For decades, emergency medical services (EMS)\(^1\) has been seen solely as a transportation service, with “real medical care” beginning in the emergency room. Since the 1970s, the United States government has worked to maintain EMS services through various acts and financial backings, and, especially in light of September 11, 2001 and proposed health care reform, EMS’s position in the medical field is changing and becoming more prominent. However, despite EMS’s impact on the medical and public communities, little scholarship exists on EMS, particularly on EMS documentation and communication.

My dissertation addresses two perceived gaps in current scholarship in the fields of medical rhetoric\(^2\), professional and technical writing, and health communication: the gap in research on EMS communication networks, and the gap in engagement between the academy and EMS. To address gaps in EMS communication research, my dissertation builds on current research in medical rhetoric, professional and technical writing, and health communication by using ethnographic research methods, including participant-observation, surveys, and interviews.

Research and best practices in medicine show that effective communication can save lives. To extend these best practices to EMS, I build on Spinuzzi’s definition of network, a “relatively stable assemblages of humans and nonhumans that collectively form standing sets of transformations: the networks represents and rerepresents [sic] phenomena in various areas,” to understand how EMS communication functions as a network (2008, p. 12). My dissertation impacts academic, medical, and local communities by contributing to a better understanding of EMS communication among those communities, an understanding that can both advance patient care and help scholars of professional and technical writing, medical rhetoric, and health communication scholarship make connections among their investigations.

Current EMS communication research focuses mostly on technology and communication problems, delays between prehospital care teams and hospital staff, and documentation (Blanford & Wong, 2004; Rowland, 2003; Avtgis, Polack, Martin, & Rossi, 2010; Munger, 1999, 2000). Scholars have not yet studied all communication networks involved in EMS, including how Emergency Medical Technicians (EMTs) and paramedics interact with other professionals working in emergency medicine, such as emergency room physicians and nurses. One explanation for the lack of research in EMS is that EMS professionals (paramedics and EMTs) are not trained in empirical methods, and, as I argue in Chapter Six, academic researchers working alongside community members are well-suited to address research gaps in fields outside the academy.

Prior to this study’s beginning, I was enrolled in an EMT course, and during the study’s duration, I became a certified EMT. As a member of the EMS and academic communities, I used ethnographic research methods, including participant-observation, surveys, and interviews, to answer the following research questions: What types of discourse occur within EMS communication as EMS professionals care for patients? How do EMS communication networks interact? Why do these communication networks interact the way they do? What role does rhetoric and professional and technical writing play in these communication networks? How can EMS networks of communication be improved? I answer these questions by collecting empirical data and grounding the results in rhetorical theory.

In Chapter One, I provide background on EMS and its development as a medical field, beginning in ancient times with a Good Samaritan caring for an injured traveler to modern day EMS services involving ambulances that serve as a mobile emergency room. I detail EMS’s history and its relationship with other fields of medicine to illustrate the dappled foundation of EMS and its subsequent precarious position in the medical field, a position that partially explains the lack of research in the field.

Chapter Two illustrates current scholarship by reviewing research in medical rhetoric, professional and technical writing, and health communication. Researchers in these fields examine medicine as it is understood and enacted within the confines of a hospital, clinic, or research facility, boundaries that do

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\(^1\) Emergency medical services is defined as “a highly specialized chain of resources designed to minimize the impact of sudden injury and illness on our society,” and those involved in EMS provide prehospital care to patients, such as first aid and emergency medical transport (Limmer and Le Baudour, 2006, p. 9).

\(^2\) Scholars in the field of medical rhetoric study “languages and texts of health or illness from a rhetorical point of view” (Heifferon and Brown, 2008, p. 2).
not apply to EMS. Without these boundaries, communication can become unstable and unpredictable, and to best understand how networks function, I turn to network theory. After providing an overview of Castells’s work on computer networks, I discuss actor-network theory and activity theory as a way to understand EMS communication networks. I assert that these theories apply to some aspects of EMS communication, including the important role of power and mediated discourse, but the EMS network strains these theories. As an alternative, I use assemblage theory and genre theory as a way forward to understanding how networks function and expand on traditional notions of these theories.

Chapter Three outlines my research methodology and data collection, which includes notes from participant-observation, survey responses, and interview responses. In Chapter Three, I detail my Institutional Review Board (IRB) approval process, which played a significant role in how this research project developed especially regarding information protected by the Health Insurance Portability and Accountability Act (HIPAA). Additionally, I discuss how the process of becoming an EMT situated and prepared me to enter into the EMS community, an often-inaccessible community to research.

Chapter Four documents the EMS communication network, paying specific attention to how it is comprised of multiple specialized nodes that are responsible for the transfer of patient information at multiple times during a 911 response. The most crucial node is the patient node because the patient stabilizes treatment and communication, which center around what the patient either orally or non-verbally reports to EMS professionals. EMS professionals, then, are responsible for treating the patient based on the information and documenting the information orally and in writing. However, internalized recall, or memory, plays a significant role in documentation and knowledge transfer and allows EMS professionals to navigate the communication network. When documenting in writing, EMS professionals take a rhetorical approach, demonstrating keen awareness of medicolegal audiences and potential repercussions.

In Chapter Five, I turn back to theoretical discussions in Chapter Two by first mapping the EMS communication network, a non-linear, iterative network that centers on a patient’s oral and non-verbal communication. I claim that EMS professionals, by relying on memory to document and provide patient care, are recovering this “lost” canon of rhetoric to navigate the networks and transfer patient information to emergency room nurses and physicians and medicolegal professionals. Finally, I draw on assemblage theory to extend activity and genre theory, which rely heavily on book culture to understand how activity and genre function, to include EMS communication. By using assemblage theory, I assert that oral and non-verbal human communication, for example, spoken word and the human body, mediate and stabilize goal-directed activity.

Chapter Six discusses the implications of my work on the professional and technical writing, medical rhetoric, and EMS fields. For researchers, I argue for the importance of working within communities under study in order to provide researchers with a first-hand account of their participants’ experiences. Moreover, I call future researchers to use this study as a foundation for professional and technical writing and medical rhetoric research, specifically in light of the development of electronic health records, which challenge traditional notions of documentation in all medical fields.

Regarding writing pedagogy, I offer instructors practical teaching suggestions for preparing students to communicate through writing in the medical fields. Specifically, I suggest instructors discuss how students in pre-health majors translate information to both expert and lay audiences, and provide students with opportunities for writing to real audiences either through developing community partnerships with health facilities or creating medical internships. In providing these suggestions, I draw from my research findings in which participants all reported the importance of medical professionals learning writing “on the job.”

Ultimately, my dissertation provides one of the first lines of inquiry into EMS communication via professional and technical writing and medical rhetoric. My research adds to these fields by incorporating perspectives of writing in a discipline from writers in a discipline, re-introducing memory to the canons of rhetoric, and extending genre theory and activity theory to include assemblage theory and the role human memory plays in genre, activity, and documentation.