medical professionals and patients. A single ethnographic study limits the generalization of these finding, but they raise questions about what might be possible. By introducing changes at the organizational and occupational level, we may be able to (re)invent how medicine is enacted and perceived. By disrupting the material and discursive divisions and hierarchies between nurses, physicians, and other healthcare providers, we may contribute to the disruption and reinvention of the medical norms that enable and constrain caregiving.

## References

- Aakhus, M. (2007). Communication as design. *Communication Monographs*, 74, 112-117.
- Aakhus, M., & Rumsey, E. (2010). Crafting supportive communication online: A communication design analysis of conflict in an online support group. *Journal of Applied Communication Research*, 38, 65-84.
- Aakhus, M., & Bzdak, M. (2015). Stakeholder engagement as communication design practice. *Journal of Public Affairs*, 15, 188-200.
- Apker, J. & Eggly, S. (2004). Communicating professional identity in medical socialization: Considering the ideological discourse of morning report. *Qualitative Health Research*, 14, 411-429.
- Apker, J., Propp, K. M., & Ford, W. S. Z. (2006). Collaboration, credibility, compassion, and coordination: Professional nurse communication skill sets in healthcare team interactions. *Journal of Professional Nursing*, 22, 180-189.
- Ashcraft, K.L. (2007). Appreciating the “work” of discourse: Occupational identity and difference as organizing mechanisms in the case of commercial airline pilots. *Discourse & Communication*, 1, 9-36.
- Ashcraft, K. L. (2013). The glass slipper: “Incorporating” occupational identity in management studies. *Academy of Management Review*, 38, 6-31.
- Ashcraft, K.L., Kuhn, T.R., & Cooren, F. (2009). Constitutional amendments: “Materializing” organizational communication. *The Academy of Management Annals*, 3, 1-64.
- Barbour, J. B. (2010). On the institutional moorings of talk in health care organizations. *Management Communication Quarterly*, 24, 449-456.
- Barbour, J. B., & Gill, R. (2014). Designing communication for the day-to-day safety oversight

- of nuclear power plants. *Journal of Applied Communication Research*, 42, 168-189.
- Barbour, J., Gill, R., & Dean, M. (forthcoming). Work space, gendered occupations, and the organization of health: Redesigning emergency department communication. In T. Harrison & E. Williams (Eds.), *Organizations, communication, and health*. New York, NY: Routledge.
- Barbour, J. B., & Lammers, J. C. (2015). Measuring professional identity: A review of the literature and a multilevel confirmatory factor analysis of professional identity constructs. *Journal of Professions and Organization*, 2, 38-60.
- Bleakley, A. (2013). Working in 'teams' in an era of 'liquid' healthcare: What is the use of theory? *Journal of Interprofessional Care* 27, 18-26.
- Byrne, G., & Heyman, R. (1997). Understanding nurses' communication with patients in accident and emergency departments using a symbolic interactionist perspective. *Journal of Advanced Nursing*, 26, 93-100.
- Casanova, J., Day, K., Dorpat, D., Hendricks, B., Theis, L., & Wiesman, S. (2007). Nurse-physician work relations and role expectations. *Journal of Nursing Administration*, 37, 68-70.
- Cheung, D. S., Kelly, J. J., Beach, C., Berkeley, R. P., Bitterman, R. A., Broida, R. I., ... & White, M. L. (2010). Improving handoffs in the emergency department. *Annals of emergency medicine*, 55, 171-180.
- Curtis, J. R., Ciechanowski, P. S., Downey, L., Gold, J., Nielsen, E. L., Shannon, S. E., Treece, P. D., Young, J. P., & Engelberg, R. A. (2012). Development and evaluation of an interprofessional communication intervention to improve family outcomes in the ICU. *Contemporary Clinical Trials*, 33, 1245-1254.

- Dean, M., & Oetzel, J. G. (2014). Physicians' perspectives of managing tensions around dimensions of effective communication in the emergency department. *Health Communication, 29*, 257-266.
- Dean, M., Oetzel, J. G., & Sklar, D. P. (2014). Communication in acute ambulatory care. *Academic Medicine, 89*, 1617-1622.
- Dutta, M.J., & Zoller, H.M. (2008). Theoretical foundations: Interpretive, critical, and cultural approaches to health communication. In H. M. Zoller & M. J. Dutta (Eds.), *Emerging perspectives in health communication: Meaning, culture, and power* (pp. 1-27). New York, NY: Routledge.
- Eisenberg, E. M., Murphy, A. G., Sutcliffe, K. M., Wears, R., Schenkel, S., Wears, R., Schenkel, S., Perry, S., et al. (2005). Communication in emergency medicine: Implications for patient safety. *Communication Monographs, 72*, 390-413.
- 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.
- Ellingson, L. (2003). Interdisciplinary health care teamwork in the clinic backstage. *Journal of Applied Communication Research, 31*, 93-117.
- Elsbach, K. D., & Pratt, M. G. (2007). The physical environment in organizations. *Academy of Management Annals, 1*, 181-224.
- Emerson, R.M., Fretz, R.L., & Shaw, L.L. (1995). *Writing ethnographic fieldnotes*. Chicago: University of Chicago Press.
- Gill, R., Barbour, J., & Dean, M. (2014). Shadowing in/as Work: Ten Recommendations for Shadowing Fieldwork Practice. *Qualitative Research in Organizations and Management*,

9, 69-89.

Halford, S., & Leonard, P. (2006). *Negotiating gendered identities at work: Place, space and time*. New York, NY: Palgrave Macmillan.

Harrison, T. R. (2014). Enhancing communication interventions and evaluations through communication design. *Journal of Applied Communication Research*, 42, 135-149.

Harrison, T. R., Morgan, S. E., Chewning, L. V., Williams, E. A., Barbour, J. B., Di Corcia, M. J., & Davis, L. (2011). Revisiting the worksite in worksite health campaigns: Evidence from a multi-site organ donation campaign, *Journal of Communication*, 61, 535-555.

Hilligoss, B., Vogus, T. J. (2015). Navigating care transitions: A process model to overcome organizational barriers and create awareness. *Medical Care Research and Review*, 72, 25-48.

Hymes, D. H. (1974). *Foundations in sociolinguistics: An ethnographic approach*. Philadelphia: University of Pennsylvania.

Knopp, R., Rosenzweig, S., Berstein, E. (1996). Physician-patient communication in the emergency department, part 1. *Academic Emergency Medicine*, 3, 1065-1069.

McCaig, L. F., & Burt, C. W. (2001). National hospital ambulatory medical care survey: 1999 emergency department summary. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

McClelland, M., Asplin, B., Epstein, S. K., Kocher, K. E., Pilgrim, R., Pines, J., ... & Rathlev, N. K. (2014). The Affordable Care Act and Emergency Care. *American Journal of Public Health*, 104, e8-e10.

McNeil, K. A., Mitchell, R. J., Parker, V. (2013). Interprofessional practice and professional identity threat. *Health Sociology Review* 22, 291-307.

- Morse, J. M., Solberg, S. M., Neander, W. L., Bottorff, J. L., & Johnson, J. L. (1990). Concepts of caring and caring as a concept. *Advances in Nursing Science*, 13, 1-14.
- National Center for Health Statistics. National Hospital Ambulatory Medical Care Survey: 2009 emergency department summary tables.
- Nordquist, J., Sundberg, K., Kitto, S., Ygge, J., & Reeves, S. (2013). Future learning environments: The advent of a 'spatial turn'? *Journal of Interprofessional Care* 27, pp. 77-81.
- Pytel, C., Fielden, N.M., Meyer, K.H., Albert, N. (2009). Nurse-patient/visitor communication in the emergency department. *Journal of Emergency Nursing*, 35(5), 406-411.
- Real, K. (2010). Health-related organizational communication. *Management Communication Quarterly*, 24, 457-464.
- Redfern, E., Brown, R., & Vincent, C. A. (2009). Identifying vulnerabilities in communication in the emergency department. *Emergency Medicine Journal*, 26, 653–657.
- Rhodes, K. V., Vieth, T., He, T., Miller, A., Howes, D. S., Bailey, O. . . . Levinson, W. (2004). Resuscitating the physician–patient relationship: Emergency department communication in an academic medical center. *Annals of Emergency Medicine*, 44, 262–267.
- Rice, K., Zwarenstein, M., Conn, L. G., Kenaszchuk, C., Russell, A., & Reeves, S. (2010). An intervention to improve interprofessional collaboration and communications: A comparative qualitative study. *Journal of Interprofessional Care* 24, 350-361.
- Rose, L. (2011). Interprofessional collaboration in the ICU: How to define? *Nursing in Critical Care*, 16, 5-10.
- Uhlig, P. N., Brown, J., Nason, A. K., Camelio, A., & Kendall, E. (2002). System innovation: Concord Hospital. *Joint Commission Journal on Quality Improvement*, 28, 666-672.



- Ulrich, R. S., Zimring, C., Zhu, X., DuBose, J., Seo, H.-B., Choi, Y.-S., . . . Joseph, A. (2008). A review of the research literature on evidence-based healthcare design. *Health Environments Research and Design Journal*, 1, 101-165.
- Zwarenstein, M., Rice, K., Gotlib-Conn, L., Kenaschuk, C., & Reeves, S. (2013). Disengaged: A qualitative study of communication and collaboration between physicians and other professions on general internal medicine wards. *BMC Health Services Research* 13, pp. 1-17.