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Communicating in crisis: Rhetorical (de)stabilization during the COVID-19 pandemic.

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COMMUNICATING IN CRISIS:
RHETORICAL (DE)STABILIZATION
DURING THE COVID-19 PANDEMIC

By

Brittany Nicole Smart
B.A., Northern Kentucky University, 2016
M.A., Northern Kentucky University, 2019

A Dissertation
Submitted to the Faculty of the
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A Dissertation Approved On

September 13, 2023

By the following Dissertation Committee

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Mary P. Sheridan
Dissertation Chair

_____
Karen Kopelson

_____
Paul Griner

_____
Debbie Potter

DEDICATION

for Tyler and Faith

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And thank you to Dr. Tyler Halicek, my heart, my home. For reading every chapter, every word. And then some. You are the one I lean on in the storm. *I love you, I love you, I love you.*

ABSTRACT

COMMUNICATING IN CRISIS:
RHETORICAL (DE)STABILIZATION
DURING THE COVID-19 PANDEMIC

Brittany Nicole Smart

September 13, 2023

This project explores the role of rhetoric in crisis—how rhetoric can contribute to both the stabilization and destabilization of a worldwide health emergency. Specifically, I utilize the COVID-19 pandemic as a case study to investigate how institutional rhetorics exacerbated the ongoing burnout epidemic amongst healthcare workers. Through a feminist, materialist take on institutional ethnography (Fullagar & Pavlidis, 2021; Griffith & Smith, 2014), I show how, while institutions like the CDC were under pressure to contain the spread of the virus, in the chaos of communicating safety regulations to healthcare professionals, they inadvertently subverted clinician autonomy and expertise by "coordinating" (LaFrance, 2019) their care practices through unrealistic "self-perpetuating" (Derkatch, 2022) efficiency rhetorics—rhetorics that no longer matched the reality on the ground in the day-to-day. Instead, clinicians were rhetorically assembled like machines, where they often felt institutions wanted them to be more like "robots," even when workers wanted to make more humanistic interventions in patient care. The hospital, as a complex rhetorical institution (Porter, et al, 2000), straddles two realms—war (against disease) and business (Segal, 1997). Between these realms, there is a tension

between mechanization and human-centric care. The hospital as mechanized imagines clinicians as soldiers to be sacrificed in battle, providing care with unquestioning service even when their lives are at risk. As a business, it imagines patients as consumers and clinicians as the machines to "fix" ailments, as if on an assembly line. However, this view conflicts with the reality that clinicians *are* humans with human limitations, and patients are people, not profits. My research demonstrates that the effects of these framings are deeply felt, particularly during a traumatic health crisis. And despite institutional rhetorics putting forth mechanistic notions of providing medical care, medicine remains a deeply embodied practice (Campbell & Angeli, 2019; Groopman, 2007; Montgomery, 2006; Ofri, 2013; Ruth-Sahd and Hendy, 2005). Utilizing feminist epistemology as a framework to study "who can be a knower" and "what can be known" (Barbour, 2018; Brooks, 2007; Poole, 2021), I closely examine the deeply embodied rhetorical work clinicians employ during the pandemic to stabilize their working environments, despite practicing under so much chaos, strife, and uncertainty. Ultimately, I argue that institutional rhetorics that mechanize people and practices have significant enduring consequences. And in the end, these effects are ultimately felt by the most vulnerable— all who enter a hospital to receive care.

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CHAPTER ONE

INVESTIGATING CRISIS RHETORICS

Introduction

I begin this project by asking: what is rhetoric's role in crisis? How does rhetoric

potentially (de)stabilize high-stakes, unpredictable situations? And in what ways do

(in)visible, embodied ways of knowing facilitate rhetorical work under these conditions?

Rhetorical work, or the "specific ways in which workplace communicators utilize

rhetoric to achieve workplace goals," serves an important function in evolving emergency

situations (Angeli, 2019, p. 14). For instance, the task of organizing a national crisis

response often begins with large governing institutions who must communicate safety

recommendations to a wide audience (e.g., wear a mask, wash your hands, get

vaccinated). Importantly, these institutions also develop detailed instructions for frontline

crisis responders, in order to coordinate a strong, unified offense/defense against a

particular public threat. However, in the development of these texts for those confronting

the crisis head-on, institutions do not always adequately attend to the material realities

that may affect protocol adherence on the local level. For example, healthcare

professionals often practice medicine under grueling working conditions at their

hospitals—even in normal times and especially in recent decades (Ofri, 2011; 2019). And

because modifying safety regulations for local contexts is primarily left to hospital

executives—those who receive guidance from the CDC but ultimately have a vested interest in the institution's financial bottom line and productivity metrics—employee needs and limitations of labor can frequently be pushed to the wayside. Even if executives have a better idea of their own hospital's unique constraints, including supplies, space, and personnel, in addition to how those might impact the applicability of these protocols, the material realities of their healthcare workers on the frontline can often be neglected. In the end, the task of managing a health crisis, affected by various evolving exigencies within and outside of the hospital's walls, primarily relies upon the practices of clinicians, who are responsible for not only taking care of their patients but protecting themselves and their co-workers from spreading infectious disease during an outbreak.

Exigence: The COVID-19 Pandemic

According to recent research, operating under tremendous constraints and taking on massive responsibilities for the COVID-19 pandemic has led to increased widespread clinician burnout, and healthcare workers have been leaving the profession in droves (Shihipar, 2021; Diaz, 2023). For example, many hospitals could not keep up with the rate of hospitalization and ICU transferal in the dark months of winter 2020-2021, and this trend continued into summer 2021 and January 2022, where cases began rising again among the unvaccinated. Burnout levels among healthcare workers were so high that in some areas, there were not enough personnel to care for those with serious cases of Covid, leading to more serious complications, and in some instances, more deaths (Fancher, 2021). Since these complications and stressors have led to increased clinician

burnout and massive exoduses by healthcare professionals (even in 2023), I utilize the COVID-19 pandemic as a case study to explore the impact of institutional rhetorics and material constraints on clinicians' experiences and daily practices. Specifically, by examining how institutions 1) assemble clinical practices in idealistic ways and 2) how workers attempt to live up to or challenge those expectations, I argue that we can understand how rhetorical work can stabilize unpredictable environments during crisis.

As an exigence, Covid has revealed a critical breakdown of norms in systems of health. Given that, as we reflect on the ramifications of this health emergency (particularly as it has theoretically "ended"), I contend it is critical to study the effects and impact of rhetoric during the pandemic's fallout. Essentially, I study the consequences of institutions not attending to the human element of practicing medicine— how downplaying the lived realities of and expertise of frontline professionals contributed to issues such as *rhetorical paralysis* (described more in detail in chapter four), where clinicians felt unable to intervene in situations that called for a more appropriate response. Investigating these issues is key, since it is a matter of "when" there will be another global pandemic, not "if" (Robbins, 2021).

This project begins by considering how the CDC's COVID-19 safety regulations for healthcare personnel emerged as a response to a pressing international exigence, reflecting upon the ways in which this document evolved to "coordinate" the work of people more efficiently across space and time (LaFrance, 2019). Although the Centers for Disease Control and Prevention (CDC) transparently report on some of the material constraints in the standardized COVID-19 safety policies healthcare workers had to

contend with during the pandemic[1], their messaging around how to navigate these issues is primarily geared toward hospital executive administrators and tends to prioritize labor optimization and efficiency, even if many of the goals may not be achievable for frontline staff. This often left clinicians to rely on their own intuitive senses and discursive practices in order to establish a "safe" space to work. In other words, particularly in a health emergency, governing regulatory texts (or "boss texts") can have major limitations and can perpetuate unrealistic assumptions of labor. According to Michelle LaFrance (2019), "boss texts," a term coined by feminist sociologist Dorothy Smith (Griffith and Smith, 2014, p. 12), are texts that seek to "regulate and standardize experience and practice" for people who are a part of an institution to follow and "circulate ideals of accountability, professionalism, and disciplinarity" (LaFrance, 2019, p. 80). By studying the values embedded in rhetorical moves made in medical safety regulations, I argue that we can understand the ways in which institutional rhetoric—especially in crisis—has significant material consequences for people, specifically clinicians and patients entering the hospital.

Study Overview & Disciplinary Frames

Scholars in the rhetoric of health and medicine (RHM) and technical and professional communication (TPC) have recently delved into the important functions and impacts of institutional/organizational rhetoric in crisis. Elizabeth Angeli and Christina

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[1] Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic

Norwood (2019), for example, study the intense rhetorical work that informs an institution's crisis response, chiefly how "gut feelings" factor into institutional interventions in public health, in their research with the Johns Hopkins Medicine Ebola Crisis Communications Team. The authors write that rhetorical work is not just about "rhetorical moves"; instead, it is "a complex process that workplace communicators use to collaborate with others, accomplish goals, and complete written workplace practices within evolving contexts" (p. 211). They note that public health communicators often do rhetorical work by drawing upon their own previous experiences—like "a skilled sailor knows how to maneuver a sailboat through stormy seas" (p. 211). Even more recently, in TPC, Tiffany Bishop and others (2022) explore the impact of institutional rhetoric during Covid—both on the public via CDC communications and within university settings from upper-level administrators' communications. Bishop considers the impact of institutional rhetorics on labor more generally during the pandemic. She ultimately argues for an "embodied" approach to risk communication, which would allow technical communicators to "analyze the role that power structures have in increasing or decreasing risk for certain bodies" and recognize the ways in which "individuals can use their bodies to communicate risk" (p. 183). In that same article, Brittany Larsen argues for a "tactical" risk communication approach that foregrounds "humans first" in messaging, specifically as it relates to labor expectations in higher education (p. 179). In shedding light on the material consequences and embodied aspects of institutional messaging during crisis, these scholars underscore just how critical humanistic frames are to technical communication. If institutions deprioritize the human factor in their rhetorical practices,

including how embodied experiences may affect and be affected by crisis response, it can lead to major consequences.

Although this scholarship examining institutional rhetorical work during a health crisis has contributed critical insights for both RHM and TPC (and has informed my own research for this dissertation), it really has only scratched the surface. After reviewing this research and considering its implications for this project, I was able to identify a few gaps that would benefit from further study. The major gap that felt critical to investigate further was the lack of perspectives from clinicians working during the COVID-19. For instance, Bishop and Larsen (2022) were not studying the hospital specifically, but their work studying tactical and embodied communication and highlighting the importance of localized experiences encouraged me to consider their research in terms of how clinicians made interventions during the pandemic—and the ways in which these professionals challenged limiting institutional rhetorics. Additionally, while Angeli and Norwood (2019) study how healthcare organizations craft a crisis response and utilize embodied knowing to do so, their research did not include clinicians' experiences and reactions to their home institution's messaging at Johns Hopkins. Further, though Angeli (2019) and Campbell and Angeli (2019) do study the rhetorical work of frontline healthcare workers, including EMTs and nurses, their research does not deeply address potential effects of institutional rhetorics on those groups, which is why this project attempts to establish a clearer link between the two. In putting that connection under the microscope, I aim to understand how both institutions and their professionals "on the ground" influence or inhibit the other through rhetoric.

For my project, I follow three major points of inquiry 1) how institutions develop their "coordinating" texts over time in a crisis, 2) how that messaging is absorbed by audiences, and 3) how people on the ground enact their own rhetorical work to intervene in incompatible institutional rhetorics. Through these points of inquiry, I eventually make several arguments. First, I argue that there are idealistic values of efficiency embedded within the CDC's coordinating texts, which clash with actual practices and human capabilities, something that became a major problem during the pandemic. To illustrate this phenomenon, I analyze efficiency ideals communicated by the CDC's COVID-19 regulations, I interview clinicians with administrative backgrounds to contextualize those values, and I speak with frontline clinicians who are tasked with maintaining these standards on the ground, in order to understand textual mismatches with reality. As Dorothy Smith (1997) writes, both understandings of reality and reality itself are established via "people's socially organized practices in *the actual* locations of their lives," and since knowledge that stems from local experience appears to be "the secret underpinning of everything we do," I argue that we can learn a lot about the function of rhetorical work in crisis by studying individuals' lived experiences during those circumstances (p. 393, 395, emphasis added).

The second main argument that I make for this study is that because clinicians aren't always constantly referring back and forth to a physical text that they take into their hands each shift to review, a critical component of their rhetorical work is *embodied*—enacted through the senses, memory, and lived experience. As Charles Bazerman (2003) writes in the editor's introduction of Beverly Sauer's *Rhetoric of Risk*, which explores the rhetorical practices of miners, "no one can check a book as the roof of

the shaft is collapsing" (p. xviii). So, if we apply this statement as a metaphor for critical care in hospitals, clinicians cannot always just "check a book" when split-second decisions need to be made, as patients' lives are on the line—and possibly even the lives of themselves and their colleagues. Therefore, embodied knowing, communicating, and decision-making—what Kathryn Montgomery (2006) refers to as rhetorical "phronesis"—becomes especially pivotal during a catastrophic epidemic. Identifying on a micro level how rhetorical work by clinicians is enacted to stabilize abnormal conditions (e.g., Covid) enables me to locate and unpack larger macro issues with institutional rhetorics.

In this chapter, I introduce the informing body of work that guides this project; outline how COVID-19 has revealed the need for greater attention to how institutional rhetorics not only impact an organization's members but can have ramifications for the general public; discuss my methodological frames, data collection, and coding methods for studying efficiency rhetorics and rhetorical work; and provide chapter previews for each major segment of this dissertation.

Literature Review

Examining Embodied Discursive Practices in RHM & TPC

This project extends scholarship in the fields of medical rhetoric and technical and professional communication that examines the role of embodied discursive practices and decision-making, particularly in risky contexts. For example, TPC scholar Beverly Sauer (1998; 2003) studies how miners utilize embodied knowledge to manage volatile circumstances in their work. She notes that because conditions can shift quickly in these

risky environments, miners must "observe, evaluate, and interpret rapidly changing sensory information," in order to keep each other safe (p. 132). Principally, Sauer expresses a desire to shed light on institutional rhetorical moves that "exclude or silence the embodied experience and local knowledge of workers—male and female" and reflects on the consequences of those silences (p. 179). Sauer's extensive research into the embodied elements of miners' rhetorical practices (and the rhetorical moves visible within an organization's regulatory documents) laid the groundwork for scholars in RHM and TPC to be able to distinguish the important connection between embodiment and rhetoric in technical industries. For instance, a key scholar in RHM for this project is Elizabeth Angeli (2019), who studies how emergency medical technicians (EMTs) enact rhetorical work in order to stabilize their shifting, hazardous work environments. Importantly, Angeli (2019) and Campbell and Angeli (2019) draw upon Sauer's (1999; 2003) research of miners' embodied intuition to create a taxonomy of embodied cues that healthcare workers tune in to when making critical judgement calls in their work. For this dissertation, I answer Campbell and Angeli's (2019) call for further study into healthcare workers' rhetorical work, and I adapt their taxonomy to examine the ways in which clinicians (physicians and nurses) employ embodiment to inform their judgment calls and discursive practices in the hospital. Fundamentally, I study how clinicians utilize embodied knowing and communication to maintain occupational stability during a years-long pandemic.

Feminist Epistemological Frame

Because this project is framed by feminist epistemology, a branch of philosophy which is mainly interested in 1) the "fusion of knowledge and practice" (Brooks, 2007, p. 55) and 2) the notion of who can be a knower/what can be known (Barbour, 2018), I seek to understand the experiences of clinicians working during a widespread crisis in hazardous environments—how they fuse situated, embodied knowledge with actual healthcare practice. Above all, a feminist epistemology recognizes the validity of knowing gained from lived experiences, upholding embodiment as an essential ingredient in knowledge-making (Poole, 2021). In this project, I chiefly utilize embodiment to investigate the ways in which clinicians do "rhetorical work" (Angeli, 2019) across time and space in a crisis through the information collected from bodily experiences. Embodiment, which can have many different definitions, is studied in both RHM and TPC scholarship, which is why this dissertation places both bodies of literature into conversation with one another. In the rhetoric of health and medicine specifically, embodiment is generally researched for the purpose of understanding patients' experiences of illness in order to shed light on injustices and other systemic issues within healthcare (Arduser, 2017; Emmons, 2010; Segal, 2012). However, as mentioned previously, this primary attendance to patients' perspectives has left a lack of clinician perspectives in the literature. As stated, Campbell and Angeli (2019) recognize this gap, and through their work, emphasize the importance of studying embodiment in healthcare workers' experiences, in order to enhance medical documentation and care for patients. Specifically, they call for more researchers to investigate "how intuition manifests in documentation contexts so that these critical, intuitive moments can guide healthcare

practice and decision-making" (Campbell & Angeli, 2019, p. 380). In TPC, scholars have

studied embodiment to make the argument that technical communicators should

incorporate users' embodied experiences to develop better texts and applications (Albers,

2011; Kirkscey, 2020). This scholarship reveals the importance of understanding how

individuals' experiences shape their interactions with and uptake of a text. To summarize,

I largely employ embodiment in each of these areas of scholarship as a frame to

understand how the localized uptake of institutional rhetoric affects individuals' lived

realities. In order to study clinicians' embodied experiences, I trace what is often

unacknowledged as knowledge-making in these medical settings—how healthcare

professionals read their own bodies, their environment, and others (including colleagues

and patients).

Roots of Embodied Knowing in Medicine

Reading bodies is a skill already deeply rooted in medical training and practice, as

several scholars and physicians have noted (Campbell & Angeli, 2019; Groopman, 2007;

Montgomery, 2006; Ofri, 2013). This kind of assessment is a key part of decision making

in medicine, where clinicians encounter a great deal of uncertainty on a daily basis.

Often, the way to proceed forward is not quite so clear cut (consider the phrase: "Let's

get a second opinion"). Clinicians have to rely on what they've learned in training,

knowledge they've gained from listening to other colleagues' experiences and input, and

what they are seeing, feeling, and hearing in the moment; all of these are critical elements

of an Aristotelian rhetorical concept called *phronesis*[2] or "practical reasoning"

(Montgomery, 2006, p. 5). This is to say that medicine, at its core foundation, is deeply

embodied and subjective. Kathryn Montgomery (2006), an English PhD who is

foundational to the study of narrative medicine, studies the art of clinical judgment and

reflects upon the dangers of treating medicine like an objective science, "even in a highly

scientific, technologized era" in her book *How Doctors Think* (p. 1). Considering those

dangers, as institutions of health push for more and more efficiency and accuracy

(Hartzband & Groopman, 2020)—even turning to AI for help (Graham, 2022; Silverman,

2019)—we can understand how an over-objectification of medicine might cause some

major issues, which is something this project attends to heavily.

    Jerome Groopman (2007), a physician who also wrote a book titled *How Doctors*

Think a year later than Montogomery's, explains medical judgement calls from a

clinician's perspective. In current healthcare pedagogy, in order to increase efficiency

and consistency in diagnosis and treatment, medical students are taught to "think" in

terms of preset algorithms or "decision trees" that follow these lines of inquiry: if patient

presents with these symptoms, then proceed in this way; if not, try this, and so on

(Groopman, p. 5). Groopman notes that although these clinical algorithms can help health

professionals make everyday diagnoses and even benefit insurance companies who get to

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[2] Importantly, *phronesis* is one of the three Aristotelian knowledges, as described in *The Nicomachean Ethics*; others include 1) *episteme* or universal, general knowledge (from which the study of epistemology is derived) and 2) *techné* or the knowledge of making or doing to produce a particular end result or product. Like technical skills of carpentry and playing an instrument, Aristotle also viewed medicine as an "art" (Angier, 2010; Hughes, 2002). Because Kathryn Montgomery is interested in medical *judgment*, which requires practical, embodied rhetorical knowledge and thinking to take a specific action, she primarily uses *phronesis*.

decide whether or not a patient needs a particular test or treatment, they can actually "fall apart" when clinicians need to think "outside of their boxes" and "discourage physicians from thinking independently and creatively" (p. 5). All in all, these preset algorithms (which are often set by the institution), rather than "expanding" clinical knowledge making, actually "constrain it" (p. 5). Though this book was published more than fifteen years ago, it calls attention to a problem that I discuss head-on in this dissertation—how medicine's gradual overreliance on Western objective notions of knowledge has contributed to the mechanization of clinical labor. While Groopman doesn't use the term "mechanization" to describe this phenomenon (what I use for this project), the issue he describes is essentially the same. He writes:

> [T]oday's rigid reliance on evidence-based medicine risks having the doctor choose passively, solely by the numbers. *Statistics cannot substitute for the human being before you*; statistics embody averages, not individuals. […] Each morning as rounds began, I watched the students and residents eye their algorithms and invoke statistics front recent studies. I concluded that the next generation of doctors was being conditioned to function *like a well-programmed computer that operates within a strict binary framework*. (p. 6, emphasis added)

Groopman wrote this well before artificial intelligence became a common topic of conversation (Graham, 2022), but his message reveals just how much these institutional values of mechanization were already in the works. As I mention later, even one of the participants in this dissertation's study, Dr. Bryan, describes feeling like a robot in response to the institutional structures put in place during Covid. These structures communicated assumptions that he and his colleagues should automatically fall in line

without question to institutional policy, thereby downplaying their own embodied expertise in the process. Groopman essentially predicted that this would happen on an even greater scale, though at that time even he could probably not imagine how much worse it could get if a pandemic came roaring in. In sum, both scholars in the humanities and clinicians essentially recognize how vital the creativity and subjectivity of embodied knowing is to the practice of medicine, and they warn their readers about the consequences of assuming otherwise.

Knowledges such as intuition have been quite stigmatized by Western science, which prioritizes empiricism and predictability (Woolley & Kostopoulou, 2013). And yet there is no objective way to proceed when an unknown virus suddenly wreaks havoc on the entire global population. Under these circumstances, institutions can often fail to recognize and support the embodied experiences and stabilizing interventions of professionals who are working on the frontlines. Therefore, especially in unpredictable settings, it's important to recognize that human emotions and experiences do play a key function. These kinds of ideas—particularly the role of healthcare professionals' emotions in medical practice—have been studied well before the pandemic hit, even by clinicians themselves. For example, Dr. Danielle Ofri (2013) explores these ideas in her text *What Doctors Feel: How Emotions Affect the Practice of Medicine*. She writes that the underlying message "in the real-life trenches[3] of medical training" suggests that doctors "shouldn't get too emotionally involved with their patients. […] Hyperefficient,

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[3] Metaphors of war are used quite frequently in medicine, as Segal (1997) notes. I point this usage out to illustrate how this phenomenon eventually became a focal point of study for this dissertation (Ch. 3).

technically savvy medical care is still prized over all else" (p. 4). However, no matter how much that idea is valued and no matter how many "high-tech tools enter the picture," the relationship a doctor has with their patient remains a "primarily human one" (p. 4). As chapter four in this dissertation demonstrates, the participants could not, in fact, remove themselves emotionally from the care of their patients. And when these clinicians felt paralyzed in a rhetorical sense, unable to intervene on their patient's behalf for humanitarian—though, technically nonmedical—reasons, it affected them deeply, even long after the worst of the pandemic was over. As Groopman (2007) notes, "Cognition and emotion are inseparable," and they "mix in every encounter with every patient" (p. 39).

Project Mapping

In order to investigate the crucial role of embodied knowing and its influence on discursive practices and decision-making in risky technical contexts, I trace the function of institutional rhetorics in crisis, mapping out how they impact frontline healthcare professionals. I survey these rhetorics through three main realms: a regulatory text from one of the largest government health organizations in the U.S. (the CDC); discourse from hospital administrators who are also physicians; and experiences from clinicians working on-the-ground during the COVID-19 pandemic (doctors and nurses). Studying how (de)stabilizing discourse manifests and evolves throughout each of these realms allows me to identify how mechanized notions of efficiency are prescribed, processed, reinforced, and challenged. Importantly, by examining these discursive realms, I illustrate how rhetoric has the potential to regulate unstable environments, as well as disrupt them

further (including the rhetorical practices of those working within these settings). This project adds to ongoing discussions among RHM and TPC scholars that underscore the consequences of ineffective technical communication—and how localized embodied practices can enhance the overall management of a crisis. Critically, my study expands the applicability of rhetorical work to encompass everyday clinical settings during a widespread health emergency, something that has been studied to a lesser degree in scholarship.

Methodology & Methods

I see my methodology and methods working together in several ways in this project. As scholars Kirsch and Sullivan (1992) write in their text *Methods and Methodology in Composition Research*, methodology includes how we imagine our research objectives in projects—and methods are the literal steps we take to gather information or how we perform research studies around texts. In particular, my study is guided by a feminist, materialist take on institutional ethnography as methodology that seeks to understand lived experiences and traces how governing regulatory texts (or "boss texts") shape those experiences (Schell, 2003). According to Michelle LaFrance (2019), institutional ethnography provides a multitude of distinct methods to collect data, including surveys, interviews, textual analysis, etc., and each of those methods, especially interviews and textual analysis, play a key role in enacting the methodological goals of IE for my project. In sum, I see methods as the implementation of explicit and intentional research practices that can enact the goals of this study's IE methodology.

As institutional ethnography (IE) is my overarching methodology, I pursue the knowledge making ideas of IE through interviews and rhetorical analysis. More specifically, I look closely at "how institutions *coordinate the experiences and practices of individuals*" (LaFrance, 2019, p. 4, emphasis in original), in order to shed light on the power of rhetoric within institutions of medicine, utilizing feminist epistemology to identify what "multiple and alternative 'knowledges' count" (Barbour, 2018, p. 209). According to Michelle LaFrance, institutional ethnography (IE) as a methodology provides a rich, holistic view of the discursive practices that take place within highly regulated settings, and it affirms that "what individuals do is always rule-governed and textually mediated," since "individual experience, ideals of practice, local materialities, and institutional discourse are mutually constitutive" (2019, p. 5). By setting out to examine the "ruling relations" or the "complex of relations…that connect us across space and time and organize our everyday lives," I seek to understand the networked ways in which discursive practices and needs shift as they are negotiated and enacted by institutions and people (Smith, 2005, p. 8). By reviewing individuals' situated perspectives or "shared identity, professional alignment, investment," I study how institutional discursive forces shape the expectations and actions of people working within them (LaFrance, 2019, p. 5). Overall, I aim to illustrate how institutions affect individual experiences of work, investigating how "macro" influences the "micro" and vice versa (DeVault, 2008, p. 4).

This study is informed by ethnographic inquiry, as I seek to locate and examine the invisible influences that impact people's lived realities. I see institutional ethnography specifically as a way to identify those invisible influences situated in institutional

contexts. As Mary P. Sheridan (2012) notes, "[W]hat is distinctive about ethnography is its orientation to understanding the rich visible and seemingly invisible networks influencing the participants in the study," and recognizing and investigating those "seemingly invisible" components of rhetorical negotiations and embodied experiences through IE is a large part of my methodological goals for this project (p. 73). Critically, I make these invisible components visible by gathering the experiences of individuals and conducting rhetorical analyses, in order to identify and understand how discursive work is applied in hazardous medical settings, paying attention to how materiality effects those rhetorical practices taking place.

Feminist, materialist perspectives on institutional ethnography are central to my research goals of identifying how institutional ruling relations and the coordination of people and practices unfolds in an emergent pandemic. Specifically, investigating how the material constraints of supplies, personnel, and technology impact clinicians' experiences with safety protocols allows me to identify the limitations of "boss texts," in addition to identifying the advantages of rhetorical interventions that challenge those texts. This goal is supported by recent scholarship that employs materialist feminism to understand how Covid has revealed systemic breakdowns in our society. For example, Simone Fullagar and Adele Pavlidis (2021) see materialist feminism as an applicable lens to examine the cracks the pandemic has exposed. The authors write:

> As a disruptive knowledge practice feminist theory seeks multiplicity while undoing the binary thinking that continues to marginalize and "fix in place" material and discursive forces (including policies, practices, ideologies and affects). (p. 154)

In other words, binary thinking—or what feminist scholarship views as hegemonic, Westernized epistemologies (Barbour, 2018; Brooks, 2007)—cannot attend to all of the material realities and discursive forces that dismantled everything we know and thought we knew about healthcare and medicine when the pandemic emerged. However, feminist epistemologies that recognize the constructed, subjective power relations that exist between material and discursive forces and support the validity and opportunities presented by embodied knowledge, can fill in the mismatches in reality that binary "objective" knowledges can miss, downplay, or ignore entirely. RHM scholar Lisa Melonçon (2017) even points to the opportunities for exploring the relationship between materiality and embodiment to understand the influence bodies and artifacts have on intuition, which is a kind of invisible knowledge I explore in my project in chapter four. To summarize, with this feminist, materialist framing of IE as methodology, which discusses knowledge-making and accessing that knowledge-making as shaped by the combination of external and internal embodied influences, I seek to make visible the ways in which institutional rhetorics coordinate individuals' experiences and practices, in order to identify what knowledges "count" as valid—and how those knowledges can help stabilize a crisis at the local level.

This study was conducted using two major qualitative methods, which followed the core tenets of IE. First, to gather the experiences of clinicians during the pandemic, I conducted interviews with both doctors and nurses. I pursued interviews in two ways, which included sending out a survey to enroll interested participants in the study and collect some initial contextual information. Those who enrolled had the option to just complete the survey or complete the survey and sit down for a full interview. The second

way I garnered interest in the project was by asking current participants to send the

survey on to anyone who may be interested in enrolling in the study. Second, to better

understand how institutional boss texts shape the lived experiences detailed in the

interviews, I analyzed key texts referenced in these interviews. Phase two of my project,

following chief principles of IE, traced outward from my analysis of those experiences to

explore how boss texts shape the lived realities of participants.

To begin the first phase, I invited participants I had met personally at formal

medical events or gatherings to complete a survey about the kinds of regulations they've

come into contact with (including training they've had with those protocols on the job,

online courses, etc.; see Appendix for full survey). For soliciting additional participation

in the study, I applied the method of *snowball sampling*, where the clinicians invited

other colleagues to join the project (Hesse-Biber, 2014). According to Browne (2005)

who utilizes snowball sampling in her research, there are considerable advantages to this

method, including that by using personal contacts (i.e., reaching out to people one knows

directly and then asking them to contact people within their networks), it can increase

trust amongst participants and encourage them to share more information. From enacting

these methods, I ended up interviewing ten clinicians total, ranging in age from 25-89,

including seven physicians (six men and one woman) and three nurses (all women), at

several different institutions across the U.S., mostly from the Midwest and East Coast.

The physicians' specialties include internal medicine, hematology, radiology, and

pulmonary critical care, and all the nurses work in postpartum units with mothers and

their newborns (Nurse Jo March, Nurse Kayla, and Nurse Megan). Three physicians (Dr.

Gary, Dr. Shane X., and Dr. Patrick) have or have had administrative responsibilities

during their career, ranging from hospital medical staff leadership to participation in a state medical association, to hospital chief executive officer, respectively. Dr. Gary and Dr. Patrick also teach or have taught classes at their academic hospital institutions as professors of medicine. Four physicians were residents at the time that the interviews were conducted (Dr. Bryan, Dr. Ronald, Dr. Tribbiani, and Dr. Dane Joe). All identifying information was anonymized, and participants were invited to choose their own code name for the study.

For conducting the interviews, I employed feminist qualitative methods—methods which honor participants' experiences and illuminate the "hidden power relations" that affect their daily lives (Ramazanoglu & Holland, 2002, p. 106). For this project, these methods involved asking in-depth questions about participants' experiences with navigating their institutions. Some questions included: what factors are taken into consideration when making decisions based upon material constraints and medical unknowns of each individual hospital? What does an intervention in established protocol look like? And what are negotiations that take place when making those decisions around safety? (see Appendix for complete list of interview questions). Interviewing both clinicians and clinician-administrators about their experiences with navigating governing regulatory documents was critical for my understanding of how rhetoric is enacted individually and collectively across space and time, especially considering the unique kairotic physical realities of critical hospital care. The questions I asked participants about material conditions, particularly constraints such as supplies, space, and personnel attempted to locate clinicians' seemingly "invisible" knowledges that are enacted *when the governing text is not enough* (Sauer, 2003). These interviews were somewhat text-

based, as I brought up the CDC's Covid safety regulations for discussion, but the primary focus was participants' own recalled experiences.

In the second phase, I mapped out and analyzed recurring tensions with institutional rhetorics in participants' responses. To do this, I coded for common themes or outliers in participants' responses that pointed towards larger thematic trends or patterns and examined how institutional ideals of efficiency mismatched with the reality of the enacting these regulations. In addition to seeing what patterns came out of this data related to institutional rhetorics, I coded for clinicians' emotional reactions (or "gut feelings") in response to the challenges of navigating institutional protocols. This information contributed to my rhetorical analysis of these interviews, which I used to identify and examine invisible knowledges (such as intuition) and rhetorical strategies (e.g., interventions) that clinicians used in crisis. By "invisible knowledge" I mean both the situated embodied experiences that clinicians call upon when making a judgement and the concrete practice that takes place. Specifically, I wanted to know how clinicians made decisions by employing embodied epistemologies to enact rhetorical work that challenges boss text rhetorics. Through this study, I sought to illustrate the complex role that embodied ways of knowing play in clinicians' interactions with governing "boss texts," especially as clinicians navigate risk. By investigating these knowledges, I illuminate key elements of the rhetorical dynamic between institutions, bodies, and material realities for hazardous healthcare settings. What follows are the specificities of my coding process and how the findings are assembled in each chapter.

I coded these interviews by utilizing ATLAS.ti software to compile the data, and I employed analytical techniques from Johnny Saldaña's (2013) Coding Manual, including

memo writing to keep track of my coding choices and processes, including "how the process of inquiry is taking shape; and the emergent patterns, categories and subcategories, themes, and concepts" in the data (p. 41). According to Saldaña, "[c]oding is not a precise science; it is primarily an interpretive act" (p. 4). As such, I initially looked for specific themes, shifting my focus as certain patterns appeared in the data, particularly as initial codes in the "First Cycle" (exploratory method) of coding led to "subcodes" in the "Second Cycle" (pattern method) of coding, and so on.

Given that I knew this study's codes may start broad and become more specific later on, the first round of coding these interviews was exploratory. That said, I did intentionally code for mismatches in reality between what the CDC Covid safety protocols instructed clinicians to do and what actually happened in the hospital in practice. To identify these mismatches, I coded for two areas, including the 1) safety ideal (what institutions would like to happen and how those ideals are maintained/ensured) and the 2) safety actual (what happens in reality). From the interviews, there were 14 codes that appeared for "safety ideal" and 50 codes that arose for "safety actual." For second round coding, I further analyzed the quotes from those codes to identify how realities of working in the hospital clashed with institutional ideals. This meant that quotes from "safety actual" were subdivided into categories that pointed towards specific instances of textual disjunctions with reality. These subdivided codes included: 1) ripple effects of safety protocol (when protocol caused more problems than they solved) (34 codes) and 2) textual limitations (which dealt with safety texts either not providing enough useful information, outdated information, or conflicting/inaccurate/confusing/changing information) (39 codes). Along with coding

for these mismatches, I coded for constraints that may have added to complications of dealing with textual conflicts with reality, including limitations on time, space, supplies, personnel, and issues such as unreliable viral testing (40 codes total). From the initial first cycle of exploratory coding, I also highlighted quotes of what I referred to as "POI" or points of interest. These codes involved tracking patterns that were interesting yet may only be used for future research (94 codes total). One of the subcodes of these POIs, "metaphorical language" (26 codes) did end up being critical to the arguments I make in chapter three, which explores just how embedded martial and economic metaphors are to medical discourse (see Appendix for specific code quotes). I decided to keep metaphorical language under the label POI, since there were other kinds of metaphors not explored in this dissertation that could prove fruitful for future study.

Second round coding also involved tracing a code I labeled as "embodiment" (105 codes total). Embodiment involved anything relating to knowledge-making through the body and with other bodies; this included how healthcare professionals read their own bodies, their environment, and others (including colleagues and patients). Preliminary exploratory coding in this code involved tracking any and all embodied cues that participants utilized to make decisions in the hospital (both internal and external embodied cues, according to Campbell and Angeli's [2019] taxonomy). Deep analysis into the quotes attributed to this coding within Microsoft Word led to the subdivided categories of 1) environmental knowing and 2) experiential knowing. I then studied the role those epistemologies played in the rhetorical work of clinicians, and from that, I identified three patterns that emerged, which included rhetorical awareness, rhetorical paralysis, and rhetorical interventions (described in the following summary of chapter

four). To track rhetorical paralysis specifically, I identified instances where participants used variations of phrases such as, "I felt unable to" or "Because of my position, I couldn't," etc. (see Appendix for specific code phrasing breakdown). In the following paragraphs, I outline how this study's codes informed each chapter's argument(s).

In chapter two, I investigate how the CDC assembles medical labor throughout the COVID pandemic through its use of rhetorics of efficiency. To accomplish this, I analyzed common themes of efficiency from the "Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic." Four main assumptions of efficiency included 1) surveillance efficiency, 2) material efficiency, 3) spatial efficiency, and 4) temporal efficiency, all of which downplay different aspects of the realities of practicing medicine during the pandemic. Additionally, I investigated how notions of efficiency evolved over time, demonstrating how these assumptions are self-generating. To study how efficiency rhetorics changed over time, I studied the text's major shift in audience and purpose, which happened gradually over several years of the pandemic. Upon analyzing the document, I noticed a recurring label that came up—"facilities." While it was sometimes used to reference actual hospital buildings, most of the time it signaled *those in charge of hospitals*, i.e., executives. Since this phrase was an indirect marker of power, I wanted to trace how it affected the document's purpose—and if it indicated a shift in audience. Over time, I found that as instructions for "facilities," increased, the document did indeed move away from its existence as a text speaking directly to frontline professionals. Instead, this document became a megaphone for the CDC to communicate with executives who are charged with creating protocols for their workers to follow. In that

textual shift, giving more power to those who are foremost concerned with their facility's fiscal growth/destruction, clinicians' experiences were inevitably deprioritized, and workers were even placed on the same equivalent as non-human resources, such as supplies. To show how this shift happened, I analyze this text's iterations from 2020 through 2022, tracking small revisions in language that indicate textual moves that serve to increase mechanized efficiency (automatic, disembodied, unquestioning).

Chapter three unpacks notions of the mechanical aspect of efficiency rhetorics in medicine further, studying how it manifests in the discourse of participants with administrative responsibilities. To trace the uptake of efficiency rhetorics in these participants' responses, I studied how metaphors of war and business manifested in their interviews—and how mechanical discursive frames clashed with more humanistic ones. When first coding participants' responses, I was taken aback by how often martial/economic metaphors arose in their discourse about working in medicine. Initially, this usage was marked as a POI (point-of-interest), but due to its frequency, it was later tracked under the code "metaphorical language." Since these were recurrent patterns that communicated a variety of efficiency values, including service, obedience, expediency, and profitability, I drew upon literature that could help my mapping of how these rhetorics reinforce certain ideas about labor in medicine. In particular, Judy Segal's (1997) article about how metaphors constrain public discourse surrounding healthcare allowed me to understand how deeply rooted metaphors of war and business are to medical discourse. While these metaphors haven't been studied in RHM as much since Segal's article, save for a few sporadic references here and there, the data from my research indicated a need for a closer look. In this chapter, I study how martial/economic

metaphors essentially constrain notions of practicing medicine, specifically in ways that they primarily perpetuate mechanized ideas about providing care. For instance, when institutions communicate assumptions of clinical labor as automatic, endlessly optimizable, objective, and disembodied (particularly in a crisis), clinicians can feel like they're just machines on an assembly line. However, when communications account for the human element, these metaphors can instead support the autonomy, expertise, subjectivity, and emotions of the message's intended audience. In that way, humanistic efficiency rhetoric can be just as effective, if not more so, than mechanized efficiency rhetoric, since it doesn't assume robotic, emotionless compliance and instead encourages connectivity and compassion, rather than disconnection and detachment.

In chapter four, I closely study the rhetorical practices of clinicians, essentially "reconstructing" a picture of what was happening in healthcare during the pandemic. Importantly, these rhetorical practices challenge mechanistic notions of practicing medicine. To examine how clinicians drew upon intuition for rhetorical work in the hospital, I coded for strong emotional responses that manifested in their interview responses, like when participants' used phrases such as "I felt bad," "I was worried," etc. Then, I traced how those emotional responses affected their intuitive decision making. Since intuition is the combination of bodily emotional and sensory responses with "previous experience" and "situational awareness" (Campbell & Angeli, 2019, p. 355; Klein, 1999), it is key to what I define as embodied knowing. To code for intuition, I utilized Beverly Sauer's (1999, 2003) research on embodied cues and sensory experiences to help me think about what kinds of embodied knowing I could potentially look for in clinicians' interview responses ("pit sense," "engineering experience," and

"scientific knowledge"). Additionally, I adapted Campbell and Angeli's (2019) embodied healthcare taxonomy to map out medical intuitive cues. In particular, I employed two specific coding methods that helped me trace external and internal intuitive cues. These methods included coding for clinicians' "physical and nonphysical experiences with the patient and the patient's environment" and coding for clinicians' "memories of previous experiences, individual feelings, and individual embodied sensations" (p. 363). By coding for the above, I aimed to get a better sense of the kinds of embodied knowledges clinicians relied upon when making risk-based decisions around safety regulations throughout the COVID-19 crisis. In turn, this informed my analysis of how mechanistic notions of medicine often came into conflict with humanistic ones.

Along with coding for embodied knowledge or knowing, I coded for clinicians' "rhetorical work," or the "specific ways in which workplace communicators utilize rhetoric to achieve workplace goals" (Angeli, 2019, p. 14). The three main themes that emerged in my coding for rhetorical work included *rhetorical awareness* (being able to identify a situation that calls for a response); *rhetorical paralysis* (feeling unable to adequately respond to an exigence); and *rhetorical in(ter)vention* (feeling empowered to problem-solve and take action). Upon identifying those themes, I mapped out the embodied elements that seemed essential to each of those types of rhetorical work for clinicians, and I illustrated how that work is key to achieving workplace goals. Further details and analyses, including the breakdown of this coding and embodied knowing chart, can be found in chapter four.

In summary, these methods allowed me to gain a much more nuanced understanding of the complex role institutions play in shaping the experiences of people

who work within them. Through my textual analysis of the CDC's Covid regulations, I was able to identify constructions of labor expectations and study how ideas of efficiency evolved over time to optimize that labor. By tracing how the document changed with each revision, I was able to identify how institutions like the CDC communicate with those with the most authority in healthcare, which are hospital executives. In tracing how the document invokes power and speaks to those with it, I gained additional insight and context into how people and practices are assembled for maximum efficiency in medicine—and how that coordination has gone relatively unchecked as corporate interests have taken over nearly every aspect of healthcare. Supplied with that knowledge, I could understand why efficiency rhetorics surfaced so frequently in participants' interviews. Interviewing those who have been in medical administrative leadership positions who are also physicians themselves enabled me to see both sides of the picture, particularly how values of efficiency, on their own, are not problematic. A hospital being concerned with everyday financials or clinicians "going to battle" to save patients is not inherently harmful. Instead, there lies a balance; if the hospital is driven towards more mechanized notions of efficiency by those at the helm, essentially discounting the human element of healthcare, that's when issues materialize. Having conversations with those on the frontlines provided an additional—and perhaps one of the most crucial—perspectives of this project. In examining clinicians' experiences of providing critical care during the pandemic, especially how they applied situated, embodied ways of knowing to do rhetorical work and make interventions, I was able to show what happens when institutions don't account enough for the human component in

their coordinating "boss texts." In the end, it's those on the ground who pay the price. And in the case of healthcare broadly, that price ultimately extends to patients as well.

Throughout this project, I demonstrate the effects of medicine being mechanized for corporate interests over the past few decades. Clinicians were already speaking out about the dangers of this over-corporatization (Groopman, 2007; Ofri, 2011; Silverman, 2019) before the pandemic occurred, and they presented their case of what feeding this efficiency "moneymaking machine" (Reinhart, 2023) would inevitably lead to. When we did end up having a major, earth-shattering health crisis, clinicians were already massively burnt out (Ofri, 2019), which meant that when institutions needed them to be "soldiers" on the frontlines of the war against Covid, rather than being heartened to fight for the cause (humanistic efficiency), many were ready to give up the gauntlet, especially after the first wave, and now even years later (Diaz, 2023). They were frustrated with the executives in the C-suite who cut their pay and increased expectations for optimization, even as they hired and paid more for ancillary travel staff (mechanistic efficiency), which caused additional tensions (Farmer, 2022; Yong, 2021). Being treated as mechanical and expendable has major consequences. And yet clinicians found significant agency when they were able to make interventions that made sense for their patients and staff (Study interviews, 2022). Overall, this project argues for the importance of the rhetorical work in medicine, particularly during a health crisis, illustrating how embodied rhetoric has the potential to restabilize chaotic circumstances and contest incompatible coordinating rhetorics that institutions put forth.

CHAPTER TWO

CONSTRUCTING THE IDEAL: HOW INSTITUTIONAL RHETORICS
COORDINATE MEDICAL LABOR FOR OPTIMAL EFFICIENCY

Introduction

> In the vector of optimization, the ceiling […] does not just recede out of grasp;
> there is effectively no ceiling at all.
> -- Colleen Derkatch, *Why Wellness Sells*

This chapter considers how the CDC's COVID-19 safety regulations, throughout

the pandemic, functioned as a living "boss text," which I define as a persuasive document

intended to manage the actions of individuals and groups on a large scale (Griffith and

Smith, 2014). Importantly, a boss text is also a document that is continuously updated for

"management's" evolving circumstances and needs (Sauer, 2003). The CDC, in putting

together their Covid infection control document, relied upon their ethos as a reputable

health institution with a long history of success with infectious diseases to encourage

unified compliance with these regulations. Further, the CDC had to make sure the

measures could be "standardized" enough for *all healthcare facilities* to implement

quickly and efficiently (Griffith & Smith, 2014). As a piece of technical communication,

this document's purpose was to direct healthcare professionals to adhere to all its

protocols, even when personnel had to work under significant constraints. These

constraints include the vastly unknown variables of the COVID-19 virus and the

continually emerging new (and sometimes conflicting) information that scientists accumulated on a near daily basis. That said, a continuous, concerted rhetorical effort towards communicating the management of infection control was essential in order to prevent hospitals from being overwhelmed with cases, keeping facility personnel and patients as safe as possible.

As this document was continually being revised, though, I argue that its rhetorical moves may have (albeit inadvertently) exacerbated the current healthcare crisis related to personnel (e.g., medical staff leaving the profession, increased burnout, etc.). I define rhetoric as communicating with the intent to inform, persuade, and/or move to action in response to a pressing exigence (Bitzer, 1968; Corbett, 1990; Pike, 1970). While this labor crisis was not a direct result of Covid, it significantly worsened because of it, as it was made more visible to the public (Ofri, 2019; Yong, 2021). In other words, this crisis was an issue that "had been simmering for years and was brought to a boil" by the pandemic (Hartzband & Groopman, 2020, p. 2485). Given that, I argue that the CDC's regulatory text, in many respects, reflects the problematic ways in which medicine has been unceasingly streamlined for mechanized efficiency over the past few decades (Kocher, 2013: Ofri, 2011; Timmermans & Berg, 2010), as shareholders sharpen their attention on the bottom line, and frontline healthcare professionals work to keep the system from falling apart entirely, sacrificing their mental and physical health to do so (Ofri, 2019; Reinhart, 2023).

I believe it is important to note, though, that while much of the discourse around the failures of the government response to Covid criticizes the actions of the CDC, we cannot ignore the fact that many of the organization's actions were stymied by the U.S.

political administration at the time (Mandavilli, 2023). This project, taking into consideration the constraints that the CDC was working under, including the limited Covid knowledge informing the organization's infection control guidance, provides a more nuanced look at the labor crisis and the impact of the CDC's rhetoric. In other words, my aim is not to vilify the CDC, but instead to study the institution's efficiency rhetoric—particularly how, in their central text, they made rhetorical moves that, over time, sought to address a more "optimal" target audience, an audience that was not primarily clinicians. Additionally, I illustrate how, in attempting to improve the standardized labor practices of medical professionals, the document's primary purpose shifted to "maximize" (Hartzman & Groopman, 2020) clinicians as a "resource," much like an N95 mask or a ventilator (CDC, 2022; AHA, 2022). This inevitably contributed to notions of frontline professionals' labor as a commodity. In this chapter, I perform a rhetorical analysis of the CDC's regulations for healthcare personnel to understand the ruling conditions healthcare professionals were working under during the pandemic (2020-2022). Reflections regarding the material impact on workers appear in chapters three and four.

Specifically, I discuss how the COVID-19 safety regulations document, as a "boss text" (LaFrance, 2019), aimed to "optimize" (Kocher, 2013) the labor of medical professionals by ultimately tailoring its rhetoric toward hospital administrators. Although this document initially geared its messaging toward frontline healthcare workers as an audience, over time, it became targeted toward those at the top of healthcare institutions, resulting in substantial consequences for workers. While in theory, the distinct shift to adjust the document in order to address administrators may have been an effort to

encourage Covid regulations to be more adaptable to each institution's local needs, in practice, it resulted in an emphasis of administrators as "knowers" (Barbour, 2018) and a deemphasis of clinical expertise and autonomy, as the document's rhetoric further "mechanized" or "made mechanical" (Oxford Languages, 2023) the labor of clinicians for the purpose of hitting perpetually "moving target[s]" of optimization (Derkatch, 2022, p. 5). Rhetorical mechanization may benefit hospital executives who aim to maximize the hospital as an investment—something that is now standard among both for profit and nonprofit healthcare institutions (Silver-Greenberg & Thomas, 2022), but it is not favorable to clinicians, since mechanization overstretches notions of human capability. I argue that mechanization likely contributed to the widespread crisis of burnout, exhaustion, stress, etc. among healthcare workers.

The consequence of over-privileging rhetorics of efficiency for nonclinical, executive-level audiences sometimes led to a deprioritizing of clinicians' mental and physical health, which is one of the reasons why many clinicians have left healthcare altogether (Galvin, 2021; Diaz, 2023). Critically, without enough clinicians that are well-supported by their institution, patient care suffers (Hartzband & Groopman, 2020). To study rhetorics of efficiency, I analyze various iterations of the "Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic,"[4] a text developed by the CDC throughout the pandemic. I argue that by studying the IPCHP's iterations over the years

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[4] For more accessible referencing purposes, going forward I will use the acronym "IPCHP" for this document.

(2020-2022), we can identify how institutional rhetorics can idealize realities of working

in hazardous healthcare environments for efficiency and productivity, and I contend that

these misalignments with reality, in turn, have major costs for frontline personnel. While

this document is only *one slice* of a bigger picture that reveals systemic issues within

healthcare, it is important to examine, as it supports a larger trend which illustrates that as

healthcare has become more commodified, the system has begun to collapse. According

to many clinicians and experts, the current system is completely "unsustainable," and it's

been deteriorating for some time (Ofri, 2011; 2019; Reinhart, 2023; Silver-Greenberg &

Thomas, 2022; Yong, 2021).

Since institutional ethnography (IE) is a core methodological frame for this

dissertation, I've selected the concept of *autopoiesis* (self-generation) as a framework to

show how institutions of health attempt to "*coordinate the experiences and practices of

individuals*" through self-generating rhetorics of optimization, particularly in a health

crisis (LaFrance, 2019, emphasis in original). According to Michelle LaFrance (2019), IE

contends that "what individuals do is always rule governed and textually mediated," and I

believe exploring how the CDC's rhetoric, which manifests in its "rules" or regulations,

impacts frontline clinicians in significant ways. Although I cannot presume to know the

CDC's discussions and major goals behind revising these regulations, I do review

particular textual traces that reveal the ways in which this document's main audience and

purpose *did* noticeably shift over time. I examine how that shift indicates a move toward

addressing an audience of higher-ups to better organize the labor of clinicians for their

institutions. Specifically, I argue that *autopoiesis* is the means by which the CDC's

rhetoric evolved over time to assemble clinicians toward a perpetually shifting goal line

of "optimization" (Derkatch, 2022), thereby resulting in a document that was more disembodied and organization-centered, rather than embodied and people-centered. In other words, the CDC's rhetoric ultimately pivoted away from the public good of supporting clinicians so that they can serve patients adequately, causing considerable problems.

Further, I examine the function of *autopoiesis* through a feminist lens. While feminism can have a number of different understandings or definitions, in this project, I focus on core tenets that examine how hierarchies of power shape who can be a knowledge maker and what kinds of knowledge are considered "valid" (Brooks, 2007). A feminist lens supports the recognition of embodied ways of knowing as a valid form of authority and expertise (Barbour, 2018). In other words, this lens helps me unpack the questions: Who can be an expert? What counts as expertise? And how do hierarchies of power reinforce knowledge-making validity? I argue that the CDC's autopoietic rhetoric, in constructing near machine-like optimization for workers, further disembodies healthcare, thus reinforcing Westernized notions of objectivity in the practice of medicine, which is much more subjective and nuanced than many typically realize (Groopman, 2007; Montgomery, 2006). In chapters three and four, I consider how participants call into question mechanized notions of healthcare, underscoring the importance of extending the scholarship within RHM that studies the importance of embodied rhetorical work in medicine (Angeli, 2019; Campbell & Angeli, 2019).

In this chapter, I first unpack the history of the term *autopoiesis*, describe how it's been taken up in the rhetoric of health and medicine (RHM), and then provide my own understanding of the term and describe how it demonstrates the trajectory of the CDC's

efficiency rhetoric. Next, I briefly describe what I mean by a "living" (Sauer, 2003) boss text, examining how the IPCHP's existence as living provides the capacity for the CDC's efficiency rhetoric to continue to evolve. Then, I outline the CDC's history as a rhetor and how their policymaking practices as an institution likely informed the development of the IPCHP. Finally, what follows is the rhetorical analysis of the IPCHP itself, where I examine the textual traces that reveal how the document's target audience and purpose shifted over time. Such work highlights the importance of examining the impact of disembodied institutional rhetoric within both RHM and crisis communication within technical and professional communication (TPC) (Baniya, 2022; Bishop, et al, 2022).

Autopoiesis & Efficient Institutional Rhetorics

In *Institutional Ethnography*, Michelle LaFrance (2019) writes that institutions are "complex rhetorical, social, and material entities" (p. 24), in part referencing the research of James E. Porter, et al (2000). I find this framing, which emphasizes the rhetorical and social role that institutions play, as well as their material significance and influence, useful for understanding how the CDC, as an institution charged with communicating critical information about health exigencies to the public, assembled its rhetoric in purposeful, targeted ways that had material consequences for those working in hospital settings during the pandemic. To study the implications of the CDC's messaging, I apply the concept of *autopoiesis* to demonstrate how rhetorics of efficiency "self-generated" for optimization (Derkatch, 2022) through the Covid safety document in order to increase productivity and maximize labor. In what follows, I examine the term's

origins and discuss how it has been taken up by the field of the rhetoric of health and medicine.

The term *autopoiesis* was coined in 1972 by biologists Francisco Varela and Humberto Maturana to describe living cells that are autonomous and self-creating, referring to processes such as mitosis. The term is a combination of the Greek words "auto" (self) and "poiesis" (creation), as the researchers wanted a word that "could directly mean what takes place in the dynamics of the autonomy proper to living systems" (Maturana & Varela, 1972, p. 16). Autopoiesis was then adapted by sociologist Niklas Luhmann (1986; 1992) in social systems theory scholarship to describe how social systems continuously reproduce themselves with materials inherent to the system; they are self-sustaining and self-defining, constructing a worldview that fortifies their existence (Hernes & Bakken, 2003; Blaschke, 2015). The term has also been taken up in business (Maula, 2006), studies of capitalism (Jessop, 1990), and law (Kaye, 2011; Teubner, 1992) among other areas of study, underscoring its versatility and applicability to understand how systems continue to proliferate and reinforce deeply embedded social structures.

In the rhetoric of health and medicine, several scholars incorporate the term into their research (Keränen, 2010; Derkatch, 2018; 2022). Lisa Keränen (2010), who introduces the concept to RHM, primarily takes up *autopoiesis* to describe how the rhetoric around biodefense simulations *perpetuates* governmental systems of biodefense (which exist in case of a viral apocalypse) by making a health crisis "visible" for "elite decision makers" and "wary publics" (p. 78). Keränen writes, "The resultant rhetorics of risk steer attention away from the conditions of risk production to the construction of a

vivid and apocalyptic post-pandemic future, which authorizes further spending and planning—even as it generates more risk" (p. 78). Summarily, there is a kind of perpetual loop that happens with *autopoiesis* in Keränen's understanding; specifically, she implies that the visibility of risk contributes to the existence of risk—a performance of a bio-warfare crisis makes that situation material, so more money is funneled into emergency simulations and biodefense and research and departments, etc. As a result, closed rhetorical systems of biodefense self-reproduce in perpetuity.

Nearly a decade later, Colleen Derkatch (2018; 2022) extends Keränen's (2010) interpretation of the term in RHM to study the "self-generating" discourse of natural wellness and health. Derkatch writes that *autopoiesis* is useful for RHM scholars in that the concept "helps to articulate how patterns of discourse are reinforced and reproduced not merely at the level of individual rhetors but, more significantly, through *systems-level discursive activity*," which is a useful framing for my own project, which studies the effects of *institutional* discursive activity (2018, p. 155, emphasis added). In addition, Derkatch's (2022) most recent work *Why Wellness Sells*, presents the idea that not only is the discourse of wellness self-generating on a systemic level, but wellness culture, through *autopoiesis*, also continues to move the goalpost of what is "well" in ways that are inherently unrealistic and unattainable. At its base, Derkatch argues, wellness culture assumes everyone is *incipiently ill*, thus broadening capitalistic opportunities to sell treatments for perceived suboptimal conditions of mind and body.

In taking up Derkatch's conceptual framework of *autopoiesis*, my project applies her fifth vector[5] of autopoietic wellness discourse, referred to as "optimization," or "the drive to become […] become more effective and efficient" to study how institutional discourse presents the assumption that medical labor can be optimized in perpetuity (p. 7). As chapter three explores in more detail, clinicians, in many ways, are expected to fall in line like automated robots. Derkatch argues:

> the human body has been transformed under global capitalism into an instrument of production that must be managed and maintained through practices of surveillance and intervention […] to ensure the continued functioning of the body-machine. (p. 143)

Utilizing this framework, I study how CDC's autopoietic efficiency rhetoric essentially reinforces the mechanization of healthcare workers throughout the pandemic by assembling their labor in unrealistic ways for their respective institutions—much like wellness culture assumes the human body can be endlessly optimized to perfection. However, unlike wellness culture which purportedly aims to improve mental and physical health, efficiency rhetoric in medicine can worsen clinicians' wellbeing and lead to diminished care for patients (Hartzband & Groopman, 2020).

Further, I argue that the IPCHP's efficiency rhetoric is not only "self-generating" or autopoietic, but in its self-generation, over time, it slowly transitions away from supporting clinician autonomy, expertise, and well-being, resulting in more disconnected

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[5] Other vectors of self-generating wellness discourse include: incipient illness, self-management, harm reduction, survival strategy, and performance (Derkatch, 2022).

patient care. Both Keränen and Derkatch's considerations of *autopoiesis* indicate that it

functions as a feedback loop, and my illustration of *autopoiesis* in this document, though

it appears to operate somewhat linearly as the discourse shifts from one point in time to

another (Fig. 1), points to a more problematic systemic feedback loop that resides in

healthcare as a social institution more broadly. The core issue of this systemic feedback

loop indicates that as clinicians are assembled for efficiency through detached and

disembodied institutional rhetoric, they experience burnout (feeling exhausted, robotic,

etc.), and this mechanization leads to further institutional expectations of medical labor as

automatic, disembodied, and expendable.

Part of what allows the IPCHP to be autopoietic is its existence as a "living"

document. I situate this definition of a living document in Beverly Sauer's (2003)

conceptualization, which was introduced by one of her interviewees in their

conversations about the Federal Mine Safety and Health Act. According to Sauer, a living

document is that which "can change in response to the specific needs of management and

labor," in order to "reflect current data, policies, or insights" (2003, p. 39). In other

words, the IPCHP is a malleable document that is beholden to the shifting requirements

of those in power—how they want their labor force to view and interact with their work

environment. By creating a living document, organizations can more easily shape the

version of reality that most benefits their goals as an institution—sometimes, at the

expense of individual workers. In my rhetorical analysis, I examine how the CDC shifts

the audience and underlying purpose of the IPCHP. In these rhetorical shifts, the IPCHP

also transfers most of the operational power to facility administrators, most of whom do

not have medical backgrounds or experiences working "on-the ground" at the hospital.

Consequently, protocols for Covid often clashed against the needs and requirements of frontline workers, something I'll explore more in detail in chapter four. Importantly, this is a tension that stretches back decades, as hospitals are complex institutions that are host to "dual lines" of authority—one for the business side and one for the clinical—that have little cross-communication and differing operative styles, which can contribute to a litany of issues (Goss, 1963; O'Connor, 2017; Shortell & Kaluzny, 1994).

Because the IPCHP is a living document, it is more easily able to generate conceptualizations of labor that primarily advance to improve efficiency. This document, in its living, exacerbates clinical mechanization as it is further optimized. While efficiency is not a problem on its own, since healthcare organizations often strategize ways to make operations more efficient (Hartzband & Groopman, 2020), the main issue arises from how the IPCHP shifted over time, through various iterations, to *primarily* bolster clinical efficiency at the cost of clinicians' mental and physical health—and even quality patient care. As mentioned earlier, when the document generated new revisions, those revisions spoke to a more executive-level, administrative audience and tended to downplay mismatches between the regulations and reality, thus diminishing the experiences of clinicians (both their expertise and, as a result, their actual lives). And if we are to return to Sauer's (2003) sense of the word, these kinds of revisions appear logical, because we know that a living document often serves the needs of those in authoritative positions and does not necessarily reflect the needs of those on the ground. However, enacting rhetorical moves that mechanize labor—particularly in a crisis—have clear consequences, as the later chapters explore.

Building the Boss Text: A Rhetorical History

In this section, I provide a brief "rhetorical history" (Turner, 1998) of the CDC and explore the origins of infection control protocols for healthcare workers to contextualize my rhetorical analysis of the Covid IPCHP. As an "institutional rhetor" (Porter, et al, 2000), the CDC's mission has consistently been to persuade people to care about their health and the health of others—to convince the public to take action by following their guidance and expertise (CDC, 2021). Since its establishment in the summer of 1946 as a new branch of the U.S. Public Health Service (PHS), the goal of the CDC (then the "Communicable Disease Center") has been to control the spread of disease, originally targeting malaria, which was endemic to the American South (Parascandola, 1996; Sledge, 2012). A little more than a decade later, in 1957, the organization also began to focus on other kinds of diseases, such as STDs after the Venereal Disease Division migrated to the CDC from the PHS (Meyerson, 2008). The "Tuberculosis Control" division followed soon after in 1960 (Meyerson, 2008). In the 1960s, the CDC was designated The National Communicable Disease Center (NCDC), and they began researching lesser studied health areas, such as reproductive health and chronic diseases, and they started national campaigns to end diseases such as smallpox, measles, rubella (CDC, 2021). A decade later in the 1970s, the CDC was renamed the Center for Disease Control (CDC), and they focused on issues such as smoking, malnutrition, birth defects, lead-based paint poisoning, and chemical hazards (later publishing the first "NIOSH [National Institute for Occupational Safety and Health] /OSHA [Occupational Safety and Health Administration] Pocket Guide to Chemical Hazards") (CDC, 2021). Because the 1980s saw the emergence of the AIDS epidemic,

the CDC sharpened their focus on HIV risk reduction and transmission prevention, launching the health information campaign "America Responds to AIDS" (CDC, 2021). By the early 1990s, it had become what we know today as the "Centers for Disease Control and Prevention" and hosted several prominent divisions to address all different aspects of disease prevention and control, including infectious diseases, chronic illness, healthy living, and environmental health issues (Etheridge, 1992; CDC, 1992). Importantly, before the COVID-19 pandemic, most people felt like they could rely on the CDC for timely and accurate information; the CDC's ethos as an organization was strong—although that has since changed, according to recent polls (Simmons-Duffin, 2021; Landen, 2022).

Because the CDC had had a long history of being the central guiding authority of disease control, health promotion, and disease prevention, the organization was in a prime position to create effective clinical guidance on Covid. However, even their knowledge of the disease was limited, so they had to build on what they did know—and lean on what healthcare workers were most familiar with. One of the most prominent rhetorical strategies the CDC used to create persuasive Covid protocols was to build upon existing regulations, namely their "Standard Precautions." Nine out of ten participants in my research study were familiar with Standard Precautions (Study survey, 2022), and most of them had received some form of training on them, whether in workshops, school, or on the job (Study survey, 2022). For example, one of the nurses, Jo March, would always keep these standards "in the back of [her] brain" in case she was uncertain and use "the highest level of precautions," presuming "regardless of what the patient status is that they're infectious, just as a bit of a base" (Study interview, March 2022). In other words,

Standard Precautions can be understood as an archetypal boss text—a document that the IPCHP (a derivative boss text) primarily draws upon.

The "Standard Precautions" document was one of the CDC's first rhetorical texts intended to induce healthcare worker cooperation with adhering to uniform practices. Standard Precautions (previously labeled "Universal Precautions") weren't instituted until the mid to late 1980s as a result of the HIV/AIDS epidemic, so they are still (relatively speaking) "green" in the world of healthcare, and they have gone through several stages of revision. In 1985, the primary goal of Universal Precautions was to "prevent the transmission of bloodborne pathogens from exposure to blood and other potentially infectious materials" (Broussard & Kahwaji, 2021). A few years later, in 1987, the CDC disseminated the "Body Substance Isolation" regulations, which recommended avoiding all kinds of bodily fluids, not just blood, and advocated for handwashing at the sight of "visible" contamination (Broussard & Kahwaji, 2021). Nearly a decade after these protocols were introduced, in 1996, the CDC's Healthcare Infection Control Practices Advisory Committee (HICPAC) compiled the "Guideline for Isolation Precautions in Hospitals," which incorporated critical parts of both Universal Precautions and Body Substance Isolation guidelines and presented several different "transmission-based" measures, including "airborne, droplet, and contact" (Broussard & Kahwaji, 2021). This document is the basis for what is now known as "Standard Precautions."[6]

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[6] While Standard Precautions are the basis for COVID-19 protocols, their own scientific roots are a little tenuous. For example, the six ft. apart mandate is based in the 1897 work of Carl Flügg, who studied the

Standard Precautions (SPs) serve a specific purpose in healthcare environments and have a wide range of applicability. According to Broussard and Kahwaji (2021), Standard Precautions are pertinent to "all patients, irrespective of their disease state" (like Nurse Jo mentioned) and are employed whenever there is a risk of exposure to "(1) blood; (2) all body fluids, secretions, and excretions, *except sweat*, regardless of whether or not they contain visible blood; (3) non-intact skin, and (4) mucous membranes" (emphasis in original). The document includes specific recommendations for hand hygiene, procedures for "donning" (putting on) and "doffing" (taking off) proper personal protective equipment (PPE), respiratory hygiene or "cough etiquette" principles, proper "patient placement," disinfecting and cleaning medical equipment, how to handle linens, guidelines for injections, and appropriate needle and instrument handling (CDC, 2016). These precautions are used in combination with "Transmission-Based Precautions," which is the "second tier of basic infection control" and employed for "patients who may be infected or colonized with certain infectious agents for which additional precautions are needed to prevent infection transmission" (CDC, 2016).

Standards such as these act as critical heuristics for what works and what doesn't; they reflect "common-sense" processes and actions (Sauer, 2003, p. 38). Furthermore, they attempt to convey in written form the "accumulated body of scientific and local knowledge about preventing disaster in hazardous worksites" and indicate "practical" and "reasonable" solutions to "complex technical problems" (Sauer, p. 37). As Sauer writes,

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transmission of viral aerosol droplets. As it stands, there is no basis for this recommendation in current scientific knowledge (Randall, et al, 2021).

standards are the result of countless discussions and collaborations regarding how to understand and measure the distribution of risk (p. 37). In other words, while the SP document appears simple, it truly reflects a long, complex rhetorical history of research, composition, evolving decision-making and political negotiation (e.g., the "six feet apart" compromise amongst the Trump administration and the CDC [Dangor, 2021]).

These regulations serve as the foundation for infection control and prevention and are in place to protect both the patient and the clinician from disease transmission. They are the basis of protocol for the Covid IPCHP—a kind of starting point—and assume a generalized audience of all healthcare workers, having to be "precise enough to prevent misinterpretation and ambiguity" but "broad enough to apply generally" (Sauer, 2003, p. 43). In other words, this is not for one hospital or specific hospitals; it's for all hospitals and healthcare spaces. Theoretically, the document strategically limits the information down to the essentials of protection and prevention, in order to be more applicable—and persuasive—across contexts. It is not specific to any one communicable disease. As I mentioned, a major rhetorical strategy of the Covid IPCHP is that it refers to foundational information from Standard Precautions—a boss text that most healthcare workers are already familiar with.

Accordingly, when Covid hit, clinicians often relied on their training with SPs in order to make timely decisions; these guidelines were concise, clear, and practical, making for an easily accessible knowledge bank—qualities that augment their persuasiveness (Study interviews, 2022). In other words, the CDC as an institutional rhetor greatly relied on familiarity (including its own robust history as a credible health organization and its foundational, standard information on handling infectious diseases)

as a rhetorical strategy to elicit cooperation and compliance (LaFrance, 2019) among healthcare workers during Covid. The CDC essentially built upon an original boss text to create a more effective and efficient boss text for the Covid pandemic, underscoring their position as an authoritative institution providing objective guidance. However, the process was anything but, as I alluded to earlier in this section. The process was instead much more complex, given the uncertainty around Covid and the charged political environment at the time.

The IPCHP, like the SP document, has gone through many phases of revision and was updated whenever there was a meaningful change in recommendations or protocol. However, again what's most interesting about these iterations is *not what the CDC says they changed*, but instead what the implications of those changes can tell us about this document's rhetorical shift and resulting increase in efficiency discourse. In my analysis, I identify the textual traces of this document's various iterations over the years of the pandemic to show that a key shift in audience and purpose *happened*. Then, using a recent iteration of the document (recent as of the interviews conducted in 2022), I examine what its efficiency rhetoric looks like and how this rhetoric downplays chief mismatches between what the document says is true, versus what was happening on the ground at the time. The primary aim of this analysis is to set up the context for understanding how the situated, embodied experiences of clinicians were *mechanized* and *minimized* in significant ways during the pandemic. I conclude with a discussion of implications of this document's major shift, in addition to estimating the consequences of glossing over major, systemic problems happening within healthcare, and considering implications for RHM and crisis communication scholars in TPC going forward.

Shifting Audience and Purpose in the Boss Text

While it's not possible to know the revision discussions behind the CDC's IPCHP, since I didn't have the opportunity to interview the members of the CDC who worked on assembling its contents, I do identify what materialized through the text's various iterations that illustrates autopoietic notions of optimization. And as I cited in the introduction, it's no secret that 2020, the year the pandemic first surged in the U.S., was a time of social and political turmoil. Therefore, it's likely that the CDC had to juggle a number of limitations when disseminating information to other healthcare institutions (see Rutledge, 2020). These constraints likely affected how this particular document for healthcare workers evolved over time. Regardless of how constraints might have affected material policy, though, what follows is an analysis of how the changes that the CDC made to this document led to a seismic shift in the text's audience and purpose that had major implications for frontline workers.

To trace this shift, I evaluate every major iteration of this document the CDC published at crucial points in the pandemic. The document timeline in Figure 1 serves as a visualization containing descriptions of notable revisions that pertain to this project. This timeline is not focused on what the CDC says they revised (which appears at the bottom of every document version as a footnote), but instead tracks inconspicuous textual absences and fluctuating language that indicate rhetorical shifts in audience and purpose. It is possible that the CDC initially wanted to underscore the expertise of frontline clinicians in order to accommodate preliminary uncertainty about Covid and make up for the incompleteness of the IPCHP. However, as my analysis reveals, the move away from

an audience of healthcare professionals toward an audience of those who manage

healthcare facilities happened not long after the document was originally created, which

meant usability for clinicians was pushed aside fairly early on. In the following two

sections, I explore each of these shifts in audience and purpose and the implications for

clinicians, utilizing a compilation of artifacts retrieved from the Wayback Machine, a

digital database containing time-stamped screengrabs of websites, hosted by the Internet

Archive.

Figure 1 (next page)

Notable Revisions in COVID-19 IPCHP: 2020, 2021, 2022. Bold green changes indicate

additions of information. Bold blue changes indicate removals of information.

Jan. 2020

Limited information (could fit on a notecard). Three simple patient-centered sections for clinicians (evaluation, testing, and infection control). **Emphasized clinical judgement and expertise.** Audience labeled as "Healthcare Professionals" in title.

Apr. 2020

Language for target audience changed to "Healthcare Personnel" instead of "Healthcare Professionals." Title changed to "Interim Infection Prevention and Control Recommendations for Patients," implying a clinical audience. **Added infographic showing a healthcare worker wearing "preferred PPE" vs. "acceptable alternative PPE." Added acknowledgement of systematic supply issues.**

Nov. 2020

Revised text down to two main sections on infection control and patient care. Removed acknowledgement of supply shortage and substituted with hyperlinks to "Optimizing PPE." Added link to "mitigate" staffing shortages; removed discussion of issue as systemic.

Feb. 2021

Removed PPE infographic. Added references to "Optimizing PPE" document and acknowledged ongoing shortages. Added a note for "facility" responsibility to provide personnel with mental health resources, more overtly addressing an administrative audience

Sept. 2021

Removed any reference to PPE supply shortages or staffing limitations. Removed note of facility obligation to provide mental health resources to personnel.

Feb. 2022

Re-added linked resource for staffing shortages. Removed PPE optimization resource; removed mention of supply shortage. Emphasized increased surveillance and personnel 'management' due to Omicron variant

Sept. 2022

Added statement to explicitly indicate document is a framework for "facilities." Increased references to "the facility" or "facilities" as a coded marker for healthcare administrators.

The first iteration of the document, labeled "Interim Guidance for Healthcare Professionals," was published January 17, 2020, and appears visibly directed at and in recognition of the expertise of frontline clinicians. This version contains three simple sections, which include "Criteria to Guide Evaluation of Patients Under Investigation (PUI) for 2019-nCoV," "Recommendations for Reporting, Testing, and Specimen Collection," and "Interim Healthcare Infection Prevention and Control Recommendations for Patients Under Investigation for 2019-nCoV." Each of these assumes 1) reader scientific/medical knowledge and 2) applicability and use by those directly taking care of Covid patients. The inclusion of "Professionals" in the title of the document (Fig. 2) further underscores that the text is meant to be used by those with a medical background and the skills to be able to provide appropriate care for said patients.

Figure 2

Screenshot from Jan. 2020 Document: "Professionals" in Title

In the April 2020 iteration, the shift in audience becomes apparent through a subtle modification. Instead of "healthcare professionals," the document is instead relabeled for "healthcare *personnel*" (Fig. 3, emphasis added). Not only does this broaden

the scope of the audience to encompass non-clinical positions, but it implies a shift

toward managing the work of *all* healthcare facility employees, whether they have "direct

or indirect exposure" to Covid patients. Given that, the assumption of every reader's

professional clinical expertise is implicitly taken out of the equation. However, it does

seem that part of the primary audience for this document is still meant for those working

on the ground in hospitals, as indicated by the title, "Interim Infection Prevention and

Control Recommendations *for Patients* with Suspected or Confirmed Coronavirus

Disease 2019 (COVID-19) in Healthcare Settings" (emphasis added). The phrase, "for

patients," implies that readers who are interacting directly with patients will be applying

this document for their work in clinical settings.

Figure 3

Screenshot from Apr. 2020 Document: Audience Shift to Healthcare "Personnel"
(Implicit: All Facility Employees)

Healthcare Personnel (HCP)
For the purposes of this document, HCP refers to all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including:

- body substances
- contaminated medical supplies, devices, and equipment
- contaminated environmental surfaces
- contaminated air

Because the document's audience is broadened, its protocol instructions are

expanded as well. While the first half of the regulations in this iteration (1-5) are more

clearly directed toward frontline workers, the other half (6-11) are "facility" management

related (i.e., directed at executive-level administrators), which is another indication of

how the document's audience is beginning to shift in discreet ways. By pursuing the

attention of administrators, the CDC is better positioned to coordinate the labor of healthcare workers more efficiently across the country, since administrators at top of the hierarchy in healthcare systems; they are the ones who can formally put into place the rules the CDC makes and modify them to fit their institution. Administrators are the primary arbiters of what Dorothy Smith (2005) refers to as "ruling relations," or "that extraordinary yet ordinary complex of relations […] that connect us across space and time and organize" our experiences and day-to-day practices (p. 8). Ruling relations are quite powerful, as they "draw upon and influence institutional patterns, such as hierarchies, allocation of resources, and work processes" (LaFrance, 2019, p. 32). All in all, when the CDC makes the rhetorical choice to modify this document for administrators, it reinforces executives' authority and expertise as rule-makers, even if they don't always have the clinical know-how to be able to remediate these protocols in ways that are realistic and amenable for their workers. After all, the main goal of administration is to assess bottom line metrics and keep the hospital running efficiently, with all too often clinicians' experiences becoming a lower-order concern (Hartzband & Groopman, 2020). Sociologist and journalist Eyal Press (2023) notes that this has become a major problem, as more and more doctors "[take] orders from administrators and executives who do not always share their values and priorities" (para. 19). As a whole, this iteration does still appear to be geared towards the average frontline healthcare worker to reference when they prepare to interact with Covid patients. However, if we consider the shift in the title and additional content that focuses on coordinating employee labor, we can see how the document's audience is evolving to focus on administrators to assemble frontline workers more optimally.

In the November 2020 version, the CDC completely cuts the phrase "for patients" in the title, replacing it with just "for healthcare personnel" (Fig. 4) and substantially whittles down the amount of information included in the document, potentially transferring it to other parts of the organization's website. Modifying the title further serves to shift the primary framing of the text. Instead of mainly patients being managed, it's personnel who must also be "managed" by "the facility," which implicitly increases executive-level administrators' authority and responsibility. This rhetorical move toward revising the document's audience a step further reiterates the notion that executives should directly oversee the practices of their healthcare professionals, presuming that is what will make labor "more effective and efficient" (Derkatch, 2022, p. 7). This idea is key, because autopoietic optimization, at its base, has no end point, and it is administrators who have the power to "continually assess and adjust" clinicians' performance "across different domains" (p. 6). While Derkatch's notion of optimization in wellness rhetoric assumes self-managed enhancement, I argue that the CDC's efficiency rhetoric assumes optimization that is to be institutionally managed. However, as I mentioned in the beginning of this chapter, that can lead to unanticipated outcomes.

Figure 4

Screenshot from Nov. 2020 Document: Only Healthcare "Personnel" in Title

In February 2021, the document makes another rhetorical move toward addressing an administrative audience, but this time, it happens in a surprising way. The CDC adds the following statement, "Healthcare facilities must be prepared for potential staffing shortages and have plans and processes in place to mitigate these, *including providing resources to assist HCP with anxiety and stress*" (CDC, 2021, emphasis added). Interestingly, this is one of the only rhetorical moves in the document (throughout all its iterations) that attempts to humanize, rather than mechanize, the labor of healthcare professionals. This comment appears to emphasize a compassionate version of efficiency—one that views supporting healthcare professionals' health as an important factor in keeping the hospital functioning properly. Both issues mentioned, staffing shortages and declining mental health, were something administrators had to confront and take into account at various points during the pandemic, particularly since they affect the institution's bottom line, and the inability to provide enough services and support across the country and were becoming common knowledge among the public (Jacobs, 2021; Yong, 2021). In fact, Dzau, et al (2020) refer to the clinician mental health crisis as a "parallel pandemic" that should not be taken lightly or ignored (p. 513). While the note about mental health appears to be in service of frontline workers, the instruction mainly acts to shift the document's target audience another step towards administrators.

Further, in this iteration, we see a more concerted effort towards addressing an executive-level, managerial audience through the inclusion of more imperative sentences. A few examples include: "Optimize the use of engineering controls," "Facilities must balance the need to provide necessary services while minimizing risk to patients and HCP," "Facilities should develop policies and procedures to ensure recommendations are

appropriately applied in their setting (e.g., emergency department home healthcare delivery)," and "Facilities should designate specific persons within the healthcare facility who are responsible for communication with public health officials and dissemination of information to HCP" (CDC, 2021). The inclusion of the protocol "Implement Universal Use of PPE" indicates that those in positions of authority were being asked to make sure their workers' PPE practices were standardized, for instance. I argue that the explicit use of "healthcare facilities" in the mental health note (Fig. 5) and imperative statements directed at facilities in certain protocols underscored this document's messaging as targeted towards those charged with creating operational plans for their workplace's "personnel." From these examples, it's clear that "facilities" are not the same people as "HCP." Facilities are the rule-makers; HCP are the rule-followers.

Figure 5

Screenshot from Feb. 2021 Document: Facility Responsibility for Providing Mental Health Resources

Healthcare facilities must be prepared for potential staffing shortages and have plans and processes in place to mitigate these, including providing resources to assist HCP with anxiety and stress. Strategies to mitigate staffing shortages are available.

A year later, in the iteration from February 2, 2022, we can see another significant shift towards an administrative audience; now, the document focuses mostly on surveillance, which was not entirely absent but attended to very minimally in previous iterations. Surveillance is a critical component of Derkatch's (2022) notion of autopoietic optimization, and it manifests in two ways: "tracking" and "hacking." Both are "largely undertaken in the name of efficiency and optimization" (p. 19). While Derkatch's

framework focuses on how individuals "track" and "hack" their bodies to be well, I focus on how institutions "track" their personnel to optimize their labor and ensure efficiency. In the case of February 2022's iteration, safety monitoring and compliance procedures are not only emphasized at the beginning of the document but throughout the text. Additional emphasis is placed on "managing" healthcare workers infected with or exposed to COVID-19, and an "Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2" document is linked multiple times. The note about providing mental health resources to workers has since been removed, though the reasoning is unclear, and the absence is not acknowledged in the revision footnotes. Overall, this iteration appeared to be another shift in audience *for administrators* to heighten surveillance to optimize their workplaces, acknowledging that Covid was not quite over just yet, and that the practices of their personnel needed to be surveilled as such.

As my analysis of these incremental changes show, to better optimize the labor of healthcare workers across the country, the CDC made specific rhetorical moves that shifted the audience from frontline workers to those in charge of facility "management." Management includes managing the patients, the personnel, and the facility itself (as in, the "building"). The phrase "for healthcare personnel" doesn't mean that the document is for clinicians *to use*. It means that the text is "for" *employees* to *follow*—once administrators have decided what kinds of practices are appropriate. A more apt title might be "for administrators to use for coordinating the work of their employees," as recent changes from September 2022 indicate (Fig. 6). In that iteration, they explicitly state that this document is for "facilities." In other words, the document's audience has

fully pivoted from frontline workers to an audience of executives. The CDC, in a nutshell, rhetorically ramped up efficiency by addressing a more influential (thus, optimal) readership. I explore how and why this may have happened later in the following section on the IPCHP's shifting purpose.

Figure 6

Screenshot from Sept. 2022 Document: Document is Officially Labeled a "Framework" for Facilities in Introduction

This interim guidance has been updated based on currently available information about COVID-19 and the current situation in the United States. Updates were made to reflect the high levels of vaccine-and infection-induced immunity and the availability of effective treatments and prevention tools. This guidance provides a framework for facilities to implement select infection prevention and control practices (e.g., universal source control) based on their individual circumstances (e.g., levels of community transmission).

Purpose: From Clinician Heuristic to Clinician Efficiency

Given that the document's audience shifted over time—first implicitly, then explicitly—we can also identify how the text's purpose changed in significant ways. In this section, I analyze the content of each iteration to highlight how the document's purpose shifted from being a heuristic (Campbell & Angeli; Groopman, 2007) for clinicians to reference when working in the hospital, to a text that primarily aims to optimize clinician labor for efficiency. As mentioned in the previous section, the title in the first iteration from January 2020 clearly communicates that the document is for healthcare professionals, and its contents would only be usable for those working directly with patients. Importantly, what also appears in the document is an emphasis on clinician judgement, underscoring worker autonomy and situated expertise. This emphasis exists

as a short phrase in the footnotes, but it's important, nonetheless: "Clinical judgment

should be used to guide testing of patients in such situations" (CDC, 2020). Because not

much was known about patient presenting[7] symptoms for Covid during this period, and

sometimes, symptoms were variable, clinicians were asked to use their best judgement in

testing patients for the virus. Therefore, in addition to its practical contents, because of

the document's support for clinical judgement, the purpose of this initial iteration

appeared to be to provide guidance to frontline clinicians and to affirm frontline workers'

experiences as they made crucial judgement calls.

In the next version, April 2020, even as the document's audience begins to shift

incrementally, the text still functions as heuristic for clinicians, since it includes a

memorable infographic that demonstrates how to wear PPE, outlining each piece of

equipment with digestible descriptions. As Figure 7 shows, one healthcare worker wears

"preferred PPE" and another wears "acceptable alternative PPE." Interestingly, in

illustrating what is acceptable and what is preferable, the CDC is able to coordinate and

standardize "donning" (putting on PPE) practices more efficiently *by addressing frontline*

workers directly. Clinicians are able to match up what they are wearing with the picture.

And as one of the participants in this study mentioned in his interview, these kinds of

visuals, which were often posted around the hospital, were the most effective in

influencing his day-to-day infection control procedures (Dr. Ronald, study interview,

February 27, 2022). However, as mentioned in the previous section, additional protocol

instructions were added to this iteration, and they clearly only addressed administrators

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[7] "Presenting" is an adjective defined as "of, relating to, or being a symptom, condition, or sign which is evident or disclosed by a patient on physical examination" (Merriam-Webster, 2023).

(or "facilities"). The inclusion of these "implementation" instructions is where we can begin to see a shift in purpose, as these instructions mainly function to reinforce clinician efficiency—upholding administrative executive power to make regulatory decisions for the health and safety of their employees and patients. The April 2020 iteration also provides a link to one of the first versions of a PPE optimization document, titled "Strategies for Optimizing the Supply of N95 Respirators," which is not meant for frontline clinicians to reference. In fact, the aforementioned text's audience is clearly outlined in a paragraph labeled "audience," which reads:

> These considerations are intended for use by federal, state, and local public health officials, respiratory protection program managers, occupational health service leaders, infection prevention and control program leaders, and other leaders in healthcare settings who are responsible for developing and implementing policies and procedures for preventing pathogen transmission in healthcare settings.
>
> (CDC, 2020)

Overall, from these messaging revisions and regulatory additions that target administrators, we can see how the CDC begins to encourage the optimization of clinicians by prompting the tracking and managing of them—similar to supplies. Clinical judgement and autonomy, subsequently, is deemphasized to an extent. In the end, the purpose of the document makes a recognizable shift from usable heuristic for clinicians, to a document that aims to coordinate clinicians for efficiency.

In November 2020, although the CDC still includes the PPE infographic within the document, they also add more links to "Optimizing Personal Protective Equipment (PPE) Supplies," which targets executives. Circumstances were pretty dire in the winter

months of 2020 as Covid cases exploded and the death toll rose, so supply shortages certainly exacerbated issues around infection control (Glasser, 2020). Therefore, in this iteration, we can further identify how clinicians are rhetorically positioned to be managed like material goods, as indicated by the CDC's inclusion of a link for "facilities" labeled "Strategies to Mitigate Healthcare Personnel Staffing Shortages." "Staffing shortages," placed on the same equivalent as "supply shortages" (and located within the same section), implies it's necessary (and possible) to optimize people in the same way as supplies. These added hyperlinked optimization documents reveal that the original infection control boss text's purpose is no longer to primarily assist frontline workers as an accessible heuristic in crisis; instead, the document aims to assist administrators in more efficiently managing their facility's resources, which include people and supplies. Consequently, in rhetorically levelling people with material goods, clinicians' lived experiences and professional expertise are minimized.

Figure 7 (next page)

Screenshot from Apr. 2020 Document: PPE Infographic

COVID-19 Personal Protective Equipment (PPE) for Healthcare Personnel

Preferred PPE – Use	N95 or Higher Respirator

Face shield or goggles

N95 or higher respirator
When respirators are not available, use the best available alternative, like a facemask.

One pair of clean, non-sterile gloves

Isolation gown

CDC

Acceptable Alternative PPE – Use	Facemask

Face shield or goggles

Facemask
N95 or higher respirators are preferred but facemasks are an acceptable alternative.

One pair of clean, non-sterile gloves

Isolation gown

cdc.gov/COVID19

In February 2021's iteration, the CDC removes the PPE infographic from the document entirely, a rhetorical choice that decreases textual usability for frontline workers. Additionally, in the previous section on audience, I mentioned that the text adds a hyperlinked resource for worker mental health, which appears, on the surface, to be a move to humanize clinical labor. However, because this note is buried deep within the protocols (it's super easy to miss), and the recommendations linked are geared towards the general public, not healthcare workers specifically, the message is a little more than a performative rhetorical move. The note does not provide specific recommendations for how "facilities" are to take care of their employees' mental health—even actions that have been proven to help mitigate burnout, such as decreasing shift hours, increasing pay,

etc. (Diaz, 2023). Instead, the note's main purpose appears to not actually help clinicians but to maximize their output as facility "resources." This aim is apparent in the note's initial introductory framing which states, "Healthcare facilities must be prepared for potential staffing shortages and have plans and processes in place to mitigate these" (CDC, 2021). Staffing shortages—a problem that inhibits institutional efficiency—is the reasoning given for helping workers with their stress levels. This statement is also followed by an optimization resource, which is the "strategies" document for managing staffing shortages. To summarize, by removing the memorable PPE infographic and adding an additional note that seeks to maximize clinician output, it is apparent that the document's main purpose is to increase clinician efficiency for institutions across the country.

September 2021 sees another revision that shifts the document's purpose, which happens through more content removal. In this iteration, the CDC cuts any reference to PPE supply shortages or staffing limitations, though these were still ongoing, pressing issues during this time, as many participants in my research study mentioned (Study interviews, 2022). Additionally, hyperlinked resources for handling *any kind of shortage* are not referenced within this iteration. Upon initial examination, this move appears to decrease usability for administrators—especially if it were accompanied by additional resources for frontline workers (which do not appear). Instead, I believe that this revision achieves a different outcome. I argue that it downplays the ongoing shortages that were still happening across the country, crippling the already broken and deteriorating healthcare system. Additionally, the CDC also removes the brief reference to facilities' responsibility towards providing any resources and support for their staff's mental health.

Overall, the CDC's removal of their acknowledgement of shortages and facility responsibility for frontline workers' mental health helps reinforce a version of reality that illustrates that the healthcare system is functioning more efficiently than before—instead of falling apart. This rhetorical move, in a sense, only helps bolster an idealized version of reality.

Later on, in February 2022's iteration, however, there's a reckoning. Due to the increasing concerns around the Omicron variant, the CDC reacknowledges some shortages, indicating the realization that we weren't quite out of the woods just yet when it came to Covid. In this iteration, although the resource to manage staffing shortages is introduced back into the document, the optimization resource for PPE is not. At this point, though, supplies were still an issue for many healthcare facilities (some up until April 2022 when I interviewed participants), so choosing not to acknowledge this problem at all continues to diminish workers' experiences during the pandemic.

In conclusion, by cutting critical information most useful to those on the frontline and focusing more on worker management and optimization, the text's primary purpose *has shifted* to coordinate clinician efficiency, rather than assist those to manage crisis on the ground as a heuristic. Through these self-generating notions of efficiency in each revision, we can see the ways in which the CDC bolstered the authoritative power of administrators, while minimizing the autonomy and experiences of clinical professionals. On the whole, these rhetorical moves by the CDC primarily indicate how the CDC's rhetoric both reflects and is participating in the current health care crisis, including widespread healthcare worker burnout and clinicians leaving the profession.

Mechanisms of Efficiency: Idealistic Assumptions in the Boss Text

As I presented at the beginning of this chapter, the CDC's rhetoric in this text is *only one part of the puzzle* that indicates more entrenched, systemic issues existing within medicine as an institution—issues that have been brewing at the surface and are now boiling over into public view. To return to this project's frames of IE and feminist epistemology—when documents are given certain levels of credibility, that has certain effects on professional organizations. Specifically, when boss texts put out a certain version of reality, they project ideas about who can be a "knower" and who can be dismissed (Barbour, 2018). Given that, I argue that the CDC's rhetoric, as it manifests in the IPCHP boss text, tends to communicate that hospital executives are the primary "knowers" who recognize what's best for their facility. In a sense, then, the IPCHP acts as a looking glass that reflects (and yet distorts) realities of healthcare. For example, if executives are the knowers, then clinicians are expected to fall in line, even as their resources are cut off, their expertise is minimized, and their autonomy is hindered (Hartzband & Groopman). At the same time, that assumption illuminates the problematic of how clinicians have been permitted to be optimized for productivity over the past few decades (Ofri, 2019). As the previous two sections demonstrate, the CDC's looking glass did not always mirror what was happening in clinicians' lived experiences, especially true as the document evolved to optimize clinical labor, rather than act as an accessible heuristic for clinicians to use.

From this analysis, it became clear to me that the CDC has significant influence over perceptions of how the healthcare system is either functioning or malfunctioning.

And yet this reality, of course, was still challenged during the pandemic by those same users who identified the text's misalignments in their work. In order to investigate those misalignments in later chapters, in this section, I break what the IPCHP assumes to be true about working during the pandemic. I also include brief points of how those assumptions, while assembling labor for efficiency, tend to de-emphasize and deprioritize the lived realities of healthcare professionals. More detailed discussions of how those assumptions conflict with reality appear in chapter four, where I examine my interviews with frontline workers. In this section, I analyze a recent iteration of the document from February 2022, which appeared during the surge of the Omicron variant. I chose to examine this iteration because that was the most recent iteration available at the time that I was conducting interviews with participants.

In the February document, the CDC makes several assumptions that speak to an optimal, functioning healthcare setting. These assumptions relate to the following types of efficiency: surveillance, spatial, material, and temporal. Because of these assumptions, the document often constructs an idealized (yet incomplete) version of reality. These notions of efficiency were often at odds with what happened in practice in hospitals during the pandemic the majority of the time, as participants in this research study noted, and while I did not conduct hundreds of interviews, I argue that their experiences reflected much larger trends, as indicated by investigative reporting over the years (Press, 2023; Diaz, 2023; Yong, 2021).

Importantly, IPCHP protocols were presented as standardized measures, and as such, they critically assumed most facilities would be able to adhere to them—which was, in many instances, not the case. That said, they often provided a distorted and

sometimes misleading picture of what was possible for workers to *actually do* during the

crisis. While the following is not a comprehensive list of efficiency expectations, it

highlights what appeared to resonate most with participants in this study. These

assumptions include:

I.   **Surveillance Efficiency**: Because the document assumes everyone who enters

a healthcare facility is a risk, either at risk themselves or a risk to others in the

facility, the document assumes that there will be consistent and reliable

surveillance. For example, for the following recommendation to work,

"establish a process to identify anyone entering the facility, regardless of their

vaccination status," which is a part of the first listed IPCHP guideline, the text

presents the assumption that the personnel and technological resources are

available to efficiently manage an identification process to track everyone's

status that comes into the building (CDC, 2022). Moreover, the document also

assumes consistent testing is readily available and able to be given at any time

by medical staff, meaning that at any given point, the Covid case count and

risk of spread will be accurately known. However, this kind of hyper-vigilant

monitoring was not always possible, as some participants in this research

study note, due to other pressing institutional obligations and an overburdened

workload. Interestingly, for monitoring Covid patients, Dr. Shane X.'s team

came up with a creative solution: baby monitors to keep track of patients at a

safe distance (Study interview, April 5, 2022). Since staffing shortages were

recurrent during the pandemic across the country, it's likely that many or most

institutions, not just a few, had difficulty achieving optimal surveillance

efficiency. However, because it's not standard for protocols to be implemented bottom-up over top-down, Dr. Shane had to make strong arguments to get the baby monitor protocol implemented at several hospitals, even coming up against administrative resistance to the idea (more in chapter four). This was further made difficult due to widespread staffing shortages (nurses, doctors, and respiratory therapists). Hospitals then had to hire a lot of travel nurses and *locum tenens* physicians—even when credentialing these hires wasn't one hundred percent foolproof (Dr. Gary, study interview, March 14, 2022).

II.   **Material Efficiency**: What was most surprising in reviewing these protocols from February 2022 was the default assumption that there were enough supplies or PPE (personal protective equipment) to efficiently and effectively protect everyone in the hospital, even when this has been notably inconsistent across waves of the pandemic, according to participants in this study. For instance, under "Implement Source Control Measures," it states that facemasks (the "NIOSH-approved" N95s, respirators, and fitted facemasks) may be used for a whole shift if one does not come into contact with an infected person and "unless they become soiled, damaged, or hard to breathe through" (CDC, 2022). If a worker does care for someone with Covid, they must dispose of their mask immediately after the encounter and "and a new one should be donned" (CDC, 2022). In other words, regardless of whether or not someone comes into contact with an infected person during their shift, the document recommends disposing of it at the end, which means it assumes any

staff member can obtain as many new high-grade masks as needed. Moreover, before any healthcare worker enters the room of a patient with "suspected or confirmed" Covid they must don the appropriate PPE, which includes "NIOSH-approved N95 or equivalent or higher-level respirator, gown, gloves, and eye protection"—assuming all of those things are able to be retrieved in an efficient manner at any given point in time (CDC, 2022). To reiterate, quickly retrieving all of these components for protection was often simply not possible (if they were even available at all); this was a constraint that repeatedly came up in this project's interviews. For example, Dr. Tribbiani explained that clinicians at his hospital could only get one mask a week, which meant their masks were often "soiled" or not "tight-fitting" going into potentially hazardous situations. When they did need a new mask, they had to sign them out, which wasn't great for emergency situations—especially when Dr. Tribbiani had to sign out masks for multiple people (Study interview, March 2022). A postpartum nurse in this study, Megan, remarked that she and her colleagues "got ripped a new one" if they needed to open a new N95 for whatever reason, underscoring the difficulty around obtaining masks throughout the pandemic (August 23, 2022).

III. **Spatial Efficiency**: In several areas of the document, the CDC assumes healthcare facilities are large enough to accommodate for physical distancing—person to person and room to room. For example, it assumes that spacing apart chairs and managing patients to be "six feet apart" at all times is doable for most facilities, though it does acknowledge that in order to do so,

more administrative tasks are needed (scheduling appointments for treatments, group activities, etc.) (CDC, 2022). Additionally, it recommends creating an entire unit just for Covid patients, and thus, it assumes there is enough space to do so: "Facilities could consider designating entire units within the facility, with *dedicated* HCP, to care for patients with SARS-CoV-2 infection" (CDC, 2022, emphasis added). The CDC defines "dedicated" as healthcare personnel that only work with Covid patients for their shifts (CDC, 2022). However, optimizing space was an issue for several of the participants in this study working on the frontline, and sometimes institutional protocols around spacing caused more problems than they solved (see Dr. Ronald's interview in chapter four). Additionally, while some hospitals attempted to have "dedicated" HCP to attend to Covid patients at first, at some point when cases skyrocketed, that was not possible. This is something Nurse Kayla mentioned specifically, even as nurses on her unit worked on set rotations to attend to Covid patients (usually just two nurses out of the unit at a time) (Study interview, March 28, 2022). As another example, Dr. Gary mentioned how some hospital office spaces had to be converted with beds just to accommodate the influx of Covid patients (Study interview, March 14, 2022).

IV. **Temporal Efficiency**: In several parts of the regulations, the CDC assumes that there is enough time for certain infection control protocols. For example, under the "Environmental Infection Control" guideline, it recommends that once a Covid patient "discharged or transferred," healthcare workers should not enter the empty room "until sufficient time has elapsed for enough air

changes to remove potentially infectious particles" (CDC, 2022). Not only

does it assume there is enough time to wait before cleaning and letting another

patient use the room, but it also assumes that there is space to keep patients in

other parts of the facility until such time has elapsed. Although it does not

provide the amount of time needed to wait until entering the room within this

document, it does link to another document that provides the various clearance

times for specific ventilation rates. Interestingly, this document is dated with

the year "2003," and the figures cited are from the "AIA guidelines, 2001

edition"; it was last reviewed in 2019, and the most recent changes in 2017

were made to formatting, not content (so, all this information is dated pre-

Covid). According to these guidelines, most rooms in the hospital are

recommended to be set at around 12 ACH (air changes/hour), which would

mean an average of 35 minutes for 99.9% airborne contaminant removal.

Either way, that duration can be a long time when many new patients are in

need of care. According to participants in this study, sometimes waiting for

rooms to be cleared was not possible, as there was not the time nor space to do

so, especially when their hospital was being overwhelmed with cases. This is

why areas such as "COVID-land" were constructed—an entirely walled off

part of a unit used to only house those with the virus (Nurse Kayla, study

interview, March 28, 2022).

Although we cannot know the reasoning behind the ideals presented in the February

2022 iteration of this document, it's important to recognize their effects. The most

prominent issue is the CDC's efficiency rhetoric often did not match with what was going

on in the lived realities of frontline workers, which meant expectations could not be met on a greater scale. This is key to highlight, as some participants argued that, in some ways, the surge of the Omicron variant in winter 2021-2022 was worse than the surge of the Delta variant in winter 2020-2021 (supported by data that suggests that, despite the decreased death rate, the rate of infection and hospitalization was greater in winter 2021-2022 [NYT, 2022]). Ultimately, as the textual traces in the previous two sections reveal, over time, the document became less usable for frontline healthcare workers, resulting in diminishing recognition and support of clinician experiences/expertise and personal health.

Conclusion: Institutional Discursive Influences on Efficiency in Medicine

The CDC's rhetoric in the IPCHP during Covid reveal just how inextricably bound the value of efficiency is to medical culture. Even when there were glaring misalignments between what was happening in healthcare day-to-day and the CDC's guidance, the text further attempted to optimize practices within hospital settings in ways that minimized clinicians' true experiences. While making the best of resources in order to survive dire circumstances is not inherently problematic on its own, what does cause issues is purporting to streamline for efficiency to maximize professionals' output without taking into account the very real, long-term human consequences. And while assumptions of endless optimization didn't necessarily start with the CDC, as medicine has become corporatized over the decades (Ofri, 2019), I argue that their rhetoric that reinforced notions of who could be a "knower" (Barbour, 2018) did lead to material consequences for workers.

As I've shown in this chapter, as autopoietic rhetorics of efficiency evolve in the Covid boss text, they continually move the goalpost of what is optimal. Therefore, even as clinicians were experiencing burnout more and more throughout waves of the pandemic, their labor was still organized for near-robotic efficiency, as institutions expected them to "patch up" and "continue on" (Derkatch, 2022, p. 18) while they continued to provide services for the "moneymaking machine" of healthcare (Reinhart, 2023, para. 16). In turn, these assumptions often exhausted the goodwill of healthcare professionals (Yong, 2021), who now do not have much faith or hope that things will get better in medicine in the future (Diaz, 2023). In other words, institutional rhetoric has real power to recognize who can be validated as a knower and who can be dismissed. In the end, it wasn't just the CDC that contributed to this crisis—it was healthcare institutions across the country who also upheld these expectations for their own workers, even as they denied or dismissed their concerns entirely (Hartzband & Groopman, 2020; Study interviews, 2022).

In looking back through the frame of institutional ethnography, it's clear that the CDC Covid boss text attempts to "coordinate the experiences and practices of individuals," in significant ways by shifting the target audience and purpose of the text (LaFrance, 2019). Through this project's feminist lens, we can also identify how, that by putting forth ideas of who can be a knower and what can be known, the text instead privileges a Westernized, patriarchal form of technical communication that purports to be "neutral," "rational," and "objective," removing humanistic concerns from the equation (Barbour, 2018). As the text has shifted to a document that primarily privileges medical

efficiency, rather than the lived experiences and expertise of those on the frontline, I argue that it has contributed to the healthcare labor crisis.

Because of the considerable adverse consequences that result from primarily efficiency-driven, disembodied institutional rhetorical choices—choices that may "work" in the short term but intensify existing problems for workers in the long term, I argue that it is important for scholars within RHM and TPC to consider how autopoietic rhetorics might impact crisis response. In applying Derkatch's (2022) notion of autopoietic discourse as it relates to wellness, specifically its vector of optimization, we can see how, much like "wellness" can never really be achieved due to its conception as a moving target, efficiency in medicine has its limitations as well. To put it another way, there is only so much productivity you can extract out of healthcare professionals before there's nothing left. As much as they are equated with PPE resources in this document and other kinds of commodification-focused discourse (AHA, 2022), the fact remains that they are humans with human limitations. And if institutional rhetorics aren't working for them, and instead are purportedly working to maximize their labor, then the problem is compounded. Neglecting to attend to these issues in the decades to come will no doubt have detrimental outcomes for healthcare.

Recognizing notions of efficiency in medicine is key, primarily because there is a tension between hospitals' desire to provide as much healthcare services as possible and clinicians' physical capacities—especially working under less than desirable conditions in a health emergency (Saba, 2022). Because disease outbreak response begins and ends with major organizations like the CDC, it's important to recognize their influencing power in shaping expectations of how healthcare institutions function. Given that, their

mission to "save lives" and "protect people from health threats" (CDC, 2022) can't just stop at those who enter the hospital for care; *it must also include those working within the site*. The cost is mass burnout, which is critical to pay attention to, because supporting clinician health is vital to continue in providing the "public good" of healthcare services. I argue that as healthcare workers leave the profession in droves, paying attention to how institutional rhetorics shape their experiences of work is vital, as research shows that neglecting to attend to clinicians' lived experiences leads to less-than-ideal experiences for patients (Hartzband & Groopman, 2020). After all, the endless goal of "optimiz[ation] […] may, in the end, not help us move forward as much as keep us right where we are" (Derkatch, 2022, p. 142). In both RHM and TPC scholarship, it is critical for researchers to consider how institutional rhetoric can inadvertently destabilize unpredictable environments and situations further by prioritizing certain knowers and epistemologies over others.

From here, I believe it's important to examine *what happened* during the pandemic to understand exactly how institutional rhetorics translate to material outcomes for workers in times of uncertainty. In the next two chapters, I review the ways in which clinicians with administrative perspectives challenge institutional rhetorics of efficiency and mechanization, as they navigate the hospital as a powerful and influential institution of health. Additionally, in the final chapter, I make localized perspectives visible through clinicians' experiences to underscore the importance of rhetorical work in a health emergency, attending to nurses' and doctors' deeply embodied experiences and discursive practices.

CHAPTER THREE

POPULAR MECHANICS: DECONSTRUCTING THE HOSPITAL AS A BOUNDARY
OBJECT

Introduction

> A culture working within a mechanical model of medicine will attend to the sorts
> of interventions that are observable and measurable.
> > -- Judy Segal, "Public Discourse and Public Policy:
> > Some Ways That Metaphor Constrains Health
> > (Care)"

In this chapter, I proceed to examine the ways in which people and practices are

coordinated across medical institutions during a health crisis. As the previous chapter

explains, one of the ways that this coordinating work happens is through the autopoietic

rhetoric of efficiency in medicine, which assembles people to work toward a perpetually

moving target of optimization (Derkatch, 2022), as illustrated by the kind of organizing

language used in the CDC's Covid regulations. This rhetoric of efficiency, as it shapes

labor for optimization, can further disconnect medicine as an embodied, human-centered

practice of providing care. I refer to this process as *mechanization*, meaning "making

something mechanical in character" (Oxford Languages, 2023). To be "mechanical" is to

be "uninfluenced by the mind or emotions" (Merriam-Webster, 2023). For this portion of

the project specifically, I utilize Judy Segal's (1997) article "Public Discourse and Public

Policy; Some Ways That Metaphor Constrains Health (Care)" as a model to study how

metaphors of war and business, which are able to illustrate mechanization, arise in the

discourse of those working in healthcare during the pandemic. Further, I examine how notions of efficiency are both taken up and challenged. In particular, I analyze the perspectives of physicians with administrative responsibilities to explore the difficulties of navigating the hospital as a boundary object that is pulled between mechanization and human-centric understandings of hospitals.

I argue that hospitals, as institutions, are "rhetorically constructed human designs" (Porter, 2000, p. 613) that exist as boundary objects, or "plastic" social constructions that sit between various discursive realms and serve many different purposes (Star & Griesemer, 1989). Given that, different people, depending on their purpose and relationship to medicine, "design" various understandings of what the hospital is. For some, these spaces may be defined as "efficient" by existing as a sound investment and as a place for triage in a war against disease. However, in the push to make the hospital "more efficient," tensions between *what is efficient* emerge. In the case of this project, I argue that efficient as *mechanized* can diminish efficient as *human-centric* healthcare. Further, I argue that analyzing the discourse that emerges from those working in the hospital can help us understand the deeply embedded mechanized assumptions of labor in medicine and how they intensify in times of crisis. This mechanization, enacted because of missions of efficiency, I argue, strains the hospital's existence as a boundary object. I explore how this process, as it continues to move the target toward more and more extreme notions of efficiency as mechanized, may eventually tear the institution apart, when what we know as healthcare becomes unrecognizable, and this should be of paramount interest to scholars in both the rhetoric of health and medicine and technical and professional communication (TPC).

Navigating the hospital as a "boundary object," an object that "inhabit[s] several intersecting social worlds" can be a complex task for healthcare administrators, particularly when attempting to adapt and apply regulations from government organizations such as the CDC to their institution during an international health emergency (Star and Greisemer, 1989, p. 393). Crisis response after all, as Elizabeth Angeli and Christina D. Norwood write, is a constant balancing act for "governing bodies" (Ding, 2014a) who must consider "a series of calculated choices within material, economic, and ethical contexts," arguing that these are "rhetorical challenges" that call for rhetors to negotiate a number of different "constraints" and evolving circumstances, in order to reach their intended audience(s) (2019, p. 212). Hospital administrators, as the intermediaries between the CDC and clinicians and patients, must continuously manage this complex rhetorical situation as they act in the role of facility operator. This work is made even more precarious if those who hold administrative positions or responsibilities are also clinicians themselves, like the physicians in this chapter.

Along with outlining the complex rhetorical nature of communication in high-stakes situations, Angeli and Norwood (2019), as well as other researchers, point out the ways in which embodied expertise (namely, "intuition") can be a significant influencing factor in developing an appropriate response (and help in problem-solving) in medicine, where there are a significant amount of unknowns (Angeli, 2019; Ruth-Sahd & Hendy, 2005; Woolley & Kostopoulou, 2013). In their study where they interview members of the Ebola Crisis Communication Team (ECCT), for instance, Angeli and Norwood describe how their participants referenced "gut feelings" during times they "encountered a boundary or limitation while creating the PPE guidance" (2019, p. 211). Navigating

these situations, according to the authors, requires communicators to have a robust sense of "audience, collaboration, and exigence" (p. 225). Furthermore, successfully handling boundaries or limitations in these situations can be accomplished by "deferring to expertise and drawing on experience" (p. 226).

The notion of "expert" and "expertise" is something that is repeatedly discussed in feminist epistemology (who can be "knower" and what can be "known") (Barbour, 2018; Stanley & Wise, 1990). Embodied knowledge is something that often gets lost or dismissed when a disembodied, "objective" form of expertise is privileged—and in the context of this project, that would be the CDC Covid "boss text" for healthcare workers, which hinges on a "neutral," Westernized understanding of knowledge, as described in chapter two. A feminist epistemology directly challenges the objectivity of the boss text, making it a prime frame to explore how participants in this study make their own embodied interventions, thereby humanizing the practice of medicine, even if those interventions are not always visible to others. And although embodied expertise is beginning to be recognized and studied more (Woolley & Kostopoulou, 2013), more often than not, those working in medicine are advised "not to trust their intuition" in order to "avoid reasoning errors and cognitive biases" (p. 60). However, in a crisis situation where there are many unknowns, fluctuating circumstances, and material limitations, embodied expertise can be quite beneficial (Angeli & Norwood, 2019). This is certainly true for participants in this chapter who call upon their clinical expertise for their work in administrative leadership.

While scholarship within the rhetoric of health and medicine has made a thorough and concerted effort to understand how patients advocate for themselves as experts on

their own bodies, illnesses, and experiences (e.g., Segal, 2012; Kessler, 2020; Takayoshi, 2020; Hooker, 2022; Siegel Finer, 2022, etc.), not as much has been done in the subfield to study how clinicians read bodies (including their own) and their environment and apply personal experiences in relation to their work and decision-making (save for the work of Angeli & Norwood, 2019; Angeli, 2019; Campbell & Angeli, 2019). Drawing upon embodied knowing has been addressed even less for those working in healthcare administrative positions specifically—those typically in charge of putting together a crisis response during an infectious disease outbreak (aside from Angeli and Norwood's 2019 study with the ECCT at Johns Hopkins Medicine). However, if recalling and employing embodied knowing is a significant method that crisis response communicators can effectively utilize to manage an evolving rhetorical situation and overcome hurdles, then it's important for RHM and crisis communication scholars within TPC to continue to study how this kind of knowledge works in practice.

Exploring the value derived from embodied knowing is critical to destigmatizing other forms of knowledge-making and decentering Westernized epistemologies that purport to be "neutral" and "objective." While there are benefits to having streamlined, universal protocols to refer to during a health emergency, neglecting to acknowledge the existence of other forms of expertise (personal experience) and minimizing major constraints (such as recurring supply/personnel shortages) has its consequences (such as increased clinician burnout and the public being "over" the pandemic, people not taking precautions, and then overwhelming overburdened hospitals). These kinds of moves by healthcare organizations, in their attempt to mechanize medicine for efficiency, primarily serve to smooth over existing cracks within the healthcare system. However, it doesn't

change the fact that these cracks still exist; therefore, studying administrative perspectives that call into question the ways in which medicine is mechanized to serve privatized interests can not only reveal the coordinating limitations of boss texts but the limitations of a dehumanizing, efficiency-driven healthcare system.

Medical efficiency, as exemplified in the assembling language of the CDC Covid boss text, produces an idealized version of healthcare, one that envisions healthcare systems (and the people in them) to operate like well-oiled "machine[s]" (Reinhart, 2023)—it is this robotic aspect of efficiency that tends to be problematic. In that idealization, inconsistencies sometimes arise between what the text says is reality versus what happens in practice. When the text promotes efficiency rhetoric, it inevitably minimizes ongoing issues within the healthcare system—issues which poke at the mechanized assumptions of how people work. These issues, as outlined in chapter two, presented as anomalies or bugs in the machine, include but are not limited to personnel shortages, supply shortages, spatial limitations, personnel becoming sick, personnel not getting vaccinated, etc. (CDC, "Guidelines for Healthcare Personnel," 2022). The offhand references of systemic issues, combined with the fact that the strategies to handle these issues are located elsewhere on the CDC site, appears to project the image that mechanized medical efficiency is largely "working" as a coordinating method. And while presenting an optimistic, "objective" image of a smoothly operating healthcare system in regulations can help bolster the image of the CDC as a credible institution and encourage hospitals to concentrate on achieving specific outcomes or checking certain boxes (e.g., decreasing the mortality rate, getting a one-hundred percent worker vaccination rate), it

fails to recognize the harsh and often inhumane conditions of personnel working on the frontlines of those facilities.

To summarize the conclusions of the previous chapter, there are two main overlapping issues with the CDC text's rhetoric of efficiency, including 1) an idealization of healthcare's operations (which fails to reflect the reality of the industry—especially in crisis) and 2) a mechanized model that does not account enough for the human aspect of providing healthcare. As an institutional text that homogenizes and "objectif[ies]" knowledges, the CDC regulatory text tends to create an "over-determined sense of what goes on" in healthcare settings, which progressively "erases divergences, disjunctions, and differences of experience and practice" (LaFrance, 2019, p. 82). This kind of minimization of real problems not only happened within regulations from the CDC but was also reflected at the local level within individual healthcare facilities, where hospitals "downplayed the severity" of healthcare workers' experiences (Yong, 2021). In order to make these protocols more applicable and relevant for healthcare workers, I argue frontline perspectives *must* be more included in the development process—both on a national and local level, recognizing that personnel are not unfeeling machines[8] (Segal, 1997) to be put to work. Jain (2016) writes, "As health systems focus increasingly on

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[8] In Judy Segal's article, one of the common medical metaphors in health policy discourse is "the body is a machine." Segal explains its meaning in relation to patients being regarded as machines who can purchase "repairs" for their bodies (p. 222). However, I use it to discuss how healthcare workers are assembled to be machines as part of the problematic medical efficiency. This term has a long history in medical philosophical literature, dating back to René J. Dubos's (1959[1987]) work *Mirage of Health*. I employ Segal's frame due to her feminist re-examination of this metaphor.

maximizing value, physicians are dramatically underutilized assets" that can offer valuable expertise and insights to those in administration (para. 12).

Healthcare administrators, as mediators charged with implementing the protocols for their facility, are in a prime position to make regulatory interventions and call into question problematic, disembodied efficiency rhetoric by listening to the lived experiences of their workers. However, challenging mechanization can be a complex endeavor. Administrators, as facility operators, often must adhere to aspects of mechanized efficiency to fulfill shareholder expectations, meet the institution's bottom line, and achieve patient satisfaction. As a result, while mechanized efficiency might not support the health and well-being of frontline workers, it does meet the capitalistic goals of the healthcare institution, allowing it to continue to be a sound investment, even if the hospital loses money (AHA, 2022) in crisis times.

Therefore, even if administrators are personally concerned about the hazardous realities their frontline workers face, they are not beholden to that audience. Instead, because of concerns of the hospital as an investment, they can often uphold dehumanized notions of medical efficiency, which means reinforcing institutional mechanization, and clinicians are often left to deal with the consequences. To fulfill the requirements of shareholders, administrators collect significant amounts of aggregated data in order to effectively assess risk (institutional, legal, financial, etc.), among other factors, and create an implementable strategy for operating the facility that is productive—financially for the institution as well as metrically (desired health results and overall satisfaction) for patients. Collecting this data appears especially important during a health crisis, when risk is evolving rapidly day-to-day. However, prioritizing mechanized medical efficiency

means under-cutting human-centric, embodied understandings of the hospital—understandings that each of the participants in this chapter noted as important. As research demonstrates, situated, embodied perspectives can greatly inform and improve the strategic response to a rapidly evolving crisis situation (Baniya, 2022; Bishop, et al, 2022). Further, analyzing the recurring themes that arise from distinct, localized perspectives *deemphasizes* the idea that there are only singular, automatic, objective paths forward in health crises. By validating the information gained from attending to embodied, situated perspectives, it can open up space for administrator/clinician collaboration and innovative problem-solving. In turn, it would ultimately reveal the limitations of disembodied notions of efficiency, effectively challenging the use of rhetorics of mechanization—which assemble people and practices in robotic, restrictive ways.

In this chapter, I highlight the hospital as a boundary object that primarily reinforces efficiency in medicine through structural mechanization. To break down how the hospital functions as a boundary object that chiefly upholds problematic notions of efficiency, I study how Judy Segal's (1997) metaphors of medicine as "business" and medicine as "war" manifest in the discourse of participants in this study who are physicians with administrative responsibilities. While it's been nearly twenty-five years since Segal's article was published, I argue that these metaphors are more relevant now than ever and can reveal the ways in which medicine continues to be streamlined for efficiency in dehumanizing ways—mechanizing people and practices to serve shareholder interests, particularly during a widespread health crisis, which should be a pressing area of interest to RHM and TPC scholars. Physicians with administrative

responsibilities (the participants in this chapter), while recognizing why healthcare values the kind of efficiency that meets financial and clinical bottom lines, call this culture into question and reveal the pressure points of this system that can exacerbate systemic problems in medicine throughout a pandemic.

To uncover these pressure points, I show how human-centric, embodied understandings of healthcare can help solve unexpected issues caused by problematic notions of efficiency and challenge mechanized realities—realities that paper over systemic issues. Personnel in this chapter who have administrative responsibilities often poke holes at these realities and make significant interventions in their work that point to the importance of administrators incorporating human-centric considerations into institutional decision-making related to policy and practice. As participants' embodied experiences as clinicians greatly informs their perspectives of how a hospital should operate, it reveals the need for more healthcare workers in medical leadership positions as well.

These situated interventions, based on human-centric, embodied understandings of healthcare, contest Westernized notions of objectivity (what is observable and measurable) as supreme and pave the way for more nuanced and embodied forms of knowledge-making, which a feminist epistemology supports. I posit that incorporating human-centric notions of efficiency into decision-making is a prime way for healthcare administrators to make interventions that reflect a more recognizable reality (i.e., what is actually happening within the hospital). It does not mean that they have to neglect obligations to the hospital as an institution that needs to attend to concerns of productivity (i.e., making sure people can be hired, supplies can be procured, and patients can achieve

the results they desire). Instead, it implies a deeper, more embodied understanding of applying metrics and expertise to an evolving crisis situation. It accommodates for more circumstantial complexity, provides solutions to handle roadblocks that come up, and it recognizes the importance of understanding the lived experiences of those with less power to influence regulations but who have the biggest impact on patient care—frontline workers. In sum, such reframing of crisis management communication can challenge the need for authoritative and "aggressive" response to a crisis that is enacted to assert "control over the situation" and instead provide a space for more nuance and flexibility (Coombs, 2009 p. 242). This flexibility and incorporation of human-centric efficiency is key, as the hospital becomes "overstretched" as a boundary object—evolving into more of a mechanism of capitalism than a mechanism of care. Ultimately, if hospital systems keep becoming optimized for efficiency by mechanizing the labor of their workers, it will cease to be a legible institution for healthcare. In other words, when the hospital stops functioning as a boundary object and is located too fully in the realm of mechanization, it undermines core healthcare issues surrounding the people providing and needing that care. More broadly, I argue that analyzing the ramifications of a deteriorating institutional boundary object and unpacking the role of its surrounding discourse in crisis is critical for RHM and TPC to investigate further, as these issues imply significant consequences for patients and those taking care of them.

Boundary Objects & the Bureaucratization of Medicine

In Star and Griesemer's (1989) work, the authors write that boundary objects are "objects which are both plastic enough to adapt to local needs and the constraints of the

several parties employing them, yet robust enough to maintain a common identity across sites"; they are flexible in general use and become more "structured" in "individual-site use"; and despite having varied implications within different discourse communities (or social worlds), their structure is "common enough to more than one world to make them recognizable" (p. 393). A boundary object, according to the authors, must be continually managed, in the goal of "developing and maintaining coherence across intersecting social worlds" (p. 393). In other words, boundary objects meet critical needs of several different groups, and they perform recognizable functions across sites.

Susan Popham (2005) uncovers the kinds of tensions that occur with boundary objects that are stretched between several sites by analyzing technical forms in healthcare. These documents (including patient examination, patient visit, diagnosis, insurance, and billing claim forms), Popham argues, act as boundary objects that perform specific functions in relation to the social worlds of medicine, science, and business. Popham discusses how different sectors often "compete" for power against one another and asks, "[H]ow is that competition revealed or constructed in medical documents or genres?" (p. 281). This question, which addresses how various social worlds collide as they prioritize their positioning through bureaucratic healthcare tasks, helps illuminate how the hospital itself functions as a boundary object—particularly the tension that surrounds it. I argue the hospital, as a boundary object, sits at the nexus of competing interests (much like administrative documents do). These competing interests, though, primarily revolve around the tension between mechanized notions of efficiency and human-centric understandings of efficiency. This competition is only amplified during a crisis, where other kinds of factors (e.g., shortages) are introduced, and the pull between

each of those understandings starts to fray the knots that work to keep the system together.

As the intermediaries between the "boss text" (regulations) and the frontline workers at their facility, healthcare administrators have a responsibility to maintain the hospital as a boundary object that sits between competitive interests. They must balance productivity with human capability. However, sometimes prioritizing investment calculations for privatized gain and operating the hospital for mechanized efficiency means clinicians' experiences and perspectives are minimized. It's important to note that during normal times, clinicians don't really feel heard by those at the top either (Chandrashekar & Jain, 2019), but this is especially true throughout a global health emergency, where time (and money) is of the essence, and crisis rhetorics from government institutions intensify on a mass scale (Ding, 2014b). In other words, mechanized efficiency in the hospital is simply fortified in crisis; there's little room for clinicians to challenge the structures in place—they are expected to just do their job. And yet a lack of recognized clinician agency didn't always use to be the case, as these structures exist in part due to the bureaucratization of medicine.

According to the organization Physicians for a National Health Program (PNHP), the number of healthcare administrators has exploded over the past century compared to the number of physicians for the same time period, a rate captured by data collected from the United States Census Bureau's Current Population Survey, the Bureau of Labor Statistics, and the National Center for Health Statistics. From 1975 to 2010, the rate of physicians grew 150 percent (steadily with the overall population), while the number of administrators ballooned at a rate of 3,200 percent. As the general population grew and

health services expanded, hospitals needed to accommodate for this demand and address the increasingly business-oriented aspects of medicine, which required adding bureaucratic positions to handle the day-to-day operations of healthcare, such as records keeping, insurance, billing, regulations, customer service, scheduling. After all, clinicians first and foremost need to focus on taking care of patients. However, as hospitals moved toward becoming more business-focused, methods to make healthcare more economical and streamlined began to emerge (e.g., introducing aggregated trackers for efficiency and performance), such as DEA (Data Envelopment Analysis), which is a "performance measurement tool in efficiency assessment of healthcare systems" (Cantor & Poh, 2018, p. 1). Healthcare, in the last few decades, as it has scaled up to accommodate public demand, has become more and more focused on recording and analyzing measurable metrics (Hartzband & Groopman, 2020).

The hospital, as a site of learning and providing treatment, was not always so business oriented. For example, according to Chandrashekar and Jain (2019), around the 1970s, healthcare institutions mostly operated as "open workshops" that did not have much bureaucratic supervision. This was certainly true for participant Dr. Patrick, who reflected on his experience working as an intern (a first-year resident physician) during a local flu epidemic in his community in 1960: "Most of the time, the administration was not really much aware of what was going on […] but when they were, they were quite supportive and basically said, 'Keep doing what you're doing'" (study interview, February 27, 2022). This history was also acknowledged by one other participant, Dr. Gary, who has had a long career in both clinical care (pediatric radiology), teaching, and research. He noted that physicians used to have much more ownership and agency in

their institutions' processes and procedures, and over the years, that power has been transferred to more centralized organizations, whose leadership are "pretty far removed from the frontlines of patient care," often to due necessity, as the institutions of health are quite large and have sprawling networks of operations (Dr. Gary, study interview, March 14, 2022). Furthermore:

> It's just—as an organization goes from dozens to hundreds, to thousands, to tens of thousands of people, it has to function let's say more in a bureaucratic fashion, just following rules. Look at the organization chart and the strategic plan and job descriptions and make sure all that's followed, and we're going to be doing our jobs well. You can't base decisions on relationships anymore like, "I know so and so who's our chief financial officer," or "I know the head of the emergency room. We have a relationship, and we make ...." You can't do that anymore when you get a lot of hospitals and thousands and thousands of staff members and so forth. (Dr. Gary, study interview, March 14, 2022)

Currently, most administrator positions in hospitals only require a bachelor's degree, with a master's being preferred at the executive level (U.S. Bureau of Labor Statistics, 2021); those who go into those positions typically have little to no medical background, especially in recent years (Jauhar, 2017). Additionally, administrators greatly outnumber physicians at a rate of one doctor per ten administrators as of 2013 (Kocher, para. 3), and I imagine that number is even greater now, a decade later, in 2023, though I was unable to locate updated data.

As a result of the rise of hospitals functioning as businesses, an increasing number of non-clinicians were making major decisions for healthcare systems, producing friction

between those who work in administration and those who diagnose, treat, and care for patients. The hospital, as a boundary object, has different implications for hospital personnel, depending on their respective positions. While the hospital is generally understood by both administrators and clinicians as a place that people come to receive healthcare, as a boundary object, the hospital is stretched between the differing values and missions of each party—particularly definitions of efficiency. Clinicians primarily see the hospital as a human-centric setting to apply their expertise to treat people, and administrators, first and foremost, see it as an investment. And when one segment of the hospital population gets to make the rules and the other doesn't, it can make things contentious (Bhardwaj, 2017).

Research has shown that not having a say in hospital operations has contributed to increased clinician burnout (Shanafelt, et al, 2017). According to Chandrashekar and Jain (2019), "As administrators impose rules, management procedures, and regulations to streamline clinical processes and achieve the 'triple aim' of healthcare, the burden often falls on physicians" (p. 264). The "triple aim of healthcare," as defined by Berwick, et al (2008), includes "improving the experience of care, improving the health of populations, and reducing per capita costs of health care" (p. 759). This can be difficult to achieve for frontline clinicians who lack ample support staff other resources (especially during a pandemic) and yet are asked to be quicker in providing care, see more patients, read more scans, and spend more time ensuring that care procedures are coded properly for billing to insurance companies, thus inhibiting more clinically accurate diagnoses and treatment plans (Groopman, 2008; Popham, 2005). Therefore, in Chandrashekar and Jain's (2019) article, the authors argue for the importance of building bridges between administrators

and clinicians, and they provide several recommendations for doing so, including finding shared values in providing quality patient care, gaining clearer insight into each other's roles, improving transparency, and increasing collaboration between the two parties, among others. Above all else, they emphasize the importance of fostering an environment of respect and autonomy, which is definitely easier said than done.

To provide some insight into how the hospital functions as a boundary object that primarily reinforces mechanized efficiency, I analyze the discourse of participants who play or who have played dual roles in healthcare that give them unique perspectives—in clinical practice and in administration. As mentioned earlier, it is not typical for physicians to be in administrative roles or take on leadership responsibilities. However, from my conversations with these physicians in particular, it appears that they believe clinicians can make a difference in these positions, and one of them (Dr. Gary) even underscores the importance of training young M.D.s to be future leaders in their healthcare institutions. Understanding how these hierarchical roles typically operate in healthcare is critical for investigating how participants in this study both take up and challenge rhetorics of mechanization, as they navigate the difficulties that occur in medicine during a pandemic.

Mechanizing Metaphors in Medical Discourse

Specifically, for this chapter, I highlight my interviews with three healthcare personnel that work or have worked in administrative positions of authority for their healthcare institution or outside health organization. These participants include a retired hospital CEO (Dr. Patrick), a state medical association district councilor (Dr. Shane X.),

and a university hospital's vice chair of education (Dr. Gary) who has responsibilities in his department's medical staff office (which is accountable for ensuring that all the members of their medical staff have the appropriate qualifications, are practicing up to standards, etc.). Each of these participants holds a medical degree and have worked/currently work in clinical practice (i.e., "frontline" work), which no doubt informs how they view(ed) their administrative responsibilities. Because they also have relevant experiences of working during infectious disease outbreaks during their time as clinicians, their experiences also make an appearance in chapter four.

To unpack how the hospital functions as a "boundary object," I draw upon Judy Segal's (1997) metaphors of medicine that appear in clinical discourse which reflect the various realms of the hospital. In particular, I examine how participants' discursive constructions of the boundary object call into question problematic notions of medical efficiency—specifically how it coordinates people and practices in mechanized (disembodied) ways. While rhetorics of mechanization appear in their interview responses through the kinds of metaphorical framings Segal describes, the participants push back against the notion that medicine should be so streamlined for efficiency that it strips away the elements that make it embodied and human. Although they recognize how aspects of mechanized efficiency can help make things run smoother, they note how critical elements of care can be lost in the process. By exploring the nuances of these frames, I seek to shed light on how discursive constructions of systems (such as hospitals) can shape RHM understandings of institutional contexts. Overall, these participants' dual positions as clinicians and administrators help them understand the

complex nature of how medical institutions function, recognizing problems as well as opportunities for improvement, particularly in a crisis.

According to Derkatch and Segal (2005), "Metaphor is the quintessential rhetorical device," as it serves a persuasive function, often going unnoticed because it is primarily seen as ornamental or decorative speech (p. 141). In this way, its messaging is subtle: the authors write, "We often think and speak in metaphor without even realising that we're doing it" (p. 141). Because of metaphor's subtlety, its messaging is much easier to take up, even unconsciously. It's likely the reason why metaphors have become so pervasive in medicine—they provide a "metaphorical map" (Lakoff & Johnson, 1980) to think about how the workplace should function. Initially, when I was coding interviews, I simply flagged participants' usage of metaphorical language as a "point of interest" (POI), but upon reflecting on how metaphor is wielded in health policy discourse and medical care, I can see how it serves a much more significant purpose; in both metaphors of *medicine is war* and *medicine is business*, it can perpetuate the image of a streamlined, well-functioning healthcare system. After all, if something is operating in a military fashion or like a business, it implies efficiency and efficacy. Therefore, the use of these kinds of metaphors is the clearest way we can see how rhetorics of mechanization attempt to automatize medical labor.

The exigence for this project is especially important to consider here, as a "healthcare crisis" in the U.S. is usually presented rhetorically as an "economic crisis" (Segal, 1997, p. 219). This was true for Covid, which led to a major lockdown of businesses across the country, increased unemployment, and disruptive supply chain issues. According to Segal, responses to crises in healthcare either tend to "address

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financial concerns directly" (ex. closing sites of care) or to "address financial concerns as human concerns" (ex. "managed healthcare"), and in both framings, healthcare is "further commodified" and the perception of the issue as "fundamentally economic" is bolstered (p. 219). While her article discusses a healthcare crisis in terms of debates on policy and not an international infectious disease emergency, it's still useful to consider how a "crisis" in healthcare exacerbates commodification (medicine as business). In a capitalist economic system, everyone and everything can be a commodity or a good and service "intended for exchange" (Appadurai, 2005, p. 35). This is especially true in medicine, where in times of a health crisis, millions more people are spending money on care and treatment, even if, like in the instance of Covid, there really isn't any cure.

With the influx of patients, though, comes a need for more services, more providers. But because clinicians are people too, they can fall ill as anyone else does during a pandemic—their absence crippling the healthcare system when it's at its most dire. In a capitalist system, especially during a health crisis, clinicians—like masks, hospital beds, ventilators, and oximeters—are tracked as a commodity (AHA, 2022). Problematic medical efficiency through the frame of medicine as business (for privatized gain) reinforces that commodification and assembles people and practices in mechanized ways for the sake of streamlining care for profit. But as recent mass departures from medicine show, the commodification and mechanization of healthcare workers is not sustainable (Yong, 2021; Ofri, 2019). To call attention to this kind of coordination of healthcare workers, like Segal, I argue we should ask, "*What is a person in health care?*" (p. 229, emphasis in original). Segal primarily positions this question in terms of the "patient" (e.g., as a "consumer," etc.), but I think it's important to consider it in terms of

healthcare personnel, especially for those in dual roles like participants in this chapter. But what *is* a person in healthcare? And what does that mean for the hospital's existence as a boundary object?

I've used the term "mediator" to describe administrators who have to balance the hospital as a boundary object, and I've shown how clinicians can be framed as commodities, but there is also another frame for patient-facing healthcare workers—war. Labels such as heroes, soldiers, warriors, frontline workers, etc. all contribute to this noble idea of human sacrifice in battle. However, although self-sacrifice may be perceived as noble and commendable, it romanticizes the labor that clinicians do and assumes all are willing to give their life for the cause, in turn minimizing their own needs and health to do so. Problematic rhetorics of medical efficiency that utilize frames of war as unquestioning sacrifice and obeisance assume a measure of self-loss, in addition to implying a level of expendability. Segal (1997) points out that these war frames are intrinsic to healthcare, citing the work of Warren (1991):

> The way of life of physicians-in-training prepares them for a life of fighting the enemy of disease, even as novice soldiers are prepared ... for fighting a war. In both cases, status differentiation by rank is clearly maintained, and technical proficiency is stressed. There is little time for sleep, let alone time for reflection upon personal values and goals…. (p. 43)

Reinforcing efficiency discourse that minimizes the human needs of healthcare workers in order to maximize results does cause problems. If clinicians are framed to be war heroes, that implies that they are willing to give up everything, and it places the burden entirely on them to fix the health crisis (which leads to, for example, removing culpability

from the general public to take precautions, get vaccinated, etc.). If they are framed to be no more than a sellsword, a paid mercenary providing a service to defeat a specific enemy (in this case, Covid), then they are, presumably, expendable as the next hire.

According to participants in this study, they feel like they're being treated more like robots (study interviews, 2022). Dr. Bryan noted that it seemed as though frontline clinicians were expected to neglect their own needs while working during the pandemic, where they had to downplay the degree to which they were "actual human beings with physical bodies" (study interview, March 19, 2022). As Dr. Anna Lembke, a psychiatrist and professor of addiction at Stanford Medicine, notes in the recent documentary *Take Your Pills*, "Medicine has become industrialized to the point where doctors kind of function like workers on an assembly line," which in turn can make interactions with patients more impersonal and transactional (Foster, 2022, 0:50:35). Asking clinicians to ignore or minimize their own human needs has consequences.

Overall, framings of *medicine as business* and *medicine as war* can mechanize bodies and practices for streamlined efficacy in ways that are quite problematic. Although these framings have some difference as far as clinicians being perceived as either soldiers or commodities, they both share core qualities that are damaging. As these framings rhetorically mechanize how people and practices are assembled, they dehumanize notions of labor in healthcare. In the following sections, I explore the uses of these framings, showing how they can shed light on pressure points of the medical culture of efficiency, especially as it is fortified in a health crisis, overstretching and pushing the limits of the hospital as a boundary object.

Medicine is War

Put simply, the hospital is a place where sick and injured people are diagnosed and treated. Hospitals handle all kinds of cases: some are emergencies, some become emergencies, and some fluctuate between the two states. It is also a site of learning, where medical students observe proper procedures on all kinds of rotations of labor, which illustrate the different types of fields they can go into (e.g., radiology), and residents pursue their chosen specialty, often alternating from hospital to hospital to learn different sub-specializations of that area (e.g., neuroradiology, chest radiology, etc.).

The hospital serves many functions, and at all times (emergency or not), there is a "war" happening. "War" is often a metaphor people use to make sense of what transpires in the hospital; it is a battle between sickness and health—a war against diseases and wounds. This metaphor of "medicine is war" is nothing new, and it appears recurrently in public discourse on health policy, especially in "crisis," as Segal (1997) points out. Segal writes, "The metaphor *medicine is war* informs a great deal of common parlance: *Invading* microbes are resisted by the body's *defense* mechanisms—or pharmaceutical *magic bullets*; in the *battle*—Or the *bout*—with cancer we *bombard foreign* cells and we *fight* for our lives" (pp. 222-223, emphasis in original). This notion of war is intensely amplified during a pandemic crisis where additional precautions must be taken, and the focus sharpens to defeat a particular virus that is wreaking havoc on the public.

While metaphors of war may or may not appear in hospital-specific protocols crafted by administrators, they do manifest in the discourse of healthcare workers, speaking to how rhetorics of mechanization might affect clinicians' perceptions of

themselves and their work. Medicine is war, as a metaphor, does have its nuances, and these nuances speak to the tension between efficiency in medicine as mechanized and efficiency as humanized. Part of that nuance depends upon the ways in which people are organized within the hospital system—the strategic placement of personnel. One participant, Dr. Gary, who has administrative responsibilities in his department's medical staff office, used a compelling war metaphor to describe this kind of strategic procurement and placement. Since there were significant staffing shortages during the pandemic across all hospitals in the U.S., new clinicians often had to be hired at substantial rate:

> We hired a lot of *locum tenens* physicians. Basically, a *locum tenens* just means somebody who holds the site, so to speak, *holds the fort*. I mean, the regular people can't be there, so you get somebody to come in and cover for them, and we faced some real issues over the credentialing of those people. (Dr. Gary, study interview, March 14, 2022, emphasis added)

In war, you have to be able to have enough people to not only go to battle but also enough to "hold the fort." These positions must be strategically assigned in order to mitigate any shortcomings and keep things from getting out of control—it's critical to defend the fort to win the battle. In addition to this metaphor invoking military industriousness, it also alludes to very real systemic problems happening within healthcare and made worse by the pandemic. Holding the fort, in this instance, means people had to be hired to just keep things together so that they wouldn't fall apart. It reinforces the ways in which clinicians are assembled like battalions in crisis. And while making sure the hospital is staffed is important, this kind of framing that alludes to

soldiers and war assumes a level of sacrifice on healthcare workers' ends. Clinicians are holding the system together by a thread, strongly "committed to the ethics that brought them into the field in the first place" (Ofri, 2019). Because many enter the profession as a "calling," it makes it easier for these institutional structures to "push them to sacrifice ever more of their time, energy, and self" than they have to give, "blurring the line between service and servitude" (Yong, 2021, para. 20). Dr. Gary appeared acutely aware of this issue, arguing for the importance of executives listening to the lived experiences of clinicians.

Since most executive-level hospital administrators are not medical degree holders themselves (Gupta, 2019), it would've been difficult for them to negotiate the nuances and practicality of the CDC's infection control regulations without having expertise working on the frontlines of care. While it's not possible for any individual to fix systemic supply chain disruptions, these kinds of issues do have to be managed in some way at the local hospital level. Because these decisions are more complicated and are better made with medical knowledge, physicians are key to the equation. In other words, having someone with clinical expertise at the helm of hospital operations can majorly benefit crisis response and policymaking. The best example of the importance of clinical expertise in leadership is in a war metaphor used by Dr. Patrick, reflecting on his time as a hospital CEO. He describes how his background as a physician in internal medicine was vital for him as an administrator:

> I had a better understanding of the relevance of various safety protocols and precautions. Some were senseless. Some didn't make much sense at all, where the risk was so low. It wasn't worth, as a clinician, wasn't worth taking the time and

effort to adhere to them. Others were so important that if you didn't do something your colleague would say, look, you haven't done this or that, whatever. But I think I had a better understanding of which areas were most important to focus on as opposed to just a blanket approach to the implementation and monitoring of standards. […] I think that the, as a hospital CEO, the fact that I had a medical background was extremely important for this. There's nothing different from someone who's been *in the trenches* and now is in the leadership position. (Dr. Patrick, study interview, February 27, 2022, emphasis added)

Because Dr. Patrick had been someone who was once "in the trenches," it meant that he could better adapt the regulations of his hospital to the situated needs and realities of his personnel. He aligns himself rhetorically with his colleagues who work the frontlines of care. Although this metaphorical usage of "in the trenches" reinforces the framing of "medicine as war," (clinicians are soldiers, the hospital is a battleground, etc.), it simultaneously calls into question rhetorics of mechanization that disembody the practice of medicine and challenges notions of "expert" that the boss text sets out to project. "In the trenches" implies that there is a certain kind of expertise that can only be gained from an embodied experience. It is this human-centric, embodied approach to management, in fact, that allowed Dr. Patrick to better remediate regulations for his personnel, underscoring the idea that if the boss text is only implemented "as is" instead of "as it should be," it can cause unnecessary hurdles in providing care, amplifying impracticality. In chapter four, I discuss in depth how clinicians working during the pandemic navigated those impracticalities.

As the previous chapter observed, when the vaccine for COVID-19 became available, it significantly impacted elements of the CDC regulations for healthcare personnel. These elements include differentiated precautions for those who are vaccinated versus those who aren't, modified quarantine times and testing frequency, and promoting personnel education on the importance of vaccines, among others. This is to say that vaccination status became one of the primary foci of the document, clearly aiming to shift the main objective towards a post-Covid healthcare reality. However, vaccination presents a rhetorical problem (Campeau, 2019) for administrators and health crisis communication managers. They must persuade their workers that it's in their best interest to get vaccinated for the good of the hospital healthcare community. But because they don't typically have frontline expertise as clinicians, it's likely difficult for them to know how best to persuade their audience, especially nurses, who have been getting vaccinated notably less often than physicians (Shivaram, 2021; Khubchandani, 2022). According to Shivaram (2021), "While a majority of nurses are vaccinated and more than half support vaccine mandates in the workplace, some are pushing back against requirements to get vaccinated or face mandatory testing," which has led to both resignations and terminations of employment, exacerbating the crisis of staffing shortages (which was already an issue prior to COVID-19) (para. 15). Despite alluding to the notion that there might be some resistance or hesitation (as indicated by the CDC document's note recommending personnel education on vaccines), the CDC boss text chiefly assumes that people will be vaccinated if eligible, minimizing the disruptions that occur when many people (not just a few) choose not to. Because mechanization in medical culture assumes workers will fall in line and comply with all their workplace's regulations without

question, institutions can sometimes fail to recognize that clinicians are people, too; they worry about "vaccine safety, side effects, and efficacy" and are also susceptible to "misinformation and lack of knowledge" and can have mistrust in "experts, authorities, or pharmaceutical companies" (Khubchandani, 2022, p. 230).

However, if vaccine campaigns are designed with human-centric concerns in mind by those who understand the need to build relationships and have compassionate conversations in order to build trust (Shivaram, 2021), they can be quite effective. One participant, Dr. Shane X., who is a pulmonary and critical care physician and serves as a district councilor for his State Medical Association, shared with me how he worked with a team of physicians and business leaders to encourage people to get vaccinated. To rhetorically frame the endeavor as something collectively achievable, Dr. Shane said that the team employed a war allusion in the creation of the project's name. However, it was less of a war command, which can make people resistant and defensive, and more of a rallying cry, which can foster enthusiasm, positivity, and even pride. Metaphorically invoking the momentous power behind Winston Churchill's 1941 "V for Victory" campaign, which functioned to "unite and inspire" people during World War II (Cosgrove, 2014), this COVID-19 vaccination effort was organized around the letter "V" —"V" for "vaccine" and victory against Covid. Dr. Shane emphasized the importance of this major project for his area:

> We […] had multiple like, rallies, communication things, you know, people going
> out to houses. So, you know, the project locally was, you know, quite quite
> important and effective initially get the word out. And it saved I—you know—we

can't quantify—I would say probably saved a lot of lives. (Dr. Shane, study

interview, April 5, 2022)

This rhetorical framing, metaphorically channeling a successful (and memorable) war

campaign, appears to have worked on multiple levels. Not only did it appear to energize

those on the administrative team to coordinate communications, organize events, and

even facilitate personal door-to-door conversations, but it appeared to have made a real

impact on persuading people to get vaccinated. In this way, the framing of medicine as

war can be beneficial, if it is *human-centric*. If it invites participation, conversation, and

collaboration, rather than mandating certain practices, it might truly coordinate

widespread action, such as getting vaccinated. Human-centric framings take into account

affectual response and memory to persuade a wide audience, instead of enacting

mechanized pronouncements that do not account for affectual responses or choice. And

although this campaign occurred for a specific geographic area instead of a specific

hospital, I found my participant's involvement, as a physician serving as a State Medical

Association district councilor, important in this rhetorical endeavor.

 The experiences of these participants reveal the ways in which the metaphorical

framing of medicine as war greatly affects how clinicians see their roles and

responsibilities. As a metaphor, though, *medicine is war* can be taken up in several ways,

and how it functions depends on how people are rhetorically positioned in that war. If it's

used to mean a soldier who just takes orders, the framing can reinforce mechanized

notions of medical efficiency. If it's employed to validate the choice of a "patriot"

choosing to do their part based on their embodied experience, then it can support medical

efficiency as human-centric. The frame of war in medicine is important to study because,

as recent RHM literature indicates (Cole & Carmon, 2019; Agnew, 2018), it is still pretty commonly used in conversations about healthcare. As demonstrated by interview excerpts, medicine as war is commonly taken up and can appear in discursive phrases such as "we just felt like we were *under the gun*" (Dr. Gary, emphasis added) and "I'm one of those people who are *boots on the ground*" (Dr. Shane X., emphasis added), which is why I argue its impact, specifically on the work and identities of clinicians must be acknowledged. While it is not always the case, war metaphors can mechanize labor in ways that cause clinicians to sacrifice their physical and mental health for their jobs. Moreover, rhetorical mechanization through mandatory directives without conversations can cause frustration in clinicians who may end up leaving their positions because they don't feel heard, causing more staffing shortages and seriously dangerous gaps in care. These limitations presented by framings of medicine as war do shed light on the oppressive conditions of working in medicine, but they also point to how they can be utilized effectively in a way that considers the dignity of the human person, which can be best understood by the people who have worked on the frontlines of care. For the participants I interviewed, it appeared to be important for them that they made an impact in their administrative roles, and this sometimes meant breaking from set standards and charting their own course to improve the conditions of their community (whether at the hospital or regionally). (For example, Dr. Gary continues to bring embodied experiences of workers to boardroom meetings with executives in order to humanize what goes on in the institution.)

As a boundary object, the hospital functions as a battlefield against disease in normal times, but this aspect drastically intensifies during an international health crisis.

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It is in those times of crisis that healthcare administrators must, to an even greater extent, consider how to humanize—rather than mechanize—their workers, and this is something that would benefit from embodied, clinical expertise. Overall, these war metaphors help shed light on issues within problematic medical efficiency and regulatory objectivity, underscoring the idea that navigating regulations is a situated endeavor that benefits from localized interventions.

Medicine is a Business

Because business has become inextricably linked to the core structure of healthcare institutions, it significantly influences the perception and discourse on how healthcare should operate. According to Segal (1997), this metaphorical framing (*medicine is a business*) can be understood through the idea of producing "quantifiable units of care, ideally with observable and measurable effects," writing that this model of medicine is "easily mapped onto the discursive realm of economics" (p. 225). In this framing, patients are "'consumers,'" and healthcare "'providers'" are "'managed care vendors'" (Segal, 1997; Freeman, 1992). However, medicine cannot be entirely "subsume[d]" by business ideals, Segal argues, because patients are still understood as the "prime beneficiaries" of services rendered at the hospital, whereas in organizations of business, the owners have the most to gain (1997, p. 226; Melito, 1982). In the decades since Segal's article, however, it appears that business framings of medicine that primarily serve individual investors over the general public have, in fact, come to be pervasive, as patients have received less quality care while paying more, healthcare workers have been paid less, and shareholders have found increased gains (Lee, 2020;

Kinder, 2020). In other words, medicine as business is not necessarily problematic on its own—it's when private investment values overtake the human element of healthcare that major issues inevitably arise.

In viewing the hospital as a site of business, administrators must take into consideration the facility's finances, patient satisfaction, the site's supplies and staffing, and legal issues (e.g., being held liable for complications, deaths, etc.), among other concerns, in order to oversee a thriving operation. According to Dr. Patrick, attending to potential harm caused to patients in a way that's forthcoming to the family and public is critical, otherwise the hospital's risk of being sued might increase, "and we would *lose a lot of money*" (Study interview, February 27, 2022, emphasis added). During his time as CEO, his philosophy was to be as honest as possible[9] when a mistake was made, in order to hopefully garner respect for the transparency: "And in fact, the more you tell, and the more you share early on, the less likely you are to be sued." Dr. Patrick, in taking into account the human element of care and a patient's family's need for truth, appeared to actually save the hospital money (i.e., a human-centric approach, rather than a mechanized one), which is backed by medical literature (Kraman & Hamm, 1999).

Hospitals, across the board, are a major investment; facilities often depend on grants, donations, and endowments for conducting the latest research, buying new equipment, constructing additional buildings, and taking on other extraneous

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[9] Importantly, the act of apologizing in medicine balances a fine line that aims to reduce legal liability yet appropriately acknowledge harm. Firms such as the nonprofit advocacy organization, "Sorry Works!", help hospitals navigate these exigencies by providing linguistic strategies to minimize institutional legal jeopardy.

improvement projects. While one-third of hospitals in the United States are considered "for-profit," there is little difference in procedure and standards of care compared to "nonprofit" hospitals (TGWU, 2021). For administrators, there are some logistical differences in managing and operating these sites related to institutional foci and values. According to The George Washington University School of Business (2021), nonprofit hospitals are often religiously affiliated and provide community services as a charitable organization under the IRS, and for-profits are typically owned by company shareholders and investors who have money at stake. While for-profits do focus more on marketing and advertising, *nonprofits still allocate expenditures to those areas as well* to stay "competitive" in the healthcare market; both nonprofits and for-profits alike make sure to supply top-notch training and equipment (TGWU, 2021). And as recently as December 2022, *New York Times* reporters investigated the issue of nonprofits making *a lot of money* with little oversight from the IRS, all the while enjoying "lucrative tax exemptions" (Silver-Greenberg & Thomas, para. 7). Further, according to the reporters, "in recent decades, many of the hospitals have become virtually indistinguishable from for-profit companies, adopting an unrelenting focus on the bottom line and straying from their traditional charitable missions" (para. 7). This is to say that shareholder investment values influence a great deal of what hospitals do, no matter the tax status, especially as medicine has become corporatized.

Because many modern U.S. hospitals are relatively large and often part of a networked system of care, it is the case that administrators must track the financial and material ins and outs in order to understand the facility's viability and tackle issues that arise. While issues of supply and demand and customer (and shareholder) satisfaction are

certainly important to consider in order to run a smooth healthcare operation, on the other hand, as mentioned earlier in the chapter, an overconcern with these metrics and a subsequent push for mechanized efficiency can increase pressure on workers and cause problems such as labor inequity and increased burnout (Arnsten & Shanafelt, 2021; Hartzband & Groopman, 2020; Ofri, 2019; Yong, 2021). Dr. Danielle Ofri, a physician at Bellevue Hospital in New York, argues that healthcare has come to be "corporatized to an unrecognizable degree" and that the "business of healthcare: depends on the exploitation of doctors and nurses to hold the "entire enterprise together," which comes at a tremendous cost for clinicians (2019, para. 1-2, 5). Criticizing this systematic corporatization, Ofri writes:

> By now, corporate medicine has milked just about all the "efficiency" it can out of the system. With mergers and streamlining, it has pushed the productivity numbers about as far as they can go. (2019, para. 4)

Though Ofri wrote this article a year before the pandemic began to surge in the U.S., it speaks to how an overconcern with medicine as an investment was already impacting healthcare in a negative way, particularly in regard to labor practices. During the pandemic itself, when working conditions became even more severe due to intense overflow, healthcare workers reported that their hospitals "cut salaries, reduced benefits, and canceled raises" to save money, all the while requiring them to increase shifts and extend their working hours, "denying paid time off," and minimizing the hardships they faced (Yong, 2021, para. 17). Though these are business decisions intended to keep the hospital running, they are grounded in assumptions of mechanized labor—labor that is unemotional, automatic, adaptable, modifiable and without physical limitations.

Because the value of mechanized efficiency has become so intrinsic to the culture of healthcare, there were equity issues that arose during the pandemic as well, stemming from prioritizing the profitable aspect of the hospital. One of these equity issues revolved around supply procurement. According to participants in this study, bigger hospital systems could make major financial decisions to make up for shortages in PPE during the pandemic—shortages that amped up the competition between hospitals and sometimes, left smaller facilities without many options. Dr. Gary notes that likely this happened in part due to the "era of *rapid consolidation* in healthcare," where "a lot of physician practices have been purchased by multi-specialty groups and a lot of multi-specialty groups have been purchased by hospitals," leaving solo practitioners or small group practices "at the wayside," which can be particularly problematic during a health emergency when resources are scarce (Study interview, March 14, 2022, emphasis added). According to Kenton (2021), consolidation often occurs due to goals of "*operational efficiency*, eliminating competition, and getting access to new markets" and can ultimately lead to "a concentration of market share and a bigger customer base" (para. 3-4, emphasis added). While consolidation in healthcare is likely to increase efficiency and gains for some, it can increase disparities for others, thus neglecting issues that might negatively impact populations outside of those large health systems.

Issues of equity in the distribution of resources is not something that's addressed within the CDC Covid boss text, apparent by the minimal acknowledgement of the existence of systemic supply chain issues and personnel shortages. While the document does provide a link that describes how to "optimize" PPE, it does not acknowledge the fierce competition for resources that ensued among healthcare facilities across the nation

throughout the Covid crisis. Dr. Gary, who is a part of a large (and expanding) hospital system, described this issue when discussing how his facility tackled the PPE shortage:

> [The Hospital] paid a one hundred percent price premium. So, they paid twice as much as the normal price, but they bought a whole shipping container of face masks, which may not sound like much, but that is an unbelievable number of these things. I mean, a shipping container is a big, big thing, full of nothing but face masks and paid a premium price for it, which they were able to do because they're [The Hospital]. It's certainly the largest health system in [State] but suppose you're a hospital down in [Small Town] or up in [Small City]. Well, how do they compete? They can't go out and buy a shipping container, and they don't have the financial wherewithal to pay premium prices. So, one problem, I think, that developed was basically equity in the distribution of scarce healthcare resources like personal protective equipment. The big players are able to access things that are difficult for the smaller players to come by. (Dr. Gary, study interview, March 14, 2022)

In balancing the hospital's business financial concerns, administrators, during a health crisis, often look to prioritize their facility's preservation. They must make large-scale investment decisions that benefit the continued successful operation of their site. If supply accounts reveal a major shortage issue, it certainly encourages those kinds of big moves based on self-preservation. After all, if you're looking at numbers, the strategy can be clear-cut to some. However, while making investment decisions for an individual site is helpful for that particular institution, it disregards the realities that smaller practices face—increasing health disparities for those in less populous or rural areas who are trying

to survive the crisis. In other words, sometimes privileging mechanized efficiency, thus making hospital operations less human-centric, particularly in a pandemic, can exacerbate equity issues for other healthcare systems and their workers. And while shortages may not be problems that affect larger hospitals since they can afford to pay the premium price, their practice of serving the institution as an investment first can increase inequity and add significant pressure on the overall system of healthcare. If the CDC's regulatory text had addressed issues of equity, it might at least have given administrators more options on how to handle supply procurement during a shortage in a way that considers local communities outside of the city. In sum, concerns of equity are not typically a business priority because they're not profitable, but when this human element of medicine is not attended to, it ultimately exacerbates larger healthcare issues, even if a particular facility can keep running.

However, medicine doesn't have to operate as a business that is interested primarily in self-preservation during a health crisis. From the experience of one participant, it was clear that when clinicians are in leadership positions that allow them to take charge of resource allocation and management, they could make financial decisions that considered the public good of all the hospitals in the area, rather than just one system. Dr. Shane X., the pulmonary and critical care physician serving as a district councilor for his state's medical association (a different state than Dr. Gary), discussed the importance of allocating resources appropriately. Dr. Shane, along with the team of physicians (the State Medical Association) and the governor, utilized regional data during the pandemic to identify which healthcare locations had shortages, determining where supplies needed to be distributed by asking questions such as: "Where do we need the

ventilators?" "Where are the sickest counties?" "Do we have masks?" and "Do we have testing?" (study interview, April 5, 2022). For the team, it was important to prioritize the "hotspots" in the state and share resources accordingly, rather than, as Dr. Shane noted, a particular city "hoarding it all," which would be ineffective in terms of tackling Covid. Looking at the data and seeing where things were "code red" was important because it was quite chaotic in the beginning (Dr. Shane, study interview, April 5, 2022). And reviewing what was happening numbers-wise, it seems, helped give the team a logistical understanding of what needed to be done, aiding their financial decision-making in a time of crisis and uncertainty. Utilizing a business lens that considered how supply and demand metrics could be used for the public good (human-centric), rather than simply an individual facility's bottom line (mechanized), in other words, made for a more effective crisis response. Dr. Shane noted that businesspeople often took part in meetings to address the evolving situation to give perspective on this process:

> As soon as, you know, it sounded like things were getting bad when the lockdown
> started, we started having multiple meetings, both locally and, and statewide with
> various important-like government leaders, primarily, businesspeople, trying to
> figure out what the best avenue of action was. So, there were calls twice weekly,
> once every two weeks, sometimes once every once every week, depending on
> how the situation occurred. (Dr. Shane, study interview, April 5, 2022)

These meetings, which appeared to be straightforward and orderly ("we had an agenda, we followed the agenda"), ebbed and flowed throughout the waves of the pandemic, occurring more frequently when cases were dramatically rising and then trailed off as cases tapered off (Dr. Shane, study interview, April 5, 2022). This is to say that the team

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operated in a very systematic and symbiotic way amid the chaos, considering how the situated expertise of physicians and those in business could be combined to achieve more equitable resource allocation for healthcare workers, patients, and facilities. Viewing medicine in a way that's business-informed (operationally) yet takes into account the human element of care can make a significant difference in combating an unknown virus during a health crisis. In particular, when administrators consider health as a public good, rather than as a private (institutional) commodity, they can better provide what frontline workers need and ask for, and it can ensure safer working conditions and improved care for patients.

In sum, the metaphorical lens of medicine as business when framed as investment-centric (privatized financial gain), rather than people-centric, can exacerbate issues in crisis. As Dr. Gary notes, "We're not talking about *what accounting method to use* or *what the best marketing program* would be. We're talking about *how to contain the spread of an infectious disease*" (Study interview, March 14, 2022, emphasis added). Like framings of medicine as war that imply automatic obedience and sacrifice, viewing medicine as a business that is focused on the interests of shareholders can mechanize working conditions that depend upon the unlimited professional labor and goodwill of healthcare workers, as it asks them to expend more of themselves—their time, their health, and their energy—to help people at their most vulnerable, all in for the sake of efficiency. Medicine as business, if it is wielded in institutional self-interest, can cause equity issues, where one facility is stockpiling resources in a time of scarcity, and other smaller hospitals are left without, intensifying the pressure that the virus is causing systemically. On the other hand, when the framing is to save *people*, rather than money

(huma-centric notions of efficiency), it can positively impact public health as a whole. In what follows in the next section, I consider the implications of these framings for the hospital, considering the consequences of overstretching healthcare for mechanized efficiency and what that means for the future of medicine.

What is a Hospital? What is a Person in Healthcare?

The hospital, as a boundary object, is elastic (Star & Griesemer, 1989). The use of metaphorical framings of business and war in common discourse reveal how it is able to stretch quite comfortably across social worlds. People know the hospital is a place to seek treatments for ailments, a place where people fight for their lives. And yet it is also a place where people profit. When being shaped for mechanized efficiency, the hospital is a place that commodifies the labor of its professional workforce, and as a complex institution that hinges on the objectives of capitalism, it is ever-growing and expanding. Dr. Danielle Ofri (2019) considers elasticity in terms of the "mushrooming workload" for clinicians, "[I]n health care, there is a wonderous elasticity – you can keep adding work and magically it all somehow gets done" (para. 9). For example, if the unit is short staffed, a nurse won't take their lunch break, or a physician will make room in the schedule for more patients (para. 9). Even if from an administrative point-of-view things are "purring along just fine," constantly streamlining for mechanized efficiency and moving the target for optimization in a way that dehumanizes labor is not sustainable for clinicians or patients (para. 11, 13). Eventually, there comes a breaking point. When the hospital continues to ask clinicians to push their own personal boundaries, sacrificing self for labor because of a commitment to a sense of duty or a calling, the institution

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inevitably falls apart as a boundary object. It becomes no longer recognizable to the people who work there, as it strays away from the standards of "health" and "care."

Mechanization is a key part of that systemic breakdown of the hospital as a boundary object. Framing medicine as war (in the automatic, unquestioning sacrifice and duty sense) and medicine as business (in the privatized gain/clinicians as commodities sense) can have the ability to disembody the human element of healthcare, methodically stripping away physical exhaustion, emotional trauma, and other aspects of burnout from the equation—the consequences of which are explored in the following chapter (e.g., rhetorical paralysis). Segal (1997) writes, "Inevitably, a mechanical notion of the body produces a mechanical notion of health care," but conversely, I argue that mechanized notions of healthcare produce mechanized notions of people. If the hospital is a factory and clinicians—and their work—are treated as mechanical or "uninfluenced by the mind or emotions" (Merriam-Webster, 2023) then they will *feel* robotic as well, as one participant described in his interview. He said they felt as though they were being asked to "behave as much like robots as possible" (Dr. Bryan, study interview, March 19, 2022). If they feel like "a commodity" to their hospital (Yong, 2021, para. 3), they will feel as expendable as the next person. And they will leave, causing the system—which relies on mechanized efficiency—to become even more unstable. That said, many already have left. During the pandemic, nearly one in five medical professionals have resigned from their positions (Galvin, 2021). Of those who have kept their jobs, thirty-one percent have considered leaving (para. 3). Because of this mass departure, those who stayed have been greatly affected by the shortages (para. 9), feeling the pressure of a system that already was asking them to stretch themselves so thin.

To return to Segal's (1997) question "What is a person in health care?", we have to consider how the hospital has continued to operate as an object of capitalism throughout the pandemic, doubling down on bottom line concerns. As hospitals attempt to slow the financial hemorrhaging from increased spending on labor and supply procurement (AHA, 2022), we can see that a person in healthcare—specifically a person who is a clinician—is rhetorically framed as an investment for the hospital. While that may have been the case for a while, since healthcare has become more and more corporatized for decades now, it is clearer now more than ever. Hospitals have lost and continue to lose billions because of the pandemic (AHA, 2022), and clinicians are a key part of bottom-line metrics, just as "resources" are (para. 1). When people are dehumanized, treated as another number on a chart, it can lead to unintended consequences, such as feelings of lack of dignity, lack of safety, lack of support, among others. The overarching consequence is a feeling of a lack of control—and that is something worth paying attention to.

When people feel that they have little control over their situation, that can lead to feelings of hopelessness, anxiety, and elevated stress levels. For clinicians, over time, that can lead to the aforementioned issue of burnout (Arnsten & Shanafelt, 2021; Hartzband & Groopman, 2020), which can mean leaving the profession *entirely*. For nineteen percent of medical professionals who said they'd considered leaving healthcare permanently, one of the reasons cited was "general sense of being disposable" (Galvin, 2021, para. 13). Therefore, as administrators navigate the hospital as a boundary object, stretched between mechanized versus and human-centric understandings of healthcare, I argue it is important for them to listen to the human experiences of their personnel and

challenge notions of mechanized efficiency—especially during a pandemic, when the labor healthcare workers do is often grueling and seemingly endless.

However, currently, because of the way the hospital system is structured, clinicians do not have as much power as administrators to impact policy. This is to say that, as things stand, policy is primarily devised top-down. This is particularly true in a pandemic. For Covid, and many other kinds of infectious disease protocol, everything starts with the CDC. And yet as we learned in the last chapter, although the Covid document for healthcare personnel originally appeared to target clinicians as an audience and provided practical advice to them specifically, it eventually became an administrator-centered text (containing language such as "facilities must…") (CDC, 2022). Because crisis response starts with the CDC during a health emergency, it is crucial for CDC policies to recognize the humanity and human limitations of clinicians, so that hospitals might follow suit.

As an organization, the CDC has great power to shape realities around an infectious disease outbreak, including putting pressure on traditional hierarchies by decentering mechanized rhetorics of efficiency. If they were to instead prioritize the humanity of frontline workers in their document for healthcare personnel, rather than center administrators as an audience, it would at the very least validate clinical interventions in protocol. While some hospital administrators may be inclined to draw upon the expertise of its clinical personnel, they are not obligated to do so under the CDC's guidelines. It may seem intuitive, but that kind of check-in with clinicians is something that all administrators should seriously consider, in addition to other kinds of collaborative efforts, especially when attempting to mitigate burnout during an intense,

ongoing worldwide health emergency. Scholars Arnsten and Shanafelt (2021) write that these kinds of efforts may mean marked changes in organizational leaders' routine behaviors and can include "regularly asking physicians for input, providing them greater voice in decision making, developing and providing clear structure to rapidly expanded care teams, and providing authentic opportunities to organize and shape their working conditions" (2021, p. 768). As my next chapter shows, when clinicians feel supported in the decisions that they make, and when they feel heard by hospital leadership, they can make interventions. However, if major decisions are made without them, such as added bureaucratic tasks to safety measures (e.g., having to sign out an KN95 even during a patient "code"), it can cause more issues that there were to begin with. What is a person in healthcare, if not an expert on their own experiences of work?

Conclusion: Getting Metaphors of Medicine to Work for Workers

Given that the literature shows framings of medicine as war and business still impact conversations surrounding the rhetoric of health and medicine today (Cole & Carmon, 2019; Agnew, 2018; Derkatch, 2022; Cole, 2022), it is important to recognize their influence on and profound embeddedness within medical discourse. As I've shown, while these framings can mechanize medicine in ways that are harmful, there are also opportunities to orient them in a way that foregrounds human-centric notions of healthcare. Because clinicians possess a nuanced understanding of their work environment in a way that administrators without a medical background might be unable to, they may be able to help provide insight on how to maintain the hospital as a human-centric institution—especially those who have dual roles and experiences like participants

in this chapter. When the hospital values humanistic efficiency, it can operate in a way that takes into account the experiences of its medical professionals and its patients. However, when it is overstretched to mechanize people and practices for efficiency, it can fall apart and become unrecognizable to those who are key to its day-to-day operation.

Ultimately, it's a compounding effect. Workers leave, which adds more pressure to perform on those who remain, and in turn, there's consequences for patients, such as "rushed or subpar care" (Galvin, 2021, para. 9), leading to increased medical errors (Yong, 2021). Moreover, as Yong writes, expertise is "hemorrhaging," as more clinicians have retired early, causing a massive gap in experience—knowledge that would've been critical for the incoming generation of medical professionals to receive (2021, para. 25). It is this kind of expertise that is key to effective clinical "phronesis" or "practical reasoning," because "collective experience" makes for better clinical judgement calls and reduced errors (Montgomery, 2006, p. 5). Over time, this may have a significant impact on the quality of patient care, particularly when there's another pandemic. During a health crisis, where circumstances are constantly shifting, soliciting advice and expertise from colleagues who have the pertinent experience is all the more critical.

As rhetoric of health and medicine scholars have noted, recognizing the validity of localized and embodied expertise can provide different ways of looking at an issue and even aid in problem-solving in times of turmoil (Angeli & Norwood, 2019; Angeli, 2019; Campbell & Angeli, 2019). For crisis response managers, that can even mean drawing upon emotions and gut feelings (Angeli & Norwood, 2019)—re-embodying a process of decision-making that is typically prescriptive and seemingly objective and neutral. And as this chapter has demonstrated, viewing the frontline healthcare workers as human beings

who can supplement gaps in non-clinical administrator knowledge, thus opening new possibilities for problem-solving, can ultimately lead to overcoming mismatches of reality due to missions of mechanized efficiency. While there are some benefits to operating medicine in a way that is more streamlined and economical during crisis, the lasting consequences are much more detrimental.

In conclusion, considering how chaotic, hazardous, and uncertain the Covid pandemic made working in hospital settings, scholars in the rhetoric of health and medicine should seriously consider the implications of institutions of health functioning as boundary objects. Of particular importance to this scholarship, if medicine is disproportionately disembodied as it is mechanized for efficiency, patients become reduced to consumers, clinicians become no more than machines, and systemic inequities can increase, thus dismantling healthcare as an institution that is truly about "health" and "care." What appears in the next chapter is the experiences from clinicians (even the ones that appear in this chapter)—how they worked under this system of efficiency during the pandemic, exploring how they dealt with regulatory limitations, how they solved problems, and how they felt. Listening to these voices is critical, since they highlight the impracticality of medicine operating as an efficiency machine, especially during a crisis.

CHAPTER FOUR

RECONSTRUCTING REALITY: EMBODIED RHETORICAL WORK IN AN
ONGOING HEALTH CRISIS

Introduction

> Without … embodied knowledge, texts are incomplete and dangerously
> misleading. And without being integrated into [people's] embodied sense of the
> physical world they move in, texts are of no use at the moments when they are
> needed, **because no one can check a book as the roof of the shaft is collapsing**.
>
>   -- Charles Bazerman, *The Rhetoric of Risk*, "Editor's
>   Introduction"

In the two previous chapters, I explored how institutional rhetorics can mechanize

people and practices in ways that are problematic and even harmful for the sake of

efficiency, underscoring how they tend to downplay the human limitations of providing

healthcare, particularly during a widespread emergency. However, it's important to not

only examine rhetorics at the upper echelons of medicine; we must understand how

institutional discourse ultimately affects those working on the ground. In other words,

how do *frontline individuals* enact rhetorical practices to work through crisis—

particularly in ways that are embodied and tactical? And what are the resulting

implications of how institutions either succeed or fail in "coordinating people and

practices" (LaFrance, 2019) in crisis? I define "tactical" as "adroit in planning or

maneuvering to accomplish a purpose," and "tactics" as "small-scale actions" that are

"carried out with only a limited or immediate end in view" (Merriam-Webster, 2023). I

situate my understanding of what is "tactical" in crisis communication research within technical and professional communication (TPC), where several scholars have emphasized the value of localized tactical communication over blanket top-down approaches (Baniya, 2022; Bishop, et al, 2022; Holladay, 2017). For example, Brittany Larsen (Bishop, et al, 2022), who compares email communications from Illinois State University (ISU) and its Writing Program during the COVID-19 pandemic, writes, "[T]actical, localized communication efforts may provide more helpful information in times of crisis than less-targeted communication," since this type of communication can better take into consideration "positionalities and experiences" (p. 179). Larsen found that programmatic-specific messaging was much more effective at disseminating critical information, as rhetors acknowledged and were responsive to the needs and obligations of a specific group of people. Additionally, it helped that the speaker (in this case the writing program director) was a part of the community to which they were talking. Importantly, these scholars suggest the value of recognizing localized embodied experiences, knowledge, and rhetorical practices in crisis—how being, feeling, seeing, and communicating as a particular person in a situated context affects rhetorical work.

That which is "embodied," or the idea of embodiment has many definitions that include one's social position, lived experience, identity, etc. (Johnson, et al, 2015; Amsterdam, et al, 2017). In crisis communication research within TPC, Tiffany Bishop notes that we come to know our environment by "watching and interpreting what bodies do" (Bishop, et al 2022, p. 182), and Erin Frost (2018) considers embodiment a "complex phenomenon" that comes from "a physical presence of a body itself as well as the many experiences associated with being in a particular kind of body that must navigate a

variety of cultural contexts" (p. 25). From these understandings, there is an emphasis on a distinctive type of insight or knowing that resides at the micro level within a localized, situated context. According to Sweta Baniya (2022), a researcher in technical communication, this kind of knowledge based on embodied experience is critical for investigating effective crisis management. For Baniya's research on natural disaster response, it was important to "study and honor the participants' lives and experiences as a source of important knowledge and understanding"—something that is also critical for this dissertation (p. 330). To encompass these considerations more broadly, I utilize the term "localized expertise" to examine how clinicians responded to and overcame challenges during the pandemic. Localized expertise encompasses several kinds of embodied ways of knowing—knowing that is both personal and contextual to time, place, and exigence. It is expertise derived from what is *observed*, *known*, and *felt* not only in the moment but also in previous lived experiences.

The two main types of localized expertise I identify in this chapter, adapted from RHM scholars Lillian Campbell and Elizabeth Angeli's (2019) taxonomy of embodied intuition in healthcare, include 1) *environmental knowing*: visual cues, including signs and objects, and observation of others; and 2) *experiential knowing*: previous experiences (personal and from others) and empathetic feelings being experienced in the body. These embodied ways of knowing are key components of what Angeli (2019) refers to as "rhetorical work," or the "specific ways in which workplace communicators utilize rhetoric to achieve workplace goals" (p. 14). This means having a keen awareness of audience, purpose, context, constraints, and exigence when attempting to make sense of their environment and take action. I argue that identifying how clinicians handled

unpredictable challenges by drawing on these types of expertise is critical, as their experiences can reveal the function of rhetorical work during times of uncertainty. Importantly, clinicians' lived experiences illustrate the importance of acknowledging medicine as an embodied, situated practice, which is a framing endorsed by feminist epistemological conceptualizations of knowledge (Poole, 2021).

In a crisis situation, embodied knowing serves a tactical purpose to help clinicians navigate unanticipated hurdles that arise in patient-facing care. Further, Tiffany Bishop writes, "Tactics […] are useful tools for identifying power structures within institutions," and by studying embodied tactics in crisis response, we can "identify the ways in which bodies enact power or have power enacted on them" (Bishop, et al, 2022, p. 182). As we pinpoint how power and perspective shifts from clinicians to administrators in the CDC boss text in chapter two, so, too, can we identify how power works for and against those on the frontlines. Put another way for this project, by studying how clinicians respond rhetorically in crisis according to environmental and experiential cues, we can better discern how these workers are able or unable to make situated interventions while contending with inadequate resources and other constraints. Since a feminist epistemological lens encourages scholars to trace what counts as knowledge and who counts as a knower (Barbour, 2018), it is important to study how embodied knowledge "expands" notions of the rhetorical situation (Andersen, 2014a; Angeli, 2019), especially in a worldwide health emergency.

It is the aim of this chapter, then, to extend the conversation around the significance of embodied rhetorical work—an area still notably "understudied in scholarship" within RHM and TPC (Angeli, 2019, p. 14). This chapter continues to use

the COVID-19 pandemic as a case study to investigate the ways in which clinicians employ embodied expertise on the job to work toward "goal-directed action" (p. 30). To explore these ideas, I analyze interviews with ten clinicians (seven physicians and three nurses), identifying how they handled pressing challenges working throughout the COVID-19 pandemic. Because this is a study of medicine as an institution writ large, rather than a single healthcare site, interview participants come from several different hospital systems around the United States (West Coast, Midwest, and East Coast), all of which take Covid safety guidance from the CDC. Despite differences in site and position, there were several commonalities in experience that I identified, experiences that I argue can likely speak to how things were happening on a larger scale for clinicians throughout the country. My data come primarily from interviews conducted during the Omicron variant surge in late winter and spring of 2022, when the experiences were fresh and ongoing for participants in this study. I referenced the February 2022 infection control protocols from the CDC in part to understand participants' experiences, even as some of the regulations were more site-specific. To identify and understand the kinds of embodied expertise participants employ and the rhetorical work that they do, I primarily build upon Angeli's (2019) research of rhetorical practices in EMS work from her text *Rhetorical Work in Emergency Medical Services*, where she studies "how communicators harness the power of rhetoric to make decisions and communicate in unpredictable contexts" (p. 1). I argue that a hospital in the COVID-19 pandemic, as an unpredictable space, operates much like an EMS workplace environment, where crisis is a given, and there are many situational unknowns and constraints of time and space.

In my analysis of these interviews, I map out the embodied elements that appear critical to rhetorical work, in addition to the rhetorical work itself. In studying clinicians' rhetorical work, I locate three central themes that arose in participants' interviews, including 1) rhetorical awareness (being able to identify a situation that calls for a response), 2) rhetorical paralysis (feeling unable to adequately respond to an exigence), and 2) rhetorical in(ter)vention (feeling empowered to problem-solve and take action). From these understandings, much of which focus on the localized experiences of individuals, I seek to establish how rhetorical work has the potential to "stabilize" medicine in tumultuous times (Angeli, 2019, p. 30). Additionally, I believe that calling attention to these embodied practices happening as part of rhetorical work can destigmatize less-understood knowledges—such as intuition—within healthcare spaces (Woolley & Kostopoulou, 2013), and through that, expand what counts as "knowledge" and who can be a knower.

Recognizing Localized Expertise

The questions of who can be an expert and what counts as expertise are core considerations in feminist epistemology, which takes into account the social situatedness of knowledge (Harding, 1991; Barbour, 2018). Further, as scholar Patricia Hill Collins (1990; 2000) writes in *Black Feminist Thought*, "epistemology points to the ways in which power relations shape who is believed and why" (p. 252). And while feminist epistemology can have a number of different definitions and interpretations, there are a few important ideas that inform my own understanding. Philosophy scholar Monica C. Poole summarizes these ideas in feminist epistemology as: "knowledge is situated";

"lived experiences are knowledge"; "power shapes knowledge"; and "knowledge comes through collaboration" (2021, para. 5). From these ideas, there is an emphasis on epistemic location or the "perspective you have as a knower" and this is influenced by your social positioning (Poole, para. 8). Poole states that individual perspectives shape what people "perceive, what they ignore, and how they interpret information" and compares it to being at a sporting event with a friend, where you aren't able to find seats together, and you end up sitting apart (para. 8). While you and your friend were at the same event, there were likely things you both missed and different things you noticed, depending on each of your perspectives. You could even have different assessments of the game: "maybe from your angle, the referee made a bad call, but from your friend's angle, the referee's call looked perfectly justified" (Poole, B. 2, para. 2). The notion of epistemic location increases in complexity when you add things like power dynamics, lived experiences, and social positioning to the mix.

Epistemic location is important to consider in recognizing the situatedness of localized expertise, because it illustrates the idea that where you are, what your role is, and who you are impacts *what* you know, *how* you know, and *why* you know. More than that, these perspectives affect *what you can do*. It matters if you work in patient-facing care, if you're a nurse or a physician, if you're an attending physician or a resident, or working in internal medicine or radiology. Localized perspectives and experiences are greatly shaped by professional roles in the hospital, and the power and knowledge held as a resident, nurse, or attending physician affects the kinds of rhetorical work enacted. Therefore, epistemic situatedness is a key part of understanding how participants in this study utilize localized expertise. Different social positions or positionalities affect how

various modes of expertise are used for rhetorical work by clinicians, especially in a health crisis when institutional resources and support are in short supply.

What follows is an examination of each kind of localized expertise mentioned in the introduction (*environmental knowing* and *experiential knowing*)—what they are and what they look like in the experiences of participants, demonstrating how these insights affect rhetorical work in medicine. Participants' positions as nurses, residents, and attending physicians likely affect how those knowledges are employed in practice in the hospital, and I plan to explore what those practices can tell us about the inefficacy of primarily efficiency-driven (mechanized) institutional rhetorics during a health crisis. As a larger goal for the dissertation more broadly, I believe that investigating how these knowledges are enacted in times of chaos and utilized for rhetorical work can illuminate how local experiences can inform the development of institutional policies, underscoring the value of frontline workers having "a seat at the table" (Dr. Gary, study interview, March 14, 2022).

Embodied Knowing

Scholars in the rhetoric of health and medicine, a subfield of rhetoric and composition that is often in conversation with TPC, have recently called for more attention to the study of how healthcare workers make decisions based on embodied kinds of knowledge, such as intuition. As mentioned in the previous chapter, intuition has a bit of a stigma in medicine (Woolley & Kostopoulou, 2013). And yet research shows that intuition is employed more frequently than assumed to make care decisions (Green & Mehr, 1997; Groopman, 2007), particularly among nurses (Ruth-Sahd and Hendy, 2005).

It's likely used more discreetly instead of overtly because it does not align with Westernized scientific standards of "objective" knowledge-making (Barbour, 2018). However, intuition is not just a "feeling" or even an "unconscious ability to inform action"; instead, it can be understood as "a type of intelligence that develops from experience, and from the ability to be attuned to the surrounding environment and material conditions of a workplace" (Campbell & Angeli, 2019, p. 353). It is a "deliberative process" that takes into account people, environment, objects of the present moment and experiences of the past (p. 355). According to Angeli (2018), it can be both a conscious response that takes into account an assessment of an evolving situation and environment but is also comprised elements that are sometimes subconscious.

Engaging the gaps of clinical embodied intuition RHM and TPC research can not only help us to understand how healthcare operates and the ways in which rhetoric impacts "daily life and public meanings and practice" in material ways but can also reveal how lived experiences shape rhetorical work (Scott, et al, 2013). What I was struck most by in my interviews with participants was their use of *present observations* and *experiences of memory, emotion, and invention* to handle challenges in the chaos of Covid. These external and internal embodied cues, which are key to environmental and experiential knowing, appear to greatly help in times of uncertainty—times where decision-making is quick and based on limited information. According to Campbell and Angeli, studying intuition further can help healthcare workers better identify why they are making the decisions that they are and make for improved medical training in the future. Therefore, this chapter aims to continue to fill the gaps that these authors present in their work, which includes 1) "focusing on and valuing providers' embodied

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experience" and 2) "acknowledging and fostering the critical role of intuition in medical decision-making" (2019, p. 356).

To study how participants in this study utilize embodied knowing in practice, I traced the sensory prompts or cues that are a vital part of rhetorical work in the hospital. Table 1 tracks sensory prompts and cues that came up when participants talked about responding to particular exigencies during the pandemic, including cues by technology, other people, and their own feelings. This tracing work adapts Campbell and Angeli's (2019) taxonomy of embodied cues used by healthcare providers (EMS and nursing students) to better align with the data collection goals of this project. My first cycle of coding was broad and exploratory, and it involved tracking all kinds of embodied cues that were triggered by objects, people, and participants' own feelings and memories. Second-round coding included identifying the types of embodied knowledge used (whether it was generated from the outside environment or inside the individual). Further, I explored the types of cues that prompted those epistemologies to be used. And from my data, it's clear that embodied knowing aided clinicians' rhetorical work during the pandemic. As Angeli (2019) writes:

> [R]hetoric's power to change and persuade the people who receive it does not necessarily happen in ways that we can easily identify with words, visuals, artifacts or sound—rhetoric's power to persuade in unpredictable environments can happen through unquantifiable methods, such as senses, memory, and invention techniques. (p. 14)

In tracking these embodied cues and practices that aren't always easily identifiable, I study how rhetorical work happened throughout the waves of the COVID-19 pandemic in

hospital settings. After describing examples of participant uses of environmental and experiential knowing, I outline major themes that speak to the realities of working in healthcare during Covid. In attending to these realities, I am providing an open space for clinicians' lived experiences to be heard and making an argument for the importance of rhetorical work in crisis.

Table 1. Environmental and Experiential Embodied Cues used by Clinicians (adapted from Campbell and Angeli's taxonomy)

Cue	Definition	Doctor Example	Nurse Example
Material	Environmental cues based on material objects in the workplace, including technology, written instructions, posted signs	A doctor hears their **pager** alerting, which tells them a patient is "coding," indicating an emergency response	A nurse notices a patient's oxygen levels drop on their **meter device** while they are walking them to the bathroom
Interpersonal	Environmental cues based on people in the workplace (patients and co-workers), including verbal, physical, nonverbal cues	A resident doctor watches as **other co-workers quickly "don" PPE** when entering a room during a patient "code" and assesses level of infection risk	A nurse identifies that a **patient is presenting signs** of hemorrhaging, **notices team is in close proximity**, and calls out for assistance
Flashback	Experiential cues based on previous experiences, including personal memories and the experiences of others	Doctor remembers a **similar instance of a patient coding** due to respiratory failure during medical school and responds accordingly	Nurse recalls **training in disaster response** and applies it to handle challenges with Covid
Emotional	Experiential cues based on personal emotions or being able to place yourself emotionally in a particular scenario	Doctor **feels that it's wrong** for a dying Covid patient to not see their family member and makes a visit exemption request	Nurse empathizes with ill Covid patient who is the **same age as them**, and they adjust their "at-risk" assumptions accordingly

Environmental Knowing

Like Campbell and Angeli (2019), I situate my understanding of knowing that comes from the surrounding environment on Sauer's (1999, 2003) research on the

embodied sensory experiences of miners. Environmental knowing is exactly what it sounds like; it is external perceptions based on what's in the surrounding environment, whether that's material objects or the verbal, physical, and nonverbal communicative practices of others. As Kathryn Montgomery (2006) writes in *How Doctors Think*, analyzing what's happening on the outside is an essential component of clinical judgement or rhetorical *phronesis*, meaning practical reasoning. According to Montgomery, *phronesis* allows doctors to "combine scientific information, clinical skill, and collective experience" to treat people (p. 5). Further, Campbell and Angeli (2019) write that *phronesis* encourages a person to "recognize and respond to various cues that are distributed across internal and external contexts," a skill that, honed over time, transforms into "habituated intuition" (p. 374). Doctors[10] are trained to read the body to make diagnoses, create treatment plans, and provide care. However, this doesn't stop with the patient; physicians—and nurses—are constantly reading other kinds of signs from their environment, including material cues from technology and interpersonal cues from co-workers. If clinicians are trained to be attuned to read the patient's body for diagnoses and care, certainly we can identify how they tune into sensory cues from their environment to do rhetorical work in the hospital. In this section, I provide a few examples of how environmental knowing happened for participants in the study and show how they utilize this information to "make sense" of their environment and take action (Young, 1976, p. 1).

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[10] Interestingly, there is no book on "how nurses think," and there are few texts that deeply explore only nurses' experiences of work.

Because safety regulations were constantly shifting throughout the pandemic, clinicians, understandably, sometimes had a difficult time keeping track of what they were supposed to do, what they weren't, how, when, and in what order. While these regulatory updates often were communicated in daily emails for participants, changes were sometimes very easy to miss—and at times, these changes appeared arbitrary, inapplicable, or negligible. This made it more difficult for clinicians to assess risk and take appropriate, consistent precautions. Here's Dr. Ronald, a second-year internal medicine resident, describing the issue:

> There used to be a very specific order that you had to don and more importantly, doff in. For example, they wanted you to not take off the eye protection while you were wearing the gloves, because they didn't want you to infect your eyes. And they wanted you to alcohol-wipe down your gloves after leaving the room before you started doing anything. And then they changed it a couple times, saying, "Actually that breaks down the gloves and can infect you easier." And then they changed it again, saying, "Actually, just take off the gloves." It felt like they were just making it up as they went, if that makes sense. So, I don't think most people had a whole lot of confidence in that. (Study interview, February 27, 2022)

To deal with the pandemic as a complex, ever-shifting exigence, Dr. Ronald paid attention to what the others in his environment were doing—and how they acted toward him—in addition to noticing posted signs with visuals demonstrating new safety protocols around the hospital. This is what Angeli (2019) refers to as "multisensory invention," or "the process of using the senses and intuition to gather and *synthesize data*,

to make a choice, and to complete goal-directed activity in an unpredictable environment" (p. 98, emphasis added). Dr. Ronald shared:

> Anytime there was a change, I only found out from a nurse getting mad or from just happening to notice that the signs look different or are different graphics. And it was only a couple months ago that I noticed like, "Oh, now it says, do not use alcohol in your gloves because it'll break them down and spread infection." And it's just by purely noticing the signs. (Study interview, February 27, 2022)

Visible frustration from colleagues made procedural errors readily apparent to this participant, as well as explicit markings in designated spaces that indicated specific tasks. In addition, another sign for Dr. Ronald included strips of tape on the floor marking a specific "doffing area" (to remove PPE), which is something his hospital was very strict about. Once he noticed people began to stop walking toward that particular marked off area, he observed where they took off their PPE instead and followed suit. Throughout Covid, Dr. Ronald continually looked for these kinds of environmental signs, as they were much more persuasive than the barrage of emails sent daily to residents ("They spam us with emails for everything, so it's impossible to use that reliably").

In his search for the correct information, Dr. Ronald had to work tactically, utilizing environmental knowing to jump hurdles that arose from receiving large amounts of shifting (and sometimes conflicting) information in the day to day, a situation that is both "a constraint and [an] exigence in an unpredictable workplace" (Angeli, 2019, p. 97). This is an issue that Brittany Larsen (Bishop, et al, 2022) describes in their study of university emails; the quantity of daily emails about Covid was overwhelming for faculty and grad students who were on multiple listservs. Not only was there an issue of

information overload, though. Additionally, because these emails were so generalized, they didn't contain as much useful information as more targeted department emails. For Dr. Ronald, looking for "signs" in both people and objects that were around his work area, helped him respond to situational variability more effectively. Overall, paying attention to these external cues, both material and interpersonal, was important for him to enact environmental knowing to properly follow precautions—even if he didn't have much faith in the ever-changing protocols themselves.

Being aware of the hospital's environmental signs was also important for participants who were working as nurses during the pandemic. For example, according to Kayla, who works as a floor nurse and has recently taken on additional responsibilities as a charge nurse and team lead for her hospital's postpartum unit, an important environmental marker was cheekily referred to as "COVID-land." COVID-land was a secluded, restricted section of the postpartum unit for the Covid-positive patients; it was cordoned off by a set of locked doors, and there was a list of nurses who would volunteer to tend to those in that section on scheduled rotations. As a space, COVID-land was vital to keep the postpartum unit functioning and safe for Covid-negative and Covid-positive patients alike, and "going into it" meant a marked increase in personal risk.

Before entering the doorway to COVID-land, nurses cued into their assessment of whether they were wearing the correct gear (including double masks, appropriate clothing, etc.) to minimize risk of infection to self and mitigate transmission to healthy patients. Upon exiting COVID-land, they were cued to properly "doff" or take off their PPE so that they could be cleared to enter non-Covid spaces. While Covid patients at Nurse Kayla's hospital (as of March 2022), are now taken care of in separate negative

pressure rooms instead of an entire walled off ward, environmental assessments are still critical. Nurses must be aware of which rooms host Covid patients and which host non-Covid patients. Before crossing the threshold to enter a room, they check if their PPE is appropriate; before crossing another threshold, they ensure they remove PPE correctly so that they can be "considered clean before going into these other rooms" (Nurse Kayla, study interview, March 28, 2022). Importantly, while in the room, they have the ability to communicate nonverbally that they require assistance: "If you need something while you're in a room, we hit our call light and somebody will bring it to the door, so that way we're not having to go out of the room and then come back in and everything." Overall, this attendance to material cues reinforces proper procedure and encourages tactical communication with the team.

Nurse Kayla's responses also indicated an importance of being tuned-in to audience and constraints—specifically her co-workers' particular physical limitations, comfort-level, and institutional obligations when considering communicating the need of assistance with Covid patients. For example, "There's a couple of our nurses that are older, so we don't really let them go into COVID rooms just to limit their risk. Then, if people have immunocompromised illnesses, we try to limit that as well (Nurse Kayla, study interview, March 28, 2022). Additionally, because many of her co-workers would put off "going into COVID-land" for as long as possible due to fear and anxiety, there was an awareness that backup for those working with Covid patients would be limited and perhaps not always guaranteed. Nurse Kayla recalled being afraid of not getting the support needed while working in the marked off unit (which was usually her and one other nurse). Further, there was an understanding that if nurses were occupied with their

institutional obligations (such as patient assessments) in another room, help might be even more difficult to come by. All of these elements appear to be crucial to take into consideration when communicating requests for workplace support.

Nurses largely rely on each other as a team to work through issues that come up in their practice; they go to each other for advice, extra help in providing patient care, or simply emotional validation. And although staffing shortages became a persistent issue throughout the pandemic, and it became difficult for nurses to be able to count on another person being there to assist them in working through an issue, tapping into the collective knowledge of the surrounding hospital community of nurses was still paramount. Nurse Kayla shared:

> In any situation where we aren't sure of something, we will go to other staff on the unit and be like, "Hey, what do we do in this instance? What would you do?" We kind of talk with each other. […] In my charge position, I am that person that people go to for things. If I'm not able to figure it out, I will contact the labor and delivery charge nurse or the NICU [Neonatal Intensive Care Unit] charge nurse, and if they don't know either, then we kind of go up the chain of command and if it's not too late in the day, I'll try and get ahold of my manager, or, I have access to the nursing supervisor who knows every policy that you could ever think of. (Study interview, March 28, 2022)

Because the work of nurses is largely relational, as in based in relationships and shared knowledge with their other staff members, much of the information communication comes from discourse that happen on the job, rather than referring to a material text when making a decision, and this relational coordination is key for providing quality care

(Havens, et al, 2010). People are the main sources of knowledge. Consequently, when there are staffing shortages, and a nurse can't get the support and advice that they need, it can be a significant problem. Nurse Kayla's responses indicated that expertise—the expertise, advice, and support of their fellow staff members would greatly help them get through working in a situation with so many unknowns. And it's clear that attending to the cues of her environment assisted her and other nurses make appropriate decisions and take action in the workplace.

Environmental knowing is derived from a practical application of sensory cues that arise from a particular place. In high-stress, hazardous, unpredictable work environments, whether it's a coal mine (Sauer, 2003), emergency medical services (Campbell & Angeli, 2019), or a hospital during a pandemic, these kinds of material and interpersonal cues can significantly inform risk assessment and effective care practice when there's shifting exigencies and constraints. Clinicians inundated with large amounts of new information surrounding Covid that changed often or conflicted had to look to their environment and the people around them to see what was working. Dr. Ronald paid attention to the visual, nonverbal communicative cues around him, including negative emotions from others, and modified his safety practices. Nurse Kayla attended to environmental cues that influenced her risk assessment and tactical communication within the hospital. Both clinicians attended to external material and interpersonal cues in order to enact the know-how to tactically navigate their hazardous work environment during Covid. Highlighting these practices that stem from environmental knowing reveals the limitations of rhetorical coordination at the institutional level, such as non-specific, blanket daily emails that share the newest protocols. If clinicians tend to primarily rely on

their environment for quick, accessible cues that show them how to appropriately respond and effectively accomplish workplace tasks safely during a health emergency, then that is important to recognize.

Experiential Knowing

The next kind of embodied knowing critical to this chapter is experiential knowing or knowing that comes from previous experiences (including the experiences of others), in addition to experiencing feelings of empathy, compassion, or sympathy. Experiential knowing revolves around *internal cues* of a person's memory and emotion. For example, collective "experience" is a key element of clinical judgement; it allows clinicians to apply what they've learned in similar situations, to "make sense of the particulars of one patient's illness and to determine the best action to take to cure or alleviate it" (Montgomery, 2006, p. 5). Experiential knowing also appeared to be useful for participants to make decisions when they were left unsure about a particular protocol or safety measure. In what follows, I provide a few examples of how participants in this study utilized experiential knowing to handle the unpredictable circumstances of Covid, analyzing the kinds of internal cues that influence rhetorical work.

Several clinicians in this study noted that they relied on previous training in different areas to deal with the uncertainty of the pandemic, such as the unknown nature of the virus and the shifting nature of regulations. Recalling previous training or experiences is what I refer to as the "flashback" cue, or an internal cue prompted by memory. Memory or *memoria* has an important tradition within rhetorical canon, going all the way back to Cicero and texts such as the *Rhetorica ad Herennium*, utilized for the

purpose of recalling and applying discourse to a particular situation (Crowley, 2010; Crowley & Hawhee, 2011; Yates, 1966), and more recently, it has been given a closer examination for TPC contexts (Whittemore, 2015). Angeli (2019) considers three kinds of rhetorical memory in terms of communicating and taking action in unpredictable environments, which include "individual," "collaborative," and "professional" memory. She argues, "Like invention, intuition, and the senses, memory *stabilizes* communication and decision-making because it is a consistent tool available to communicators as their environment changes" (p. 116, emphasis added). While this is a study of clinicians in the hospital setting and not EMS workers (like in Angeli's study), I argue that shifting conditions of the Covid pandemic prompted a critical need for rhetorical memory in order to "respond to exigencies and changing rhetorical situations" (p. 116).

An example of this memory work being applied in practice comes from Dr. Tribbiani, a resident physician in diagnostic radiology, and he describes how he drew upon his experience as a hospital housekeeper to make appropriate decisions around infection control (such as donning/doffing). From his interview responses, it appears memories from the hospital he worked at prior to his residency functioned as a kind of heuristic (Groopman, 2007) during the pandemic when he was working as an internal medicine intern. He shared:

> Before medical school, I was actually a housekeeper in a hospital. So, we had a lot of formal training, with safety regulations and PPE, different droplet airborne contact precautions. And comparing and contrasting the two, like just off the bat here, and I never really thought of it like this, but I feel like I had a lot more formal training as a housekeeper than I did as a resident physician. […] Like

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housekeeping; it was very, very formal, very hands on, like, "this is how you do it" show and tell. Whereas, you know, in the resident physician capacity, it was more of like, assumed, "Oh, they know how," and this is more of—I don't want to say formality, because that's, that's a little bit disingenuous to it. It was a little bit more than a, you know, formality for them. They did go through some stuff. But I felt like it was it was one of those things that needed more like, you know, show and tell. (Study interview, March 23, 2022)

Dr. Tribbiani's experience training as a housekeeper was effective because it involved embodied learning that was hands-on; these were "show and tell" practices that instructed workers how to implement the proper infection control safety procedures. Because of this robust experience, he remembered what to do in mitigating the spread of communicable disease—even when circumstances were uncertain with Covid. According to Angeli (2019), this kind of recall would be what she refers to as "professional memory" or "knowledge gained, remembered, and recalled in a workplace setting" (p. 121). This training, which was "nailed into [him]," provided structure and stability in a time of chaos. While it's likely true that time was of the essence in the beginning of the pandemic, and that is why regulations were reviewed as more of a formality for medical staff, it is clear that Dr. Tribbiani benefited from having a more embodied experiential instruction of donning/doffing and droplet/airborne precaution procedures. He was able to "flashback" to those times as a housekeeper in the hospital and apply experiential knowing to make up for any shortcomings from his formal physician training and respond to evolving exigencies and constraints.

From my interviews, it's apparent that frontline workers recognize the need for having experiential knowledge to draw upon for work in the hospital. This knowledge also appears to be key for rhetorical work, which can assist in understanding and negotiating changing circumstances in hazardous healthcare spaces. This was certainly true for the following participant, Nurse Jo March. Jo works as a staff nurse on a mom and baby unit that primarily focuses on postpartum care. She is also an assistant professor at her city's local university, teaching courses on nursing theory, leadership and management, community health, obstetrics, among others, in addition to teaching clinical experiential learning in the hospital to future nurses. For Nurse Jo, one of the most useful experiences in dealing with Covid's pressing, shifting exigencies has been her involvement in health crisis training, including getting additional experience through her unit's IDRT (infectious disease response training) and in developing her university nursing courses around disaster response. She shared:

> Because the NCLEX[11] is focusing a lot more of their time in community health, a lot more of their questions are coming from the perspective of disaster nursing. So, that's both natural disaster and manmade disasters. So, earthquakes, tornadoes, hurricanes, obviously, and then terrorist attacks, bio-terrorism—things like that. And now, obviously pandemic training. A lot of what I am doing in the classroom setting is focusing a lot more on what types of training you would see at a FEMA-type disaster nursing class. (Nurse Jo, study interview, March 4, 2022)

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[11] The NCLEX or the "National Council Licensure Examination" is the exam all nursing students in the United States have to pass in order to become licensed nurses.

While Nurse Jo has not attended official FEMA trainings herself, developing these disaster response pedagogical materials for her students appeared to be a useful heuristic for her during Covid. As she noted, because "[p]olicies at the hospitals change all the time, not just with Covid," and if she encountered uncertainty, she could draw upon her experiential training (in other words, her "professional memory" [Angeli, 2019]), which includes "bare bones, basic disaster training." Nurse Jo shared, "If you don't know what you're going to expose yourself to, then you go to the max." Importantly, this is "always where [her] brain goes, especially if there's ever any uncertainty, or if there's ever any question."

Utilizing this experiential knowledge, it appears that there also needs to be a continual assessment and awareness of the rhetorical situation, in order to select the appropriate response and take action. Indicating a critical need for embodied expertise, nurses must use that awareness for "thinking on [their] feet" (Nurse Jo, study interview, March 4, 2022). Further, participating in experiential learning experiences, such as disaster simulations, can add memorable tools that clinicians can then recall and apply in unpredictable situations. This includes practice with assessing rhetorical situations. For instance, RHM scholar Lisa Keranen (2010) considers how TOPOFF viral apocalypse simulations, as rhetorical spectacles, act as catalysts to elicit specific, scripted rhetorical responses and action. They are meant to be memorable, so that responders can act swiftly in times of crisis. According to Kevin Rozario (2008; 2019), whose research primarily resides in cultural theory and disaster studies, these spectacles are so memorable, in part due to their potential for "processing, intellectually and emotionally, the experience of living in a world of systematic ruin and renewal, destruction and reconstruction, where

technological and environmental disasters always loom" (p. 6). In other words, disaster simulations are embodied experiences that function as a heuristic when the real crisis emerges.

In Nurse Jo's interview, she made the argument that if more nursing students had the opportunity to process a pandemic scenario before it happened, they might be better suited to respond to uncertainty instead of experiencing everything at once. She shared:

> And really, if the past two years have shown us anything, it is possible. It's a
> possibility that things like that can obviously occur and we have to react. I think
> that the better trained, and the better prepared they are for that reaction, the better,
> and more smoothly things will go in the hospitals. We've seen that, obviously
> with COVID, because like I said, a lot of our nurses had no disaster training. They
> didn't have any infectious disease training, and they were being thrown into a
> situation where they were forced to learn it on their feet. (Nurse Jo, study
> interview, March 4, 2022)

According to Nurse Jo, there are only a handful of colleges across the nation that have started doing disaster simulation and integrating it into their curriculum. While a significant amount of the nursing curriculum focuses on pharmacology and medical surgical nursing, which are still quite important, Nurse Jo shared that students don't get as much experience in disaster scenarios. But being prepared for those unpredictable, chaotic scenarios is critical. Like Nurse Jo, if all nurses received this instruction, they would be better able to enact experiential knowing based on their disaster training, paying attention to the kinds of flashback or emotional cues that trigger its use and apply that knowledge for rhetorical work.

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To summarize, experiential knowing comes from a practical application of previous experiences that are triggered by internal flashback or emotional cues. Like environmental knowing, it can be employed for rhetorical work in situations of chaos and uncertainty. When in doubt, participants relied on the experiences that prepared them the best. For Dr. Tribbiani, that included drawing upon "professional memory" as a hospital housekeeper, where cleaning and protection standards were demonstrated at great length, so much so that the experience was a better heuristic than his formal training as a physician reviewing Covid protocols. For Nurse Jo, it involved her recalled instruction in infectious disease and disaster response and developing pedagogical materials for students, affording her the opportunity to put that knowledge to good use in the hospital during Covid. Both clinicians utilized experiential knowing as a response to the uncertainty brought about by Covid, in addition to handling the constraints of shifting safety procedures and unknowns about the virus. It's important to recognize how effective this kind of knowing is, since like environmental knowing, it can reveal how clinicians make critical judgement calls when things get tough—a key part of rhetorical work.

Realities of Caring in Crisis

To further the conversation on the kinds of embodied expertise that healthcare workers utilize for rhetorical work in a crisis, I study three major themes that emerged from my interviews with participants. These themes, which shed light on the realities of caring in crisis, include rhetorical awareness, rhetorical paralysis, and rhetorical in(ter)vention. I utilize each of these sections to illustrate the kinds of rhetorical work

clinicians were doing to grapple with particular exigencies and constraints in the workplace. I've already briefly mentioned some of these exigencies in passing, including staffing and supply shortages and information overload (daily email dumps). However, there were more challenges that surprised me in the interviews, and I wanted to discuss them here, as I believe they underscore the importance of studying how rhetorical work happens in a widespread health emergency. More broadly, I believe that these instances reveal how institutions both succeed and fail to coordinate people and practices (LaFrance, 2019) in hazardous healthcare settings.

Rhetorical Awareness: Bureaucratic Structures

In exploring the rhetorical work of clinicians, one of the important elements to study from the data was how rhetorical awareness (being able to identify a situation that calls for a response) manifested for participants. While participants did not refer to "rhetoric" by name in my interviews with them, their responses indicated that they were doing "rhetorical work," which involved having an acute sense of the pressing situation at hand, its constraints, and how to deftly utilize persuasion, memory, invention, and other rhetorical strategies to handle it (Angeli, 2019). One of the more pressing exigencies clinicians faced in attempting to adhere to safety regulations and providing care during the pandemic was bureaucratic processes that held up workflow. These processes were not meant to be impediments, as they often served a specific purpose (i.e., rationing to make sure staff had enough PPE to get them through the week). However, because these processes still impeded clinical work, they had to be navigated tactically. For example, Dr. Tribbiani described his hospital's issue with acquiring N95s, which basically became

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"like gold" during the pandemic (Study interview, March 23, 2022). There was a "one mask a week" policy in place due to the shortage, so clinicians had to be selective when they obtained theirs, and Dr. Tribbiani chose to pick his supplies up on Mondays. For context, N95s are only meant to be worn for *a single shift* (if they are not soiled, damaged, etc.) and then disposed of (CDC, 2022). If a clinician comes into contact with an infectious Covid-positive patient, the CDC recommends the mask be discarded afterwards and replaced immediately after exposure (CDC, 2022). However, because of persistent supply chain issues throughout the pandemic, adhering to these protocols was often impossible. N95 masks (and even the blue surgical masks) had to be meticulously accounted for—and because of this, there was an atmosphere of distrust around procuring them. At Dr. Tribbiani's hospital, administration put a sign-out process in place to keep track of procurement and usage. He shared:

> Like they're under lock and key, and that was the other thing—you had to walk downstairs, and you had to sign your name. You sign your name, you put what department, and then you put the quantity that you took, which was a little bit intimidating because, you know, if I went down there and I'm like, you know, "I'm going to make a run for the ICU [Intensive Care Unit] team," and you've got the attending, the pharmacist, five interns, and two seniors [residents], and "I'm going down there to get N95 masks." You know, it's intimidating because you're like, "Hey, like, I need this many." And, you know, given the climate, they question you like, "What are you doing with those for the ICU team?" but you get that, like, you're under that notion that, "Oh, you're stocking these at home or something for your own good. You're squirreling them away." But yeah, that that

was something that never that never went away, like having to sign up for PPE.

(Study interview, March 23, 2022)

For Dr. Tribbiani, it was frustrating constantly feeling like he was under suspicion when acquiring masks, even if he understood the reason behind the accounting process. But in order to persuasively communicate his need, the situation called for an acute rhetorical awareness that would help him complete this particular workplace errand. His audience, the gatekeepers of the PPE, were there to conserve supplies, and thus, were hypercritical of all requests they received. With the understanding of audience, context (being emotionally keyed into the climate of suspicion), and constraints (supplies were limited), Dr. Tribbiani had to make a persuasive argument that would be establish purpose for retrieving masks, as well as exigency or pressing urgency (i.e., this run is for the ICU team). This was important rhetorical work that accomplished a specific purpose in a way that was timely and deliberative.

Further, because this sign-out process was in place, PPE was not readily or accessibly available, and clinicians could not retrieve these items in times of emergency, such as when a patient was "coding" (which is often synonymous with going into cardiac arrest). As a result, sometimes rhetorical work happened within a span of seconds. Dr. Tribbiani described one instance during his intern year of internal medicine (the first year of the pandemic, early 2021) where he'd misplaced his N95, and there was a "code" that emerged from the endoscopy suite. He was called in to do chest compressions[12] to relieve

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[12] According to the AHA (2020) BLS/ACLS guidelines, chest compressions are quite intense, and every two minutes or less, the person performing them has to be relieved. Compressions are performed on a set rotation so that no one gets too exhausted.

his other colleagues, who had been working nonstop to recover the patient's pulse. The scene he arrived at was particularly frenzied. He shared:

> Like, I mean, all these codes are chaotic, but this one was especially chaotic, because you've got, you've got the GI doctor, you've got anesthesia, all the nursing staff, and they're all just like, "Holy fuck, we just killed someone." So, they all stepped back. They're giving, you know, our team leader who was [Ali] at the time, giving away all the information of what's been going on. And then the ICU team was taking over, all the while, you've got, you know, pharmacy rushing in and it's all in a tight space. But I remember just getting out the doorway and I'm like, "Alright, there's more than enough while [Ali's] in there, I don't have an N95. So, I'm not going to go in." But [Ali] looked at me, he's like, "Tribbiani, you're next on the chest." And I'm like, "Oh, God." And so, I looked, and I just asked the nursing staff, I'm like, "Do you have an N95?" and she's like, "Yeah, here," and she just pulled it out of her pocket—wasn't wrapped or anything, it was hers. And I don't even remember, if it was my size or anything. […] I just grabbed it from her. And I'm like, "Alright, you don't have to step up. It's my turn." (Study interview, March 23, 2022)

Dr. Tribbiani had to be swift and tactical when getting this mask for a patient code, and it involved a rapid assessment of his environment and exigence. From his response, it's clear Dr. Tribbiani was emotionally cued into how pressing this situation was—the patient was going into cardiac arrest, and the team responding to the code was under extreme duress. But this was also emergency care in the era of Covid—he understood the personal risk of not having PPE when performing chest compressions, which requires

close proximity and causes the patient to expel a significant amount of airborne respiratory droplets. And then there's an added constraint—if he asks for PPE from someone else, that means potentially taking away his coworkers' protection. But it was his turn, and his team leader had called for a response. So, he turned to one of the nurses, quickly communicated with purpose, retrieved the mask, and went to work. Although using a mask that a) belonged to another person and b) was not fitted to his face (as is important for an effective N95), being exposed to significant airborne droplets from the patient outweighed that risk. Ultimately, in the chaos of the hospital during Covid, it appeared quick rhetorical work was key for Dr. Tribbiani in resolving unexpected hurdles that arose.

Another instance of a clinician navigating a bureaucratic process by utilizing rhetorical awareness (and particularly, *multisensory invention*) during the pandemic comes from Dr. Bryan, who works as a radiology resident at a county hospital. In his interview, he recalled a recent incident (around January 2022) when he was working on a fluoroscopy service rotation. A patient, who was scheduled for a hysterosalpingogram (a study to help locate the source[s] of fertility issues), reported to the intake nurse that she recently recovered from a runny nose and cough but that she tested negative from a home antigen test. Although the home test was negative, the technologist double-checked with Dr. Bryan if the patient could undergo the testing procedure or if she needed to reschedule, due to her recent Covid-like symptoms. He shared:

> I had some difficulty finding the appropriate policy form, which suggested that I
> should ask her to come back in a few weeks. But the form was something like a
> year old, and a lot had changed in that time, not least the availability of home

tests. I assessed the patient and determined that her symptoms could be explained by another cause (allergies), took her temperature (normal) and informally made sure the technologist was, like me, comfortable performing the study, which we proceeded to do. (Study interview, March 19, 2022)

Dr. Bryan noted that the patient believed this procedure to be urgent, and he took this exigence into account when assessing the situation and responding appropriately. While the initial form (from the early Covid days) recommended waiting an extended length of time, Dr. Bryan decided that because the protocol was outdated (based on prior information that didn't consider the new home Covid tests), he would trust the patient's negative test result. Attending to internal cues, including assessing his own comfort and checking in on the comfort level of his fellow staff member, in addition to performing an additional test (a material cue from temperature reading), Dr. Bryan was able to gather information, "synthesize data," and take decisive action "to complete goal-directed activity" in an uncertain situation (Angeli, 2019, p. 98). By utilizing multisensory invention informed by embodied and situated expertise, he was able to determine that this course of action made more sense than the policy in place, and he was then in a position where he could perform the study in a timely manner. Dr. Bryan assessed the context— particularly that springtime allergies were emerging this time of year in this part of the country—and did what he *felt* was right according to his practical clinical judgement. In a rapidly developing and changing situation such as Covid, rhetorical awareness can greatly inform decision-making, especially since sometimes policy isn't always caught up with the science and doesn't often account for nuance.

Navigating bureaucratic structures in place during a pandemic is not an easy thing to do, especially for newer residents who are just beginning to learn more about their specialty. However, these participants were able to utilize rhetorical awareness and apply embodied, situated expertise to make interventions when necessary. Most importantly, they were able to view guidelines as a starting point, but not ending point, valuing other more current and contextual information in a way that still kept the risk relatively low for themselves and their colleagues, in addition to prioritizing the well-being and needs of the patient. Clinicians in these circumstances not only tuned into the cues of their environment (urgency, context, constraints), but also the cues of others (audience skepticism, receptiveness, exhaustion, comfort level, etc.) and their own internal physio-emotional state, in order to work through pressing exigencies, despite bureaucratic hurdles.

Rhetorical Paralysis

Continuing the conversation around unpredictable exigencies that arise in medical environments during a health crisis, the next recurring theme that emerged from interviews is what I refer to as *rhetorical paralysis* or feeling unable to adequately respond to a problem or exigence. While RHM literature on rhetorical work studies how rhetoric translates to action (Angeli, 2019; Campbell & Angeli, 2019; Angeli & Norwood, 2019), it does little to account for the inverse—what happens when individuals understand the situation, possess a rhetorical awareness, and recognize actions that should be taken, and yet feel paralyzed or unable to respond in the way that they'd want to. This was a common occurrence for participants, so it wasn't something that I felt I

could ignore. Rhetorical paralysis appeared to arise for clinicians when they encountered institutional regulations that were either *causing more problems* than they were attempting to solve or protocols in place simply didn't make sense for a particular context, and they felt unable to intervene. However, understanding these exigencies still called for a clear rhetorical understanding of the situation to consider potential options, even though institutional constraints may have inhibited a more desirable response.

The first example comes from Dr. Ronald, who dealt with a safety issue during a rotation at his local VA (Veterans Affairs) hospital. Since the VA hospital is a small facility with already limited space (at least the one where he worked), patients have to share rooms. And during the pandemic, there was a protocol in place where all COVID-positive patients were required to share a room. In theory, this makes sense. However, this regulation was made more complicated due to the unreliability/inconsistency of Covid tests during the winter-spring 2021-2022 Omicron wave. Dr. Ronald described a time where there were three "COVID-positive" patients were sharing a room, but upon assessing environmental material cues, he noticed that there was one patient who actually didn't have any Covid symptoms—he just tested positive on intake, due to an infection three weeks prior. The test was so sensitive that it was still picking up that he had Covid, but according to Dr. Ronald, the patient wasn't really at risk of infecting anyone.

So, it was probably not a real result, but he just had to be in that room. And then there was another guy who did test positive for COVID and didn't have respiratory symptoms, but his symptoms were really from COPD [Chronic Obstructive Pulmonary Disease] and not really COVID. The other person in that room definitely had COVID, was very sick and infectious, and we were like, "Are

we just exposing the other two to COVID-19? False positives in the test?" We're

not sure. But we had to follow this protocol, and we couldn't really split them up.

(Dr. Ronald, study interview, February 27, 2022)

Fortunately, Dr. Ronald shared that the two patients not exhibiting Covid symptoms

didn't end up getting reinfected or fall more ill, but it was still a strange feeling for him,

grappling with the fact that he might be putting more people in harm's way, due to a well-

meaning but problematic protocol in place ("Am I exposing these two relatively false

positive people? Am I exposing them unnecessarily just because that's our protocol?").

Dr. Ronald was highly aware of the exigence; two patients who were likely noninfectious

and not ill with Covid were being put at risk as a result of institutional structures in place.

But because the institutional policies were persuasive enough in "coordinating"

(LaFrance, 2019) its clinicians' actions—as well as inaction, Dr. Ronald and his team felt

unable to respond to this pressing issue. Though they had embodied, situated expertise

that they'd applied to understand the exigence's unique context, urgency, and constraints

(including the inaccuracy of the tests and limited space within the hospital), they were

rhetorically paralyzed.

This team was in a tough position, where, on one hand, they were responsible for

protecting non-Covid patients from being exposed to the virus, but institutional structures

didn't provide enough flexibility to where they could feel comfortable enough to make a

case to move the patients elsewhere. Especially from Dr. Ronald's "position" (Poole,

2021) as a new internal medicine resident and an assessment of institutional receptivity

(an awareness of audience), he believed that he had to just "go with it," although that

meant going against what he thought was the appropriate action as a physician ("I'm not

at a level where I tell the hospital what to do"). Pushing aside his "gut feelings" (Angeli, 2019), which were persistent ("I felt weird"), he managed the risk for the patients the best he could, while adhering to the protocol that was in place.

Although bureaucratic structures and protocol-based risk were considerable stark realities that clinicians had to face during the pandemic, one of the most recurring exigencies—something that made an appearance in nearly every interview—was rhetorical paralysis that emerged by not being able to intervene on behalf of their patients for humanitarian reasons. Westernized medical science, in its aim of objectivity and neutrality (Barbour, 2018), has a difficult time accounting for the human element of healthcare, particularly clinicians' compassion for their patients. During the interviews, when I asked participants about the times that they felt they had to deviate from protocol, almost always the answer related to wanting to make an exception for a patient to see or speak to a loved one when the patient was either very sick or on the verge of death. When that wasn't possible for one reason or another, clinicians felt guilty, angry, and despairing. As much as medical education attempts to teach clinicians to be stoic and neutral (Papadimos, 2004), at their very core, they are still human. In what follows, I provide several examples of the most challenging realities of rhetorical paralysis—how clinicians desired but were unable to make desired visit requests for their critically ill patients. These circumstances in particular required a deep awareness of exigence, urgency, timeliness, constraints, and other factors, even if rhetorical intervention wasn't possible.

The limited visitor policy, which varied from hospital to hospital and in restrictiveness from wave to wave of Covid, was something every clinician came up

against at some point. Although policies like these were put in place for a critical reason, including preventing exposure to the virus and mitigating infection rates, they did produce some intensely stressful situations, placing clinicians between a metaphorical rock and hard place. Although some clinicians were able to make persuasive visitor requests in exceptional circumstances with little resistance in their hospitals, others faced immense pressure from institutions to not intervene because of either their position within the hospital or workplace atmosphere.

In the first example, Dr. Bryan describes one of the patients that profoundly affected him in the first year of the pandemic, in August 2020, while he was an internal medicine resident. While on his ICU rotation, he was charged with treating a man who became extremely ill with Covid, taking care of him six days a week. Dr. Bryan watched as the man went through the whole process of the disease, starting with having moderate shortness of breath, which called for supplemental oxygen. Not long after admission, he needed intubation, in addition to pressors to maintain his blood pressure, and his ventilator eventually had to be turned up to its highest setting. Throughout this process, Dr. Bryan became close with the patient's daughter, communicating updates regarding his condition over the phone. He shared:

> But [I] had never met her because hospital policies at the time prohibited visitors, except for end-of-life. Eventually, one morning while we were rounding, his pressures and oxygen saturation tanked and nothing we were doing could fix it. I called his daughter, and she came in with her mother, the patient's wife. His wife stayed in the waiting room while his daughter came back and watched him through the glass. We showed her how to put on PPE and let her go in to say

goodbye. He hadn't been conscious for days, but she still spoke to him and played

his favorite music (Johnny Cash) before giving us the go ahead to stop the life

support measures, and he died within a minute. His daughter was very kind and

thanked us profusely for everything we had done, though naturally one still feels

guilty that more couldn't have been done. But more than that, I felt that it was

morally repugnant that he hadn't seen his loving family for the two weeks

between the day of admission to the day he died, the last two weeks of his life.

(Study interview, March 19, 2022)

Dr. Bryan, while understanding the context of why this type of policy was in place (to

keep the spread of the virus under control), couldn't help but feel that the policy in place

didn't fit these particular circumstances. He grappled with the urgency of the exigence—

the patient was quickly atrophying from the onset of his admission to the hospital and

should have been able to see his family sooner, instead of just in his final moments. Dr.

Bryan's strong emotional responses to this situation indicate a desire to intervene but

feeling unable to respond rhetorically in the way that he wanted to.

Dr. Bryan felt bad that he and his team couldn't have done more, and this is

something that he is still haunted by. In his interview, he noted that it's become more

widely agreed upon that visitor restrictions "went too far" at the beginning of the

pandemic. However, at the time, from his position as a new internal medicine resident,

similar to Dr. Ronald, he didn't feel like he could make an argument to hospital

administration to intervene. Institutional rhetorics, it seems, were persuasive enough to

prevent this intervention. He shared:

[A]s a lowly intern I had no say in the policies anyway, even as I had to explain

them to countless families. My bottom line is that social distancing measures to

reduce transmission are always going to be about tradeoffs, and I think as a

society we should give higher weight to allowing people to see their loved ones in

their final days. (Study interview, March 19, 2022)

Not only was Dr. Bryan paralyzed in one rhetorical sense, but he also had to employ

rhetoric *to persuade* families of the definitiveness and inflexibility of this policy. Even as

a medical professional, someone who was directly responsible for the care of patients in

the darkest months of Covid before the vaccine, Dr. Bryan didn't believe he had the

power to make a rhetorical intervention. He had to uphold institutional rhetorics. And yet

I found it moving that he did what he could while still under these constraints, including

making sure the daughter was always updated, ensuring the family did see the patient

before he passed, and preserving this situation in his memory to argue for more flexibility

in these kinds of circumstances for the future.

Rhetorical paralysis was not unique under these conditions, and some situations

were even more restrictive than others. If their family members had Covid, according to

safety protocol in place at several hospitals, patients weren't allowed to be visited at all.

Dr. Dane Joe, who was working as a senior resident physician in internal medicine during

the height of Covid (2020-2021), shared the impact of that kind of experience with me in

her interview. When she was working in the ICU (Intensive Care Unit), she had

significant responsibilities, involving the oversight of twenty to forty patients, the

management of orders (including the supervision of interns' notes and orders), central

line placement, leading cardiac resuscitation, and more. Above all, she said her main

responsibility was to "put out fires and stabilize patients" (Study interview, April 14, 2022). That's exactly what she had to do when one day, there was an elderly patient (80 or 90-years-old) who was "crashing." She shared:

> He was about to die, and we were putting him on all sorts of medications and support. I called his wife to confirm code status since it would be futile to resuscitate him in his current condition. She was unable to come to the hospital to say her goodbyes because she was sick with COVID. She requested that I put the phone up to his ear for her to say goodbye. In a room full of people, I held the phone to his ear with her saying her goodbyes to her husband. It was the most heartbreaking thing I've ever witnessed, and I still tear up when I think about it. (Study interview, April 14, 2022)

Dr. Dane, in her assessment of the situation, was considering several constraints—all of which greatly inhibited rhetorical intervention. Material cues revealed to her that the patient was nearing death, so the exigence was extremely urgent—ever pressing, minute by minute. In gathering additional information, she found his wife was Covid-positive. Further, similar to Dr. Ronald and Dr. Bryan, because Dr. Dane was a resident the hospital (albeit a senior), and not an attending physician just yet, it's possible that she wasn't comfortable in making an argument to request exemption to the strict rule in place, especially at the beginning of the pandemic. Considering these factors, while she was emotionally cued into the gravity of the situation, understanding that this would be the last time the patient's wife would see him alive and feeling immense sympathy, she was unable to intercede. And again, it's important to note that this instance of patients not being able to see their loved ones before they died (at all) was by no means an isolated

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occurrence. But this experience has stayed with her, indicating the lasting emotional impact of rhetorical paralysis.

Ultimately, institutional rhetorics in these cases were incredibly persuasive; they were essentially effective at "coordinating people and practices" (LaFrance, 2019) in each hospital setting. However, because these institutional rhetorics were so powerful, it meant that clinicians felt inhibited to make interventions where possible and sometimes, necessary—even when they had the rhetorical awareness to do so. Generally speaking, the rhetoric of infection control policies is markedly authoritative and rigid; it doesn't communicate much flexibility. That, coupled with constraints of individual hierarchy status in the hospital, limited space and time, and potentially low audience receptiveness appeared to make rhetorical interventions in these cases nearly impossible for clinicians. Dr. Gary, the attending physician with administrative responsibilities that made an appearance in the previous chapter, expressed his frustration with the stringency of these policies as well. While he works in pediatric radiology and not the ICU, he noted that many of his colleagues who had to stick by these rules truly struggled with it. He shared:

> So, we had patients dying in our hospital who couldn't have visitors, who might have spent the last hours, days, weeks, even months of their life unable to see the people in the world who mattered most to them and to whom they mattered the most to. So, it may not have changed mortality statistics, but I think it had a profound effect on the care of those patients and the quality of their life in the last days. (Study interview, March 14, 2022)

Dr. Gary highlighted this support from family as a critical element of care. It's something that's not quantifiable (Segal, 1997)—unscientific (Barbour, 2018)—but important,

nonetheless. He emphasized that while these policies technically "didn't kill people in mortality statistics," to a certain extent, they were still quite harmful. Although he didn't establish the policy, he shared that he "felt bad about it." Like Dr. Bryan, Dr. Gary's response indicates that his internal emotional cues were telling him that these institutional policies—and their rigid rhetoric—were displacing a major part of care. He sympathized with his colleagues who were having a difficult time enforcing these regulations, though he did not have to implement them himself working in the radiology department. Similarly, Dr. Tribbiani underscored the importance of being able to "read the room" in order to accommodate for unique contexts and situational variability, particularly in the case of patient visitors (Study interview, March 23, 2022). After all, Dr. Tribbiani noted, "objectiveness is one thing," but "they even stop wars on humanitarian grounds to evacuate people." In sum, this rhetorical work by participants, though it didn't lead to rhetorical intervention, was important in sensemaking during the pandemic. When things appeared unpredictable or even chaotic, rhetorical work helped clinicians consider potential paths forward, even if factors such as institutional location and/or power dynamics inhibited action.

Rhetorical In(ter)vention

As powerful as rhetorical paralysis was for various clinicians in this study, a few participants were able to make important interventions, utilizing situated, embodied expertise to assess a situation and take appropriate action. I refer to this process as *rhetorical in(ter)vention*, which is feeling empowered to take action in response to a particular exigence. It combines two ideas, including 1) intervention and 2) invention.

Intervention is the action(s) taken in response to a pressing situation (from the Latin

intervenire "to come between, interrupt" [OED, 2023]) and invention draws upon the

traditional Aristotelian rhetorical sense, which is "generative and innovative" and locates

"novelty within the commonplace" (Miller, 2016, pp. 100-101). Further, I bring in

Angeli's (2019) notion of multisensory invention, mentioned earlier in this chapter, which

is enacted by employing the senses, getting a read of the environment, and gathering

information in order to respond. According to Angeli:

> Multisensory invention pushes the notion of invention moving beyond textual or
>
> cognitive practices; the whole communicative external environment and the
>
> communicator's intuition and senses are brought into play with this form of
>
> invention, pushing the boundaries of how communicators come to know
>
> information and choose a course of action. (p. 99)

Ultimately, Angeli argues, "[i]nvention can be understood as a situated, embodied, and

sensory experience and process" (2019, p. 100; see also Hawhee, 2004; Prior & Shipka,

2003), which is key for the rhetorical work in a crisis (Baniya, 2022; Bishop, et al, 2022).

Therefore, to illustrate how rhetorical in(ter)vention happened during the

pandemic, I want to discuss how embodied, situated expertise was applied in two

fascinating examples that came up in Dr. Shane X.'s interview (he's the pulmonary and

critical care physician/State Medical Association district councilor who also appeared in

the previous chapter). In the first instance, he told me about a pressing exigence and

constraint in providing care: when the pandemic first hit, there was notable lack of

available negative pressure rooms and monitor beds for Covid patients. As a result, the

medical staff had to get creative. Evaluating their environment and potential technology

they could use to augment their senses, they came up with a solution—baby monitors. Dr. Shane shared:

> We got baby infant monitors, and we got like pulse oximeters you buy off the
> street. We put the—baby monitors now, you know, you have videos on them—and
> so we have them put in the room where the patient was in their bed, and we'd see
> them. We had a little oxygen probe on their fingers—we could see that as well.
> (Study interview, April 5, 2022)

These devices not only kept the patients well-cared for but also allowed clinicians to monitor health status from a distance, while balancing a mass influx of patients with Covid and managing other kinds of constraints (e.g., limited supplies and spacing issues). Dr. Shane was able to utilize invention to modify the team's embodied, environmental knowing capabilities in a way that improved workplace safety; this enhanced what Angeli refers to as "mediated senses" or data obtained from "senses and technology" that "cannot otherwise be seen" (p. 103). As Angeli notes, "invention's power lies in its generative abilities to support a communicator's interaction with an environment," and Dr. Shane's experience indicates the impact of that generativity (p. 115).

Because of the usefulness of this invention, it was accompanied by a rhetorical intervention. This involved Dr. Shane making a persuasive argument to several hospitals in the area, utilizing logos or the evidence from the first hospital to demonstrate that these devices to monitor Covid patients were effective and kept medical staff safe. The second hospital he went to was responsive; they implemented the new protocol within three days. However, he did come up against low audience receptivity at the third hospital, which had no way to monitor their patients safely. In spite of this reluctance, Dr. Shane made

repeated arguments to hospital administrative staff, such as the Chief Nursing Officer, Chief Medical Officer, and the CEO, to hopefully change their minds on the issue. But ultimately, the hospital refused to implement the idea; they "felt like they could handle it" (Dr. Shane, study interview, April 5, 2022).

As a result of this opposition to an innovative safety measure that would help clinicians to "achieve workplace goals" and "stabilize unpredictable situations" (Angeli, 2019, p. 14), Dr. Shane believed that this information about a potentially hazardous medical environment was important to communicate to others. He shared: "If they don't listen, then you're stuck, right? So, then, you know, you tell your patients, 'Don't go to that hospital because it's unsafe. Their standard of care is not the same.'" He noted that he believed many clinicians felt unsafe at this hospital as well, which indicates a heightened climate of stress that would aggravate an already hectic crisis situation.

All in all, this case illustrates how embodied, situated in(ter)vention markedly improved a situation where there were clear material and spatial constraints. In hospitals where this policy was implemented, it appears patients and clinicians were better off, as the staff had a viable method of monitoring that they could rely upon. Amidst the chaos and uncertainty of the emerging pandemic, it seems that these kinds of interventions could be the difference between life or death. Most importantly, Dr. Shane's persistence and resourcefulness speaks to how rhetorical work can stabilize in times of unpredictability, something that should be of significant interest to scholars in RHM and TPC as a field more broadly (Nadel, 2007; Spinuzzi, 2008).

The second example from Dr. Shane describes interventions he made regarding the limiting hospital visitor policies mentioned earlier in this chapter. Drawing upon his

own ethos or authority as an attending physician, he was able to persuasively communicate his final judgement calls to the staff. He shared:

> So, it was with the […] end-of-life cases, where, where, you know, they would not allow the patient's family to come in and see the patient. And so, you say, you know, "This is ridiculous," you know, "The patient's family also has COVID," you're not, you know—just put them in masks and bring them up here. Because, you know, we are human beings, and we are compassionate. And, you know, the risk is low, you know. […] And, yeah, what I would do is, I would just say, "Hey, tell the nursing supervisor, I'm doing this," or "Yeah, it's okay." And I got very little pushback. (Study interview, April 5, 2022)

In these scenarios, Dr. Shane employed an embodied sense of his environment to gather necessary information and consider his options. He critically assessed situated context, particular exigencies (including risk level), and audience, in order to communicate his purpose in making exceptions for patient visitors to the team. From his responses, it appears that because Dr. Shane felt so strongly about the inflexibility of these policies and was in a more elevated position to make an impact, he felt empowered to enact interventions as needed. Merging his embodied expertise that stemmed from observing the factors in his workplace setting and internal cues that drew upon his experience as a physician and as a compassionate human being, he made decisions that "interrupted" policies that didn't make sense for certain circumstances.

Some institutions' rhetorics communicated more flexibility than others, and at times, even nurses felt comfortable enough to make rhetorical interventions in these visitor policies. Such was the case for Nurse Kayla, who shared that at her hospital during

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Covid, if an infant was passing away, they were often able to make an argument to higher-ups to allow multiple visitors to come to the hospital. In order to make this case and get approval, nurses had to touch base with their nursing supervisor or their manager. According to Nurse Kayla, these conversations often revolved around "what the nurse's discretion is" and "what the nurse thinks would be the best for everyone involved," indicating a reliance on professional ethos, which was supported by their embodied understanding and read of the situation and its unique circumstances (Study interview, March 28, 2022). In her unit, it appears that the staff is permitted quite a bit of autonomy and input regarding the kinds of interventions they'd like to make based on their situated expertise and knowledge of patients' unique needs. As a result of this supportive rhetoric from the institution, nurses at this hospital were in a better position to make successful requests for protocol exceptions, as their arguments and credibility as frontline workers were taken into serious consideration.

The final example demonstrating the application of rhetorical in(ter)vention comes from Dr. Gary's interview, represented by what he refers to as "illustrative stories." Dr. Gary essentially intervenes by sharing frontline stories with executive-level administration, which includes people on his hospital's health board, the chief executive officer, chief financial officer, chief operating officer, etc. He considers this one of his most important roles in his work as hospital medical staff leadership and believes listening to what colleagues and patients are saying is critical. Dr. Gary shared:

> [Hospital administration] tend[s] to see the world in terms of PowerPoint
> presentations and bar graphs and pie charts. It's all aggregated data. That's
> important. I'm not saying we shouldn't do that, but if you don't have the stories,

let's just say you're only getting half the picture, something like that. (Dr. Gary,

study interview, March 14, 2022)

Sharing these experiences with administration serves an important rhetorical function. It calls for administrators to pay attention to potential issues and to look closely at what is happening on the frontlines. As Dr. Gary indicated, in some ways, viewing the hospital through the "neutral" lens of data is constraining; it's an incomplete representation of what's going on. However, it appears that Dr. Gary's presentation of these frontline stories to people in the boardroom, in utilizing the "novelty within the commonplace," a key element of invention (Miller, 2016), may be able to generate conversations about what's working and what's not for the institution, revealing key insights and providing an opening for problem-solving. Everything comes down to a fundamental question Dr. Gary asks: "What does this actually mean to the people who live this every day?" He argued that one *has to know* what's happening on the frontline, and that's something that's frequently underrepresented at the highest level of healthcare organizations. Overall, Dr. Gary's response indicates the significance of frequently sharing localized experiences with those in power as a major rhetorical intervention.

In sum, rhetorical in(ter)ventions were not always possible for clinicians during the worst of Covid. Rigid institutional rhetoric often made it difficult for participants in this study to feel like they had a say or could challenge the established policy. However, when in(ter)ventions did happen, they were particularly meaningful. And embodied expertise was a key part of this. For Dr. Shane, environmental knowing revealed the mismatches of these policies with reality, and experiential knowing encouraged him to change things. From Nurse Kayla's interview, it's apparent that while supportive

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institutional rhetoric and structures encourage clinicians to speak up when they feel there is a unique situation that requires consideration, it's their embodied sense of their environment and particular circumstances that extends them the credibility to make a persuasive case to team leaders. And even if their team disagrees, at least the person feels comfortable enough to rhetorically intervene—to advocate for their patient in a way that gives them a chance to make a real difference. Finally, Dr. Gary's responses indicate that sharing embodied experiences of work can potentially bring an awareness to those at the helm of the hospital, encouraging them to see the full picture and potentially act on recurring issues. All of this rhetorical work makes for more involved and detail-oriented care, which is essential in a crisis—attending not only to what is medically necessary, but what is compassionate and humane.

Conclusion: The Importance Embodied Rhetorical Work in Crisis

As I've shown, in studying how clinicians utilize embodied expertise, we are able to see how it informs their rhetorical work in a crisis. After all, medicine is not just a science (Montgomery, 2006); it is not just measurable treatments to alleviate temporary or chronic conditions. Medicine requires a holistic understanding of care, one that doesn't stop at assessing the body as "a collection of working—and nonworking—parts" (Segal, 1997). This is critical because the body is, in fact, *not* a machine. Patients are human—and so are clinicians. To use effective practical judgement, or rhetorical phronesis, requires an accounting of *all factors* influencing a situation, including attending to embodied environmental and experiential cues. As Campbell and Angeli (2019) argue, if we study how clinicians employ embodied ways of knowing, we can better understand

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the purposes of communication in medicine—how rhetorical work ultimately affects patients.

Clinical judgement, by definition, is practical—it must constantly be applied to a variety of different situations to make diagnoses, treat illness, and assess care outcomes. In a health crisis, where constraints of time, knowledge, staff support, and material goods can exist in tandem, rhetorical work helps clinicians to achieve specific, exigent, localized goals (Angeli, 2019). Clinicians apply rhetorical work to keep things under control, "put out fires," and maintain safety standards (Dr. Dane, study interview, April 14, 2022). Embodied knowing can signal that something is amiss and encourage perceiving each situation differently and taking action accordingly. In other words, relying on gut instinct, a felt sense that involves interpreting cues that exist both outside and inside the body, can especially help when things are chaotic—when things appear most dire.

Healthcare institutions should have a vested interest in understanding the human limitations and capabilities of care—particularly compassion, since perceived inadequate compassion or lack of compassion from clinicians can affect the bottom line (Sturgeon, 2010). Arguing for the validity of intuition or embodied expertise, however, is trickier. It implies something nonscientific (Barbour, 2018) and subjective (and thus, less credible) is happening in the process of giving care. However, clinical judgement is already subjective and situated (Groopman, 2007; Montgomery, 2006), grounded in each individual's experiences, and physicians and nurses disagree all the time (Anspach, 1997). Sometimes, there is no clear solution or path forward. And yet by reading the rhetorical situation and all of its unfolding variables, paying attention to what feels right

and what feels wrong, checking in with "gut feelings," and relying on experiential

individual and collective knowledge (Angeli & Norwood, 2019; Campbell & Angeli,

2019), clinicians can more concretely tune in to what might not be working for a

particular circumstance and make rhetorical interventions accordingly.

Overall, this chapter—and this dissertation—is not arguing for an abandonment of

"objective" science in favor of embodied expertise. Instead, it's saying the embodied

expertise is a valid way of knowing, which in turn can shape rhetorical work that people

utilize to stabilize hazardous environments, particularly in a health crisis. Moreover, it's

already happening—it's already employed by clinicians, though it's not typically

validated or recognized by institutions. But especially in a pandemic, studying the

function of embodied rhetorical work is essential. Embodied expertise reveals all the

ways in which care becomes hyper tuned-in and epistemologically connected for

frontline workers during times of crisis. While Angeli's (2019) original study indicated

that this kind of rhetorical work doesn't quite apply to those working in hospitals, I argue

that Covid illustrated how embodied rhetorical work *is* critical in hospital spaces. Her and

Campbell's framework of embodied cues can and should be applied to study the function

of communication in all types of crises—but especially international health emergencies.

Further, the implications of what I refer to as rhetorical paralysis, or what happens when

healthcare workers feel unable to intervene rhetorically in a pressing exigence, in

addition to rhetorical in(tervention), or feeling empowered to problem-solve and

rhetorically intervene, may be of interest to RHM scholars and TPC more broadly, as they

study "the process by which we create and shape our communication for specific

audiences in specific contexts for specific purposes" (Andersen, 2014a, p. 118). Finally,

as Angeli notes, "[u]npredictable workplaces demand that communicators engage in rhetorical work with adaptive thinking, keen observational skills, efficient decision-making, and quick, goal-directed action" (2019, p. 97). Given that Covid intensified the hospital as an unpredictable workplace within a span of months and then years, I argue that investigating rhetorical work is more pressing than ever, something worthy of attention in rhetorical scholarship in the decades to come.

CHAPTER FIVE

IDENTIFYING RHETORICAL PITFALLS & POSSIBILITIES

This dissertation project has demonstrated the role and influence of rhetoric in healthcare settings, particularly how they have the power to both restrict and expand embodied medical practices during a pandemic. On one end, institutional rhetoric can reinforce efficiency in ways that perpetuate mechanized notions of medical practice. On the opposite end, localized rhetorical work by healthcare professionals reveals just how critical embodied decision-making is to the practice of medicine; it cannot be separated from clinical judgment. In other words, institutional rhetoric that overstretches expectations of people and practices in ways that are automated or disembodied for the sake of maintaining productivity can sacrifice more effective healthcare—at the expense of medical professionals and their lived experiences. As we've observed over the past few years, the consequences of institutional rhetorics that value short-term gains over long-term sustainability are monumental and enduring. Speaking to healthcare workers throughout the pandemic has illuminated this issue for me. The labor/burnout crisis has continued to be investigated by journalists and spoken about by clinicians as of this writing—and health professionals continue to leave the spaces that do little to prioritize their autonomy and perspectives (Reinhart, 2023; Diaz, 2023). To reiterate the urgency of this project, these kinds of institutional and local rhetorical moves in medicine ultimately

have implications for everyone, not just a select few, which is why researching these issues is key in the years to come, especially since Covid will likely not be the last pandemic.

Investigating the disparate ways in which rhetoric materializes in crisis, as well as how institutions can contribute to said crisis through their rhetorical choices, should be of interest to scholars within the rhetoric of health and medicine, as they consider implications for patient care and relationships with clinical staff and the healthcare system. Because RHM scholars focus a great deal of attention on patient advocacy and experiences (Hooker, 2022; Singer, 2022), health (in)justices and inequities (Marya & Patel, 2021; Novotny, et al, 2022; Rosas, 2023), effects of corporatized medicine on "consumers" (Cole, 2022; Thompson, et al, 2023), and cultural ideologies surrounding wellness and natural health and their impact on the public (Derkatch, 2018; 2022; Homchick Crowe, 2021), it stands to reason that it would be beneficial to take a closer look "backstage" (Barton, 2004) to understand how the "machine" of medicine operates (Reinhart, 2023). In other words, in order to truly comprehend how and why everyday people—particularly people facing disease, injury, and illness—have the experiences that they do with healthcare, it's important to consider the other piece of the puzzle, which includes the institutions themselves and the embodied work of people who are employed by them. In technical and professional communication, the role of rhetoric in crisis is a critical area of study, as TPC scholars study technical rhetoric's stabilizing ability in unpredictable environments or emergencies (Baniya, 2022; Bishop, et al, 2022; Nadel, 2007; Sauer, 2003; Spinuzzi, 2008). Of particular interest to TPC scholars would be the role institutional communications play in inadvertently undermining localized practices

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in a crisis—and how people on the ground utilize embodied communication to essentially reorient and restabilize their environment.

However, while the role and influence of rhetoric in health and technical spaces is studied greatly in these respective fields (which overlap more often than not and whose disciplinary boundaries are remarkably nebulous), there are elements of this scholarship that have been given less space. As alluded to in the previous paragraph and mentioned briefly in chapter three, RHM scholars have mostly attended to medical rhetoric's impact on the public and patients (and rightly so). And yet what's been given less attention is medical rhetoric's impact on healthcare workers—and healthcare workers' material influence on rhetorical work (and particularly their embodied practices that enable them to do this work). Although crisis communication has been studied to a great extent within TPC, it has primarily been studied in relation to environmental disasters, major accidents that happen in hazardous workplace environments, or organizational missteps in business (Baniya, 2022; Coombs, 2009; Coombs & Holladay, 2010; Frost, 2018; Sauer 2003). When the Covid pandemic happened, scholars including Bishop, et al (2022) did begin to focus on what this communication looks like for institutions during a health emergency. Despite that, there are still existing gaps in this research that indicate the need for more scholarship related to crisis communication between clinical professionals in healthcare settings, specifically.

When beginning initial research for this project in the summer of 2020, I saw an emerging opportunity to make my own intervention to supplement these gaps in a way that was meaningful and significant. The Covid pandemic was in full swing by then, and I noticed the effects it was having on my partner and his colleagues, who had just

graduated from medical school and were starting their first year of residency in internal medicine. They were launched headfirst into what would be considered one of the darkest times in healthcare in recent memory. Newly minted physicians encountered a tragic number of deaths on a daily basis; patients were dying and becoming disabled from a disease that no one knew much about; and clinicians' colleagues were getting sick, too. They felt helpless in many cases, and this traumatizing experience has stuck with them over the years, especially as the wound reopened every time there was a major wave of Covid cases towards the end of each year. That said, when I began putting together my literature review, the gaps I mentioned were not only identifiable—they were glaring. This is why I argue that RHM and TPC scholars should pursue additional research that attends to the core question Judy Segal presents in "Public Policy": "*What is a person in healthcare?*" (1997, emphasis added). While my research begins to attempt to answer that question, illustrating how healthcare professionals are assembled rhetorically for efficiency in texts, how we can identify uptakes of mechanization in common discourse in medicine, and how clinicians see themselves and their responsibility for and impact of their work, it is important to delve even deeper into what these ideas ultimately mean for medicine as a powerful social institution that serves public health.

As a much broader motivation for this project, I wanted to utilize the COVID-19 pandemic as a case study to explore in greater depth the effects of widespread burnout on clinicians, particularly how it might be impacting their work and healthcare writ large— an area of interest fostered in Mary P. Sheridan's research methods course in spring 2020, where I studied clinicians' creative expressions of burnout and their written reflections on the subject. Burnout is not a new problem within the medical profession by any means,

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but conversations surrounding it have increased over the decades as healthcare has been sharpened as a capitalistic tool. Further, I noticed more doctors and nurses speaking out about this issue (both in private conversations, at events, and in public op-eds), and I found COVID-19, as it brought this discourse to a head, was a prime way to study all the ways in which rhetoric shapes a crisis—both at the institutional level and on the frontlines of care. I was struck by how this exigence unfolded before me in real time, and I found it fascinating and illuminating how the CDC's messaging evolved during the pandemic. Being able to analyze the CDC's Covid safety guidelines over the years has provided me with richer context for my project, as well as helped me ask better questions in my interviews with participants. It allowed me to have a shared language with the clinicians in this study and an acute awareness of the issues that manifested during the pandemic. This shared understanding was important, because like Elizabeth Angeli (2019), the RHM researcher who rode alongside EMTs, I felt a bit like an outsider peeking into a largely invisible world for the everyday person: "'Aren't you getting a PhD in English?' […] People would look at me bemused, trying to solve the equation 'English + hospital/rescue squad = this girl?'" (p. 6). Yes, this girl. And also like Angeli, I fully recognized that I was entering a community where I did not have established credibility. However, over the course of this project, in building relationships with this community at events and private gatherings, applying the "snowballing" method of inviting participants to invite their own colleagues to the study, I was afforded the opportunity to enter this space. Clinicians, it seemed, especially during this time period, wanted their experiences to be heard, and choosing COVID-19 as a case study provided a window for us to be able to have these conversations. Ultimately, the aim of this project

was to shed light on how rhetoric has lasting material consequences for labor, particularly in industries that people go into as a vocation (Yong, 2021). It is these fields that are the most vulnerable to rhetorical mechanization, which is only exacerbated in a crisis, where personnel are expected to "patch up" and "continue on" like machines (Derkatch, 2022).

My two main frames throughout this dissertation, institutional ethnography and feminist epistemology, have helped me understand how institutions "coordinate people and practices" through the rhetorical moves of "boss texts" (LaFrance, 2019) and how misalignments in those texts can be challenged through embodied knowledge enacted by those on the ground—knowledge which a feminist epistemology regards and champions as valid (Barbour, 2018; Poole, 2021). Broadly, I seek to extend conversations on how embodied knowledge can inform rhetorical practices in crisis, and how institutional rhetorics can evolve to destabilize rather than restabilize hazardous workplace environments. Specifically, my project has illuminated the significantly detrimental and lasting effects of invalidating embodied knowledge/experience. I have shown that as the hospital privileges machine-like efficiency over human-centric efficiency, it ceases to be a legible boundary object—for both personnel and patients. The institution of medicine falls apart. To put it another way, as institutions continue to streamline for efficiency, putting forth autopoietic rhetorics that continue to move the goalpost of optimization, it's no surprise that the healthcare system as we know it is deteriorating. The way that the system works now is indeed unsustainable, as several physicians have noted (Ofri, 2019; Hartzband & Groopman, 2020; Reinhart, 2023). After all, if you're not being "efficient" in medicine, you're considered "deficient" (Silverman, 2019).

In this concluding chapter, I review the *pitfalls* of rhetoric in crisis, recognizing the consequences of institutional rhetorics that disembody the practice of medical decision-making or rhetorical "phronesis" (Montgomery, 2006) and particularly how efficiency rhetorics can lead to systemic mechanization and rhetorical paralysis. I argue that the absence of an intervention into the status quo by a healthcare professional can reveal just as much about the impact of mechanized institutional rhetorics as the presence of a localized rhetorical intervention. Additionally, I discuss the *possibilities* of rhetoric in crisis by exploring the significance of embodied rhetorical interventions in medicine, uncovering how they can present new possibilities through problem-solving when supported at the fundamental level by an institution. Finally, I conclude with implications for this project as well as provide areas for further research in RHM and TPC moving forward.

Rhetorical Pitfalls

A significant portion of this project focuses on the damaging effects or "pitfalls"[13] of institutional rhetorics in crisis, which are mainly discussed in the following two ways 1) how institutions overstretch efficiency rhetorics to coordinate labor optimization and 2) how those rhetorics manifest in the discourse of personnel in ways that indicate mechanical (non-human-centric) assumptions of efficiency. Both reveal how the practice of medicine has been constructed as disembodied or automated and provide context for

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[13] Curiously, the Latin origins of the word "pit" is thought to come from the PIE root "pau-," which means "to cut, strike, or stamp" (OED, 2023). Taking up that etymology, we can consider how institutional rhetoric can "cut," "strike," or "stamp" out localized embodied experiences/interventions.

why rhetorical paralysis happens for participants, as illustrated in chapter four. What follows is a review of these pitfalls and how each tends to them.

In chapter two, "Constructing the Ideal," I perform a rhetorical analysis of the CDC's Covid safety regulation document for healthcare personnel, illustrating how the text evolved over time to privilege efficiency rhetoric that was ideal for hospital administration, yet impractical for frontline professionals. This efficiency rhetoric, propelled by "logics of enhancement" that move the goalpost of optimization forward (Derkatch, 2022), has detrimental consequences for professionals working directly with patients. In overstretching capacities for labor, this rhetoric exacerbates existing problems within medicine and creates major pitfalls for workers. Strapped for material resources such as PPE, institutional support from executives, and even reliable assistance from colleagues who are overburdened/sick/at high risk of becoming disabled by the virus/or leaving their jobs, clinicians have little room to make critical interventions where necessary. In other words, the pitfalls of this rhetoric are gaping and lead to additional problems for clinicians' mental and physical health, which has lasting implications for patients (Hartzband & Groopman, 2020).

Chapter three considers the pitfalls of this efficiency rhetoric arising in common discourse for hospital workers and indicates the extent to which mechanizing rhetorics are internalized by medical professionals. As these rhetorics are internalized, they are further reinforced as they manifest in everyday communications at the hospital. The hospital, as a boundary object that is pulled between different notions of efficiency, has become primarily oriented toward the mechanized end over the past few decades, which has led to major pitfalls, including clinicians feeling like they don't have much power or

say in how they practice medicine. This feeling of decreased autonomy or powerlessness is a major issue, as it has a significant impact on burnout and disillusionment with the profession (Arnsten & Shanafelt, 2021). And if the hospital continues to be overstretched toward one end of efficiency that disembodies people and practices, it will inevitably fall apart as a boundary object—a major pitfall that foreshadows the potential collapse of healthcare as we know it.

For chapter four, I study the material pitfalls of mechanizing rhetorics for real clinicians working in hazardous settings during the pandemic. One of the more overarching apparent pitfalls was a phenomenon I refer to as *rhetorical paralysis*. This happened when participants described feeling unable to make an intervention that they believed may have been beneficial given the unique circumstances of a particular exigence. Because institutional rhetorics assembled personnel in such a way that discouraged deviation from the norm, even clinical experts, who felt that they had a better grasp of what needed to happen, believed that they could not intercede with established protocols. Instead, in many cases, they had to uphold institutional rhetorics that kept personnel and patients positioned in a certain way. The consequences of rhetorical paralysis, as my interviews reveal, not only were detrimental to patients but for clinicians as well. Many describe being the most haunted by these experiences in particular. Rhetorical paralysis is not something I've come across in the literature for this project, but I argue it is a major pitfall of internalized mechanizing rhetorics and deserves attention in both RHM and TPC research that studies how communication stabilizes in crisis.

To summarize, my project critically examines the ways in which rhetorical pitfalls manifest in a crisis and how they can generate other issues that exacerbate existing problems. In studying these pitfalls, I seek to contribute to conversations happening around the practicality of rhetoric within RHM and TPC, which endeavor to understand rhetoric's stabilizing power. Rhetorical pitfalls, and the ways that they can trip up communication goals, are important to study because they reveal how rhetoric has the potential to destabilize a crisis even further. Additionally, this destabilizing rhetoric can also "stamp out" (see previous footnote) the kinds of localized embodied interventions that may actually help to *restabilize* an unpredictable, hazardous environment. Even with the best intentions, coordinating rhetoric can overstretch human capacities of labor, causing harm to those most vital to the institution's ecosystem. In other words, rhetorical pitfalls in a pandemic come at a great cost. Organizations such as the CDC *do* have the power to shift discursive structures that mechanize medical labor for efficiency. At the very least, they are the ones who set expectations of performance during an outbreak, and if the bar is consistently set too high where most workers cannot meet it, hospital executives may not realize that they need to revise their own messaging to be more realistic, instead of continuing to move the goalpost of optimization forward to maximize output.

Rhetorical Possibilities

Although much of this study spends time uncovering rhetorical pitfalls in crisis, there are also several rhetorical possibilities made apparent by its findings. Unlike rhetorical pitfalls, rhetorical possibilities have the potential to stabilize in a pressing,

evolving exigence. Two major rhetorical possibilities presented by this research include the following: 1) recognizing the autonomy/expertise and limitations of healthcare professionals at the institutional level; and 2) validating rhetorical work at the individual level. These rhetorical possibilities reveal the importance of mitigating the effects of systemic mechanization within healthcare. First, there needs to be an awareness at the institutional level about the existence and impact of rhetorical mechanization within medicine, specifically how it assumes automatic, unemotional compliance and a perception that providing medical care is an objective, disembodied practice. Second, there needs to be institutional validation of clinical interventions in protocols that are incompatible with on the ground experiences; in other words, clinicians should feel supported to reply on their own expertise and the expertise of their colleagues.

Because autopoietic rhetorics of efficiency can evolve to push for more and more optimization, even when the goals aren't always feasible, I argue that communications from institutions such as the CDC would potentially benefit from a major rhetorical reframing. And as I discussed in chapter two, part of the issue in the CDC's protocol document stems from its intentional shift in readership. At first, the boss text addressed medical professionals, but then it shifted the message to address executives. As a result, its purpose changed from "clinical heuristic" to maximizing "clinician efficiency." These shifts happened even as the conditions of the pandemic worsened; clinicians were encountering more cases, facing staffing shortages, and some were still dealing with PPE shortages. Even still, they were expected to perform even better and faster than ever. And while some of the chaos brought on by the pandemic was unavoidable, I argue that COVID-19 simply brought to light systemic issues in healthcare that had been brewing

for some time. This is why doubling down on efficiency rhetoric during Covid only exacerbated the burnout crisis.

If we consider the power of autopoietic efficiency, fueled by "logics of enhancement" (Derkatch, 2022), to propel optimization forward, it may be beneficial to consider how autopoietic rhetorics can be utilized to foster the *humanization* of healthcare. First, if institutions began incorporating healthcare workers' perspectives more fully into operating frameworks, thereby explicitly bolstered healthcare professionals' autonomy (Shanafelt, et al, 2017) and recognized their respective credentials as experts in their field, it would send a clear message that interventions can and should be made as necessary. Further, if this framing explicitly outlined limitations of efficiency related to labor, it would communicate that optimization has limits as well. Additionally, in starting with that framing, if institutions noticed trends of burnout increasing throughout a health emergency, instead of increasing mechanizing rhetorics, they could boost compassionate rhetorics for workers that acknowledge widespread burnout, prioritize their health, and put forth recommendations to reassess productivity capabilities. Part of this process might also include encouraging frequent check-ins with healthcare professionals to meet them where they're at and set realistic workplace goals shaped by practitioner knowledge (Arnsten & Shanafelt, 2021). Finally, as rhetoricians, we might consider mapping compassionate, agency-supportive rhetorics in hospital systems' communications in our research and study their impact and uptake by healthcare personnel.

Along with reframing expectations to prioritize clinicians' autonomy, expertise, experiences, and wellbeing, another rhetorical possibility involves the support of

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professionals' rhetorical work. In chapter three, we can see how an embodied, human-centric rhetorical approach helped increase community vaccine receptivity and uptake. And in chapter four, we can appreciate the role and impact localized rhetorical work had during the pandemic—particularly rhetorical interventions. From my interviews, and existing conversations regarding clinician autonomy (Hartzband & Groopman, 2020), it's clear that many healthcare professionals don't feel supported by their institutions when considering deviating from established protocol—even when the deviation is backed by expert knowledge and might lead to better outcomes. However, this project reveals just how important those interventions are to stabilizing an unpredictable environment, and if healthcare institutions validated and valued embodied interventions, clinicians would be better able to make those stabilizing moves.

These rhetorical possibilities, by supporting clinicians' embodied practices and lived experiences as people working in healthcare, would essentially revise the notion that medicine needs to be mechanized to be efficient and effective. If this kind of rhetorical reframing were employed earlier, years before Covid, the pandemic may not have had such a profound destabilizing effect on the healthcare system. Before 2020, years of prior hospital cost-cutting measures slowly reduced staffing and yet ramped up heavy caseloads and expectations of efficiency, which made work incredibly "chaotic," as one nurse points out: "Our patients were sicker than ever, and we had less staff to help" (Onstot, 2023, para. 11). Further, at the very least, if clinicians had felt supported to make vital interventions during the pandemic, as some participants were able to, they may still have been able to hold onto hope that things would get better in medicine and consequently, stay in the profession. But currently, there's not much "hope" to go around

(Diaz, 2023), as indicated by a recent nursing survey conducted by a healthcare staffing agency, which found that only fifteen percent of hospital nurses stated that they would "continue working as [they are]" a year later (AMN, 2023, p. 7). And thirty percent of nurses stated they would likely leave their career due to the pandemic—an increase of seven percentage points since 2021 (AMN, 2023). In other words, the pitfalls of institutional rhetorics that prioritize mechanization are ever-growing. There is a pressing urgency to humanize healthcare in a way that that is meaningful and impactful, or the effects will continue to be felt by both providers and patients, particularly those who are multiply marginalized (AMA, 2020; Wingfield, 2020). These rhetorical possibilities present potential ways crisis communicators working in healthcare spaces can utilize rhetoric to positively impact the coordination of labor in a way that is realistic and humane during a health emergency. Importantly, these possibilities would help to stabilize practices in a crisis, rather than aggravate existing problems. As nurse Laura Onstot writes, clinicians "shouldn't have to choose between the job and [their] mental and physical well-being" (2023, para. 26).

Reflections & Pathways Forward: Materializing Invisible Rhetorics

From the get-go, I knew this project's goals were ambitious. I also recognized that, as a graduate student, I was working under significant constraints of time and funding (not to mention dealing with the ongoing pandemic itself). These constraints meant that this study could not cover every aspect of the events of 2020 and beyond—at least in all the ways that I wanted related to rhetoric. But these constraints also meant that I was able to narrow my scope and focus more on the trends that rose out of the data I

collected—what participants in this study were telling me was really happening during the pandemic. By using IE as a way to study how crises communication is lived and coordinated, I was better able to reach a major aim of this project, which was to make visible the harrowing experiences of clinicians throughout the worst of COVID-19. I wanted to utilize this project to amplify their perspectives of working in such hazardous conditions. Additionally, I sought to shed light on how significantly embodied ways of knowing impact clinicians' rhetorical work and decision-making in hospital settings. Embodied rhetorical practices, such as the ones outlined in chapter four, are not visible and often go unnoticed or unrecognized especially in "objective" sciences such as medicine. However, materializing these invisible ways of knowing and doing through this project illustrates just how tangible they are, presenting the idea that they can be studied further.

One of the limitations of this project was its sample size, which restricted the kinds of inferences I could make about rhetorical work in the hospital. While I did interview ten clinicians that worked at different hospitals across the United States, a greater sample size would likely lead to more comprehensive predictions about rhetorical practices on a larger scale. Further, I recognize the disadvantages of not having a diverse enough pool of participants, as I interviewed only three nonwhite clinicians and four women for the study. After my data collection had concluded in 2022, I received a generous feedback on this project by a Black rhetorician at the CCCC 2023 Research Network Forum which encouraged me to consider how I might be more intentional in my data collection practices, particularly in 1) inviting more participation from less represented and marginalized groups and 2) developing open-ended questions that

provide space in interviews to discuss how different cultural positionalities, such as race and gender, might impact experiences of work. In future research projects, I plan to center these recommendations in my methodology and data gathering. More perspectives that were not able to be collected, due to concerns of HIPPA and other logistics, include that of patients. Although I do discuss clinician rhetorical work and interventions (whether inhibited or supported by the institution), and I make assumptions of how these practices may affect patients, these insights are only one half of the picture. Understanding how patients are ultimately affected by the choices of healthcare professionals would be of key interest to RHM scholars and TPC more broadly. And finally, even though I discuss hospitals as nonprofits or for-profits, I did not ask participants whether their institutions' IRS tax designation and financial practices potentially influenced their work experiences. From interviews, it appears that most participants work at nonprofits—either a university research or religiously affiliated hospital. In future research, this study might benefit from a closer look that examines if nonprofit status has any influence on how clinicians see themselves and their work. Overall, despite the limitations surrounding perspectives gathered for this dissertation, I view these gaps as an opportunity to pursue additional research in this area, firmly believing in the value of the initial findings of this project.

As mentioned, the findings of this study point toward several future directions that research into medical rhetoric could take, and I conclude with a reflection of their significance in relation to RHM and TPC's respective social justice aims. These areas for future research appear as the following: technology, nurse-to-nurse communication, and TPC pedagogy. First, since this project explores the ways in which medicine is

mechanized for efficiency, it stands to reason that it would be beneficial to investigate

how the introduction of new technology has impacted healthcare, particularly

institutional rhetorical practices, clinicians' communication practices, and interactions

with patients. For example, as developments with artificial intelligence emerge, I argue

it's important to consider how medical care will continue to be mechanized. Instead of

adjusting labor outcomes to be more realistic and supporting clinician autonomy to

reduce burnout, institutions could potentially outsource major responsibilities for

diagnostic work, notetaking, and care recommendations to AI technology, as RHM

scholar S. Scott Graham (2022) notes in his recent work on the subject. This March at a

radiology convention I attended, for instance, clinicians marveled at how ChatGPT was

able to produce a legible diagnostic write-up about a patient who had a subdermal

hematoma; this artifact stayed quite true to the genre's reporting conventions, even if it

got some details wrong. They joked about the software taking their jobs, but the concern

is genuine, especially as many of their workloads have ballooned since Covid.

In particular, S. Scott Graham (2022) investigates the issues of AI's influence on

healthcare in his text *The Doctor and the Algorithm*, particularly how systemic biases

embedded within artificial intelligence could impact marginalized communities who enter

the "machine" of medicine. Graham argues that while there are "promises" in the realm

of AI and healthcare, there are many "perils" (or "pitfalls") which should caution the

public to be wary of giving in to the hype of this technology. Part of the rhetoric of AI,

and the current direction of medicine, is that it overvalues the quantifiable and reinforces

notions of objectivity through metrics. Citing Ruha Benjamin's (2019) research in *Race*

after Technology, Graham notes, "[t]he math hides the bias" by "deferring judgement to

cold, unthinking mathematical machines," and in doing so, "deflects responsibility" (2022, p. 10). In other words, relying on this kind of judgement has consequences, and we've only recently begun to consider the implications for healthcare and other public services, such as education. Because this project delves into the dangers of medical mechanization, particularly its prioritization of labor and knowledge that disembodied, automatic, and objective, I see researching technology's impact on and trajectory within medicine, as the natural next step forward, especially in exploring implications for social justice.

The second area of potential research that arose from the data collected throughout this project was nurse-to-nurse communication. As noted in chapter four, much of the literature published on medical knowledge and/or medical communication centers doctors and their experiences (e.g., *How Doctors Think*[14], *The Doctor and the Algorithm*, *Doctors' Stories*, *How Doctors Feel*, etc.), and while studying these perspectives is completely valid, and this research served as a strong foundation for my understanding of clinicians' experiences, I was fascinated by the discursive practices happening among the nurses in my study. Though nurses' work is examined to a lesser extent, a few scholars, such as sociologist Renee Anspach (1997; 2010), do deeply explore the differences (and sometimes intense conflicts) between nurses' and doctors' care approaches. Anspach's research on the work of clinicians in neonatal intensive care units—what kinds of information they gather, what information they prioritize, and how these perceptions shape their decision-making—encouraged me to pay close attention to

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[14] Two separate books on the same topic, published within a year of each other (Groopman, 2008; Montgomery, 2007).

how nurses in this project described their work. For example, one interesting trend I discovered in examining nurses' shared experiences is that they tended to speak in collective plural pronouns such as "we," "our," and "us" when explaining how they assess risk and make timely decisions in the hospital, indicating a strong sense of collective community knowledge and ethos. On the other hand, the physicians in this study predominantly described their experiences through first person singular pronouns ("I," "me," "my"), implying a stronger sense of individual knowledge and ethos. This pronoun usage led me to consider these questions: Who is permitted to be an "expert" or an authority in these spaces? And how do these oft-invisible power dynamics affect clinical knowledge-making and rhetorical practices? There is also, of course, a gendered aspect that this research should explore further. Statistically, most nurses identify as women (Smiley, et al., 2021), and most physicians identify as men (AAMC, 2020) (as my small pool of participants reflects). Therefore, there are also further opportunities to examine how gender and power influence discursive practices in medicine by looking closely at how nurses and doctors discuss their craft, reflecting upon their decisions and knowledge-making.

Finally, I also see pedagogical pathways for this research related to technical and professional communication. For instance, Campbell and Angeli (2019) consider the implications of healthcare workers' use of embodied cues and intuition in terms of healthcare pedagogy. They propose that their taxonomy could be taught as a kind of "heuristic" and introduced during healthcare provider training to show how intuition can be "conscious and distributed," arguing that this view of intuition "changes the capacity of healthcare providers and educators to discuss it, teach it, and study it—that is, they can

value intuition at all levels of healthcare practice" (p. 377). To incorporate intuitive awareness in healthcare pedagogy, the authors recommend giving reflective writing activities during patient simulations and clinical rotations, including tracking their own embodied cues that appear in medical narratives they've written. Campbell and Angeli note that identifying intuition as a "learned skill" is key to establish "opportunities to alert future providers to possibilities for misattunement and to address strategies for avoiding bias and stereotyping in care" (p. 377). While these are noble aspirations behind these ideas, it may be difficult as rhetoricians to make a real impact on medical curriculum, which can be pretty regimented. Given that, I believe it may be beneficial to consider how we might modify our pedagogy in rhet/comp-based scientific and technical writing courses.[15] Because pre-med and nursing majors aren't the only ones taking TPC-oriented courses as a requirement for their majors, underscoring how rhetorical work might impact all sectors of TPC may be of great value to students. For example, when an engineer is assessing structural stability on a jobsite, what do they pay attention to? If something feels off, do they attend to that cue? What about the chemist who is able to identify a safety hazard in the lab through their sense of smell? How do those cues affect critical judgement calls? Further research into how we can demonstrate the significance of rhetorical work into our TPC instruction for STEM students is key, especially as students begin to prepare to work in professional settings that are sometimes hazardous.

In summary, while the aforementioned aspects of this research I've described are by no means the only other areas that would benefit from further inquiry, they have

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[15] As a move towards reciprocity, I plan to share this study's findings with participants. However, I acknowledge that this limited action does not address the larger concerns.

significant implications for scholars in RHM and TPC, particularly as both fields hone their attention on social justice in their work (Adams, 2022; Bivens, 2020; Haas & Eble, 2018; Harper, 2020; Harris, 2021; Jones, et al, 2016; Scott & Melonçon, 2019; Shelton, 2020; Walton, 2019). It is important to consider how these research areas have the potential to extend conversations on the ways in which technical fields (and specifically medicine), despite being presented as entirely "neutral or objective," are actually subjective, "political," "imbued with values," and reinforce situated "perspectives, viewpoints, and epistemologies" (Jones, 2016, p. 345). For instance, scholar Natasha N. Jones argues for a humanistic social justice approach in TPC teaching and research *precisely because of* technical communication's historical values, beliefs, and ideals, which primarily emerged from the industrial revolution, an era "focused on *efficiency*, *expediency*, and *streamlining* processes, not the human experience" (p. 344, emphasis added). As this project has revealed, institutional rhetorics which communicate technical information can contribute to notions of "which perspectives and whose experiences are valued and legitimized," but by utilizing a critical humanistic frame that calls this discourse into question, we can understand how technical communication influences and "mediat[es] the human experience," thus addressing "issues of power and agency as they manifest in communicative practices and texts" (p. 343). In considering this project's implications for emerging technology, nurse communication, and TPC pedagogy, I aim to answer the call for more social justice work in both RHM and TPC fields, respectively.

Conclusion

As I conclude this project, I reflect upon how much I've learned about the significance of rhetoric in healthcare spaces throughout the course of the pandemic. Rhetoric is intricately interwoven within the practices of major institutions such as the CDC, it affects day-to-day policy of individual facilities, and it is enacted by individual clinicians in the hospital. More than that though, rhetoric can't be viewed as a singular "thing"—it doesn't only manifest as a text or as a speech. It is deeply embodied, materializing verbally and nonverbally through environmental and experiential cues that prompt invention and intervention. And yet it can also be paralyzing, as institutional rhetorics mechanize labor to be automatic, uniform, unemotional, and neutral. Rhetoric has the power to stabilize—as well as destabilize—an evolving crisis situation. Throughout this project, I was able to appreciate just how much of a bearing both acts have during a pandemic. Overall, I came to understand the challenges that both institutions and executives face, as well as recognize that it is ultimately clinicians and patients who deal with the consequences. As rhetoricians, we must consider how rhetoric's ability to coordinate people and practices can not only be advantageous but quite dangerous when it strays from taking into account the human over the non-human.

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APPENDIX I

SURVEY QUESTIONS

1. What is your name?
2. What is your age?
3. What is your gender identity?
4. What is your race/ethnicity?
5. What part of the U.S. or what country do you live in?
6. What is your healthcare job type?
    a. Clinician
    b. Administrator
    c. Public Health Expert
    d. Other
7. What is your official title (i.e., director of health, doctor, NP, nurse)?
8. If "other," how would you describe your role in healthcare?
9. How would you describe your workplace setting?
10. What kind of safety regulations have you encountered at work related to infectious diseases?
11. What kind of safety regulations have you encountered at work related to infectious diseases? [Check all that apply]
    a. Tuberculosis safety protocol
    b. COVID-19 safety protocol
    c. Ebola safety protocol
    d. H1N1 (swine flu) safety protocol
    e. SARS-CoV-1 safety protocol
    f. Standard Precautions
12. Have you had any formal safety training at work regarding any of the above regulations? If yes, please describe.
13. Would you be interested in participating in a follow-up interview to discuss your experiences assessing risk and interacting with hospital safety regulations during the pandemic? If so, what's the best way to reach you? [Participants were given the option for either an in-person or virtual interview.]

INTERVIEW QUESTIONS
(CLINICIANS & ADMINISTRATORS)

1. (For both) Can you talk a little bit about your position and what your responsibilities are?
2. (For both) What kinds of safety regulations have you encountered at work? What are the ones you are most familiar with? And have you had safety training and/or attended presentations around any of them?
3. (For administrators) Can you walk me through your process of crafting a Covid safety response for your specific workplace, taking into account guidelines from the CDC, along with state and local policies? What was it like? What constraints (supplies, personnel, etc.) did you have to keep in mind that were unique to your location? How did you work with or around those constraints? Whose perspectives did you take into account? How did you remediate the CDC text? What had to be left out or modified? Additionally, what does the "ideal" implementation of these regulations look like? How was your experience with COVID regulations different from other infectious disease regulations, such as TB? [Question did not apply to participants in this study; in the end, it was not used.]
4. (For both) In your position, what factors do you take into account when thinking about risk related to infectious diseases? How do you see the role of evaluating risk in your position?
5. (For both) Tell me about what it was like working in those first few months of Covid. Can you tell me about a time that described what it was like in the beginning? What it was like in winter 2020-21 before the vaccine? What it's like now? Can you tell me about a memory in particular that still haunts you?
6. (For both) Could you tell me about an instance that encapsulates your experience with negotiating the CDC's most recent shifting Covid guidelines (i.e., shortened then lengthened quarantine time, PPE protocol, etc.)?
7. (For clinicians) Can you tell me about a time when you had a question about Covid safety protocol but did not have the document readily available to answer that question? How did you proceed? Can you tell me about a time when you were rushed to make a snap risk-based decision? How did you decide to ultimately make that decision? What did you take into consideration?
8. (For clinicians) Can you tell me about a time where supplies, space, and personnel were limited? How did you proceed, while still attempting to adhere to the regulations? What negotiations with risk did you make, if any? What was prioritized?
9. (For clinicians) Can you tell me about a time where you had to deviate from the regulatory text? Did you have to receive approval from supervisors or colleagues? What was negotiating that situation like?

10. (For both, based on the text-based portion of the interview) In the CDC Guidelines for COVID-19, it states "[insert quotation from the guidelines here]." Could you walk me through an experience negotiating this particular protocol in your place of work? What was it like? What did you have to take into consideration, and why? How did you proceed? [Interviews often met time limit before this could be asked. To maintain consistency, it was not used.]

APPENDIX III

CODING BREAKDOWN
(A NONCOMPREHENSIVE CATALOGUE OF DATA)

Martial/Financial Language (War/Business)
"There's nothing different from someone who's been **in the trenches** and now is in the leadership position." (Dr. Patrick)

"We hired a lot of locum tenens physicians. Basically, a *locum tenens* just means somebody who holds the site, so to speak, **holds the fort**." (Dr. Gary)

"Well, then you're operating with a little less caution, a little less information, and we had a few cases where I think we probably hired physicians who in retrospect maybe we shouldn't have, but **we just felt like we were under the gun** and did so. Nobody died, but I think we took some people on." (Dr. Gary)

"So, I'm in community practice. I'm one of those people who are **boots on the ground**, where we actually do procedures, we actually see the patients." (Dr. Shane X.)

"I think that that led to a lot of burnout with the nurses especially because they felt, you know, **we were heroes** one year, and the next year and a half we're the villains, you know, which was, couldn't be further from the truth." (Dr. Shane X.)

"But to be more or less a **Green Horn** in such a clinical capacity with completely different capacity than being a housekeeper." (Dr. Tribbiani)
Explanation from the *Online Etymology Dictionary*: (green (adj.) in sense of "new, fresh, recent" + horn (n.). Applied to new soldiers from c. 1650)

"That's, that's one thing that, you know, if—if I ran into a situation, it's like, okay, like, is it—is it safe? Like, do I need to—do I need to fully put on **the suit of armor**? Or am I okay with a flu mask right now?" (Dr. Tribbiani)

"And there's still a fairly sizable element of medicine whose legal staff, counsels say, don't ever acknowledge a mistake, because you might be sued. And **we would lose a lot of money**." (Dr. Patrick)

"So, one problem, I think, that developed was basically equity in the distribution of scarce healthcare resources like personal protective equipment. So, one tricky thing about that to me is this is an **era of rapid consolidation** in healthcare. So, a lot of physician practices have been **purchased** by multi-specialty groups and a lot of multi-specialty groups have been purchased by hospitals." (Dr. Gary)

"We're not talking about **what accounting method to use** or **what the best marketing program** would be. We're talking about how to contain the spread of an infectious disease." (Dr. Gary)

"One of the things they did was they started **retrofitting** old factories to produce PPE equipment. You know, Canada's the largest exporter of pulp products to the US, I do know that with some certainty. And that pulp product is used in the N95 respirators. And it's crazy to think that, you know, our supply chains are so wide." (Dr. Tribbiani) Explanation of retrofitting from the *Online Etymology Dictionary*: "modify so as to incorporate changes made in later versions of the same model," 1954 (U.S. Air Force), from retro- + fit (v.). Related: Retrofitted; retrofitting. As a noun, "modification made to a product," 1956, from the verb.

"All the invasive procedures outside of the IDI on the floors in the ICU were internal medicine resident driven. So, we had to get approval from the ICU attendings to use these because, and this is interesting. So, they had a **performance bonus paid out for their line infection rates**. So, if we were at a, if we were underneath a certain point, they would get paid out a bonus." (Dr. Tribbiani)

"I would say there's **a lot more going on there than just what economic models account for**. Somehow, we need a fairly robust, comprehensive view of the human being and human families and communities and so forth, and not just America's more than 330 million Petri dishes or something like that." (Dr. Gary)

Rhetorical Paralysis Examples
"I felt that it was morally repugnant that he hadn't seen his loving family for the two weeks between the day of admission to the day he died, the last two weeks of his life. [A]t the time I didn't feel that I could express that feeling—and as a lowly intern I had no say in the policies anyway, even as I had to explain them to countless families." (Dr. Bryan)

"It was a weird feeling like, 'Am I exposing these two relatively false positive people? Am I exposing them unnecessarily just because that's our protocol?' The protocol for COVID positive patients to go in the COVID positive room. So that was the weird conundrum, but I just had to go with it because I'm not at a level where I tell the hospital what to do." (Dr. Ronald)

"He was about to die, and we were putting him on all sorts of medications and support. I called his wife to confirm code status since it would be futile to resuscitate him in his current condition. She was unable to come to the hospital to say her goodbyes because she was sick with COVID. She requested that I put the phone up to his ear for her to say goodbye. In a room full of people, I held the phone to his ear with her saying her goodbyes to her husband. It was the most heartbreaking thing I've ever witnessed, and I still tear up when I think about it." "[That situation] still haunts me" (Dr. Dane Joe)

On being frustrated that his patient was prohibited from seeing his family right before he died: "Well, her and her sister had come up to the ICU. And once they left the building, there was no readmissions. So, it's like—this is ridiculous. So, someone had told her one of the front desk staff, and I mean, they're only following the rules, but [they] had told them she couldn't come in and I'm like, 'this is the last time she's going to be seeing her dad alive'—like this is completely ridiculous that we're, like—I understand painting with a wide brush on these rules and regulations, especially during a pandemic. But I mean, to be that cold hearted." (Dr. Tribbiani)

Rhetorical Intervention Examples
On intervening in the visitor policy: "We can just touch base with our nursing supervisor or our manager to just kind of get that approval based on what the nurse discretion is, what the nurse thinks would be the best for everyone involved and things like that." (Nurse Kayla)

"I always felt one of my most important roles was to listen to my colleagues and patients and be able to share what I thought were really good stories, maybe even in a way illustrative stories would say the people on the board of [The Hospital] or the people who inhabit the C-suite." (Dr. Gary)

On getting hospitals to implement the baby monitor policy: "And when I went from one hospital that was using them, and the other one had no way of monitoring them. Within three days after I told them to do that, they did, which was a good response." (Dr. Shane X.)

On intervening in the visitor policy: "And, yeah, what I would do is, I would just say, 'Hey, tell the nursing supervisor, I'm doing this,' or 'Yeah, it's okay.' And I got very little pushback." (Dr. Shane X.)

"You know, I gave multiple talks on the [State Medical Association's] behalf. And, you know, and, you know, they understood what I did, you know, I made Facebook posts, social media, all that, you know, to get the word out. […] Because I was a clinician, I was getting questions, you know, I did TV spots, especially with the [vaccination campaign]." (Dr. Shane X.)

On sharing real stories in the C-suite: "And I tell [the other executives] the story again in the previous day. I said, 'Keep this in mind. When patients come into this hospital, they are scared. They're lost, they lose their dignity, they lose their autonomy. They don't know what's going to happen to them. They don't know who's a nurse and who's an assistant. Now just remember, whenever your role is whether you're the safety officer, whether you're the patient coordinator, whether you're in the business office, keep in mind what it's like to be a patient in the hospital. And you'll find over time that you have a much greater understanding of human disease and the frailties of people." (Dr. Patrick)

<u>Some Additional Examples of Embodiment (Feeling and/or Intuitive Sense)</u>

"Because, I mean, we worked on that in nursing school, but it's different when you're in the emergency situation for sure. And you're feeling like all of those, you know, sort of like factors like compounding **it feels much more real when there's like a patient in the moment** and not just like, you know, an actor or, you know someone that you're working this situation out with that gets your adrenaline pumping." (Nurse Megan)

"**It felt like a ghost town**. I mean, I didn't experience any, to my knowledge, psychological trauma or mental illness, but that was a weird experience." (Dr. Gary)

On being in the cordoned off Covid unit: "And we were able to shower after taking care of our patients and going home, and we were all very isolated. That area to me, **felt very safe**. And **I felt like I was very sure of myself when I went back there,** because I knew exactly what was expected, and what was going to help to protect my patients and myself when I was taking care of those patients." (Nurse Jo March)

"If it was a question of, 'Should I reuse an N95?' I wouldn't reuse it. I would get a new one. That was just my decision to make, because **I felt that it was the safest** and that's what we always said." (Nurse Jo March)

"**It was a weird feeling** like, 'Am I exposing these two relatively false positive people? Am I exposing them unnecessarily just because that's our protocol?' The protocol for COVID positive patients to go in the COVID positive room." (Dr. Ronald)

"And **I felt** like there was like a wide variety of what was you know, people were wearing, whether it was like, oh, like **someone wears glasses like me, and I deemed that safe**." (Dr. Tribbiani)

"It was just unreal. **It felt so unreal**." (Nurse Kayla)

"I mean, objectiveness is one thing, but **I feel like at that point, like, you can just read the room** see that, hey, this is something that should be allowed to even stop wars on humanitarian grounds to evacuate people." (Dr. Tribbiani)

"But **I still couldn't shake the feeling** that we were being given clearly unworkable and preposterous guidelines to follow, guidelines that often had undertones of asking frontline healthcare workers to minimize the extent to which we were actual human beings with physical bodies and to behave as much like robots as possible." (Dr. Bryan)

"So, I think once we, once we reached like that point, **we really just kind of felt like we knew what to do** with it and how to handle it, which was not the case. So, I think it was important to see that to kind of open our eyes to what we could actually be dealing with." (Nurse Megan)

"So, just like I said, using that awareness and **thinking on your feet**, is probably the biggest thing for me when we're in those situations." (Nurse Jo March)

Embodied Cue Taxonomy (Table 1 from Ch. 4)

Cue	Definition	Doctor Example	Nurse Example
Material	Environmental cues based on material objects in the workplace, including technology, written instructions, posted signs	A doctor hears their pager going off, which tells them a patient is "coding," indicating an emergency response	A nurse notices a patient's oxygen levels drop on their meter device while they are walking them to the bathroom
Interpersonal	Environmental cues based on people in the workplace (patients and co-workers), including verbal, physical, nonverbal cues	A resident doctor watches as other co-workers quickly "don" PPE when entering a room during a patient "code" and assesses level of infection risk	A nurse identifies that a patient is presenting signs of hemorrhaging, notices team is near, and calls out for assistance
Flashback	Experiential cues based on previous experiences, including personal memories and the experiences of others	Doctor remembers a similar instance of a patient coding due to respiratory failure during medical school and responds accordingly	Nurse recalls training in disaster response and applies it to handle challenges with Covid
Emotional	Experiential cues based on personal emotions or being able to place yourself emotionally in a particular scenario	Doctor feels that it's wrong for a dying Covid patient to not see their family member and makes a visit exemption request	Nurse empathizes with ill Covid patient who is the same age as them, and they adjust their "at-risk" assumptions accordingly

CURRICULUM VITAE

Brittany Nicole Smart
brittany.smart@louisville.edu

EDUCATION

Ph.D. English | University of Louisville, December 2023

> *Specializations*: Rhetoric and Composition, Medical & Health Rhetorics, Technical & Professional Writing, Feminist Methods/Pedagogy, and Digital Literacy
> *Dissertation*: "Communicating in Crisis: Rhetorical (De)stabilization During the COVID-19 Pandemic"
> *Dissertation Committee*: Mary P. Sheridan (advisor), Karen Kopelson, Paul Griner, and Debbie Potter
> *Secondary Literary Area*: Feminist Poetics and Embodiment in 20th/21st c. U.S. Poetry
> *Certificate*: Online Writing Instruction

M.A. English | Northern Kentucky University, May 2019

> *Thesis*: "The Autobiographical 'I' in Feminist Poetics: Survival, Connection, and Empowerment"

B.A. English, magna cum laude | Northern Kentucky University, December 2016

PUBLICATIONS

Book Review
Smart, Brittany. Review of *Why Wellness Sells: Natural Health in a Pharmaceutical Culture*, by Colleen Derkatch. *Rhetoric of Health and Medicine*, vol. 6, no. 4, 2023.

Community Writing
Smart, Brittany. "'Real Music is a Poem': An Interview with Jerry Everett." *Frazier Museum*, 18 Oct. 2019.

University of Louisville
Smart, Brittany. "The Global Conference on Women and Gender: Power, Resistance, and Representation." *UofL Celebrating Diversity Newsletter*, Jul. 2021.

Poetry
"Weather(ed) Patterns." *The Roadrunner Review*, vol. 9, 2022.
"The Invisible Axe." *Pennsylvania English*, vol. 41, 2021.
"Open Casket." *Plainsongs*, vol. 41, no. 1, 2021.
"When You Died, I Decided to Live." *Other Worldly Women Press*, vol. 33, 2020.

"To Grow." *Not Very Quiet*, vol. 7, 2020.
"Fort/da." *Kansas City Voices*, vol. 15, 2020.
"Anoxia." *Gravitas*, vol. 18, no. 2, 2019.
"Self Portrait as a Hare." *Levee Magazine*, 2019.

Literary Criticism
Smart, Brittany. "Civility vs. Barbarianism in *Titus Andronicus*." *Pentangle*, 2016.

DIGITAL COMPOSITIONS

2021 **Editor-in-Chief**, *Cardinal Compositions*. An online, open-access journal that annually features outstanding work from UofL undergraduate students in Composition Program courses. This special issue was organized around two themes, "Multimodal Composition and Writing for Social Change" and "Writing about Linguistic Diversity and Linguistic Racism," and it also included original poetry, artwork, and photography created by UofL students.

CONFERENCE PRESENTATIONS

"Popular Mechanics: Deconstructing the Hospital as a Boundary Object." Lightning Talk, Rhetoric of Health and Medicine Symposium, October 13-14, 2023, University of Minnesota, Minneapolis, MN.

"Reconstructing Reality: Supporting Embodied Expertise in an Ongoing Health Crisis." Presentation of Dissertation Chapter, Graduate Student Regional Research Conference, 23 March 2023, University of Louisville, Louisville, KY.

"Caring in Crisis: Examining Clinicians' Embodied Practices During the COVID-19 Pandemic." Presentation of Rhetorical Work-in-Progress Paper, Conference on College Composition and Communication, 15 Feb 2023, Research Network Forum, Chicago, IL.

"The Way of All Flesh: Confronting Medicine's Racist Past." Virtual Presentation of Narrative Rhetoric Research Paper, Medical Rhetoric Standing Group (MRSG) Panel, Conference on College Composition and Communication, 9 March 2022.

"Rhetorics of Hope and Despair: Narratives of Illness During the COVID-19 Pandemic." Virtual Presentation of Rhetorical Work-in-Progress Paper, The Rhetoric of Health and Medicine Symposium, 9-10 Sept 2021. http://medicalrhetoric.com/symposium2021/

"(Re)Examining Feminist Rhetoric: Exploring Mechanisms of Social Change." Virtual Presentation of Feminist Rhetoric Research Paper, The Global Conference on Women and Gender, 18-20 Mar 2021, Christopher Newport University, Newport News, VA.

"The Evolution of Voice and Activism in Feminist Rhetoric." Presentation of Feminist Rhetoric Research Paper, International Rhetoric Workshop, 8-10 Jul 2020, Interdisciplinarity in/of Rhetoric: Theory and Practice in Rhetorics, El Colegio de San Luis, San Luis Potosi, Mexico. (Canceled due to COVID-19)

"Remedying the 'Violence of Argument' for Technofeminist Composition Classrooms through an Eleocentric Teaching Framework." Presentation of Pedagogical Work-in-Progress Paper, Conference on College Composition and Communication, 25 Mar 2020, Research Network Forum, Milwaukee, WI. (Canceled due to COVID-19)

"The Autobiographical 'I' in Feminist Poetics: Survival, Connection, and Empowerment." Presentation of Literary Criticism, Annual Association of English Graduate Students Conference, 4 May 2019, Northern Kentucky University, Highland Heights, KY.

"Follow the Money." Presentation of Creative Nonfiction, Annual Association of English Graduate Students Conference, 21 Apr 2018, Northern Kentucky University, Highland Heights, KY.

AWARDS, HONORS, AND GRANTS

2023   **Barbara Heifferon Graduate Student Top Paper Fellowship Award**, Rhetoric of Health & Medicine Symposium, University of Minnesota.
Graduate Student Council Travel Grant, University of Louisville.
Mary Ann Ryan Travel Award for RHM Scholars, *Rhetoric of Health & Medicine Journal*, Rhetoric of Health & Medicine Symposium.
Doctoral Dissertation Fellowship Award, The Graduate School, College of Arts & Sciences, University of Louisville.
Bonnie Academic Development Travel Grant, Rhetoric & Composition Program, Department of English, University of Louisville.

2022   **Graduate Creative Writing Award for Poetry**, Creative Writing Program, Department of English, University of Louisville.
Graduate Student Council Research Grant, University of Louisville.
GNAS Spring Research Grant, College of Arts & Sciences, University of Louisville.

2021   **Andrew W. Mellon Fellowship**, MLA Summer Teaching Institute, East Tennessee State University.
Barbara Plattus Award for Excellence in Graduate Teaching, Department of English, University of Louisville.
Adobe Creative Campus Faculty Fellowship, College of Arts & Sciences, Cardinal Core Committee Digital Initiative, University of Louisville.

2020   **Dr. M. Celeste Nichols Professional Development Award**, University of Louisville.

2019   **Danny L. Miller Award for Advanced Graduate Study, English Department**, Northern Kentucky University.

2018 Lamplighter Award for Student Support and Encouragement, Northern Kentucky University.

2016 International Study Grant, Northern Kentucky University.

PROFESSIONAL DEVELOPMENT

Bioethics Course: "The Law, Medicine, and Ethics of Reproductive Technologies and Genetics" (I. Glenn Cohen), Harvard University, Fall 2023.

Research Network Forum, Conference on College Composition & Communications Annual Convention, February 2023.

Rhetoric Society of America Workshop: "Transformative Storying within Institutions" (Jo Hsu, Aja Y. Martinez, Andrea Riley-Mukavetz, M. Remi Yergeau), May 2022.

Antiracist Composition Pedagogy Course (Lauren Fusilier), University of Louisville, October 2021.

MLA Summer Teaching Institute: "Teaching at Community Colleges and HBCUs" (Jessica Edwards and Howard Tinberg), East Tennessee State University, July 2021.

Teaching Writing Online Course (N. Claire Jackson), University of Louisville, March 2020.

PROFESSIONAL APPOINTMENTS

University of Louisville
Assistant Director of Creative Writing, English Department, 2021-2022
Assistant Director of Composition, English Department, 2020-2021
Graduate Teaching Assistant, English Department, 2019-2023

TEACHING EXPERIENCE

Instructor of Record | University of Louisville

English 303: Scientific & Technical Writing
English 202: Introduction to Creative Writing
English 102: Intermediate College Writing
English 101: Introduction to College Writing

Guest Instructor | Northern Kentucky University
English 334: Poetry Writing

Adjunct Instructor | Cincinnati State Technical & Community College
English 101: Composition I

EDITING EXPERIENCE

Assistant Editor, *Rhetoric of Health and Medicine*, 2022-Present. Disseminates supplemental content to Facebook's RHM page, to the RHM Twitter account, and to relevant listservs according to a schedule created by the content strategist and creator. Posts content to the journal website. Shares special announcements, CFPs, etc. to the RHM Facebook group and relevant listservs.

Editor-in-Chief, *Cardinal Compositions*, Department of English, University of Louisville, 2021-2022. Reviewed all submissions, notified submitters on acceptances/rejections, identified themes across submissions, and arranged accepted essays into sections. Coordinated editorial team tasks, meetings, agenda items, etc. Created and designed digital issue for publication.

Multimodal Editor, *Cardinal Compositions*, Department of English, University of Louisville, 2020. Reviewed submissions in the multimodal genre and selected works for publication, checked multimodal content for potential copyright violations, set up close captioning for accessibility. Copyedited and proofread research and narrative submissions with editorial team.

Creative Nonfiction Editor, *Licking River Review*, Northern Kentucky University, 2019. Reviewed submissions of genre and selected works for publication. Coordinated with the Editor-in-Chief to contact authors to discuss edits when necessary. Sent acceptance and rejection letters to those who submitted their work.

Copy Editor/Proofreader, McWood Publishing, Cincinnati, OH. 2016-2017. Edited and proofread multiple long-form, book-length manuscripts and short stories, provided constructive feedback for authors, and checked pages for quality control. Coordinated editorial procedures and maintained editorial standards. Designed story covers and negotiated with authors regarding changes in manuscripts.

ADMINISTRATIVE EXPERIENCE

Assistant Director, Creative Writing Program, Department of English, University of Louisville, 2021-2022.
Assisted in overseeing the Italo Calvino Prize in Fabulist fiction. Supported the arrangement and oversight of the Axton reading series. Managed the program's social media activity (Facebook, Instagram, and Twitter). Worked with visiting writers, scheduled and publicized events, organized itineraries.

Assistant Director, Composition Program, Department of English, University of Louisville, 2020-2021.
Mentored graduate teaching assistants who were teaching for the first time at UofL. Assisted the Director of Composition with developing programming (e.g., orientation, pedagogy workshops). Coordinated administrative aspects of the composition program (e.g., staffing courses, evaluating portfolios, handling student grade grievances).

Executive Assistant to the Dean, College of Informatics, Northern Kentucky University, 2017- 2019.
Served as a communication link between the Office of the Dean and other administrative offices on campus, the departments of the college, and faculty, staff and students. Maintained and coordinated the daily and long-range schedule of the dean, exercising high-level professional judgment in deciding between conflicting events and issues. Coordinated travel arrangements and organized reimbursements. Edited memos and other materials; prepared agendas and collected resources for meetings; recorded meeting minutes; coordinated special projects. Established and maintained an efficient and up-to-date records management system.

SERVICE

University of Louisville
Departmental Service

2023   **Panelist**, Pedagogy Panel: "10 Essential Skills and ChatGPT," English Department, April 2023.
2021   **Assistant Director of Creative Writing**, English Department Creative Writing Program, AY 2021-2022.
        Host, Axton Series Reading with Joyelle McSweeney, English Department Creative Writing Program, September 2021.
        Workshop Speaker, Adobe Day of Discovery: "Integrating Illustrator into English 102," September 2021.
2020   **Workshop Leader**, Composition Program Pedagogy Workshop Series: "Fighting Fake News: How to Center Information Literacy in the Composition Classroom," English Department, October 2020.
        Racial Justice Committee, English Department Composition Program, AY 2020–Present.
        Assistant Director of Composition, English Department Composition Program, AY 2020-2021.

Mentoring
2020   **Ph.D. Student Peer Mentor**, University of Louisville, Rhetoric and Composition Program, February 2020 – Present.
        Alumni Mentor to Graduate Students, Northern Kentucky University, English Department, November 2020 – Present.

Outside Service
2023   **Session Chair,** Rhetoric of Health and Medicine Symposium, October 13, 2023.
2022   **Summer Workgroup Facilitator**, Rhetoric of Health and Medicine Community, July – August 2022.

Community Engagement
2019   **Oral History Writer**, Frazier Museum, Louisville, KY, Fall 2019.

AFFILIATIONS

Association of Rhetoric of Science, Technology, and Medicine
Association of Teachers of Technical Writing
Association of Writers and Writing Programs
National Council of Teachers of English
Poetry Society of America
Rhetoric Society of America

COURSEWORK

<u>University of Louisville</u>
Watson Seminar: Key Issues in Rhetoric and Writing Studies: Ethics, Gender, and Diversity (Gesa Kirsch)
Community Literacy (Mary P. Sheridan)
Teaching College Composition (Karen Kopelson)
Research in Composition: Methods (Mary P. Sheridan)
Rhetoric, Poetics, and the University (Joseph Turner)
Composition Theories and Practice (Mary P. Sheridan)
Sociology of Health and Illness (Debbie Potter)
Contemporary Theories of Interpretation (Frances McDonald)
Creative Writing II (Ian Stansel)
Queer Victorians (Deborah Lutz)

<u>Northern Kentucky University</u>
Composition Theories (Christopher Wilkey)
Teaching High School Literature (Jonathan S. Cullick)
Research Methods in Professional Writing (Janel Bloch)
Readings in Composition: Composition Studies and the Work of Social Justice (Christopher Wilkey)
Business Communication (Andrea Lambert South)
Readings in Literary Studies (Ernest Smith)
Graduate Poetry Workshop (Kelly Moffett)
Graduate Creative Nonfiction Workshop (Jessica Chiccehitto Hindman)
Theory and Craft of Creative Writing (Kelly Moffett)