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JADE CHELSEA ZHENG-CHEN WONG

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Table of Contents

List of Figures

List of Tables

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Abstract

This dissertation is about one of the most despised activities that health and human service professionals are obligated to do: maintaining documentary standards. Documentary standards are the written rules that specify how a person writes, types, clicks, fixes, stores, arranges, and reports on activities and objects. Not surprisingly, people's complaints about documentary standards are legion. They routinely lambast clicking boxes in the putative name of effectiveness and focusing on paper rather than on people as pointless, time-consuming, and counterproductive to the goals at hand. Drawing from 16-months of ethnographic fieldwork at a large, federally-funded healthcare organization in Midwestern United States, I ask, what accounts for professionals' sustained determination to maintain standards, even those they are vexed by?

To answer this question, this dissertation will offer an account based on ambivalence. The account rests on two claims. First, standards are plastic. Their meanings, practices, and consequences change depending on the situation they are in. A standard that seems trivial in one context might become immensely consequential in another. After all, even the smallest slip from standards—a document incorrectly filled-in, not filled in at all, misplaced, or lost in transit—can really make a difference not only to an organization's receipt of money and possibility of malpractice claims, but also to the life and death of patients. Second, humans are ambivalent. Humans are capable of holding contradictory views towards the same object or task, which enables them to view the once seemingly trivial standard as immensely consequential, even embracing some standards as a cause. Taken together, my argument is this: a standard's potential to shift from the realm of triviality to the realm of consequentiality, alongside humans' capacity to mobilize ambivalence, is what commits professionals to maintaining standards.

To make this argument, I will recount a series of adventures with standards. We will join healthcare professionals as they audit electronic medical records (chapter 1), devise schemes to get frontline workers to click boxes (chapter 2), conduct a risk audit of the clinical environment (chapter 3), and engage in activities to contort cervical cancer screening documentation into standardized form (chapter four). I will draw attention to the dizzying array of work—all the frustrations and seeming futility as well as the passion, pleasure, and even a sense of personal duty—involved in maintaining standards, and articulate the effects of that work on interpersonal relations, professional power, and social and organizational reproduction. Along the way, I will pay attention to ambivalence—how it is provoked, mobilized, and to what effects—to show how professionals use ambivalence to help them come to terms with the seeming absurdity of their work. In so doing, this dissertation aims to help professionals who work in health and human service organizations better understand and productively do something about their own ambivalence in settings that foster ambivalence.

Introduction: Ambivalent Adventures with Standards

The Problem with Standards

Many people join the health and human services due to a sense of calling. Supposedly, they possess a special kind spirit, what some scholars call "intrinsic motivation" or "public sector motivation," which grants them the perseverance and pluck to work in resource-strapped, emotionally-trying settings in exchange for the possibility to live out that calling: to promote social welfare, protect individuals, and make a positive difference to this world (Perry and Wise 1990; Wright 2001; Le Grand 1997; Frey 2007). However, once people join the health and human services, they might find themselves beholden to standards—the written rules that prespecify means or ends—which compel them to do things they do not really want to do. They might find themselves checking boxes in the name of effectiveness, filling in logbooks for the sake of compliance, and writing federally-mandated reports only to be stowed away in a dusty drawer, never to be taken out and read (Tai-Seale et al. 2017; Graeber 2018; Brown and Bergman 2019).

The experience of being compelled to do things one does not want to do, or being prevented from pursuing what one passionately set out to do, can harm the spirit (DeHart-Davis and Pandey 2005; Podsakoff, Williams, and Todor 1986; Graeber 2016; 2018). It can create a sense of powerlessness because the person cannot use her brain, senses, or imagination to act as she desires; a feeling of futility because the person cannot fathom how her actions produce the effects she so wants to produce; and a state of meaninglessness because the person is separated from the conditions of free will that allow her to actualize her dreams. Perhaps these feelings come from the fact that people in liberal societies are taken by very special ideology: they are agents who do agential things. They possess callings and causes and are capable of producing

effect, and so to actualize one's agency, to be able to pursue one's hopes and dreams, is what makes life worth living.

Thus, standards have cast an ominous shadow over the health and human services. By standards,[1] I mean the written rules that people and organizations are obligated to follow in response to a demand made by some legitimate body such as the government, funding bodies, professional groups, and accreditation associations, who use those standards as benchmarks to monitor, appraise, and reward professionals and organizations. Standards therefore demarcate actions and outcomes. They delimit possibilities and agency. As such, standards are often cast as the very instruments that prevent people from pursuing what they passionately want to do (c.f. Graeber 2016; Timmermans and Berg 2003).

This dissertation is an ethnographic study of professionals' engagements with standards. In particular, it is about one of the most despised of standards known to organizational life—documentary standards. Documentary standards are the written rules that circumscribe how the person writes, types, clicks, fixes, stores, arranges, and reports on objects, people, and tasks. Documentary standards are often despised because when they are routinized, they are called paperwork, and paperwork that is perceived as pointless, time-consuming, and counterproductive to the task at hand is called "red tape," and red tape is universally disliked. Red tape has even been called an "organizational pathology," for it embodies everything that is wrong, wasteful and dysfunctional about organizational life (Bozeman 1993, 276).

Nonetheless, an immense amount of work is poured into making documentary standards an organizational reality. This work includes the long-suffering commitment of those very professionals who joined the health and human services on the promissory note that they, too,

[1] For more comprehensive definitions of standards, see Timmermans & Berg (2003, 24), Star & Bowker (2000, 13–15), and Lampland and Star (2008).

can pursue their calling in exchange for less pay and greater emotional exhaustion, only to find themselves prevented from this calling because of rules, documentary standards, and even red tape. How do professionals remain resolutely committed to doing bureaucratically-banal, potentially soul-depleting work that they do not really want to do?

To answer this question, I will take you into world of the "Network."[2] The Network is a large, federally-funded healthcare organization made up of many health centers scattered across Midwestern United States. The Network's mission is to provide healthcare to people irrespective of their health insurance status and ability to pay. Consequently, most of its patients are Hispanic, female, and belong to low-income households. The Network's money primarily comes from federal funds. Therefore, the Network is obligated to meet a stringent set of standards to ensure the continued receipt of federal funds, such as the provision of healthcare to people irrespective of their health insurance status and ability to pay. Finally, the Network operates like a bureaucracy (Weber 1978; Blau and Scott 2003). It is hierarchically-structured with an established chain of communication and command, even if the leaders insist that the Network adopts a servant-leadership model where the hierarchy is, at least on paper, turned upside-down. It consists of multiple departments that come attached with defined roles and responsibilities, even if an ever-present item in meetings is how to better define and demarcate those roles and responsibilities. And all these details are governed by written standards. Standards, as they are used at the Network, refer to the written rules that specify *means* such as procedures, protocols, and workflows that make explicit how organizational tasks should get done. The Network also uses standards to refer to the written rules that specify *ends,* such as performance goals and compliance requirements.

[2] Pseudonyms, like the "Network," are used throughout the dissertation.

The question that organizes this dissertation is: what accounts for professionals sustained determination to maintain standards, specifically documentary standards, even when those standards provoke immense frustration and ire? By taking you on a series of adventures with a group of professionals at the Network, I will offer an account based on *ambivalence*. Before we begin our adventures, however, let me first offer two accounts that partially answer the question, explain why those accounts do not suffice, then introduce ambivalence as an alternative, yet complementary, account.

Three Plausible Accounts

Account 1: Standards work

Presumably, professionals maintain standards because standards work. Standards can and do achieve the goals they are supposed to achieve. They streamline processes, coordinate action, ensure stable outcomes, and even accomplish lofty goals such as safeguarding safety and ensuring quality (e.g., see Lampland and Star 2008; Yates 1989). Organizational sociologist, Arthur L. Stinchcombe (2001), even devoted a book, titled *When Formality Works*,[3] to explain when standards work.[4] For Stinchcombe, the success of standards hinges on three conditions. First, standards must be "cognitively adequate." They must be based on abstractions that adequately capture the problems, solutions, and tasks at hand. Second, standards must be

[3] More precisely, Stinchcombe is writing about formalization. In organizational theory, formalization refers to the extent to which "the rules governing behavior are precisely and explicitly formulated and to the extent that roles and role relations are prescribed independently of the personal attributes and relations of individuals occupying positions in the structure" (Scott and Davis 2015, 37). In this way, standards, as I have defined them, is an example of formalization.

[4] Leisha Dehart-Davis (2017), in *Creating Effective Rules in Public Sector Organizations*, also attempts to characterize what makes rules work. Those characteristics are: rule formalization, rule logic, consistent application, optimal control, and rule understanding. Her approach to rules is similar to how I use standards in this dissertation. However, her definition of rules pertains to "*specific behaviors under particular circumstances*" (p.10, italics included in text). My take on standards is narrower than hers because standards must be formalized; that is, written down on paper and backed with the strength of money and/or law.

communicable to users. They must be written with the right combination of terms and phrases, the lingua franca so to speak, of those reading the standards. Finally, standards must have a "trajectory of improvement." They must possess feedback systems which enable learning and correction over time (Stinchcombe 2001, 41–51). Stinchcombe argues that with those conditions, the skillful human is able to design, implement, and tinker with standards into some functionalist definition of success. He then demonstrates the validity of his argument and the success of standards by taking his readers on an expansive tour from architectural blueprints to immigrant court laws to liquidity markets.

Sidestepping Stinchcombe's proclivity to impose his own standard of success on to standards' success (for example, the law denies due process to "aliens" and so disadvantages them in applying for citizenship but successfully simplifies the work of immigration courts and administrative agencies), he overlooks two crucial factors that complicate standards' success. First, standards must seamlessly coexist with existing systems. For standards to even work at an operational within a single organization, they must meld with the physical control arrangements of the organizational environment; namely, the objects, machines, and technical systems to which the standards are applied (e.g., see Power 1996; Sagan 1993). Not only that, because standards are increasingly embedded, linked, and integrated across a greater number of organizational entities and even nations, standards must meld with an even greater number of systems that extend beyond the physical boundaries of a single organization. However, the surest way to guarantee that different standards from different systems from far-flung places seamlessly meld with each other is to standardize them all. For this reason, standards might be less easy to

fashion into success than what Stinchcombe presumed, since changing a single standard might require changing entire systems[5] (Lampland and Star 2008; Bowker and Star 2000).

Second, for standards to work as intended, they must be followed by the people to whom the standards apply. Unfortunately, people are the most difficult to standardize in a bid to get them to follow standards. Perhaps their fiercely homo economicus spirit prevents them from conforming to standards (Le Grand 1997; Bevan and Hood 2006). In fact, "rational men" cannot help but to meddle with standards in order to maximize their personal coffers. Alternatively, as Michael Lipsky (2010) suggested in *Street-Level Bureaucracy*, frontline workers might tinker with standards as a way to cope. They might develop shortcuts to reduce red tape, find loopholes to streamline processes, and employ workarounds when operations do not go as planned to help them persist in the perennially resource-strapped and rule-laden environments in which they operate. Or perhaps, as the authors of the influential *To Err Is Human* (2000) report, which stirred a patient safety revolution in American health care, stressed, humans are fallible creatures. Even with the best of intentions, humans will fail. They will slip from standards and so unwittingly thwart standards' success.

Making standards work is no easy feat. Perhaps this is why standards are known just as well for their failures as they are known for their success, and why the first account—professionals maintain standards because they work—will not do. Let us therefore return to the drawing board to ask, what accounts for professional's sustained determination to maintain standards, especially when evidence and experience abounds that standards often do not work as intended?

[5] In fact Martha Lampland and Susan L. Star (2008, 15), in their edited volume devoted solely to standards titled *Standards and their Stories,* warned that with ever-expanding reach of standards, "[t]he iron cage of bureaucracy has perhaps become a sociotechnical cage—sticky and party binding but also complexly structured with information architectures and human behavior."

Account 2: Money Compels

Perhaps people maintain standards due to money. As the standard (albeit caricatured) story goes, people in organizations maintain standards because compliance to standards is demanded by the usual culprits of government agencies, funders, insurance companies, and accreditation and professional associations, who reward organizations that comply to standards with money and special legal and professional statuses. For this reason, professionals in organizations must meet more and more standards to justify the receipt of more and more money as well as the honor of receiving those special statuses. What is more, in a system replete with legal risks, professionals in organizations are further encouraged to meet the overwhelming array of standards lest the organization loses money due to malpractice claims. Consequently, it does not matter whether people think that standards achieve whatever goals they are meant to achieve, nor does it matter whether they cynically deride those standards as mere "myth and ceremony," for what really matters is that money compels.

Money, though persuasive, is not a satisfactory account. Not all people are cold-hearted rationalists who do things for the sake of money, nor are they so feeble-minded so as to willingly submit to the dictates of money. As Bevan and Hood (2006) remind, the health and human services are made up of an assortment of people with different motivational types. Professionals are not all "reactive gamers" or "rational maniacs" working hard to profit from the system. Some professionals are, in fact, "saints" and "honest triers." Also consider Maynard-Moody and Musheno (2003) interviews with professionals serving at the frontline. Irrespective of whether they were cops, counselors, or teachers, they often molded standards, the rules enforced by the letter of the law, to comply with their own views on fairness and appropriate action. Where was money in their self-reported accounts on why they do what they do? Looking more closely at the

Network, money was never used as the ultimate reason to explain why the professionals remain committed to standards. Instead, when money did crop up, the professionals routinely embarked on an elaborate rationalizing journey whereby money somehow became a matter of providing expensive, quality, services that patients deserve but cannot afford.

Furthermore, if money did compel, why has burnout, the experience of severe physical and mental exhaustion and job dissatisfaction, escalated into a public health crisis (e.g., see Xu 2018)? Would not paying professionals high-enough salaries make following standards worth the trouble? Would not money mitigate the pain of burnout?[6] Yet even in America's lucrative healthcare system, demands to follow documentary standards—filling in logbooks, ticking checklists, and signing forms—is considered a primary cause of burnout, causing many professionals to succumb to depression, suicidal ideation, and even death by suicide (Gardner et al. 2019; Kroth et al. 2018; Shanafelt et al. 2016; Xu 2018; Gawande 2018; West, Dyrbye, and Shanafelt 2018). After all, people did not join the profession with a passionate desire to spend more time with paper than with people, to follow a "cookbook" of standards rather than to exercise clinical judgement, and to engage in tasks that slowly chip away at the soul. Given the cruel and even soul-shattering realities of on-the-ground work, no wonder many people end up leaving the profession altogether, and no wonder that at the Network, 50% of physicians who responded to a survey on finding the "Joy in Practice" were experiencing some form of burnout and 70% were thinking of leaving the Network within the next two years. Consider, also, that the aforementioned findings pertain to physicians. What about the professionals who spend most of

[6] This paragraph was written with a bit of tongue-in-cheek because burnout is a devastating issue which money cannot solve. For context, this paragraph was written in response to a series of questions I received after presenting a portion of my dissertation to an interdisciplinary group of scholars. One line of questioning was (perhaps also asked tongue-in-cheek): would not money help mitigate the absurdity of work? Do you think the professionals would be less upset or ambivalent about their work if they were paid higher wages? I think that paying decent wages always helps, (actually, paying decent wages should be demanded), but money is never the solution.

their time at a desk, behind a computer screen, who are paid lower wages to ensure that standards are maintained despite knowing how much harm those standards can cause? How might they fare?

Because people are not money-maximizers and money cannot mitigate the complex problem of burnout, money cannot adequately explain why professionals remain committed to maintaining standards. Let us therefore circle back to the initial question and ask, what accounts for professional's sustained determination to maintain standards, even when doing so can cause job dissatisfaction, immense emotional distress, and even burnout?

Account 3: Humans are Ambivalent; Standards are Plastic

In this dissertation, I will offer an account based on ambivalent humans and plastic standards. The term, ambivalence, carries meaning in at least two disciplines. For most psychologists, ambivalence is rooted in personality. It describes when an individual is pulled in psychologically opposed directions such as love and hate for the same object or person. For most sociologists, ambivalence is rooted in social roles. A social role is ambivalent when it places incompatible expectations on the person such as when a physician is expected to give her patient personalized services but must adhere to standards that demand uniform treatment (Merton 1976; Adler 2012). In this dissertation, I will waver between the psychological and sociological uses of ambivalence. Plasticity, in contrast, has a stricter definition. Drawing from science studies, an object is plastic when it shifts in meanings, practices, and consequences depending on the situation it is in (Star and Griesemer 1989; Latour 1990).

By examining how humans interact with standards, I will offer an account that rests on two claims. First, standards are plastic. The same standard that was dysfunctional in one context

can be functional in another; the same standard that was seemingly trivial in one context can be immensely consequential in another. Second, humans are ambivalent. They can possess opposing views towards the same object or task. Thus, a standard that was viewed as trivially frustrating in one situation can, in an instant, be viewed as immensely consequential, perhaps even embraced as a cause, in another. This is because even the smallest slip from standards—a document incorrectly filled-in, not filled in at all, misplaced, or lost in transit—can really make a difference not only to an organization's receipt of money and possibility of malpractice claims, but also to the life and death of patients. Taken together, I will argue that a standard's potential to veer from the realm of the trivial to the experiential reality of the consequential, alongside humans' capacity to mobilize ambivalence, is what commits professionals to maintain standards.

If it wasn't documented, it didn't happen

The topic of this dissertation grew from a peculiar phrase that was often deployed at the Network: "If it wasn't documented, it didn't happen." The phrase, which circulates American health care organizations more widely, requires professionals to leave textual traces of all pertinent actions, observations, and interventions on electronic or paper surfaces, for those textual traces carry consequences. For example, they ensure that medical services get billed, which enable organizations and workers to get paid. They provide evidence of regulatory and voluntary compliance, which is necessary for organizations to retain special legal and professional statuses. They offer information for managers and leaders to monitor, appraise, and reward their staff. They enable professionals and organizations to share information about patients, thereby facilitating patients' continuity of care. They can also dramatically affect the outcome of malpractice cases.

An important condition is tied to the mandate to document, however: professionals must follow documentary standards. At the minimum, they must leave paper trails of evidence which shows their adherence to the standards inscribed on documents such as policies, protocols, and procedures. In so doing, they are able to prove that they have exercised the minimum provision of care, or the "standard of care," expected of a skilled professional, thereby absolving them from legal liability. In some cases, however, the mandate to follow documentary standards takes on a more literal meaning. Documentation, the small etchings produced by a person's delicate flicker of fingers and hands, must be standardized. Specific boxes must be ticked, specific codes must get attached to specific diagnoses, and upper and lower cases must be used in just the right place, for only documentation that contorts to standardized form can fit and flow through various information and accounting systems, ready to be rendered into a nice number and placed on a document to be sent somewhere, to someone, who was not part of the action but requires evidence that some action was done. Thus commenced my interest in documentary standards.

The problem with writing about documentary standards is that they are everywhere, including their intellectual traces. For example, scholars of language and media studies study the manifold ideologies that are attached to words, which are themselves standardized, such as their seeming immutability across contexts (Gitelman 2014; Silverstein and Urban 1996). Scholars of science studies examine how standardized documentation bring together different people and objects from different origins and scales so as to make big entities such as social structures, facts, technologies, and diseases (Latour 1987; 1990; Star and Griesemer 1989; Mol 2002). Anthropologists of public policy and organizational sociologists scrutinize the processes, practices, and effects of humans' engagements with documents, standards, and documentary standards on matters such as affect, social relationships, power relations, and more (Lea 2008;

Hull 2012; Harper 1998; Riles 2006). How, then, can we possibly get a handle on all these literatures?

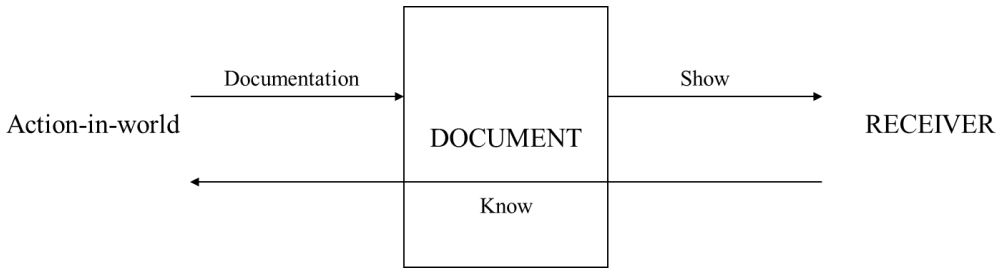
I will not list out the multiple ways that documentary standards have been approached in those literatures, for doing so will not help us prepare for our forthcoming adventures. Instead, I will take what is needed from those literatures to tell a story. A story about federally-funded health and human service organizations in contemporary United States, and about the important but underappreciated role that documentary standards play in making those organizations knowable and accountable. To tell this story, I will engage in an inversion of sorts. I will not begin with standards then whittle the topic down to documentary standards, which is how I have structured my argument so far. Rather, I will begin with document(ation) then pause at documentary standards, offering room for the rest of the dissertation to continue that story. In a way, then, the story I am about to tell should be viewed as a prequel to our forthcoming adventures with standards.

The 1980s marked a momentous moment in the development of public administration in the Anglosphere. With Margaret Thatcher leading charge in the United Kingdom and Ronald Regan as her North American compatriot, the era now known as "New Public Management" (NPM) was ushered in (Osborne and Gaebler 1993; Hood 1991). NPM aimed to deliver better, cheaper, and more innovative public services by infusing a business spirit into government. To do so, the government would set goals, devolve its service delivery arm to private health and human service organizations, introduce grants and financial incentives based on performance against those goals, then endow organizations with the freedom to choose how to pursue those goals (S. R. Smith and Lipsky 2009).

Unfortunately, freedom is never truly free because freedom, especially when granted by the government, comes with a cost. And often, that cost involves demonstrating accountability (c.f. Benjamin 2008; Ebrahim 2016). Consider Donald Moynihan's (2008) description of what it takes to demonstrate accountability in his book, *The Dynamics of Performance Management: Constructing Information and Reform*. According to Moynihan, it involves creating government-level strategic plans that contain clearly-specified goals, developing a system of measurement to monitor movements towards those goals, and the presence of information and accounting systems so that bureaucrats, appointees, and elected officials from afar can receive evidence about organizations' and professionals' on-the-ground performance against those goals. In other words, demonstrating accountability, at least in contemporary public administration in America, relies on the presence of goals as well as measurement, information, and accounting systems so that organizations can send evidence and governments can receive evidence about organizations' on-the-ground performance against those goals.

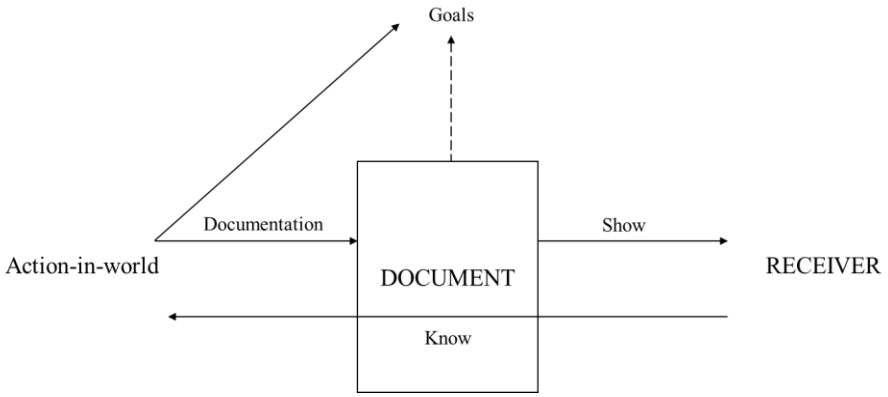
Because Moynihan's research was based on reading state and federal-level reforms and talking to state representatives about how they use performance information, we can forgive him for overlooking a more literal type of costly work involved in demonstrating accountability. Namely, the bodily, painstakingly meticulous work involved in producing evidence; evidence that relies on the steadfast efforts of people typing on keyboards, clicking on mouses, and rolling ink on paper to produce those very documents that organizations will use to demonstrate accountability to governments (Hull 2012; Harper 1998; Benjamin, Voida, and Bopp 2018).

Figure 1: The Know-Show Function



After all, documents possess a very special power in many parts of the world. Documents possess what media historian, Lisa Gitelman, calls the "know-show function" (2014, 1). They allow their receivers to *know* through *show* (Figure 1). They show through the words, pictures, and numbers displayed on their two-dimensional plane. By showing, the receiver comes to *know* about some *action(s) in the world* that occurred at some other time(s) and place(s) in the past. The production of these documents, moreover, is predicated on *documentation*, on smooshing action-in-world onto the smooth surface of documents.

Figure 2: Document's Reach to Goals



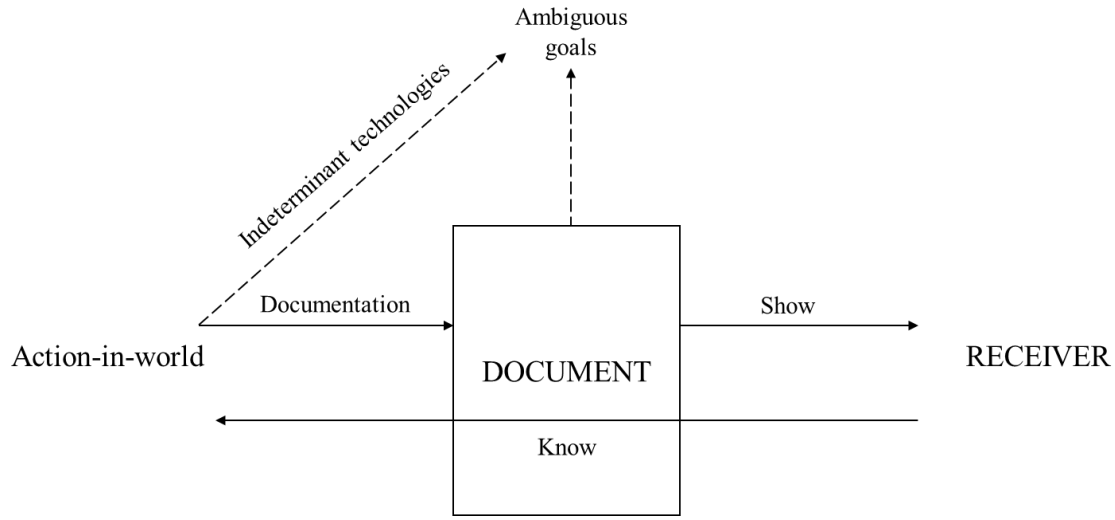
Due to this special know-show function, people use documents as evidence to account for past actions in the world. In this way, documents carry the weight of accountability on their surface. Yet in the halls of government, documents do more than just provide accounts of *past* action(s) in the world. They promise a type of accountability that reaches out to loftier, more ambitious and ambiguous *goals* such as efficiency, effectiveness, and quality (Figure 2).

Articulating the relationship between documents, action-in-world, and goals is complicated, however. For one, there is a rich tradition in the philosophy of language which addresses the relationship between the *real* and the *representation*. The basic idea is that there is no representation without re-presentation. Namely, the real is always mediated, or re-presented into slightly different form, by signs such as words, graphics, smells, and images which do the work of referring to or *standing in for* something other than itself. The implication is that representations such as the words inscribed on document are never a mere reflection or mirror of the real world. They are constructed from particular subject positions, belonging to a community of language-users with a complex array of conventions and habits, who collectively designates one kind of thing (e.g., the color red) to stand in for another (e.g., the quality of red) (Peirce 1974, particularly the "Division of Signs" and "The Icon, Index, and Symbol"; Putnam 1975; Silverstein 1998).[7] As such, what gets documented can never really capture what happened in the world, let alone some distal, lofty, goal set by the government.

The problem, however, is not just a philosophical one. In fact, at the level of everyday practice and in the questioning minds of practitioners, policy-makers, and applied scientists, there is constant wonderment as to how action(s)-in-world corresponds to the goal(s) set by government and how to faithfully capture then render those tenuous relationships on the surface of documents (e.g., see Benjamin 2013; Moynihan 2008).

[7] This does not mean that representations are not real or mere constructions made from the conventions and habits of specific communities of language-users. Representations are just as real because they allow people to collectively see, communicate, and even predict specific effects with regularity; oftentimes with enough regularity to be known as a *law*.

Figure 3: Two Complications. Ambiguous Goals and Indeterminant Technologies

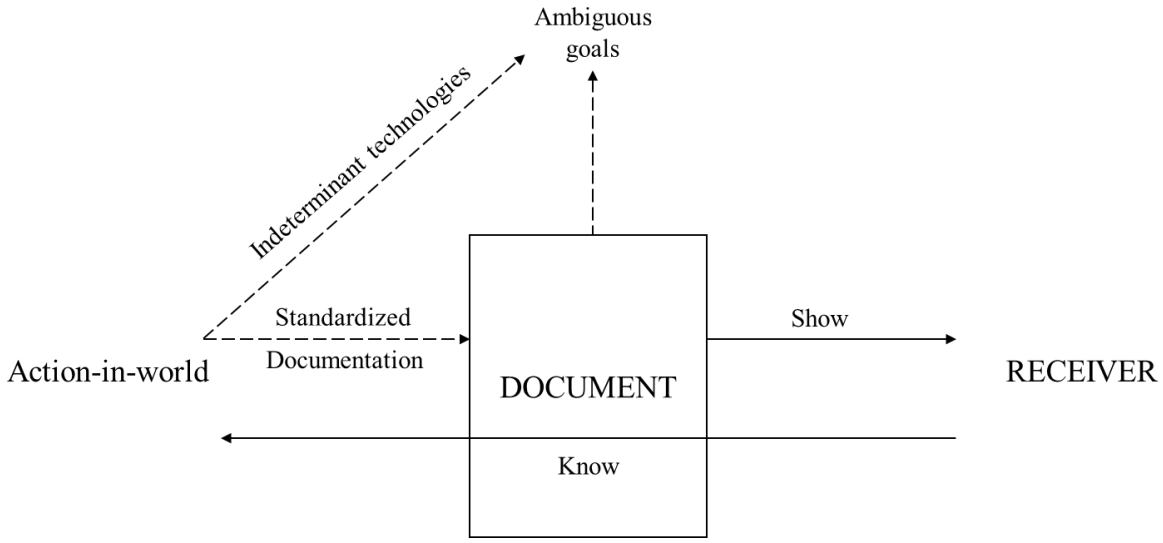


In particular, federally-funded health and human service organizations are famously afflicted with two problems that complicate the relationship between action-in-world and goals (Figure 3). The first problem is that the goals set by government are ambiguous. They are "multiple, conflicting, and vague" (Wildavsky 1979, 215; Brodkin 2011). Even a single goal can carry multiple meanings, is open to interpretive leeway, and is therefore subject to constant skepticism and dispute as to its true meaning (Chun and Rainey 2005; Rainey and Jung 2015). Yet, if people cannot agree on the definition and constitution of goals, how can they be sure that action-in-world accomplished said goals? Moreover, if they cannot collectively tether action-in-world to goals, how can that relationship even be documented and then rendered into a document?

The second complication is that technologies, the processes and practices that transform raw input into output, are indeterminant. This is because in the health and human services, humans are the raw input (Hasenfeld 2010; 2000; 1972; Sandfort 2010). However, since humans are complicated, each coming with unique needs, resources, and desires, technologies that are designed at high levels of generalization cannot produce the same human outputs with

consistency. For this reason, one cannot easily attribute a single technology to whatever human output (or outcome) was produced, for multiple technological pathways can lead to the same human destination (Cohen, March, and Olsen 1972; Pressman and Wildavsky 1984). Therefore, even if goals were *un*ambiguous, indeterminant technologies that work on complicated humans will inevitably confound the relationship between action-in-world and goals.

Figure 4: The Third Complication. Standardized Documentation



Yet there is a third complication. Not only must action-in-world be documented, often, documentation must be standardized (Figure 4). After all, standardized documentation possess the same special properties as Bruno Latour's (1987; 1990) infamous immutable mobiles.[8] Namely, they can retain the fidelity of their content irrespective of where they move ("immutable") and can travel to different places at little cost ("mobile"). More fantastically, standardized documentation are what Latour calls "combinable." They can get added and subtracted, layered and sliced, twisted and contorted with other types of standardized documentation, coming from different origins and scales, then merge into an elegant number that

[8] Bruno Latour (1990), in "Drawing Things Together," uses the term inscriptions, which he defines as "paper, signs, prints and diagrams" (p.21), to immutable mobiles. Documentation is a type of inscription.

can flow through distinct information and accounting technologies, ready to be placed on a document that is sent to the desk of a bureaucrat, funder, employee at an insurance company, and more for appraisal and reward.

Also recall that documents are ideologically tied to the know-show function. Therefore, once a document gets unmoored, lifted out of from its context of production, then sent forth to a new setting, it becomes authoritative (Hull 2012; D. E. Smith 1974; Bauman and Briggs 1990; Silverstein and Urban 1996). It speaks for the organization's actions, norms, and values, and takes on "an objective, autonomous character" of its own (Gitelman 2014, 4). And in the particular realm of government, a document that declares all i's are dotted and all t's are crossed accomplishes a remarkable feat. It proclaims that those once-ambiguous government goals have been reached, thereby giving the document-receiving organization hard evidence and indisputable reason to bequeath the document-producing organization with money as well as the highly-cherished identity, accountable, even if most people acknowledge that the document was built on sketchy grounds.

This presents a problem. On the one hand, because goals are ambiguous and technologies are indeterminate, many health and human service professionals do not find their work amenable to standardized documentation. Indeed, many professionals claim that standardized documentation unmoors and impoverishes the richness of action from their local contexts (Frumkin and Andre-Clark 2000; Berg 1997). What is more, documenting an activity in the name of some tenuously-linked yet glorious goal can produce epistemic distress and even "psychological violence" (Spitzmueller 2018; Graeber 2018). Yet on the other hand, the production of documents made from standardized documentation is necessary for people to know the organization. Funders give money, regulators endow legal statuses, and certification agencies

bestow organizations with designations of excellence based on those documents, thereby obligating health and human service professionals to follow documentary standards.

This is the trying position that health and human service professionals find themselves in—what should they do, how can they cope, how can they work through those tensions?—and where our forthcoming adventures with documentary standards will begin. But before we commence our adventures in earnest, let us first get acquainted with the theoretical and methodological mechanisms that went into constructing those adventures.

Methods

The Compromised Ant

Our adventures take place at a large[9], federally-funded healthcare organization. I have given the organization the pseudonym, "Network," because it is made up of several health centers scattered across Midwestern United States. The Network is literally a network of health centers. Though there was another reason why I chose the name, "Network." I chose it to pay homage to Bruno Latour's (2005) "Actor-network Theory" (ANT).

As a theory, ANT does not presuppose the existence of social structures such as capitalism, market forces, or the state. Instead, it posits that those structures are made from a constantly shifting assemblage, or "network," of elements such as people, objects, machines, ideas, and speech. ANT further posits that at times, the network becomes so solid that it takes on the appearance of a coherent whole—an "actor-network"—which people endow with agential powers to produce effects beyond the network of elements that is constantly at work to give and sustain its life. As a method, the researcher is encouraged to inhabit the character of a "blind,

[9] At the time of my fieldwork, the Network had over 700 employees and served over 80,000 patients.

myopic, workaholic, trail-sniffing" ant (Latour 2005, 9), who relentlessly "follow[s] the actors themselves" (Latour 2005, 12), charting out who, what, when, why, where, and how little elements come together to assemble coherent and big actor-networks (e.g., see Latour 1987; 1996; 1999; Mol 2002). As a type of politics, ANT exercises a radical type of equality. Humans are not privileged over non-humans. Rather, the ant who does ANT examines the rich social lives of both humans and non-humans such as the humble door-closer hydraulic that socializes humans to neglect the possibility that doors can slam shut and Aramis, a transportation system that was dreamt up in Paris but ceased to exist when it was tragically abandoned by its creators (Johnson 1988; Latour 2005; 1996).

I was seduced by ANT. It's cute, quirky, theoretically rich but accessible, and uses fun stories to deliver its punch. Furthermore, ANT does not presuppose the existence of social structures that orchestrate the calamities of the world from behind the shadows. Rather, ANT is committed to letting the actors, both human and non-human, speak and create worlds for themselves. However, I soon learned that I cannot commit to ANT. For one, I am too attached to using social structures, especially those pertaining to social roles, bureaucratic discourses, and technological determinism, to explain why the world is as it is. I also failed to appreciate that when a person does ethnographic research, especially at a large, bureaucratically-structured healthcare organization, one cannot magically become a "blind, myopic, workaholic, trail-sniffing" ant. For just like the professionals working at the Network, I had to follow standards. I had to comply to the many rules and regulations that prevent people from acting like ants. Finally, I had to come to terms with my own prejudices. I cannot exercise the kind of radical equality that ANT espouses because I cannot put non-humans on equal footing with humans.

Perhaps I am too much of a humanist. Or perhaps humans—their outbursts, complicated feelings, and awkwardness—are just too interesting for me to not pay attention to.

Thus, as I delved deeper into my ethnographic analysis, I found myself increasingly drawn to the teachings of Erving Goffman, the maestro of social interactions. According to Goffman, social interactions, such as a person's speech, ticks, gestures, and flusters in the presence of others, are always context-specific. They are a spur-of-the-moment kind of thing. However, social interactions are not so context-specific that they collapse into structureless situationism, for social interactions are guided by a shared set of social standards. In particular, people comply to social standards out of concern for one's own face and out of consideration for keeping the peace and avoiding conflicts (Goffman 1967; 1978; 2013). In this way, social standards are a type of structure that structures social interactions.

In *Interaction Ritual,* Goffman posed the question, "What minimal model of the actor is needed if we are to wind him up, stick him in amongst his fellows, and have an orderly traffic of behavior emerge?" (1967, 3). When I chanced upon that quote, I sensed that Goffman offered a question that my ethnographic data had answers to, even if it was not a question that I had initially thought to ask. Furthermore, since I came to the project invested in ANT, slowly compiling data that focused on humans' interactions with non-humans, I sensed that I could put a Latourian twist on the question. I could modify it to, what minimal model of the actor is needed if we were to wind her up, place her with bureaucratic objects such as standards, rules, and paperwork, stick her among colleagues in a highly-bureaucratic organization, and have an orderly traffic of behavior emerge? The orderly traffic that emerged was highly ritualized.

Data Collection

The adventures on the pages that follow are based on 16-months of ethnographic fieldwork.[10] I employed three data-gathering techniques while in the field: participant observations, interviews, and document analysis. Using participant observations, I witnessed events unfold in real-time. Using interviews, I learned how people think and talk about those events. [11] Using document analysis, I read the official accounts of those events. With multiple data sources to draw upon, I could examine the same phenomenon from different vantage points in different settings and in the company of different people and objects.

What was my position in the field? To even step foot into the Network, I had to fill in a document. The document required me to articulate who would sponsor my stay, what I would do at the Network, and with what frequency and length of time I would remain at the Network. On paper, I was sponsored by the Senior Manager of the Process Improvement Team, Evelyn,[12] I would observe members of the Process Improvement Team oversee and implement two to three process improvement projects seeking to improve the efficiency and/or quality of the Network, and I would spend two to four days per week for a period of a year at the Network.

[10] The ethnography was conducted between August 2019 and December 2020, which coincided with the World Health Organization's declaration that COVID-19 is a pandemic on March 11, 2020. Not surprisingly, this affected data collection. Thus, how I collected my data can be separated into three phases.

- Phase 1: pre-pandemic (mid-August 2019 to mid-March 2020; 7 months). I spent 2-4 days a week, in-person, at the Network conducting participant observations and interviews.
- Phase 2: during the pandemic (mid-March to late-August 2000; 5.5 months). My engagement with the Network was virtual, conducted via interfaces such as Zoom, Microsoft Teams, email, and phone. I spent 2-5 days per week at the Network, entering in and out of Zoom and Microsoft Teams meetings. In particular, I spent between 30 minutes to 2 hours per day in meetings.
- Phase 3: during the pandemic (September to mid-December 2000; 3.5 months). I ceased attending regular meetings but maintained my engagement with ongoing quality improvement projects.

The ethnographic descriptions in this dissertation are based on data collected from Phase 1. However, the arguments presented are based on all three phases. Phases 2 and 3 of the research served to validate the ethnographic findings from Phase 1 of the research.

[11] I received formal consent to ethnographically shadow 49 members of the Network. I interviewed 30 people at the Network at multiple times throughout fieldwork.

[12] All names, like this one, are pseudonyms.

The terms on the document conditioned the type of data I collected. Not surprisingly, it meant I spent countless of hours in the office, in the company of process improvement personnel, watching people type on computers and talk in meetings. The terms on the document also meant that I spend many hours reading an overwhelming array of documents such as protocols, policies, standard operating procedures, meeting minutes, emails, reports, training material, newsletters, and much much more. Simply put, I devoted most of my time just watching the mundanities of office life drift by.[13]

Being with the Process Improvement Team did have its advantages, though. Due to the team's special duty to improve the efficiency and quality of all aspects of the Network, it engaged with a wide cross-section of professional and organizational roles, ranging from the heights of the Chief Clinical Officer who steered the clinical goals of the Network to the depths of medical records personnel who scanned and faxed documents in the windowless basement of one of the health centers. Due to the team's sprawling social engagements, I got to engage with a diverse array of roles: medical directors, operations directors, middle management, physicians, nurses, medical assistants as well as members of finance, risk and compliance, data intelligence, purchasing, facilities, population health, marketing, and many more. Moreover, because the team's projects often took them to different health centers, conference rooms, lunch rooms, office spaces, and clinical spaces, I could also enter those spaces. Thus, by being placed with the Process Improvement Team, I received an unprecedented level of access to a wide variety of people and places.

[13] In fact, in order for me to relocate from administrative spaces to clinical areas, I was required to create a new project plan, complete with objectives, goals, a timeline, and a sponsor from the "executive leadership" team. I did write up the project plan and it was accepted. But something devastated the plan—the COVID-19 pandemic.

A "Cultural Fit"

Alas. My time at the Network was not as smooth-sailing as I have just implied. Even if I received numerous benefits from being with the Process Improvement Team, my ethnographic travails were encumbered by social standards. In particular, I cannot silently leer at people as they type on keyboards and expect them to act as usual, I cannot ask people to stop their work to answer my prying questions, and it is not polite to suddenly whip out then switch on my audio-recorder midway through conversation or to begin furiously typing on my laptop in the thicket of some social interaction. In other words, it is not socially appropriate to act like an ant. Instead, I must act like a human.

As a self-conscious human, I learned that the more I was willing to exchange little favors with the Network—doing side research, rearranging data, typing up meeting minutes—the more I was embraced at the Network. I also learned that the more I was embraced at the Network, the more I was rewarded with side benefits. I could observe a greater number of events, participate in a greater number of meetings, interview a greater number of people, and loosen the cords that tied me to the Process Improvement Team, which allowed me to drift to different health centers and talk to different people without the team's constant supervision.

Perhaps I also received those side benefits because the professionals at the Network considered me a cultural fit, and perhaps I was. After all, we live in the same cultural world. Like the professionals at the Network, I regularly check boxes, attend meetings, fix, clean, and present data, confront the challenges of paperwork, and find myself beholden to one too many standards. I am also haunted by the never-ending plight to document because, as an ethnographer, I also subscribe to the dictum, "if it wasn't documented, it didn't happen," which compels me to always document what transpired in the field.

Yet, the task of an ethnographer is to present others'—my informants, interlocuters, the people I am studying—worldviews as analytically distinct from my own (e.g., see Emerson, Fretz, and Shaw 2011). To be sure, I will recount a series of stories that are shaded with my own interpretive lens, casting them in the light of larger social dynamics such as the seemingly inescapable force of money, documentary ideologies, and the existential desire for humans to find meaning and do meaningful things in life. However, as I recount these stories, my voice and the voices of the professionals will sometimes merge. You see, the bureaucratic pulse that runs through the Network professionals also runs through me and, I presume, you too. Thus, the forthcoming adventures are not simply stories about some random professionals working at some random organization in some random part of Midwestern United States. They are also stories about you, me, and our ambivalent adventures with bureaucratically-banal, emotionally-exhausting, sometimes even soul-shattering organizational work such as maintaining documentary standards.

So, what are these adventures?

Outline of the dissertation

In this dissertation, we will witness healthcare professionals as they audit electronic medical records (chapter one), devise strategies to get frontline workers to click boxes (chapter two), conduct a risk assessment of the clinical environment (chapter three), and attempt to contort cervical cancer screening documentation into standardized form (chapter four). In so doing, we will observe all the work, including the people, objects, rules, roles, conventions, emotions, and bodily gestures that arise in meetings, at desks, and along corridors, involved in maintaining documentary standards. We will come to appreciate the frustrations and seeming futility of all

that work as well as the passion, pleasure, and even a sense of personal duty that accompany the pain. Throughout these adventures, we will carefully chart out the effects of this work on interpersonal relationships, professional power, the constitution of problems and solutions, and organizational and social reproduction.

Along the way, we will pay attention to ambivalence: how it is provoked, mobilized, and to what effects. From this, I will make two arguments. First, ambivalence is a mechanism of social and organizational reproduction. It makes deviating from unwanted paths difficult. In particular, with the mobilization of ambivalence, professionals can rationalize their participation in practices that they consider absurd or relationally undesirable by claiming that it is not them but the standards and the systems that they are in that compel them to do what they do not want to do. Second, ambivalence can protect professionals from succumbing to cynicism and burnout. Ambivalence, the human capacity to view an object or task as both trivial and consequential, allows them to transform what was once a seemingly trivial activity into something immensely consequential, perhaps even a cause. In so doing, ambivalence can help professionals remain committed to even the most unsavory parts of their work, such as maintaining documentary standards.

Finally, I will meditate on how we can make organizational life better for professionals working in the health and human services. To this end, I will present ambivalence as a type of stance that can help professionals take charge of their situation. A stance that can help them appreciate the ironic significance of their work, even when it all feels so futile, even when it feels like all the standards are against them, by infusing their work with meaning, excitement, and even hopes of a better future. Ultimately, I offer these adventures to help professionals, with noble plans to make the world a little better by devoting their working lives to the health and

human services, make sense of the endless contradictions of their work: its pleasures and pain, the inescapable feeling of yet again yet still believing that someday, somehow, things will be different.

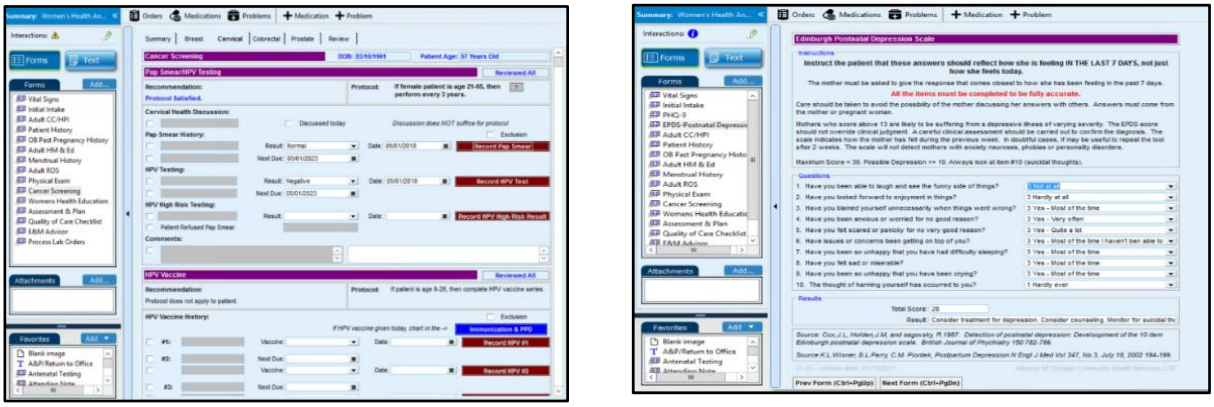
Chapter 1: Epistemic Gaps, with Audits and Avoidance

The Epistemic Gap

For events to exist in the world of the Network, they must be documented. For documentation to have a bureaucratic life beyond the page it was inscribed on, documentation must often be standardized, for only standardized documentation can fit and flow through various accounting and information technology systems, ready to be consumed by some bureaucrat in some far-flung place who was not part of the action but demands convincing that some action was done. For documentation to be standardized, however, everything must be put in its place. And not just any place, but the right place. For when there is a right place, everything that falls outside the right are wrong, which makes it easy for the person to identify the wrongs in order to put them back to the right.

Because documentation breaths bureaucratic life into organizational events, we will begin our story at the desk of a professional who is auditing. She is ensuring that documentation has been put in its right, standardized, place. The desk in question contains traces of the professional's personality: a hot-pink cannister filled with black coffee and a tub of Trader Joe's cookie butter. Those details, however, are beside the point, for what really matters is that the desk in question supports a laptop which carries the *electronic medical record* and the *compliance report*.

Figure 5: Deidentified images of the EMR



Source: These images were extracted from an information package, created by the Network's Process Improvement Team, called the "Clinical Quality Enterprise Goals Data Definition Guide." No identifying information is featured in these images.

The electronic medical record (EMR) contains a record of the patient's medical history (Figure 5). It is filled with many awkward boxes. Some are large, others are small, most are rectangle. Some are squeezed tight with words, others are empty, waiting to be filled in. The boxes are like "rabbit holes," described one user of the EMR. They offer too many places for documentation to go in, and so thwart workers' attempts to document in the right, standardized, place.

Figure 6: The Compliance Report

Patient ID	First Name	Last Name	DOB	Compliant	Comments

The compliance report, in contrast, is neat. It is parsimonious in content, composed of boxes that are uniform in height and width and tastefully topped with a header defined in bold (Figure 6). The compliance report is a spreadsheet that holds basic information about a patient: patient identifier number, first name, last name, and date of birth. Each line of information is affixed to the columns, "Compliant" and "Comments," in which the auditor will place her own

documentation to indicate whether a patient record is in compliance to a federally-mandated task and any additional notes about said task.

It is 7:45am, the office is mostly empty, with the only sound coming from the hum of the heater. Despite being alone, the professional hunches her back forward, squints her eyes at her laptop, and places her pink earphones in her ears as if to declare do not disturb because this professional is hard at work, auditing.

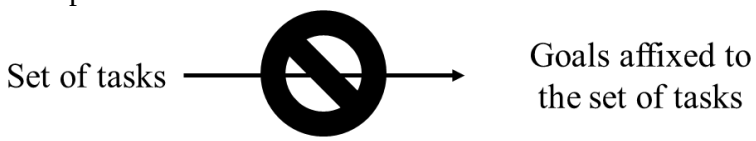
In *Audit Society, Rituals of Verification* (1997), Michael Power describes audits as a set of practices and normative ideas. As a set of practices, audits refer to the tasks of checking, monitoring, and verifying the facticity of some activity or object against some standard. As a set of ideas, audits are attached to goals through which the auditing practice makes sense and has meaning. For example, by attesting to the credibility of a written account, financial audits promise trust in an economic exchange relationship where one party cannot perfectly monitor another. However, as Power cautions, financial audits may not guarantee trust. Errors are easily missed because audits rely on a small sample of transactions, auditing decisions are opaque because they are based on an insular set of expert opinions, and the auditors' independence cannot be achieved for their audits rely on the cooperation of the audited organization to check its own internal controls. Here lies the problem, Power concludes: too often, the relationship between the goals and tasks of audits is tenuous (Power 1997, 96; Strathern 2003).

Let us return to the professional who is auditing. Her task is to verify whether documentation adheres to standards, which she does by checking whether documentation in the EMR matches with documentation in the compliance report. Yet, the goals of her task are to "quality assure," to reduce errors in production, output, or systems, and to "quality improve," to

improve the quality of health services provided. Not surprisingly, she suspects that her auditing tasks are detached from the goals that her audits are meant to serve.

Is the professional engaged in what David Graeber (2018, 9–10) famously called a "bullshit job"? That is, a "form of paid employment that is so completely pointless, unnecessary, or pernicious that even the employee cannot justify its existence even though, as part of the conditions of employment, the employee feels obliged to pretend that this is not the case?" After all, the task seems to exist to allow the Network to claim that it quality assures and quality improves when, in fact, the task really involves checking whether documentation adheres to standards by comparing documentation in the EMR to documentation in the compliance report.

Figure 7: Epistemic Gaps



Let us call this gap, the human belief that what a set of tasks entails in practice is detached from the goals that those tasks are supposed to achieve in theory, an *epistemic gap* (Figure 7). Epistemic gaps can be harmful. They can stir thoughts of absurdity, which can spiral into feelings of cynicism, meaninglessness, and even epistemic distress.[14] And, as the late David Graeber (2013) warned, such gaps can even cause "profound psychological violence," "moral and spiritual damage," and a "scar across our collective soul."

This chapter examines a group of professionals who are tasked to audit as they deal with their own epistemic gaps. It asks, how do professionals work with epistemic gaps?

To answer this question, we will enter the backstage of the Network, the putative region where performers break from character by offering a more "truthful" performance than what was

[14] Refer to the introduction for a brief literature review.

rendered at the front (Goffman 1978). At the back, we will move with the auditor-professionals to desks, cubicles, office spaces, and lunch rooms, catching snippets of meeting talk, office talk, interview talk, and self-conscious talk. In so doing, we will learn that the putative backstage of the Network is also the professional's front because not only must they audit—monitor, check, and verify—the EMR and compliance reports, they must also audit the *social* situation. They must constantly monitor and check their own behavior, verifying whether they comport to what is socially-expected of the role they inhabit and mobilizing the right verbal and non-verbal cues so that others obtain the socially-correct impression of them.

I will argue that by performing these *social* audits, the professionals work with epistemic gaps by sidestepping, or more aptly *avoiding*, them altogether. For when the professional suspects that a task is detached from its goals but is responsible for making it look as though it is not, she must continue doing her task as if it works as it ought to work. In particular, she must *avoid* overt signs of epistemic gaps because any public admission of epistemic gaps might jeopardize the professional's fate, puncture the team's air of confidence and consequence, and undermine the assumption that the organization is running as it should run.

So, as the very person sporting the pink earphones and buoyed by black coffee in the hot-pink cannister, I continue to audit with the commitment of a professional, unencumbered by epistemic gaps.

The Context and the Characters

Before we proceed, let us orient ourselves to the context and characters of this story. Each year, the Network fills in the *Uniform Data Systems* (UDS). The UDS is a standardized reporting system that all health centers which receive federal funds from the Health Resources and

Services Administration's (HRSA) Health Center Program are mandated to fill in. The report requires organizations to provide information on matters such as the number and socio-demographic characteristics of patients served, operational details such as the quantity and types of services provided, and financial data such as the dollar amount and sources of income that the organization received. Moreover, the UDS report requires organizations to provide information about their provision of patient care by reporting on the "clinical quality measures," which are activities that they are federally-required to perform, count, and document on.

Though the descriptor, "clinical quality," precedes the word, "measure," there is little illusion that the measures serve as evidence of quality.[15] To illustrate, at the Network, some clinical quality measures such as the depression screening and body mass index measures are snidely called the "box-clicking" measures because their execution entails articulating a set of standardized questions followed by clicking a few boxes in the EMR. Since executing those measures does not rely on improving the patient's health outcomes; indeed, one could easily click boxes without asking the screening questions or engaging in concerted follow-up about depressive symptoms or weight, professionals at the Network have called them "made-up."

On the other end of the spectrum, there are "patient-dependent" measures. While all measures are, to a degree, patient dependent, executing some measures require greater dependence on patients' compliance. Examples include the childhood immunization measure, which requires guardians to consent for children to be regularly jabbed in accordance to a schedule, and the colorectal cancer measure, which requires patients to voluntarily poop on a strip, place the strip in an envelope, then physically drop off the envelope in a box at the

[15] Even the UDS Instruction Manual, which specifies how to fill in the UDS Report, refer to the measures as "process measures," explaining, that "[t]his means that they document services that have been shown to be correlated with, and serve as a proxy for, positive long-term health outcomes" (HRSA 2019, 75).

Network. Although patient-dependent measures are considered more credible than the box-clicking measures, perhaps because prodding or extracting human parts are involved, they can easily become arbitrary through the imposition of a bureaucratic timeline. For example, doing the childhood immunization measure relies on making sure the child receives all the requisite vaccines before she or he turns two. Consequently, if the child receives all the vaccines upon two years and one day of age, the child does not meet the measure definition. The patient record is "non-compliant."

Figure 8: Health Center Quality Leader Gold, Silver, and Bronze Badges

Source: The images are from the Health Resources and Services Administration's Health Center Program's website. HRSA. (2021) Community Health Quality Recognition (CHQR) Badges. HRSA Health Center Program. https://bphc.hrsa.gov/qualityimprovement/community-health-quality-recognition/badges (accessed June 6th 2022).

Though most, if not all, the professionals at the Network express a leeriness towards the clinical quality measures, the measures must still get done. After all, not only does performing the measures in the top 10, 11-20, and 21-30 percent of all peer health centers grant the Network the right to place a gold, silver, or bronze "Clinical Quality Measure Badge" on its marketing material, thereby designating it a "Health Center Quality Leader" (Figure 8), the receipt of those badges comes with varying levels of monetary rewards. Epistemic gaps therefore pushed aside, in order for the Network to get more money and more covetable badges of quality, it must get the frontline workers to do two tasks.

First, the frontline workers must do the clinical quality measures. This requires getting the frontline workers to adhere to "workflows." Workflows are like standard operating procedures. They are "the set of tasks – grouped chronologically into processes – and the set of people or resources needed for those tasks, that are necessary to accomplish a given goal" (Cain and Haque 2008, 217). As a metaphor, workflows conjure images of streams of water or electric circuits dissolving formerly separate nodes into one of smooth continuity. In this way, the word also reflects the aspirational texture of movement in the clinic, where people frictionlessly flow through space and time within their tightly-defined roles doing tightly-defined tasks to accomplish tightly-defined goals.

Figure 9: Documentary Flows

Regrettably, *doing* the measures in sync with workflows is not sufficient for the Network to receive badges of quality and money from the federal authorities. The frontline workers must also *document* their *doings* so as to enable *documentary flows* (Figure 9). For documentation to flow, however documentation must be standardized, for only standardized documentation can get captured by a *computer script*, correctly rendered as "compliant" or "non-compliant" in the compliance report, then transformed into 0s and 1s, contorted into a percentage, placed on the UDS report, and sent to the desk of a bureaucrat who then appraises and rewards the reality[16] made from documents by flowing money and designations of quality back to the Network.

[16] The concept, documentary reality, comes from Dorothy E. Smith's (1974) "The Social Construction of Documentary Reality." She argued that documentation creates an account of "what actually happened" based on

Unfortunately, there is a problem. The Network does not reside in a magical world where work and documentation frictionlessly flow. Instead, it resides in a messy world filled with fallible people who, as many leaders and managers at the Network frequently opine, are human. Humans, however, are liable to slips, lapses, and mistakes[17] and can even refuse to follow standards with complaints of lack of time and resource capacity issues, with the effect of disrupting work- and documentary flows. For this reason, the Network must hire a cadre of professionals who are tasked to fix those errors,[18] including members of the Process Improvement Team.[19]

The problem that organizes the Process Improvement Team's work is that health care administrators operate in an environment with pressures to do more with less but cannot and should not compromise on quality. Thus, with an eye towards efficiency, the team must drive quality improvement initiatives at the Network to promote better health outcomes.[20]

specific categories and conceptual procedures that go through significant editing and corrective processes. Nonetheless, documentation is taken up as the "real" account of what occurred, and is consequently used as the basis of governance, management, and administration.

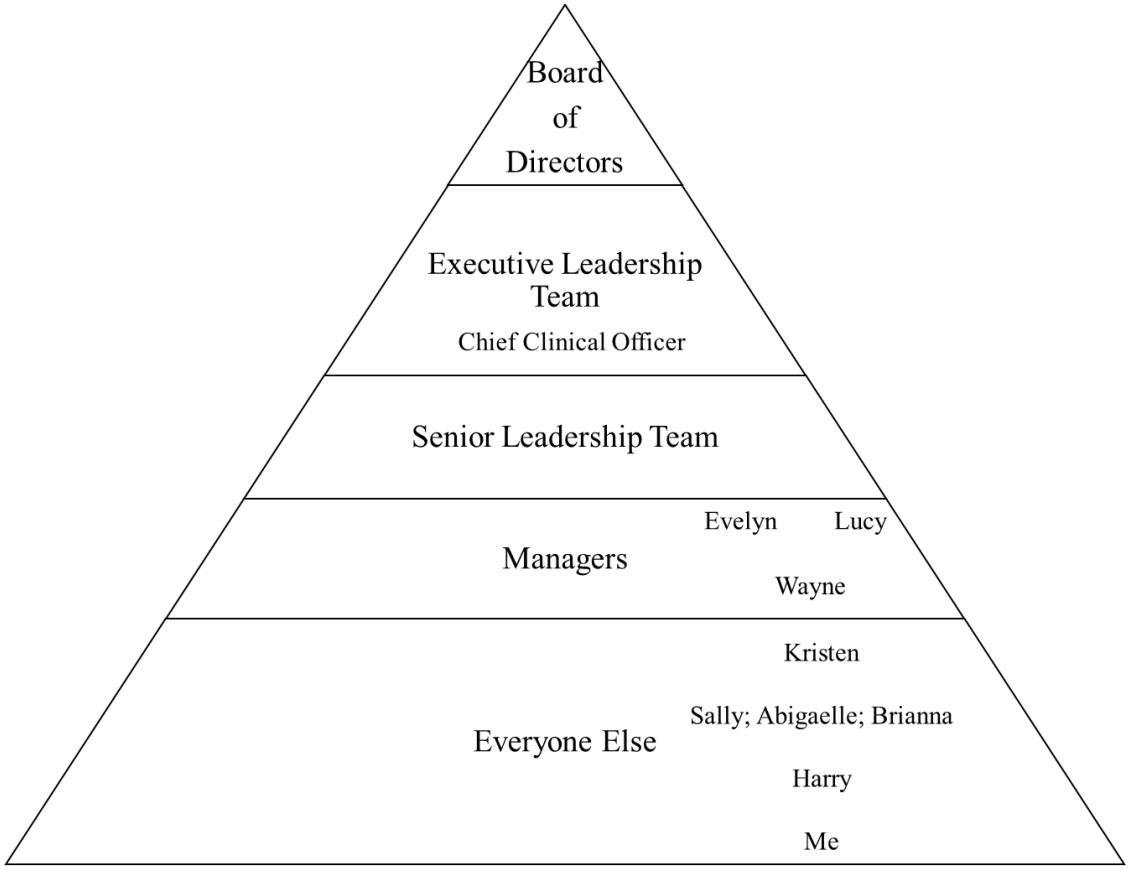
[17] This phrase is from the Institute of Medicine's (2000) *To Err is Human* report.

[18] This work is sometimes called "maintenance and repair work"(e.g., see Henke and Sims 2020; Star and Strauss 1999), which describes the mundane and hidden work of smoothing bumps and fixing unexpected contingencies—of fixing cracks, cleaning data, removing dust—which is necessary for the day-to-day running of everyday life. On the other hand, this work might be what David Graber (2018) calls duct-taping, which involves duct-taping over others' mistakes, such as frontline workers' failure to maintain documentary standards.

[19] In practice, the task of auditing the clinical quality measures is more widely distributed at the Network. Some clinical quality measures, for instance, require a degree of medical expertise to audit. For this reason, only physicians and residents can audit the asthma and statin therapy measures. Nonetheless, the Process Improvement Team is formally responsible for the clinical quality measures.

[20] Also note that the Network is federally-mandated to hire people to oversee quality improvement and quality assurance programs, which includes monitoring the clinical quality measures. This is written in chapter 10 of the *Health Center Program Compliance Manual* (2018), titled "Quality Improvement/Assurance," which writes "The health center designates an individual(s) to oversee the QI/QA program established by board-approved polic(ies). This individual's responsibilities would include, but not be limited to, ensuring the implementation of QI/QA operating procedures and related assessments, monitoring QI/QA outcomes, and updating QI/QA operating procedures."

Figure 10: Organizational Hierarchy



The Process Improvement Team is led by Evelyn, who is a Senior Manager. On the organizational hierarchy, she sits below the Senior Leadership Team, which sits below the Executive Leadership Team, which sits below the Board of Directors (Figure 10). The other members of Process Improvement (Kristen, Sally, Harry, and Brianna), along with this ethnographer, are lumped in with everyone else. Our positions are so insignificant that we do not formally have a place on the organizational chart (I have added this "Everyone Else" detail for the readers' convenience). Other Network professionals who we will encounter but are not part of the Process Improvement Team include Lucy, the Director of Clinical Operations who hierarchically sits beside Evelyn, Wayne, a manager but without the qualifier, "Senior," of the Network's Data Team, and Abigaelle, the Infections Control Officer.

In what follows, we will spend time with these professionals in the months leading up to the UDS submission deadline to observe how they work with, or more appropriately avoid, epistemic gaps.

Inside the Network

Four months before submission deadline

On a violently snowy morning, the Chief Financial Officer is sitting in his office. He ponders, the first time it snowed this year fell on Halloween; the second snowfall of the year is today, which is Veterans Day. Two heavy snow falls, both falling on a holiday. Surely, he muses, the snowfall is an omen that something bad will happen. On this ominous morning, Evelyn, Sally, and I are seated at our desks, auditing the compliance reports. More precisely, we are *quality assuring* the compliance reports, which Evelyn explains as,

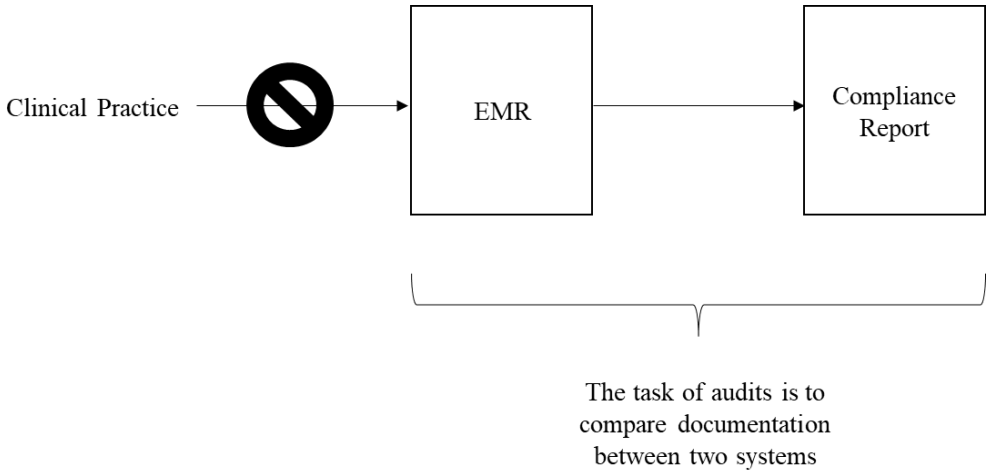
> "[S]o in any type of industry, there's always like, you wanna make sure, which is part of process improvement right, you want to be reducing error so there's always a form of evaluation to ensure that this is free from error. Or as low as error as you can get."

Evelyn's reason for quality assuring is to make something "free from error," or at least "as low as error as you can get." To be sure, reducing error is a worthy goal. This is especially true of engineering, the ostensive birthplace of quality assurance, where real-world processes and outputs are compared to statistical measures of control (Power 1996).[21] Unlike engineers, however, the Process Improvement Team is checking whether documentation in the EMR

[21] Just as Michael Power notes in footnote 11 of "Making Things Auditable," where this statement is extracted from, sociologists of technology have shown that the statistical measures of control against which quality, or more precisely "fitness for use," is a social construct; there is nothing "natural" about checking engineering processes and outputs against statistical measures of control. Like Power, however, I draw this comparison to make a rhetorical point.

corresponds to documentation in the compliance reports. Somehow, the connection to the putatively real[22] world of clinical practice has gotten lost (Figure 11).

Figure 11: Broken connection between clinical practice and quality assurance



Perhaps, however, losing touch with the putatively realer world of clinical practice does not actually matter because, as Evelyn points out, quality assurance is "part of process improvement" and is conducted "in any type of industry." For years, sociologists have argued that organizations adopt practices because they are demanded by funders, regulators, and professional bodies who have affixed those practices with normative values (DiMaggio and Powell 1983; Meyer and Rowan 1977). Sociologists claim that the more those practices are culturally cherished because they are taken as enactments of some normative value, the more they will be supported in organizations even if they do not serve the organization's technical goals. Importantly, enacting those practices infuse and define the organization with the highly-valued identity that it wishes to convey to an audience; an identity that is often honored with money and recognitions of honor. Perhaps, then, the team engages in quality assurance because

[22] Note that I do not think that the world of practice is any more real than the technological/operational world of audits. I am drawing this distinction the play on the trope, employed in fields such as public administration, implementation science, applied economics, and so on that there is a yawning gap between theory and practice or paper and practice that must be bridged.

quality assurance is what responsibly rational organizations do, even if the practice is premised on checking the quality of internal controls in lieu of directly checking the quality of the clinical objects or services that the internal controls are supposed to be checking (Power 1997, 12; Strathern 2000).

On this snowy morning, Evelyn, Sally, and I are pulled by the dull glow of our computer screens into the UDS universe where all that counts are given special terms: *measure definition*, *denominator*, and *numerator* (HRSA 2019, 73). The *measure definition* specifies the people, tasks, places, and times that are necessary to do and document the clinical quality measure. The body mass index (BMI) screening measure, for instance, specifies the people (patients aged 18 years and over), tasks (documentation of height, weight, BMI, and follow-up plan), place (in a medical visit) and time (within 12 months of a medical visit) that matter to the BMI measure definition. The *denominator,* a count of the number of patient records that are included in the measure definition, forms the so-called *universe* of the measure definition. A denominator of 1 means the patient record resides in the universe; a denominator of 0 means it does not. Finally, the *numerator* is a count of the number of patient records that meet the measure definition. A patient record that meets the measure definition is called *compliant* and is marked 1; a patient record that does not meet the measure definition is called *non-compliant* and is marked 0.

In this UDS universe, patients were never given names with biographical histories, let alone medical histories, as they are merely patient records made up of 0s and 1s. The goal of the UDS universe is to get as many patient records to submit themselves to the measure definition: to have a numerator of 1, to be a 1/1, to be compliant.

Yet on this snowy morning, something ominous is afoot. The compliance reports have denominators of 3s and 4s, which prevent the team from knowing which patient record truly resides in the UDS universe. Evelyn consequently cries,

'I'm on edge! This is all wrong!'[23]

Moments later, she cries, 'I'm getting so riled up!'

Like a clarion call, Sally and I are drawn from our desks to Evelyn's cubicle. Evelyn had just emailed Wayne, the author of the computer scripts which produced the compliance reports, asking for the definitions of the 3s and 4s.

Wayne emailed back, 'The output is within 1% of the reports in the EMR.'

'What does that mean?' Evelyn exclaims. So with Sally and I as witness, Evelyn sends Wayne another email:

'I still don't understand what the designations are,' which receives the almost-immediate response of:

'We don't know what they mean either.'

Wayne's response sends waves of shock across the three of us. Does not Wayne understand that his admission of ignorance and disinclination to investigate the definitions of 3s and 4s carries the fates of others? Namely, Evelyn's responsibility to monitor the clinical quality measures, the team's task to quality assure the compliance reports, and the Network's obligation to demonstrate its clinical quality to federal bureaucrats with full confidence in the quality of its data? From this email, three figures sequestered in a cubicle and huddled around a desk begin to tsk, tut, enlarge their eyes, and shake their heads. Individual speech and gestures begin to burst

[23] I use single quotation marks to indicate speech that is paraphrased speech. While I have attempted to retain the accuracy of all quotes in single quotation marks, they are not directly taken from an audio recording or print source.

forth and jump between those figures, creating a collective stance that is uniform in direction and intensity towards uncooperative Wayne, his unhelpful email, and the nettlesome compliance reports. In this brief moment, something magical occurs. The three figures have *embraced*[24] their role. They have transformed into impassioned professionals who, through their carefully-synced movements in body and speech, are "transfigured in an ecstasy in which [their] personal attributes are merged with those of the office" (Hughes 1937, 406).

Audits. So preoccupied with their own universe, so demanding with special terms, so concerned with ensuring that documentation in the EMR corresponds to documentation in the compliance reports. Perhaps the Chief Financial Officer was right to suspect that something ominous (or more appropriately, odd) would befall the Network on this violently snowy morning because in embracement, the professionals have effectively circumvented the sharp thrust of absurdity that accompanies the bizarreness of being frustrated by 3s and 4s and the banality of doing the auditing task.

Three months before submission deadline

Four figures are seated on swivel chairs. They are facing Evelyn who is standing, leaning against the panel of her office cubicle, who has just called an impromptu meeting. Evelyn gushes,

'We've gathered a nice team. All hands on deck!'

Evelyn has just received a new set of compliance reports. Unlike the previous reports, so encumbered by 3s and 4s in the denominator, the new reports only contain patient records with denominators of 1 and numerators of 0. Evelyn thus exclaims,

[24] In *Encounters: Two Studies in the Sociology of Interaction* (2013 [1961]), Erving Goffman lists three features of *embracement*: a self-professed attachment to the role; demonstrable skills to perform the role, and visible investiture in the tasks attached to the role.

'There is no confusion as to whether it's is in or out [of the UDS universe.] They're all non-compliant!'

The team's forthcoming task is to audit patient records that are marked, non-compliant, in the compliance report. Recall that frontline workers might have complied to the measure definition. However, if they do not follow documentary standards, compliance will not get captured by the computer script and accurately rendered as "compliant" in the compliance report. The team must consequently identify patient records that are marked as non-compliant in the compliance report yet have evidence of compliance in the EMR for manual changing into standardized form.[25] More precisely, as Evelyn puts it, they must 'look for words or phrases in the EMR itself that something was done to get us credit.'

This is not to say that the team is dabbling in deceit when they search for opportunities to change patient records of non-compliance into compliance. They are simply ensuring that the Network gets credit for what the frontline workers have already done. Though more importantly, when the Network is three months shy of the UDS report deadline, it is useless to verify whether patient records designated as compliant in the compliance report are actually non-compliant in the EMR, especially when changing compliance to non-compliance is counterproductive to the purpose of demonstrating quality because only instances of compliance that is aggregated, transformed into a percentage, then shoved into a federally-mandated report becomes known as bureaucratic quality. In this way, changing quality, at least on paper, does not only rely on managing people in the clinical world of practice. Changing quality can also be accomplished by manually changing documentation in the EMR itself.

[25] Note that the professionals are not permitted to manually change documentation in the EMR themselves. A registered physician must do so instead.

At the Network, it is no secret that audits are essential to the project of quality improvement.[26] In fact, I was introduced to this relationship the first day I entered the Network. As part of orientation, Evelyn presented the *Enterprise Goals* to me. She explained that when leaders and managers refer to the Enterprise Goals, they often refer to a collection of clinical quality measures that have been affixed to performance thresholds that the whole organization must strive to meet. I subsequently asked:

> "So how do you go about sort of implementing the whole protocol [*Enterprise Goals*]? Like, for instance, here you've got a, you've got some underperforming staff. How do you…"

To which Evelyn replied with a story about Lucy. Lucy was tasked to improve one health center's performance on the childhood immunization clinical quality measure. Evelyn began her story as so:

> "[W]e had her first start doing a chart audit to figure out is there something, is there something that's missing in the charts? Are there things, like, is it being done and we're just not recording it properly?"

She then proceeded to contextualize her statement with details about the Network's cumbersome EMR, before smoothly returning to audits to articulate a more general lesson.

> "When you approach a project we always just want to figure out what is our current state right now. […] So at first that starts with doing the chart audit."

[26] The U.S. Health Resources Services Administration defines quality improvement as "systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups" (HRSA 2011, 1). Accordingly, quality improvement is an orderly and methodical affair that relies on making quality measurable. For the Network, the measures have been defined as the UDS clinical quality measures.

For Evelyn, improvement begins with identifying the "current state," which is found by way of the chart audit because when one audits, not only do past events resurrect into existence, they rush into the present to become the "current state." Sometimes, the current state enables the professional to figure out what went wrong in the past, which then presents opportunities for improvement in the present. Perhaps the frontline workers did not do the measure. Or perhaps the frontline workers did do the measure but failed to document their doings in the right, standardized way. Both perhaps, however, invite opportunities to schedule more meetings, write more standard operating procedures, and host more training sessions to re-establish what it takes to do and document the measures with line with standards.

Though at other times, Evelyn continued, the audit is powerless to improve upon the current state. In such cases, the Process Improvement Team is called upon to go into "operations overload." They must convene an interdisciplinary group of stakeholders to a single conference room, task the stakeholders to use post-it notes to map out the current state on the wall, determine why the current state has fallen short from the ideal state, then find solutions to close the gap between the current and the ideal state. Though even this mapping activity can fail. In those instances, the team must physically shadow the frontline workers to verify and check whether the workers are indeed following the standards that they claim to be following, search for gaps between what they say and what they do, then offer solutions to close the gap.

Evelyn's story about Lucy, however, commenced and ended with the chart audit,

"So after the chart audit that she completed, she did a lot of corrections. […]. She corrected a bunch of stuff that maybe just wasn't documented properly. […]." Though the story had a less-than-happy ending. "So actually we did see a bit of a jump. Not as much as we had hoped."

Thereafter, I made several attempts to arrange an interview with Lucy. After several failed attempts, Lucy and I finally met, two weeks after the UDS report was submitted, seven months into my tenure at the Network.

A Polite Engagement with Lucy

On a cloudy Friday morning, two people meet in a windowless office room. The first person, Lucy, is the Director of Clinical Operations and a registered nurse. Her position was borne from leadership's concession that not all tasks at the Network can be neatly separated into "clinical" and "operations" but sometimes straddle in between. Lucy therefore oversees operational issues that require clinical expertise, or clinical issues that require operational fixes, or issues that no one in clinical and operations roles desire to oversee.

The second person, this ethnographer-cum-auditor-turned-interviewer, plays a "discrepant role" (c.f. Goffman 1978 see chapter IV, particularly p.145). Though she has volunteered to help audit the compliance reports in the name of quality and the collective good of the Network, she is also an ethnographer who is armed with an audio-recorder. She has also allied herself with the Process Improvement Team. Conceivably, then, she could be a "spy," gathering and leaking potentially incriminating information to people in the Process Improvement Team and beyond to the likes of you, which could implicate dear Lucy.

Lucy glows with antiquated charm. Her speech is littered with metaphors of quilting and detective work. Her quality improvement findings are typed on outdated orange-template PowerPoint slides, adorned with clipart such as a cartoon detective dog and a cartoon detective grey-haired man. Lucy's tone is steady, her facial expressions is steady, her eye contact is steady. With her steady composure, one cannot help but to think Lucy is sincerely committed to her

audits, which she describes as 'intimate' and involves 'turn[ing] problems into potential.' That is, until you carefully listen to what she says about her quality improvement audits.

"There's a lot of opportunity. A lot of missed opportunity. Or opportunity to fail."

In the world of quality improvement, failures do not exist, only opportunities for improvement. Thus, the expected ending to "opportunity" is "for improvement" and not "to fail." At first blush, I wonder whether Lucy has muddled her words, so I respond to her steady expression with equal steadiness in expression, politely avoiding her muddle. Lucy, however, continues to use the right words in the wrong ways: "There's just so much potential for missed opportunity"; "There's just so much potential for you to not give immunization for so many different reasons so that when it happens it's really, it's victory"; "Through no fault of their own, they're doing so well." Lucy muddles her words, pinpoints possibilities for failure rather than improvement, and attributes success to chance rather than her own managerial skill with so much consistency that I begin to suspect that Lucy is not at all muddled. Rather, I suspect that she is exhibiting a degree of rebellion, comedic in tinge, towards what her role demands. Yet without the usual accompaniment of a wink, coy smile, or twinkle in her voice, I cannot tell if Lucy is being sarcastic or sincere. I therefore respond to Lucy's muddled words as if they were not muddled, as I am too polite to suddenly switch to a laugh.

Polite and police come from the same root word, *polis.* Lucy was polite in expression. She rarely offered facial cues or shifts in intonation to suggest that her words, her job, or auditing are a laughing matter. Likewise, I was polite in expression, even if I was inclined to burst into awkward laughter. By policing our polite expressions, never did we air epistemic gaps, even if we broached then skirted by them. Instead, we comported to the organizational standards expected of our station, with Lucy meticulously describing and myself attentively listening to all

the technical details that goes into audits, puffing out airs of confidence and consequence so as to support the assumption that audits are working as they should work. Perhaps Lucy came out of the interview thinking I was extremely well-mannered, if not a bit bright-eyed and naïve. Or perhaps she came out thinking that I put on a polite show, just as I came out of the interview a little warier of Lucy's show.

A Brief Interlude

While I was at the Network, I made the error of expressing a desire to audit. When I began to audit, I made the bigger error of expressing an enthusiasm for audits. I was so good at expressing my enthusiasm for audits that I soon lost the opportunity to express my waning desire to audit, and so I found myself tied to auditing. My engagement with audits elicited different responses from members of the Process Improvement Team. Evelyn praised me for channeling similar 'vibes' to the previous year's intern. The intern was so good at auditing that Evelyn offered her paid employment to stay at the Network to continue to audit, but the intern sadly declined. Harry, in contrast, felt bad for me. After witnessing the dramatic morning due to the troublesome 3s and 4s in the denominator, he expressed an interest to audit, which he soon revoked once he made the discovery that 'auditing is boring.' Likewise, Brianna rarely engaged in auditing; she preferred dealing with people instead. When she learned I was still auditing, she chuckled saying, 'we've gotta get you outta there.'

Kirsten, however, was different. Though most of our interactions were limited to good mornings, goodbyes, or casual chit-chat while moving to, from, or between meetings, Kristen routinely expressed her support for my audits. When I found an error in a computer script which spoiled the flow between the EMR and compliance report, she praised, 'you're doing an

important job. Thank you.' When I recounted the dramatic morning of 3s and 4s in the denominator, she sympathized with my plight, saying 'nothing is ever as easy as it first appears.' This is why Kristen's strong reaction to my involvement in audits, one month before the UDS submission deadline, took me by surprise.

One month before submission deadline

Thursday morning, early January; the temperature is hovering around freezing, with light snow. I weave my way through the office cubicles and rooms, without audio recorder in hand. I pause by Kristen's office. Kristen was recently promoted from member of the Process Improvement Team to Project Manager of a drug-purchasing program. In addition to moving one rung higher on the organizational hierarchy, she moved from a desk in a public office space to a desk in her own, private, room.

In the privacy of her room, I say good morning to Kristen, and Kristen replies good morning. Kristen inquires how I will spend my day. I respond that I will audit a clinical quality measure compliance report, to which Kristen responds with an outburst. Kristen calls audits an inefficient use of time and resources. Of course, no one at the Network ever really defines what they mean by inefficiency. One just knows that at the Network, inefficiency is an insult and a state that must be avoided because in the rational world of process improvement, one establishes goals with the intent of reaching those goals. Activities that do not help you reach the goals or delay you from reaching those goals are called inefficient: waste. Likewise, if there are faster, cheaper, or more profitable ways to do one's activities, one's current activities are also called inefficient: waste. And waste should be discarded.

I quickly defend the Network from accusations of inefficiency. I explain that my engagement in audits is not inefficient from the Network's perspective. In particular, the Network does not financially lose because I am not getting paid to audit. Instead, I have willingly submitted myself to an economic transaction or, more politely, a relationship of reciprocity where I exchange my labor for ethnographic access to the Network.

Kristen, however, overthrows my retort by implicating me in an "unsustainable" system. She cries, people are relying on my help now, but who will replace my efforts once I leave? In truth, finding my replacement is not too difficult. The Network receives a steady stream of interns who are tasked to audit in exchange for course credits which they then amass in exchange for a university degree. Then, with a university degree, they can enter an organization, just like the Network, where they might find themselves auditing, once again, though now in exchange for money and employment. Fortunately, I am too polite to remind Kristen that she is also part of a system, seemingly unsustainable, which is fueled by the inefficient use of people's time. I subsequently I keep my opinions to myself.

Or, perhaps I did not respond because Kristen did not give me room to respond. Instead, Kristen delivers her final blow: she lambasts the clinical quality measures themselves. She exclaims that the clinical quality measures do not even reflect quality. She further adds that even if the clinical quality measures did reflect quality, the data upon which the clinical quality measures are based on are of poor quality. Thus, she concludes, the Network gets money based on how well they 'fine-tooth comb' then fix the poor-quality data that does not even reflect quality.

Kristen's outburst surprised me, even if it drew her closer to her professional charge to seek efficiency and despise waste. Not knowing how to respond to Kristen's outpourings, so

different from her usual cool-headed demeanor, so at odds with her previous affirmations of my auditing engagements, I veer us back to polite territory. I ask Kristen how she plans to spend her day. To my second surprise of the morning Kristen tells me that she will spend the day auditing. In fact, she spent the previous night auditing and will continue to audit today because, just like me, she has an upcoming submission deadline. She must find drug-using patients that the Network can claim as its own because drug-using patients come affixed with money.

One might consequently excuse Kirsten for her outburst. Perhaps Kristen had a bad night and was having a bad morning because she was forced to audit. Perhaps she was projecting her own frustrations at her own inefficient use of time on to me. Yet, to my third surprise of the morning, Kristen cries out, 'there's satisfaction when you catch the patient.' She then lunges forward, clenches her hand into a fist, draws it to the side of her body, and shouts 'It's like, Yeeeesssss,' as though the pleasure from getting money from catching drug-using patients makes auditing an efficient use of Kristen's time.

At that moment, I realized Kristen and I share a lot in common. On the one hand, we are both skilled at critiquing audits. Let me demonstrate my standard critique: we are auditing in the name of quality when I suspect that it is not serving quality because quality cannot be easily measured. Furthermore, even if quality could be measured, the data upon which quality is assessed is dubious because people routinely make mistakes and technologies are always faulty. For this reason, organizations that demonstrate high quality are often the bigger, better-financed organizations with the resources to fix the quality of their data.

Yet, there was another reason why I felt that Kristen and I were alike. We both experienced an odd kind of pleasure from auditing. In *Utopia of Rules, or Why we Really Love Bureaucracy After All*, David Graeber (2016) suggests that submitting oneself to bureaucratic

rules offers "a kind of covert appeal" because it is like playing a game.[27] In particular, when one experiences a system that is shrouded in opacity despite continued attempts to make it more transparent and where appeals to accountability are always subverted by never really knowing who is responsible for what, rules offer a way for you to succeed in that system. Rules define a field, bound it in time and space, specify how to play the game to win, and as long as you follow the rules of the game, "it is even possible to win!" (Graeber 2016, 109). Kristen wins whenever she catches a drug-using patient who is bureaucratically-attached to money. I win whenever I find opportunities to change a non-compliant patient into a compliant one. Perhaps, then, Kristen and I secretly love the rules of bureaucracy because with those rules, we know how to play the game to win.

Wary of consuming too much of Kristen's work-time and feeling regretful for leaving my audio-recorder at my desk, I ask Kristen if we could continue this conversation over lunch as an audio-recorded interview, to which she agrees.

Later that day: The regulating power of the fluster

At noon, Kristen arrives at my desk, ready for lunch. Sally, who is sitting in the cubicle behind me, is in listening earshot of our lunch plans so we invite her to join. Kristen, Sally, and I

[27] I have simplified Graeber's argument. More precisely, Graber offers an argument based on a fear of the complete negation of bureaucracy. To do so, he first compares the bureaucratic world to a fantasy world. He suggests that we read fantasy novels, where worlds are governed by charismatic beings, to escape what the bureaucratic world stands for: impersonal control by the governance of rules. That is, until we seriously think about what living in a fantasy world might entail, where life and death hinges on the whims of those all-mighty powerful beings, leading us to conclude that living in the bureaucratic world is perhaps the better option. Graeber then distinguishes play from games. He suggests that play is appealing because it is creative and fun; it allows for innovative and surprise. That is, until one remembers that play left unchecked can lead to arbitrariness and destruction. After all, play is what powerful gods in fantasy worlds do to people, cats do to mice, and little boys do to wings of flies. Games, in contrast, belong to bureaucratic worlds. Games are structured, bounded in time and space, and are governed by clear rules. And as long as you follow the rules of the game, "it is even possible to win!" (Graeber 2016, 109). And this, explains Graeber, is why one finds utopia in rules.

subsequently enter the lunchroom together. We spot that Abigaelle, the Infections Disease Control Officer, is eating lunch by her lonesome, so we invite her to our table to join us for lunch. Thus, what commenced as an interview with Kristen turned into a focus group composed of Kristen, the original target, Sally, who spends approximately one week per month engaged in audits, and Abigaelle, who conducts risk audits of the Network's clinical environment every month. In the background, the Director of Risk and Compliance is hovering by the microwave, members of Human Resources are eating lunch at the table next to us, and a gigantic mosaic fish is eyeing us from the wall. Amid this lunchtime arena, I commence the focus group with the question,

"How would you define audit?"

Kristen responds, "To support or disprove an assumption of some sort… right?" shading her answer with hesitancy. She continues, "Like for [the program she is auditing], the assumption is that all our scripts are compliant and there are a bunch of criteria that would make them compliant. So you're auditing to make sure that they have all the criteria… I don't know."

Unlike Kristen's morning outburst, her answer in the lunchroom wobbles with the hesitancy of "I don't know." Though, what doesn't Kristen know? Surely, Kristen knows the definition of audits. She just skillfully defined audits as a task that involves verifying whether a "bunch of criteria" (not truth) renders the script (not action-in-the-world) compliant, using the careful subtlety of words to carry echoes from her morning outburst into the setting of the lunchroom without raising Sally and Abigaelle's suspicions.

Sally builds upon Kristen's answer, saying "That's the essential part of it. Trying to make sure everything you're doing is right and if it's wrong, what's wrong about." Sally replaces

Kirsten's hesitancy based on checking an "assumption" and "a bunch of criteria" into the certainty of "right" and "wrong."

Abigaelle builds upon Kristen's answer, continuing "I think of it in terms of evaluation. Proof that you did it right. Or you did it wrong. For improvement," thereby directing Sally's "right" and "wrong" towards a purpose, improvement, for when one adopts a process improvement mindset, it is not sufficient to determine what is wrong about the wrong. One must tinker with the wrong until it fits into the right, for that is improvement.

If Kirsten's hesitancy is replaced by Sally's certainty of right and wrong which then swells to Abigaelle's direction to improvement, where else along the scale of better can the definition of audits go? Regrettably, I puncture the glorious build-up by returning to the hesitancy of assumptions. I ask,

"Then what happens, when you think the assumptions are wrong? Like, the bases of what you're auditing [are wrong]?"

Kristen and I interlock eyes, a feeling of unease wafts by, which Kristen affirms with a *fluster*. Kristen inaudibly mumbles to herself, then says,

"I don't know. I feel like it was more eloquent earlier today."

Kristen's fluster then spreads its effects on to me, for I unfold into a fluster. I lower my voice and stumble on my words.

Jade: As soon as there's a lot of people here.

Kristen: Way too much pressure.

Jade: Yeah. Cos this is like a populated area. I feel weird to talk. I don't know.

Kristen: I don't know.

While Sally and Abigaelle are watching by the sidelines, silent.

Under the pressure of answering questions about audits in the lunchroom, our interaction has crumbled into a wave of flusters because Kristen doesn't know, I don't know, or perhaps we have both chosen not to know in a setting where what gets said may get caught by passing ears. But what don't we know? Perhaps Kristen does not know how to position herself in relation to my question. If she maintains her stance from this morning's outburst, she exposes herself to Sally, Abigaelle, and perhaps wandering ears as a cynic or bad team player who defames a task that everyone on the table is paid to do. However, if she changes her tune to conform to the prevailing stance at the table, she reveals herself to this ethnographer as an inconsistent, professional phony who is willing to embrace audits in the public setting of the lunchroom but will lambast them in the private setting of her office. As for me, I don't know how to best help Kristen extract herself from this perilous position that I have placed her in. So instead, we fluster.

I subsequently try to circumvent any further flounder into flusters. To this end, I draw a distinction between "beneficial" audits and "not as beneficial" audits so as not to discredit audits whole-cloth, ramble a bit, then end with "I actually don't know what I'm saying." I then change tact by exclaiming, "my controversial stance is that I like meetings," to which Sally responds, "I like meetings when they're effective." With little ambition to commence a theorization about meeting effectiveness, I return to the topic of audits. This time, however, I continue the glorious path of audits, commenced by Sally and built up by Abigaelle, by asking them to state the consequences of not doing their audits. Kristen replies.

"The biggest consequence would be if we don't have tight compliance on these things then they can kick us out of the program. That could be catastrophic."

As if the recent flusters caused by defining audits and broaching assumptions which stumbled into a series of "I don't know['s]" never occurred, Kristen seemingly regains her

confidence because Kristen now knows that not having a "tight compliance on these things" could be catastrophic. Sally responds next.

"I mean, we're looking at that stuff monthly so that decisions aren't made immediately. So it's pretty low risk. I just like to make sure that my stuff is correct."

Unlike Kristen who calls her audits catastrophically consequential, Sally calls her audits "low risk." Wrong answer. Does not Sally know that it is self-sabotage to undermine the significance of one's work, especially in the public setting of the lunchroom? Does she also not understand that the tenor of her response carries implications for the usefulness of the auditing task that the people at the table are paid to do? Fortunately for Sally, Kristen steps in.

"But you can't lead the [named] program in the wrong direction. If you said like, oh, we're failing on one of these goals…"

Kristen reminds Sally that she needs accurate data to avoid the embarrassment of saying that the program is failing on a goal when, in fact, it is not. Sally subsequently modifies her response,

"Or really performing well when we're not… Like patient care is one of the risks. You're like, one of these patients don't need to be screened for this, but maybe they should have… So that's a risk," thereby transforming her previously "pretty low risk" audits into "a risk." Right answer.

Unfortunately, the focus group abruptly comes to a close because Kristen has finished her lunch, with Kristen interjecting,

"Speaking of audits. I've got to go back."

A 17-minute lunch. 17-minutes filled with potholes and possibilities of airing epistemic gaps; gaps that were skillfully avoided through cringe, flusters, and I don't knows. In

"Embarrassment and Social Organization," Goffman mused that signs of embarrassments such as blushing, fumbling, and flustering are built into social interactions so that "[s]ocial structure gains elasticity; the individual merely loses composure" (Goffman 1967, 112). As for these lunch-goers, all it took was a question, "what happens when you think the assumptions [about audits] are wrong," to prompt Kristen to fluster, which caused me to fluster, which cued Sally and Abigaelle to remain silent, with the effect of us avoiding answering the question and airing epistemic gaps altogether. And so, with a fluster, the social norm of confidence and consequence—that we, the work, and the organization is in order—snapped back into shape again.

Note that by leaving the lunchroom as soon as she finished her meal, Kristen exercised the most effective way to work with, or around, her own epistemic gap. She exited the situation altogether.

Before I leave the Network for the day, I return to Kristen's office. I apologize for making lunch awkward and concede that the lunchroom was not the right setting to talk about audits. She accepts my apologies, assures me not to worry, and tells me that she is all right. And perhaps Kristen is all right; she never did expose herself as a cynic, phony, or bad team player over lunch. But nor did Sally or Abigaelle. Sally, for instance, called the clinical quality measures "baffling," describing them as simply "wording" in a private meeting about audits. Abigaelle, in a casual conversation along a corridor, shared that her previous employer was ranked first in terms of quality but did not deserve that title because it was always understaffed and people were always overworked. Abigaelle and Sally, like so many other professionals at the Network, express epistemic gaps in passing but never indulge too long in them, at least in public settings,

for to publicly question the tasks one is paid to do can carry consequences that no one wishes to face.

Avoiding Epistemic Gaps: A Reprisal

This chapter commenced with a problem: the professionals who are tasked to audit are susceptible to epistemic gaps, the suspicion that their task is disjointed from the goal(s) that the task is meant to accomplish. This stirred the question, how do professionals work with epistemic gaps? By following the professionals to the putative backstage—to office spaces, office rooms, and lunchrooms—we learned that there is no backstage, only different fronts where the professionals are expected to uphold the standards that are demanded of their role. We also learned that rather than working through epistemic gaps, the professionals are more likely to avoid epistemic gaps, which we witnessed in at least four ways.

- Avoidance by *embracement*, a collective show and synchronization of emotions where members of a team temporarily suspend the absurdity of the task by embracing the immediate, professional, duties assumed by the professional self (refer to four months before submission deadline).
- Avoidance through *politeness*, where one takes another's expression of sincerity—a steady gaze and steady voice, with no indication in speech or action of sarcasm, cynicism, or humor—for the person's sincerity towards her work, even if epistemic gaps are hinted throughout (refer to the polite engagement with Lucy).
- Avoidance through a *fluster*. A fluster can act as a social cue that informs people to stop talking and/or to change tact, thereby providing an opening for social participants to avoid epistemic gaps altogether (refer to the regulating power of a fluster).

- Avoidance through *exit*, or by leaving the social situation where epistemic gaps threaten to get exposed, just like Kristen who exited the lunch situation.

By collectively avoiding epistemic gaps, by sidelining then shoving emergent feelings of triviality, frustration, and even meaninglessness under the rug, the professionals sustained airs of confidence and consequence in the work that they do, with the effect of lubricating the appearance that the team and organization are running as they should run. So why might these professionals, who are situated at the lower-rungs of the organizational hierarchy, wish to avoid airing epistemic gaps? In our final scenes, I will offer one explanation.

<u>An Interview with the Boss and the Subordinate.</u>

As Evelyn is driving me from one health center to another, I ask her, "So I was, what do you think people's perceptions of QAing, or like chart audits, within the Network [are]?"

Evelyn replies, "I think *they* like it because I feel like we're always doing it."

Evelyn employs a special tone of sarcasm to express that I should view her participation in auditing not as a reflection of what she likes, but what *they* like. Evelyn therefore distances herself from the auditing task even though as Senior Manager of Process Improvement, she must publicly rally herself and the team to embrace the task. Evelyn does not share who the "they" in her answer refers to. I assume, however, that she is referring to her superiors in the organizational hierarchy, who hold the power to promote or let Evelyn go depending on how well she performs her role.

Harry and I are chatting over lunch at a Thai restaurant, a five-minute walk from his desk at the Network. Harry is reflecting about Carlos who was recently let go from the Process Improvement Team for not keeping pace with the demands of the work. As the newest, youngest,

member of the Process Improvement Team who is still on probation, Harry is aware that he has "got to do what the boss [Evelyn] says" or else he will "end up with Carlos."

Unfortunately, Harry acts in ways contrary to the social standards expected of his role. Harry, for instance, has publicly called auditing boring, standard operating procedures silly, and is prone to question why things are the way they are. As we chat, Harry calls his work "nothing, absolutely nothing. I just go to work, sit down, type on my computer, talk to people, present a couple of things, go to meetings, facilitate, make people talk to each other, then I go home." He then asks,

"Do you think most organizations are bogus?"

He later elaborates, "Do a lot of people think this way? Or am I the only one? Because when I say this to, like when you first meet someone and you start talking about all this stuff, sometimes like, I start saying that kind of stuff to people. And it's like, something clicks in their head, like I had no idea. Do lots of people think that way?"

I respond, "I don't know. [But] I think people aren't as forthcoming as you. So if they think that way, they'll hide it. Or just divulge it to very close friends."

Evelyn let Harry go; he was not a good fit. Harry made the mistake of not conforming to social standards. He did not mobilize a commitment to his work despite feeling alienated from it.

Let us now return to our car ride with Evelyn. After conceding that the Network is the first clinical setting she has worked in and so her ensuing comment about audits might not hold sway in other clinical settings, Evelyn shares:

"I don't know any other way to do it. Like, you have to see, you get a [compliance] report. How is that report being generated? So the only way you can look is the chart [i.e.,

EMR]. You know, to see how, if, this is actually being documented. […] So for clinical quality data, I don't know any other way."

In this statement, Evelyn takes us back to the beginning of the story. Namely, for events to exist in the world of the Network, they must be documented. For documentation to have a bureaucratic life beyond the pages it was inscribed on, documentation must be standardized, for only standardized documentation can fit and flow through the various accounting and information technology systems, ready to be consumed by bureaucrats in some far-flung place who use the reality constructed by documentation to endow organizations with quality and money. So perhaps this is why the professionals must audit. That is, if documentation is wrong, if it is not standardized and does not flow to the desk of a bureaucrat, quality, money, perhaps even the existence of the Network, is at stake. Perhaps, then, the professionals are living in a documentary reality without epistemic gaps because, as Evelyn puts it, "I don't know any other way."

Chapter 2: The Ambivalence of Clicking Boxes

The Box-Clicking Measure

Twelve members of the Staff Quality Improvement Committee are seated around a conference table. The door is closed shut. There are no glass windows or glass walls to peer out through. The room encloses. The only light, save for the sharp glow radiating from laptop and television screens, shines from the overhanging bars attached to the wooden-paneled ceiling. Within the purple walls of this dimly-lit conference room, the Chief Clinical Officer is about to appraise the Network's clinical quality measures.

Clinical quality measures are performance standards.[28] As we learned from chapter one, they are a list of activities that the Network is federally mandated to perform, count, and report on. Recall that each year, the Network must submit the *Uniform Data Systems* Report (*UDS Report*) to the Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services. In the USD report, health centers must report on the age, sex, and demographics of their patients, their operational details such as staffing and room utilization ratios, as well as their performance on the clinical quality measures.

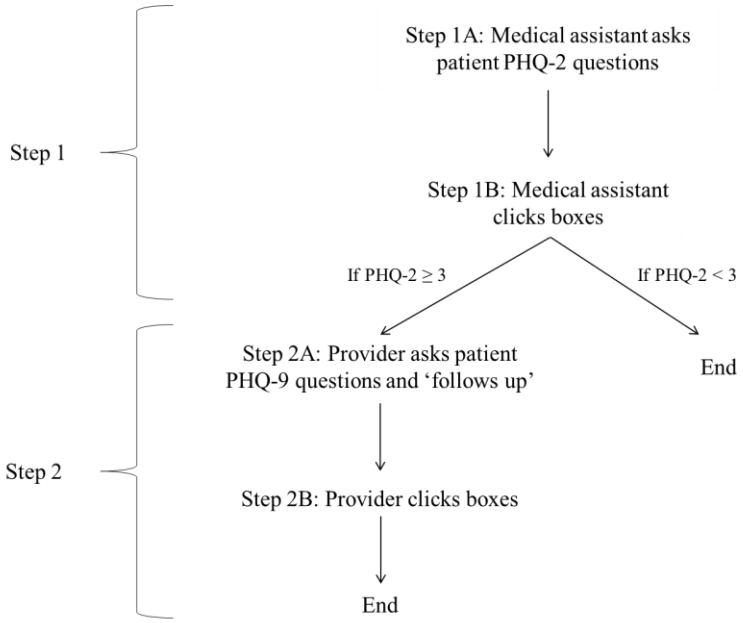
[28] In the nonprofit and public administration literatures, the clinical quality measures would be called "performance measures," which are metrics that track and monitor the execution of tasks towards pre-established goals. Practitioners and academics have mixed stances towards performance measures. For example, performance measures could move organizations along the path of effectiveness if only they better matched their concepts of measurement (Benjamin 2013). They could encourage workers to reach pre-ordained goals if only they did not tempt workers to hit the quantitative target and so miss the conceptual mark (Bevan and Hood 2006; Le Grand 2010). They could bring about organizational improvement by pinpointing problems that could be fixed if only they were less concerned with changing outputs and more concerned on bettering client outcomes (Benjamin 2013; Carnochan et al. 2014). They could be used to meet the demands of clients, frontline workers, and funders if only each group did not have idiosyncratic wants that oblige organizations to make difficult decisions about whose demands should be prioritized (Ebrahim 2016; Campbell and Lambright 2016). They could offer accountability by assuring funders, service users, and other interested parties that organizations are using public monies efficiently and effectively if only they did not blindside organizations by a type of "myopia" bent on fulfilling funders' requirements in pursuit of money (Ebrahim 2005; Thomson 2010).

This is a story about the "Depression Screening and Follow-Up Clinical Quality Measure," defined in the 192-page UDS instruction manual as the:

> Percentage of patients aged 12 years and older screened for depression on the date of the visit using an age-appropriate standardized depression screening tool ***and*** if positive, a follow-up plan is documented on the date of the positive screen. (2019, 89).

The terms of the depression measure have been set: who is screened (person 12 years and older), the tool (an age-appropriate standardized depression screening tool), the timeframe (on the date of visit), and the sequence of tasks (screening then follow-up if the screen is positive). It is now up to the Network to execute the terms, which it has chosen to do through two, box-clicking steps (Figure 12).

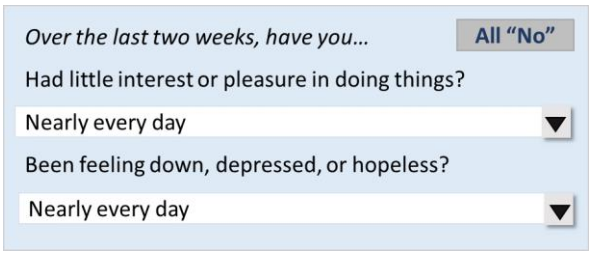
Figure 12: The Box-Clicking Steps



Step one occurs between the medical assistant and patient. The medical assistant asks the patient two questions from the screening tool, the Patient Health Questionnaire-2 (PHQ-2). "Over the last 2 weeks, how often have you had little interest or pleasure in doing things"; "Over the last 2 weeks, how often have you been feeling down, depressed or hopeless?" (Step 1A). The

patient's answers are then documented in the electronic medical record by means of clicking two, thin, rectangular boxes (Step 1B; Figure 13). These rectangular boxes are populated with pre-filled answers: "Not at all," "Several days," "More than one-half of the days," and "Nearly every day." The patients' results are then aggregated and given a score. If the score equals or is greater than three, the physician[29] enters the scene.

Figure 13: Recreation of the Two Long Thing Boxes in the Electronic Medical Record



In Step two, the physician asks the patient nine questions from the Patient Health Questionnaire-9 (PHQ-9; Step 2A). Examples include "over the last 2 weeks, have you been feeling tired or having little energy"; "have poor appetite or overeating"; "feeling bad about yourself." Thereafter, the physician engages in "follow-up," which involves scheduling an appointment for the patient with a behavioral health specialist. The physician must then document that follow-up was done by clicking a third, sheepishly small, faintly-outlined square box requiring a cumbersome click-scroll to locate in the electronic medical record (Step 2B; Figure 14).

Figure 14: Recreation of the Follow-Up Box in the Electronic Medical Record

[29] At the Network, the physicians are grouped under the category, "provider." At the Network, professional groups such as physicians, dentists, behavioral health specialists, and nurse practitioners are classed as providers. However, because provider is a confusing term, even causing some confusion at the Network (for example, a registered nurse is not a provider but a nurse practitioner is), in this dissertation, I have replaced the word, "provider," with the word, "physician" for clarity. I have also replaced the term, "provider," with the term, "physician," in direct quotes.

Due to the manner in which the depression measure is executed, people at the Network snidely call it the "box-checking" or "box-clicking" measure, phonetically mimicking the percussive sound of a finger clicking a computer mouse clicking a box in the electronic medical record. Unlike other clinical quality measures such as the colorectal cancer screening measure, there is no need for patients to poop on strips or opportunities for specimens to get lost in transit. Unlike the childhood immunization measure, there is no need to offer an education on the importance of getting vaccinated. Supposedly, the depression measure's path to compliance is trivially concise. It simply relies on the on-the-spot extraction of information about the patient then placing that information in the electronic medical record. All you have to do is click. Yet, the supposedly simple task of clicking the depression measure's boxes garnered the focused attention of leaders and managers for seven months.

"Slide," the Chief Clinical Officer calls out.

The meeting facilitator clicks the mouse; the PowerPoint presentation progresses, unveiling a slide with a table colored in Microsoft's default blue (Table 1). The table contains information on the Network's three-year performance against the depression measure in two ways. First, as a percentage of patients who were screened for depression and had a medical visit at the Network (a). Second, as 1s and a 2 to reflect the Network's performance on the depression measure against all health organizations who submitted the *UDS Report* (b).

Table 1: The Network's Performance on the Depression Measure[30]

	a			b		
	2016 %	2017 %	2018 %	2016 quartile	2017 quartile	2018 quartile
Network	83	83	83	1	1	2
National average	60	66	71			

[30] The figures were changed to protect the confidentiality of the Network.

Recall from chapter one that doing and documenting the clinical quality measures at a higher rate than that of peer organizations is consequential. Not only does it discursively render the Network a higher quality one, granting it the right to place a gold, silver, or bronze star on its marketing materials, it also determines the level of financial rewards that the Network might receive. The distribution of rewards depends on thresholds that place health organizations in quartiles. Being placed in the first quartile means the organization performed better than at least 75 percent of other health organizations; the second means it performed better than at least 50 percent of other health organizations, and so on. The distribution of federal money based on quartiles is why presenting performance as 1s and 2s is so helpful, for without even needing to know the intimate details of the depression measure, the presence of anything but a 1 should alert the meeting participants that the Network has not reached its goal.

"We fell from the first to second quartile," states the Chief Clinical Officer, which she then appends with a smirk. "Although our performance has remained steady, everyone else has started checking their boxes so we need to improve ours."

According to the "2" which follows the "1's" in the table, the Network's performance regressed. It fell from the first quartile in 2016 and 2017 to the second in 2018. Yet also according to the table, the rate at which the Network clicked the boxes stayed the same at 83 percent. The Chief Clinical Officer therefore dismisses the depression measure as a matter of clicking boxes while the meeting participants affirm her mocking by casting sideway glances at each other and chuckling. Building off their collective sniggers while not missing the opportunity to remind them how, as members of the Staff Quality Improvement Committee, they ought to orient themselves to the depression measure, the Chief Clinical Officer continues:

"The reason we care about these dumb box-checking measures is not just because it looks good because we get these gold seals which we also like to flash around. […] It gives us a lot of money […] and if we check a couple more boxes, we'd double that. Ha!"

Her statement about "these dumb box-checking measures" does not provoke controversy. Not even the mocking "Ha!" raises objection. Perhaps the meeting participants cannot openly rebuff the Chief Clinical Officer because she is the Chief Clinical Officer. Or perhaps there simply is not enough time. In particular, the meeting agenda has appointed twenty-five minutes to appraise sixteen clinical quality measures, compelling the Chief Clinical Officer to speak swiftly while conveniently quashing opportunities for others to interject. Or perhaps that inside the purple walls of the conference room, the meeting participants know what their organizational role demands. Namely, as members of the Staff Quality Improvement Committee tasked to "support the ongoing direction, coordination, and evaluation of quality improvement," they are permitted to treat the depression measure as dumb as long as the Network is in the first quartile. However, as soon as the Network inches towards then falls below the first quartile, they must launch into managerial action not simply because being in the first quartile "looks good" and gives them "gold seals which we also like to flash around," but because "[i]t give us a lot of money." After all, each box left unclicked puts the Network at risk of falling to the second quartile, being in the second quartile comes with less money, and money is rarely dumb.

The professionals are ambivalent, wavering in their views of the depression measure.

This is a story about their ambivalence: how it is produced, how they deal with it, and its effects.[31] In this story, we will witness the organizational and social consequences of

[31] In particular, this is a story about sociological ambivalence. According to Robert Merton (1976, 5) in *Sociological Ambivalence and Other Essays,* sociological ambivalence is "built into the structure of social statuses and roles." It occurs when peoples' interests, desires, and values collide with the obligations and behaviors expected of their social statuses and roles in society, which "result in mixed feelings and compromised behavior" (p.9). In this

ambivalence. We will observe the professionals reenact a set of organizational[32] roles and practices that breach their preferences, well-intentions, and values in order to meet performance goals. Yet with ambivalence, they will create a distance[33] between what they purportedly think and what they do about those practices. Through creating this distance, they will minimize their own participation in the enforcement of those practices by implying that it is the depression measure, their organizational role, and the regulatory and funding systems which they are in that compel them to do what they do not want to do. From this, we will appreciate how ambivalence makes it difficult for the professionals to deviate from professedly unwanted paths.

To show these dynamics, we will enter three meetings. In each meeting, we will encounter different responses to the box-clicking problem: adding the depression measure to the physician's financial incentives; changing the vehicle through which medical assistants ask the depression screening questions; and providing training to the residents. Also in the meetings, we will cut across the organizational hierarchy and encounter different professional roles (Figure 15, continued on next page). At the top (but not topmost), we will encounter the members of the "Senior Leadership Team." They are made up of the "Senior Clinical Leaders," who are responsible for overseeing the Network's major clinical areas such as pediatrics, reproductive health, and nursing, as well as the "Senior Operations Leaders," who oversee district-level

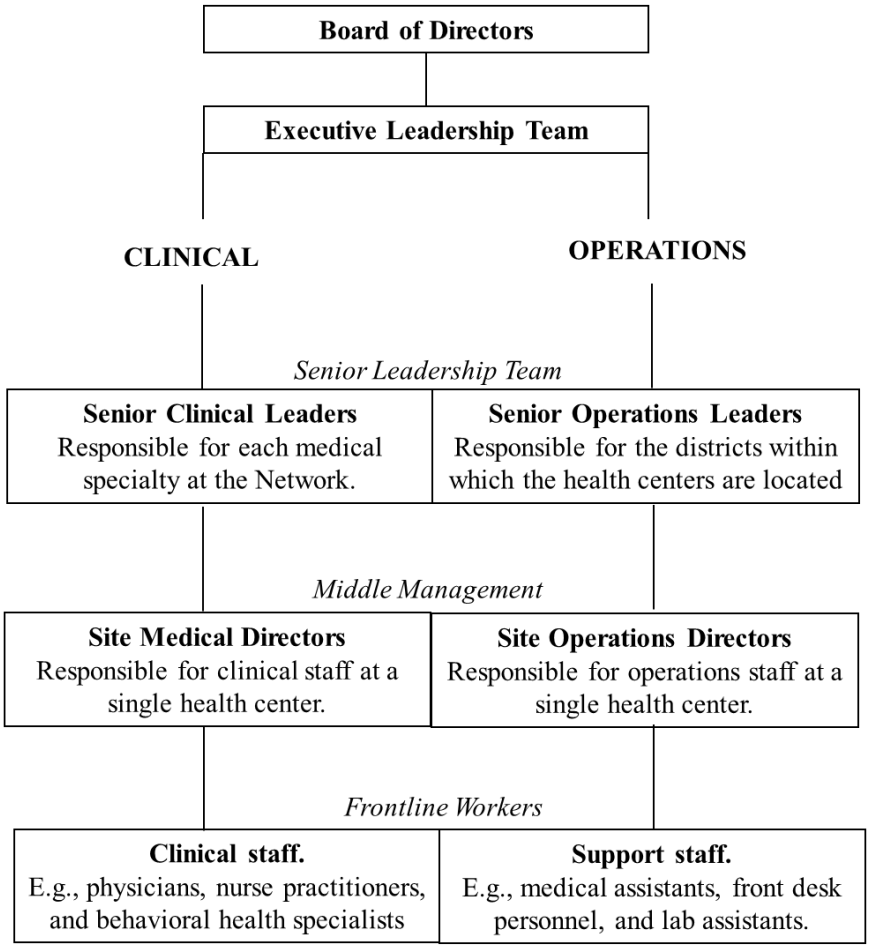
way, sociological ambivalence is different from the individualized, psychological variety of ambivalence arising from personality (p.9)

[32] Throughout the chapter, I use the terms, "organizational roles" and "professional roles". For the most part, professional and organizational roles overlap at the Network. For example, the person who belongs to the profession of medical assistant also inhabits the organizational role of medical assistant at the Network. Sometimes, organizational roles exceed the requirements of the professional role. For example, the Chief Clinical officer is a leader and manager (i.e., organizational roles) and practicing physician (i.e., professional role) at the Network. I have attempted to be clear in my use of professional and organizational roles throughout this chapter.

[33] The argument I present follows Goffman's (2013 [1961]) concept of "role distance," which occurs in situations where people are confronted with contradictory expectations demanded of the social role that they are obliged to play. Role distance, as succinctly explained by Rose Laub Coser (1966) involves (1) performing a detachment to the behaviors expected of the social role, such as through the use of humor to diffuse the contradiction (e.g., see Coser 1959) and (2) using the created distance to prepare for another role that (i) subverts some audience's expectations and (ii) conforms to some other audience's expectations.

operational activities across the Network. At the middle, we will encounter "Middle Management." They are made up of the Site Medical Directors and Site Operations Directors of each health center that make up the Network. They respectively manage the clinicians (e.g., physicians, residents, nurse practitioners, behavioral specialists) and support staff (e.g., medical assistants, front desk personnel, case managers) at the health center they oversee. Finally, we will encounter the residents, who are graduate students in training to become licensed physicians.

Figure 15: Organizational Hierarchy and Roles



The Objects and Practices of Solving Problems

Before we enter the meetings, let us first get acquainted with the *Enterprise Goals*, *Medical Assistant Pre-Visit Workflow*, and the meeting format.

Converging people towards coordinated action involves the production of goals. Each year, members of the "Executive Leadership Team," which is made up of individuals occupying the highest strata of the Network such as the Chief Executive Officer and the Chief Clinical Officer, revise the *Enterprise Goals*, a large colorful spreadsheet that specifies the Network's goals for the year. Since the Network's performance on the depression measure fell from the first to the second quartile, it was added to the *Enterprise Goals*, and since members of the Executive Leadership Team's end-of-year bonuses are tied to the achievement of the *Enterprise Goals*, they have financially tied themselves to ensuring that the Network performs better at the depression measure.

When problems are first encountered, the chosen solution is often a pre-existing solution. The Chief Clinical Officer therefore added the depression measure to the *Medical Assistant Pre-Visit Workflow*, a glossy five-page spiral bound document, reasoning, "It is a way we seem to address a lot of our box-clicking issues, and I don't know if I have any creative ideas other than that." The *Medical Assistant Pre-Visit Workflow* functions as a standard operating procedure. It enumerates the tasks that medical assistants are instructed to perform on the patient before the patient visits the physician such as "Confirm name, date of birth and preferred language" and "Check weight, height/length." Through teal-colored, large-sized font, the medical assistants must now ask the PHQ-2 depression screening questions (refer to Figure 12, Step 1).

Regrettably, adding the depression measure to the *Pre-Visit Workflow* did not move the Network from the second to the first quartile.

When problems require even more effort to solve, the meeting and its objects—the conference room, conference table, meeting agenda, and meeting facilitator—are recruited to help. The conference room is the putative workstation of managerial action. It serves as the designated space for representatives from each professional group to convene, bringing their disciplinary perspectives to bear on the issue at hand. The size and position of the conference table, always large, always placed in the center of the room, mirrors its aspirational significance, for the table is where interdisciplinary decision making ostensibly unfolds. The meeting is governed by an agenda. The agenda segments the meeting into "Topics," each of which have "Desired Outcome(s)" and apportioned talking time, thereby underscoring the managerial ethos that meetings are effective insofar as action is taken and outcomes are achieved within the time apportioned on the agenda (Schwartzman 1989). Finally, there is the "Facilitator" who ensures that the meeting stays on time and on topic. When the clock ticks to the appointed hour, she might begin with, "All right, let's get started." As the meeting proceeds, she might flash both hands in the air, spreading her fingers into two fans as if to say ten more minutes. As time marches on, she might loudly whisper, "five minutes," while flashing one hand in the air into a fan. Then when time runs out, she might call out, "we're at the end of our allocated time for this," because she knows that a successful meeting is one that ends of time. An exceptional meeting, however, is one that ends early.

Let us now enter the meetings.

Meeting 1: The Unfair Depression Measure and the Physician Incentives Plan

The first meeting is with the Senior Clinical Leaders. They are the directors of each medical specialty at the Network such as adult medicine, pediatrics, and behavioral health. They are led

by the mischievously smart, ceaselessly busy, Chief Clinical Officer, who tends to sprinkle her speech with flashes of grin as if to conceal her fatigue and to forewarn of her attempts at humor. In this meeting, the Chief Clinical Officer will propose revisions to the *Physician Incentives Plan*, a twenty-eight-page document detailing the financial rewards physicians receive based on their performance against the clinical quality measures. She will suggest adding the depression measure to the *Physician Incentives Plan*, much to the displeasure of the Director of Nursing who implies that it is unfair. Meanwhile, we will witness the work of ambivalence in sustaining a set of social relationships that enable the implementation of this unfair practice.

The Senior Clinical Leaders are seated, shoulder-to-shoulder, around a small conference table in a small conference room. Their heads are wavering between the figure of the Chief Clinical Officer and a television screen projecting the PDF of the proposed revisions to *The Physician Incentives Plan.* They have established the rhythm of their interaction. In response to each proposed revision, at least one leader must say "yes" or agree to take the conversation "offline" while the others convey non-committal assent or at least non-disagreement through silence. With this flow, most proposed revisions do not spark controversy. Instead, they contribute to the feel of interdisciplinary teamwork marked by the avoidance of open conflict.

The Chief Clinical Officer widens her mouth into a grin, readying the leaders for humor.

"Right now, the [behavioral health] measures are, I mean they're kinda made up."

The leaders fling their heads towards the ceiling and expel a laugh, affirming her statement and validating her humor, which then quickly subsides into silence so as to let her continue.

"I would vote for at least making the depression screening measure one because it's one where we're not doing well on UDS [Uniform Data System]."

Unfortunately, the Chief Clinical Officer's humor and rationale of "we're not doing well" does not sustain the flow because the Director of Nursing—champion of medical assistants, author of the *Medical Assistant Pre-Visit Workflow,* and mastermind of "Medical Assistant Appreciation Breakfasts"—speaks. She commences with confidence.

"I don't think we should have the depression for any of the..." but her confidence dwindles to the uncertainty of an unfinished sentence. She then makes a second attempt. "That is a medical assistant-driven workflow and paying [physicians] for something they have nothing to do with…" Though this, too, fades without an end.

Despite the ambiguity of two unfinished sentences, her meaning is clear. If medical assistants are primarily responsible for screening and clicking the depression measure's boxes, the physicians should not get the financial rewards (see Figure 12, Step 1).

With the insinuation of unfairness lingering in the air, the room is silent; the interactional flow is broken. Thus, with the responsibility vested in her as Chief Clinical Officer, she attempts to fix the flow by breaking the silence. For her first attempt, she takes the *do* in the Director of Nursing's objection, "they [the physicians] have nothing to *do* with [it]," then dissolves it with the response, "but they're [the medical assistants] not *doing* it," to which the Director of Pediatrics affirms with vigorous head-nodding and the cry of "I *did* every one of them myself!" Silence falls, once again, as if to declare that the Chief Clinical Officer's attempt failed, the Director of Pediatrics' interjection was unhelpful, and to highlight the awkwardness of this conflict based on who actually *does* the work. And so the Chief Clinical Officer tries, once again, to fix the interactional flow. This time, however, she uses the tone and vocabulary of reasonableness that her organizational role prescribes:

> "I tell my medical assistant that you're *doing* it. And I agree hopefully we can remove it soon, but we are not in the top quartile for this. […]. And I think it's part of what you said. It can't just be, oh my medical assistants aren't *doing* it so I'm going to ignore it."

In these statements, the Chief Clinical Officer summons three pre-existing relationships to support her proposal. The first is between the medical assistants and the physicians. Because the *Medical Assistant Pre-Visit Workflow* did not solve the box-clicking problem, she hopes that adding the depression measure to the *Physician Incentives Plan* will financially compel the physicians to click the boxes in the medical assistants' stead, or at least financially goad the physicians to verbally instruct the medical assistants that "you're doing it." In particular, she uses a circular logic to argue that if physicians are responsible for medical assistants, as implied in the possessive pronoun "*my* medical assistants," and if medical assistants are responsible for clicking boxes, physicians must have something to *do* with the depression measure, even if they simply say "you're *doing* it."

Moreover, adding the depression measure to the *Physician Incentives Plan* reinforces the presumed make-up of the people who inhabit the role of the physician. That is, the *Physicians Incentive Plan*, filled with many sentences and written in small Times New Roman font, entails inducements with the promise of money, for physicians did not spend multiple years and dollars at a university acquiring emblems of expertise just to click boxes. Since clicking boxes reorients them away from why they entered the profession and is contrary to the Network's insistence to "work at the top of your license," physicians need incentives to induce them to do what they do not want to do. Medical assistants, in contrast, need no such inducements. They simply require instructions in large-sized font on a colorful *Medical Assistant Pre-Visit Workflow* document to

tell them what to do, or at least an obliging physician to remind them of what their organizational role demands.

The second relationship that the Chief Clinical Officer summoned is between herself, as the Chief Clinical Officer, and the Director of Nursing. The Chief Clinical Officer positions herself as the receptive and listening leader. She acknowledges through paraphrasing: "I think," she says, "it's part of what you said." She finds agreement in the disagreement, "I agree," she affirms, "hopefully we can remove it soon." But with compromise, "but we are not in the top quartile for this." Fortunately for the Chief Clinical Officer, she is authorized by her organizational role to reinterpret and transform the Director of Nursing's disagreement into agreement without having to change her own. With the backing of the organizational hierarchy, a decision is reached, or perhaps it was always predetermined. The depression measure will be added and then removed from the *Physician Incentives Plan* but only once the Network is in the top quartile. The Director of Nursing subsequently folds her arms across her chest, casts her eyes to the ground, and shakes her head while muttering, "It's not OK. I'm not comfortable with it."

Finally, by saying "we are not in the top quartile for this," a third relationship is summoned: between the depression measure, money, and the provision of costly care. At the Network, it is widely known that the depression measure and its boxes play a crucial role in the acquisition of money. Consider an all-staff meeting where the Chief Clinical Officer plainly expressed the financial significance of the depression measure. She announced, "the gold award first and foremost tells us that we're doing the right things by the patients. […] And there are financial benefits as well." Yet, for an organization whose mission is to provide high-quality, affordable care, the rationale of "financial benefits" simply will not do. The Chief Clinical Officer subsequently continues, "And this is important because the care we provide and the care

patients deserve is expensive. It costs more to give than what insurance and patients bring in." She reassures her listeners that the Network cares about the clinical quality measures not simply because it brings in money, but because money can cover the cost of care that "patients deserve." Then, having layered the pursuit of money with the pursuit of patient care, she ends her speech in appropriate managerial form: "There are special boxes to click in the EHR [electronic health records];" they must be clicked to "captur[e] the work correctly to get the credit we deserve."

Let us pause to appreciate the Chief Clinical Officer's ambivalence. Despite introducing the depression measure with a grin and the remark, "they're kinda made up," and knowing that its inclusion in the *Physician Incentives Plan* is unfair—she did in fact warn the leaders in subsequent meetings to expect its removal because "this has been moved to the *Medical Assistant Workflow*; it's largely not a [physician] activity"—she still defended the decision to add the depression measure to the *Physician Incentives Plan.* To support her proposal, she invoked three pre-existing relationships. First, between medical assistants and physicians, as if the addition of the depression measure to the *Physician Incentives Plan* simply reconstituted the pre-existing distribution of power, rewards, and responsibility between the medical assistants and physicians. Second, between herself and the Director of Nursing, because the organizational force of hierarchically-stratified roles obliged the Director of Nursing to relent to the Chief Clinical Officer's decision to add the depression measure to the *Physician Incentives Plan.* Third, the depression measure, money, and the provision of services, as if the financial force of money which is incidentally tied to the provision of services that patients deserve but cannot afford is what forced her to hand to implement a policy where physicians financially benefit from medical assistants' work.

This is an advantage of ambivalence. With ambivalence, the Chief Clinical Officer can separate what she would like to do with the depression measure from what she thinks her organizational role, money, and quartiles as well as the Network's pre-existing social arrangements and resources allow her to do. With ambivalence, she can minimize her involvement in the enforcement of "made up," unfair practices by shifting the source of control and therefore blame for her proposed revision to the funding system. Though on the other hand, the Chief Clinical Officer's ability to make difficult decisions is what makes her an effective leader. Namely, as an effectively ambivalent leader, she understands that it is sometimes necessary to suspend values of fairness, deny personal preferences to do away with clicked boxes, and forgo socially-aspirational forms of interactions such as fairness in order to pursue the more pressing goal at hand—money, which incidentally covers the cost of care that patients deserve but cannot afford.

Meeting 2: The Culturally Insensitive Depression Measure and the Piece of Paper

The second meeting is with the Site Medical and Site Operations Directors of each health center that make up the Network. Together, they make up the Site Management Team. In this meeting, the directors will learn that the Network underperformed on the depression measure. The news will provoke a stylized response from the directors, commencing with rote outrage then progressing to the reasoned pursuit of solutions. At the same time, we will observe the reproductive power of ambivalence, which enables the directors to agree on a solution that upholds a pre-existing set of relationships between the directors, medical assistants, and physicians while inadvertently redirecting their attention away from the patients.

The directors are seated in the largest conference room in one of the health centers, appropriately named the "large conference room." Due to the number of directors in the room, twenty-nine in total, the conference room feels small. They cannot all fit around the conference table. Some must sit on chairs, lined against walls and tucked between tables, carrying sandwiches, cookies, crisps, and caffeinated beverages; items that make attending the following team-building lunch worth the trouble.

The room hums with chatter. Like kids whispering in a school assembly, some of the Medical Directors offer side commentary in hushed voices while the meeting proceeds. Although unlike schoolkids who must remain silent, the directors are permitted to enlarge their hushed whispers into a comment directed to all. At times, a single comment can elicit a string of diatribes. At other times, it provokes laughter.

The directors are laughing because the diabetes screening compliance report should only contain 0s and 1s but, as one Site Medical Director pointed out, it contains 2s. No one knows what the 2s mean and where they came from, and so they laugh instead. With practiced forbearance, the meeting facilitator allows their laughter to subside before she moves on with her PowerPoint presentation.

With a click of the finger, the PowerPoint reveals a set of vertical histograms about the depression measure. The tops of the histograms have fallen beneath a dashed and bolded line that indicate the UDS 75th and 90th percentile respectively. The histograms therefore declare that the Network has missed its goal, and so the meeting facilitator announces:

"With adult depression screening, we knew this was a struggle for us." She pauses, allowing the news to sink in. "We're not used to seeing the Network's aggregate data look this way. So far below our goal."

The hums move to silence, which then unravel into noise. At first, the Site Medical Directors ask questions about the manner, sequence, and location of the depression measure's clicks. One Site Medical Director leans forward, squints her eyes at the PowerPoint slide, and says "So it sounds to me what people are saying is that there's a box. That you click." Soon after, their questions escalate to verbal outbursts. "It's clicking the box. That's the problem!" states one Site Medical Director. "Just like [the] smoking [measure], you just have to click," cries another, which receives the affirming reply, "It's like the box that says advised to quit. It's kinda messed up." One Site Medical Director loudly whispers, "Yeah, not that you actually did it, just that you said you did," while his colleague stifles a laugh while shooshing him silent with flailing arms. All the while, the Site Operations Director remain silent.

In Site Management Teams meetings, the Site Medical and Site Operations Directors play distinct roles. Because the Site Medical Directors also practice as licensed physicians, they are authorized to imbue their speech with varying degrees of emotion which ostensibly come from their intimate experience with the Network's clinical policies, procedures, and clinical quality measures. Most Site Operations Directors, in comparison, have little on-the-ground clinical experience. Instead, they have acquired their expertise through degrees in health or public administration. Due to their distance from on-the-ground work, the Site Operations Directors often comport with the sensibility of detached problem solver, one step removed from clinical action yet always ready to implement solutions. As such, the Site Medical Directors do most of the complaining; the Site Operations Directors do most of the listening.[34]

[34] To be sure, there are cases where a Site Medical Director's face stiffens to the point of detachment and an Operations Director's speech dances with feverish passion. However, these cases are recognized as idiosyncratic features of those individuals and not the organizational roles to which they belong. Furthermore, the manner of interaction evolved throughout my time at the Network. More than half of the Site Operations Directors were newly employed at the time of this meeting, and so were less forthcoming in meetings. Nonetheless, from the perspective of the meeting facilitators, the Site Medical Directors are more vocal and difficult to manage than Site Operations Directors; the former were more likely to complain and less likely to implement solutions than the latter.

Yet together, they know what makes for collaborative teamwork. The Site Medical Directors provide ideas based on clinical experience; the Site Operations Directors implement them based on what is practically feasible and financially sound. Consequently, the Site Medical Directors temper their passions and join in the reasoned pursuit of finding solutions to the box-clicking problem. Perhaps, as one Site Medical Director suggested, there is something amiss with the depression measure's boxes which causes people to miss the click. Perhaps, as another proposed, there is something wrong with the *Medical Assistant Pre-Visit Workflow* document. Or perhaps, recommends another, they should collect more data to ascertain whether the physicians or medical assistants are primarily to blame for not clicking boxes. Finally, a Site Medical Director volunteers culture as a reason:

> "I think culturally, for a lot of people, it's a lot of discomfort from the medical assistant's standpoint more so than from the patient's, sometimes."

Despite the equivocation of "I think" and "sometimes," culture is a safe explanation around which the meeting participants can cohere. Not only is "culture" a polite way to gloss over the fact that most medical assistants are young, Hispanic, women, culture is adequately familiar as a concept to summon stereotypical thinking because culture, according to the Network's in-house "Change Management" workshop, is a key facilitator and barrier to organizational change.

In this setting, the meaning of culture is "a lot of discomfort" that *medical assistants* feel when they ask the depression screening questions in prying earshot of parents, partners, and other patients. To be sure, the directors also called attention to the potential discomfort *patients* feel when they are asked the PHQ-2 questions in front of other people. For example, one Site Medical Director said, "It's also very challenging for our adolescent population because we are

asking the question with the parent in the room." Unfortunately, patients' discomforts are difficult to change when there are no private rooms available for medical assistants to privately ask the PHQ-2 questions. Moreover, the directors are not permitted to manage the patients to get them to answer the PHQ-2 questions, though they are permitted to manage the medical assistants.[35] The directors, constrained by the physical edifice of the health centers and what their organizational role allows, must therefore reorient their concerns away from the patients—the very people they are meant to serve—to the medical assistants in order to fulfil their organizational charge to ensure that boxes get clicked.

With this familiarity of culture to latch on to and empowered by her organizational role to manage the medical assistants, a Senior Operations Director finally speaks. She removes her glasses from her nose and props it on top of her head as if to preamble her thoughts:

> "Since we have everyone here, I just have one question. There is a general overall consensus in the behavioral health world that this [*PHQ-2 questions*] needs to be on paper. So that when a patient checks in, we hand them a piece of paper where they check the PHQ-2. Since we have all the leadership of the sites in the room, how many would vote for putting this on paper?"
>
> Hands raise to the air. The piece of paper receives their blessings.

Like the meeting with the Senior Clinical Leaders, the acceptability of the solution relies on pre-existing assumptions about medical assistants' role and relationships. With no one coming to their defense yet permission to speak on their behalf, or at least their cultures, medical assistants not only must continue clicking the depression screening boxes, they are also given the

[35] Note that the Site Medical and Site Operations Directors did ask medical assistants why they do not click the box. The typical response is either (1) they are in a public space when they ask, which feel uncomfortable; or (2) they were not trained to ask the PHQ-2 questions.

blame. To be precise, the directors have just agreed through the absence of disagreement that the medical assistants' culture is responsible for obstructing the path towards the reaching the goal. Therefore, if medical assistants' cultures are responsible for missing the goal, why not circumvent culture altogether by replacing the speaking vessel of the medical assistant with the speaking vessel of the paper? And if medical assistants are not formally granted a seat at the table to speak at these meetings, who else but the Site Medical and Operations Directors are present to speak on their behalf? All the while the physicians, who incidentally are in the room because they are the Site Medical Directors, are by default absolved of blame.

On the other hand, perhaps the meeting participants did not really believe in the reason of culture and the solution of the piece of paper. Rather, perhaps they reached consensus because a Senior Operations Director was willing to implement it, no one strongly disagreed with the proposal, time is of the essence, and the depression measure's boxes still required clicking. In fact, there was one voice of dissent, "Obviously our folks that can't read is an issue"; a voice of pragmaticism, "as long as it's entered by the medical assistant once it's done"; the meeting facilitator who shooed the directors to finish the topic on time, "we do also want to get to the round robins"; "So, may I suggest that we go through the round robin and then come back to questions about this particular one"; and the fact that the chosen solution was the solution that someone was willing to implement.

This is the power of ambivalence. Even if the directors think the depression measure is "kinda messed up," reorients them away from patients' discomfort towards medical assistants' culture, and upholds the stereotypically fraught relationship between the medical assistants, directors, and physicians, the directors know what their organizational roles demand. Namely, their roles demand that something practical must be done about the meeting topic in the time

appointed in the meeting agenda. In this way, perhaps what the directors were ultimately agreeing on was the type of organizational roles, relationships, and interactional processes they wish, or feel obliged, to maintain at Site Management Team's meetings.

Meeting 3: The Clicky, Squeeeeny, Box and the Residency Didactics

At the Network, it is widely known that the residents struggle with executing the clinical quality measures, which the leaders suspect is due to their lack of training on the financial importance of these measures. The leaders also suspect that the residents do not know where and how to document their execution of these measures in the electronic medical record. In the educational lecture or "Residency Didactics" we are about to enter, we will witness Evelyn, the Senior Manager of Process Improvement, attempt to redress this educational gap. At the same time, we will witness the depression measure offer an education of its own. It will help socialize the residents into the institutionally-correct way to comport to the world of clinical quality measures—with ambivalence.

It is Friday afternoon. Nine residents are seated at tables. The tables are arranged as an amphitheater, giving way to a stage upon which Evelyn is reporting on the clinical quality measures. The energetic movements of her body compensate for the residents' seeming tiredness. Some are resting deep in their chairs with arms folded and eyes glazed-over; others are openly charting on their laptops; others still are swiping and typing on their phones. At least two have put on the impression of interest, nodding and maintaining eye contact as she speaks. With the aid of a PowerPoint presentation, Evelyn moves on to the box-clicking clinical quality measures. With a tone and rhythm consistent with her preceding sentences, she says,

“So pay attention when you're documenting. It's a box clicking one [...] So like literally clicking that darn box.”

The residents stir from their daze. They begin to chatter among themselves. The chatter then unfurls into a series of questions about the manner and content of box-clicking, which is then pierced by the cry,

“I’m not doing that!”

The room catapults to silence bar one resident who rolls his eyes, clasps his cheeks with two hands, then expels a sigh. The resident-crier continues,

“So what? What is the reason that the Network cares about these measures?” She dramatically pauses. “Is it payment?”

One resident extends his hand to the air and rubs his thumb and index finger around an imaginary paper bill. The residents are waiting for the answer they all know the answer to.

“That’s a good question,” Evelyn replies, which she then appends with an elongated “Ummm…” as if to imply that she is formulating a well-crafted response, then answers with the elegant bluntness of “Yeah.”

Laughter erupts, followed by an outpouring of opinions and emotions. Some point out the disjuncture between what is captured in the box and what happens in the clinic: “Obviously there’s a huge disconnect between clicking that box and what actually should be done”; “It’s not a one-size-fits all.” Others release frustration. “This is a joke”; “This stupid compliance checkmark”; “We’re talking about compliance for sure.” Others, still, make sport out of it. “What does Mindy Kaling say? Check a box and save a life?”

For a group who are supposedly in want of an education on clinical quality measures, their response to the Evelyn’s statement was flawless in execution. Recall how the Site Medical

Directors and Site Operations Directors responded to the depression measure. They commenced with silence, then moved to exclamations of frustration and discomfort, then resigned themselves to the fact that those boxes must nonetheless get clicked. Let us now consider the residents' response. Evelyn's introduction to the phase, "box-clicking," stirred the residents from their slumber. It provoked the outburst, "I'm not doing that," and the demand, "So what? What is the reason that the Network cares about these measures? Is it payment?" The room jolted to silence, pregnant with judgement against the depression measure, and pregnant with the possibility that Evelyn, too, will be judged depending on how she responds. Evelyn subsequently had a choice. She could answer with "Yeah," or dodge the question with the embellishment of "Yeah… but" and offer an explanation. Evelyn chose to answer with "Yeah," then threw the next move back to the residents. The residents could either accept her answer and move on as if nothing happened, or extend the moment by adding cries of outrages, mocking, and humor of their own. The latter, the institutionally-correct way to comport to box-clicking, was chosen as the residents burst into laughter and unleashed their opinions about box-clicking. By making the institutionally-correct choice when they responded to the depression measure, the residents subsequently transitioned from frustrated students to shrewd co-conspirators who have come to accept box-clicking as part of their clinical lives.

With the uproar of box-clicking seemingly behind them, Evelyn shows them the depression measure's "follow-up" box using a PowerPoint slide projected against the television screen, thereby returning to her education (refer to Figure 14).

Resident 1: So with that little clicky box right there…

Residents snigger

Resident 1: You didn't do depression screening unless you click that box?

Evelyn: Uhhh, yeah. For the purposes of recording, of reporting compliance.

Residents grown

Resident 1: So with that little clicky box right there.

Resident 2: It's so small.

Resident 1**:** I wouldn't have thought this squeeeeeny little follow-up, that the follow-up was that tool in the screening.

Three educational lessons can be gleaned from this interactional moment. First, Evelyn learned that perhaps it was not the medical assistants or medical assistants' culture that was responsible for unclicked boxes. Rather, perhaps the neophyte residents who incidentally do not get physician incentives may be to blame, thereby giving credence to the working hypothesis that underperformance is due to the residents' lack of education and can be redressed through even more education. Evelyn subsequently relayed her findings to the health center's Site Medical and Operations Directors, the Residency Preceptors, and the Electronic Medical Records Team, recommending that they offer the residents even more training on matters of box-clicking.

Second, the residents learned that "you didn't do depression screening" lest the box is clicked. Well, at least for "the purposes of recording, of reporting compliance," Evelyn added. Clicked boxes are essential for enabling managers to know what happened in each medical visit because even if the residents wrote detailed notes about the patient's depressive symptoms and created an exquisite follow-up plan to address those symptoms, those notes come to naught lest the boxes are clicked. In particular, with a few clicks of the mouse, the depression measure activity can get smooshed into binary form—they either clicked or did not click the boxes—which is then purified into electronic datum as either 0s or 1s. Through the compilation of the 0s and 1s, basic arithmetic and permutations can be performed on the depression measure activity,

allowing information from multiple people, times and places to be manipulated and made known as two-dimensional "paper, signs, prints and diagrams" or texts (Latour 1990, 21). And with the circulation of these texts, what was initially a click of a box can enable leaders, successively positioned higher-up in the Network's hierarchy know, assess, and reward what was accomplished on the floors of the clinic.

Third, the residents learned how to orient themselves to the box-clicking depression measure. With the introduction of the phrase "box-clicking," the residents' visual encounter with the box in the PowerPoint slide, and their laughs and sniggers at the box as well as Evelyn's willingness to play along with their tone and manner of questioning, they collectively agreed on the appropriate way to respond to the depression measure—with ambivalence. Perhaps their ambivalence is due to the feeling that the gravitas of follow-up seems incompatible with the smallness of the box. Consider the repetition of the phrase, "little clicky," which almost became a figure of speech as one resident began repeating "click," "clicking," "clicky" while the other residents offered a harmony of affirming sniggers and groans. The shortness of "little clicky" was then contrasted with the exaggerated lengthening of the vowel in "squeeeeeny little" as if to emphasize the resident's incredulity and strain of squeezing the big world of compliance, money, and depression screening and follow-up into that little follow-up box. In this moment, the depression measure also became an educational measure. It helped the residents constitute and agree upon the ironic constitution of the clinical world in which they inhabit, where clinical quality measures like the depression measure can be both big yet small, trivial yet significant.

The Management of the Depression Measure

This was a story about leaders' and managers' attempts to manage the depression measure. In this story, we learned that getting people to click the box was a lot more complicated than what one would presume, and not just because its box-clickiness produced rote outrage across the board for being "made up," "dumb," and a "stupid compliance box." It was also due to leaders' and managers' uncertainty over who was not clicking the boxes and why.

Perhaps this uncertainty is why managerial action relied on a host of decentralized and localized efforts to propagate the box-clicking practice. In the first instance, managerial action involved adding the depression measure to the *Medical Assistant Pre-Visit Workflow* document, which unfortunately did not yield the desired outcome as specified on the *Enterprise Goals*. Subsequently, managerial action entailed adding the depression measure to the *Physician Incentives Plan*, producing a piece of paper with the PHQ-2 depression screening questions, and creating an educational resource for the residents. Managerial action therefore involved forging different relationships between the depression measure and distinct professional groups: financial inducements for the physicians, a piece of paper for the medical assistants, and a training resource for the residents.

Let us take away one managerial lesson from the leaders' and managers' efforts. Through deploying a suite of role-specific strategies, they offered tailored solutions to the problem of box-clicking. In so doing, they allowed distinct professional roles to work in parallel without obliging them to agree on the local implementation details of the depression measure, let alone know how the other professional roles were being induced to click the box. In this way, the depression measure is what Star and Griesemer (1989) calls a boundary object. A boundary object describes how people from different communities coordinate on the same task without having to come to a

consensus on the localized details of that task. In our case, the leaders sought to motivate each professional role based on assumptions about who inhabits each role, the most appropriate way to get them to work, and an understanding of their standard work routines in their standard task environment. Managerial action therefore rested on deploying strategies that were adequately localized to cater to distinct professional groups yet firmly standardized to converge them to the same boundary object, the depression measure.

This was not only a story about management, however. It was also a story about ambivalence.

Because the depression measure tied the professionals to different people, objects, and goals, the professionals could not hold a single view towards the depression measure. To clarify this point, let us break the depression measure into three parts. The *practice* of the measure pertains to how the measure is captured; in our example, by box-clicking. The *meaning* of the measure refers to the broader goals the measure may seek to accomplish, such as better patient health outcomes. The *consequences* of the measure refer to the material results of complying to the measure, such as the receipt of money and gold stars. The professionals may praise certain aspects of the measure's *meaning* such as safeguarding patients' mental health, view its *consequences* such as the pursuit of money with suspicion, and experience its *form* of box-clicking with frustration.

I suggest that the multiple practices, meanings, and consequences that get attached to the depression measure is what provokes ambivalence. In our story, it provoked a type of ambivalence that was similar in style and effect across the three meetings. In particular, consider how ambivalence was produced across the three meetings. First, the depression measure was introduced by a declarative statement about underperformance: "it's one where we're not doing

well on UDS"; "With adult depression screening, we knew this was a struggle for us"; "It is one we continue to struggle with." Silence would then ensue, sometimes immediately, at other times following a quick exchange about the details of the depression measure's execution. Silence would then give way to outbursts such as "It's kinda messed up"; "I'm not doing that"; "This is a joke." Those outbursts would then yield to the acceptance that those boxes must still get clicked for the purposes of money, compliance, and the provision of care, among other reasons.

Also consider the effects of ambivalence across the meetings. First, it enabled the professionals to demonstrate their belonging to the same community of practice (Lave and Wenger 1991). By mobilizing ambivalence, the professionals demonstrated their ability to orient themselves to the depression measure in terms of what is expected of their organizational roles while also reaffirming that they share the same repository of experiences, knowledge, and beliefs about the depression measure (Carr 2010; Goffman 1978; 1981). Consider, at one moment, they knew they could critique the depression measure through collective silence, laugher, or outrage. At another, they knew they were required to change their tone and join in the reasoned pursuit of enforcing or complying to the depression measure.

Second, ambivalence helped the professionals cope in spaces of contradiction by creating a separation between what they think and what they do about the depression measure. To illustrate, in all the meetings, the declaration of underperformance was followed by a release of seemingly irrepressible pent-up emotion, which Goffman (1981) calls a "response cry," as if to convey the meeting participants' supposedly sincere feelings of incredulity and frustration towards the depression measure and all the money, regulatory requirements, and organizational practices it brings. Notice, too, that they were quick to articulate their issues with the depression measure: the fact that what is captured in the boxes may not reflect what happened in the clinic,

that they can click boxes without asking the question, and that the depression measure is "kinda messed up." These releases are significant because they assured the meeting participants, both to themselves and to each other, that what they do is distinct from what they desire to do. These releases also conveyed that they are all in on the open secret that box-clicking measures are trivial yet consequential and so they must persist in ensuring they get clicked. Perhaps, then, ambivalence might even protect professionals from succumbing to a type of burnout borne from attempts to reconcile what they wish they could do in theory with what the immediate exigencies of their work demands. In this way, ambivalence might insulate them from the discomforts and distress of going against their preferences, well-intentions, and values.

Third, ambivalence permitted the reproduction of particular roles and relationships. Consider the decision to add the depression measure to the *Physician Incentives Plan*. One could argue that the hierarchically-stratified structure of the Network and the funding system that the Network is in were responsible for obliging the Director of Nursing to defer to the Chief Clinical Officer who then deferred to money and quartiles to which the depression measure is tied. This, in turn, reinforced the asymmetric distribution of responsibilities and rewards across the physicians and medical assistants. Also consider the Site Management Team's meeting. One could argue that the depression measure, meeting structure, and organizational roles provoked the choreographed performance of organizational parts whereby the Site Medical Directors expressed rote outrage at the depression measure while the Site Operations Directors remained decidedly detached. Yet together, they agreed on a solution that relied on the directors speaking on behalf of the medical assistants by constituting them in possession of a culture which prevented them from asking the depression screening questions. This, in turn, served to reinforce the stereotypically-fraught relationship between directors and their subordinates, the physicians

and the medical assistants, and reoriented the directors away from the patients to the medical assistants.

To be sure, it is not my intention to cast the leaders and managers at the Network in a poor light or to retell cliché stories about physicians versus medical assistants, leaders versus frontline workers. Such renderings would only muddy their complicated relationships, suffused with control yet care, distance yet comradery, friendship yet hierarchy. Furthermore, it is a refrain at the Network that medical assistants are overworked and underpaid and something must be done about it.

Yet, as hardnosed leaders and managers who must ensure the Network remains financially viable to cover the cost of expensive care that patients deserve but cannot afford, they must remain vigilantly ambivalent. What is more, given their time constraints, a million things on their plate, and the importance of getting funds to remain financially viable, what else can they do but to enforce the clicking of boxes by falling back on extant roles, relationships, and strategies like the *Physician Incentives Plan*, pieces of paper, and educational resources? Meanwhile, this manner of reasoning is what makes ambivalence a quotidian mechanism of social reproduction. It allows the professionals to minimize their own involvement in the enforcement of practices they so readily critique by shifting the source of control and decision-making power to the organizational roles, structures, and regulatory and funding systems they are in, thereby absolving themselves from reproducing practices that might go against their preferences, well-intentions, and values.

Epilogue – The Wily of the Depression Measure and the Productiveness of Ambivalence.

Perhaps you are wondering, were the leaders and managers successful at managing the depression measure? If so, why? To answer this question, let us return to the Site Management Team's meeting.

The clock ticks to 11:05, ushering in the next topic, "Clinical Quality." The meeting facilitator hands out piles of paper to the directors for discussion. The paper contains site-specific information about the clinical quality measures, conveyed through histograms and tables spanning several pages long. Some directors look studiously at the paper, pen in hand, writing comments along the margins. Others lean against the desk, resting a hand on cheek as they survey the paper. One director looks shocked, with a hand rested against her mouth as if to suppress a gasp. Perhaps she has mobilized the impression of shock because the piles of paper have declared that performance on the depression measure has improved dramatically across all the sites. Months of focused attention has ostensibly yielded success. She later even announced in round robins, "we've improved thirty per cent for the depression screening measure […] Showing [physicians] the clicky box […] has really improved compliance rates!"

Let us now dash to a meeting with the Site Operation Directors where the results of the piece of paper pilot, containing the PHQ-2 questions that the medical assistants were tasked to get patients to read, is being unveiled. The director responsible for the pilot announces, "so far the numbers have increased and it's very helpful," to which another interrupts with the concern that some patients cannot read written instructions. Her concern, however, is intercepted, curtailed, then shut down as a stack of paper, now laminated as if to signal its importance and impending handling by multiple patients, is passed along to the Site Operations Directors with the instruction to take two per medical assistant per health center.

To the best of this ethnographer's knowledge, no one drew a cause-and-effect relationship between adding the depression measure to the *Physician Incentives Plan* and the improved box-clicking rate.

So, what caused the improvement? Was it showing the residents and physicians the clicky little box, allowing the bits of paper to speak on the medical assistant's behalf, adding the depression measure to the *Physician Incentives Plan*, or all of the above? Unfortunately, the question will remain unanswered. Since leaders and managers are practical people, they are not obligated to find true causes and culprits to problems. After all, when goals are met, there are a million other concerns to attend to, and time remains of the essence, the issue is not whether the data truly supports their working hypotheses of cause and effect. The issue is not even about whether they truly believe in those hypotheses. What matters is whether the data shows improvement and the achievement of goals. Let us therefore gloss this ending, assume their efforts worked through the power of collaboration, conclude that the depression measure was managed by the savvy of the leaders, then move on to the next task, for this is what they did.

The story, however, has not ended. One month after the clinical quality data were revealed in the Site Management Team's meeting, I was tasked to arrange the past twelve months of clinical quality data into a table. As I rearranged the data, I noted that performance on the depression measure increased dramatically between June and July of 2019 and remained stable thereafter—two months before it became a matter of concern in meetings at the Network. Worried about my own data-extraction and manipulation skills, I sent an email to Evelyn, the Senior Manager of Process Improvement:

Jade: If you look at the Network's longitudinal data, performance on depression screening jumped incredibly in July. What caused this jump?

Evelyn: Depression actually hasn't seen as much of an increase. It's just that the Data Team only updated the script to be looking at one visit in the last year instead of every visit for this fiscal year.

The computer script upon which the leaders' and managers' worries, efforts, putative success and sense of achievement was based on got updated. Previously, the boxes required a click in every medical visit for the depression measure to get counted as being performed. The boxes now require a click at least once a year. Seven months of labor was poured into the boxes due to a confusion about the definition of the depression measure. This definition was written into a computer script, which then extracted data from the electronic medical records. The data was then transformed into numbers, histograms, and percentages, which were then presented at different meetings and used as the basis of managerial action. The Network's performance on the depression measure did improve on paper, but only as an artifact of using a different computer script. Indeed, so much relies on successfully clicking the depression measure's boxes, and so much relies on accurately rendering that box-clicking information on paper, graphs, and tables. So even if the leaders and managers think those boxes are "dumb" and "made up" because they do not capture the concept, events, or phenomena they are meant to capture, clicked boxes are still used as the basis for evidence, decision-making, and managerial action, and not to mention the acquisition of money. In other words, clicked boxes are consequential.

Figure 16: Recreation of the "Previous" Box in the Electronic Medical Record

Meanwhile, I encountered another little box in the electronic medical record called "Previous" (Figure 16). It is located directly below the two, thin, rectangular depression screening boxes that the medical assistants are responsible for clicking. The "Previous" box

hovers softly against a duck-shell blue background, non-obtrusively but seductively calling for a click. This box is special because with a single click of the mouse, it permits the medical assistants to circumvent the depression screening questions altogether. It does so by replacing the two, thin, rectangular boxes' depression screening answers with the patient's answers from the previous medical visit.

The Network leaders and managers know that the medical assistants routinely click the "Previous" box without asking the PHQ-2 depression screening questions. The Director of Reproductive Health often raises this issue in Staff Quality Improvement Committee meetings. A handful of Site Operations Directors have told me about this previous-box-clicking practice. I have personally shadowed medical assistants who clicked the previous box far more often than the two, thin rectangular boxes. Yet, as long as goals are met and there are other concerns to contend with, clicking the depression screening boxes without asking the depression screening questions need not raise alarm. This is the convenience of ambivalence.

Chapter 3: Seeing and Documenting Risk with Standards

Standardized Encounters with Risk and Safety

Evelyn is the Senior Manager of Process Improvement. Standing five-feet tall plus a few extra inches thanks to her extensive array of high-heeled shoes, she is responsible for wielding the power of acronyms such as PDSA (Plan, Do, Study, Act) and DMAIC (Define, Measure, Analyze, Improve, Control) to reduce waste and increase efficiency. Taylor is the Director of Risk and Compliance. Proficient at switching from an endearing chortle to a sonorous boom, she is responsible for identifying, preventing, and minimizing risk through managing risk incident reports and malpractice claims. Together, they are "redesigning a new tomorrow" by standardizing the Network's approach to events that have led to patient harm or had the potential to do so, which are also known as "critical care incidents."

To pursue this mission, framed positively as the pursuit of patient safety or "freedom from accidental harm" (Institute of Medicine 2000, 4), they have produced a workflow on a piece of paper. This workflow is depicted as a sequence of sunset-orange boxes, diamonds, and oblongs that hold tiny words and are strung together by grey arrows. It stipulates the process by which critical care incidents should be classified, evaluated, corrected, then rendered as "improvements" to the Network. The details of the workflow do not matter for this story.[36] What

[36] The curious reader may wonder whether the workflow mattered to the people in this story. On the one hand, due to the COVID-19 pandemic, the implementation of the workflow was put on hold. Yet on the other, the writing of the workflow was prompted by the Network's feedback from a recent Federal Tort Claims Act (FTCA) on-site audit. The Network failed the audit, partly because the FTCA auditors charged the quality improvement department of unsatisfactorily documenting their processes. Failure to respond to the auditors' feedback is financially consequential. It puts the Network at risk of losing its FTCA-deeming coverage, which means that rather than the Federal Government getting sued and having to pay the associated malpractice claims, the Network must do so itself (HRSA 2019). So, there was a need to "redesign a new tomorrow". The Network must respond to the FTCA's feedback lest it loses its coverage and therefore money. Fortunately, creating a workflow that standardizes the Network's response to critical care incidents on a piece of paper is a convenient way to demonstrate that it is trying to improve its documentation.

matters is how Evelyn and Taylor enlist their hearers to this vision of patient safety by escalating the subtlest of risk into a matter of life and death.

Evelyn and Taylor are standing with microphone in hand in front of a PowerPoint projection. They have twenty minutes at the Physician Grand Rounds to convince their audience to accept this "new tomorrow" of patient safety.

Though the purpose of the Physician Grand Rounds is to provide a lecture on emerging medical trends, discoveries, and issues idiosyncratic to the Network, it feels more like a family reunion. Upon entering the conference room, one will always smell scrambled eggs, link sausages, pancakes, and coffee, inviting the meeting participants to eat. One will always hear the life updates of physicians convened in small groups, talking about issues ranging from their kids' obsession with TikTok to the details involved in Catholic funeral preparations. And one will always see the head of the Network-family, the Chief Executive Officer, slide from row to row, seat to seat, greeting people by name before the commencement of formalities.

The lecture itself is harmonized by the hums of chatter, contributed no less by two physicians seated in front of me. They are whispering, offering side commentary, and giggling. Consequently, it is no easy feat for the Grand Round presenters to keep their audience members engaged. However, with rhetorical panache honed from their respective seven and eleven years of experience working in the health care safety industry, Evelyn and Taylor capture the audience in three swift moves.

Move one. Establish the condition of health care in America. "It's entirely risk," states Evelyn. Risk—the possibility that any action may harm the patient or professional—lurks in every corner and hovers in the air, threatening to endanger at every turn. In fact, health care has gotten risker since it has been called "complex" and "fragmented" (c.f. Institute of Medicine

2000; Power and Hutter 2005). With more people and technologies involved, bringing with them more things to coordinate, standards to meet, and entanglements with regulations, funders, accreditation bodies, and best-practice principles, the sheer number of things to get wrong have simply multiplied. Inevitably, the risk of stepping outside these ever-increasing standards have also increased.[37]

Move two. Present a solution to risk. The PowerPoint slide changes, giving way to the text, "HRO" [high-reliability organization], capitalized and layered on top of a cartoon dartboard. A large white dart, perhaps symbolizing what is consistently good and right, directly hits the bullseye while overwhelming three little wooden darts. Evelyn continues, "We're trying to get to zero harm to get to the high reliability organizational model in health care."

Despite sociologist's Charles Perrow's assertion that industries characterized by "interactive complexity" and "tight-coupling" makes accidents borne out of chance normal, as expressed in the title of his influential book, *Normal Accidents: Living with High-Risk Technologies* (Perrow 2011), high reliability offers a competing view. High reliability is the science and management of safety where risks can be pre-empted, detected, and controlled before they escalate to harm (Chassin and Loeb 2013; Sagan 1993; Weick and Sutcliffe 2011). According to Evelyn and Taylor, high reliability in health care means "consistently performing with high patient quality outcomes, low risk, low errors, across all services and sites and settings" and "getting to zero harm." High reliability therefore offers a hope, an aspiration, and a

[37] And it is not just health care that has gotten riskier. As famously articulated by Ulrich Beck (2013 [1992]), the post-industrial society is a risk society. Unwittingly, humans have manufactured risks through the march of technological progress. These risks have necessitated human intervention to both anticipate and quell through further advancements in science and technology. What is more, many of these risks require scientific, specialized knowledge in order to discern their likelihood of occurring and severity of consequences, which has since spurred everyday citizens to react to their "incompeten[ce] in matters" (p.53) by becoming "small, private alternative experts in risks of modernization" (p.61). They might, for instance, attempt to reestablish control over the signs of risk by receiving a crash education at a Provider Grand Rounds on what they can do about risks.

solution to risk. It simply relies on consistently avoiding "harm" through the consistent performance of actions, even if its realization tautologically relies on its own success.

What does consistent performance entail? Evelyn and Taylor do not have to explain what it means in this presentation because the professionals at the Network have been trained to know. Under Evelyn's tutelage, one learns that errors occur when there is a lack of consistency. They are "ultimately the result of not following the process," she explained to me two weeks into my tenure at the Network. Based on Taylor's years of working in the health care safety industry, she asserts that not following protocol or the standard of care is usually the "root cause" of critical care incidents. Consistent performance, then, is executing activities according to standards. It is maintaining standards.

There is a snag, however. If risk is the existential condition of health care in America, is not "getting to zero harm" too romantic a pursuit? Like most professionals trained in risk and safety, Taylor knows how to preempt this retort. As if on cue, she interrupts Evelyn. "I just have something to add. So zero harm doesn't mean we're not gonna have incident reports. It doesn't mean that we're gonna have zero mistakes happen, but the goal is to not allow those mistakes to harm a patient, so that's what we mean by zero harm." Taylor assures the audience that mistakes will and can happen under a high reliability model, but only to the extent that they do not harm patients. Taylor's assurance, however, leads to another snag. Without the benefit of hindsight and nothing but the future to anticipate, risk remains a problem because it always holds the potential to harm. This takes us to the next move.

Move three. Dramatize the potential, not-yet-realized, consequences of deviating from zero harm (c.f. Carr and Lempert 2016). To accomplish this task, Evelyn begins with a simple question. "What would 99 percent reliability mean?" She allows the question to linger, creating

suspense. “So, 99 percent high reliability, not 100 percent, but 99 percent high reliability, means,” Evelyn pauses for dramatic effect, “One hour of unsafe drinking water every month.” She appends the statement with rhetorical questioning, drawing her listeners in. “So one hour. Do you think that's acceptable?” She then steadies the tempo of her speech, stressing the seriousness of what is to come. More shocking statements: “Two unsafe plane landings per day at O’Hare. Twenty-two thousand checks deducted from the wrong bank account each year. Would you like that? Sixteen thousand pieces of mail lost every year.” Each statement is increasingly accompanied by a muffled chorus of gasps and wows of disbelief from the audience. She then shifts her tone to one of sympathy as she articulates what 99 percent high reliability means in health care. “Twenty-thousand incorrect prescriptions every year. Which we can start to see happen a little bit. And five-hundred incorrect operations each week, which I think the last two in healthcare, we know that this happens. So this, I’m sure that even more than this happens.” Evelyn then personalizes 99 percent high reliability by reminding her listeners that incorrect prescriptions and incorrect operations are part of their existential reality, beginning with a hesitant, “which we can start to see happen a little bit,” which grows into the firmness of “we know this happens,” which then flourishes into the certainty of “actually more than this happens,” creating a sense of urgency which preempts the conclusion Evelyn is about to give: “And this is 99 percent highly reliable. And this just illustrates that none of those things are acceptable.”

Evelyn has not finished. To conclude her speech, she catastrophizes the consequences of not getting to zero harm by summoning the worst possible outcome—death. “If we had an hour where we got sick or die because of the water that we're drinking. You can't have!” before

rearticulating the now inescapable conclusion, “So this is to illustrate the importance of safety culture in trying to get to zero” in an almost calm, clinical, manner.

The room is silent. Even the once-giggling physicians seated in front of me are silent. With the power of Evelyn’s speech, the audience members have been brought to see the risk, feel the fear, and anticipate the crisis, leading them to the conclusion that no level of harm is acceptable (c.f. Roitman 2013; Masco 2014; 2017). Never mind the facticity of those statements. And never mind the fact that such shocking accounts are all too familiar. Just two weeks earlier, Evelyn and Taylor gave the same presentation at the Quality Improvement Staff meeting, to which the audience members responded in the institutionally-appropriate manner of raising their eyebrows and lightly covering their mouths as if to suppress their shock. Just seven weeks earlier, the same presentation was given to the Senior Operations Directors. With exaggerated gusto, the Regional Director of Operations slammed the piece of paper she held down on the table, hurled a look of horror to the Chief Operations Officer, to which the Chief Operations Officer duly reciprocated with a look of equal horror. At the annual Quality Assurance Day, an event that all staff must attend to satisfy federally-mandated training requirements, Taylor commenced her speech on “Risk Mitigation and a Culture of Safety” with the statement, “Medical error is the third leading cause of death” (Makary and Daniel 2016; but see Shojania and Dixon-Woods 2017).

Seeing Risk Through Standards

Evelyn and Taylor are not alone in their manner of educating. Ever since the publication of the U.S. Institute of Medicine’s *To Err is Human: Building a Safer Health System* (2000), health care professionals have been educated to see risk as an ever-present condition which threatens to

lead to medical errors[38] and patient harm. The report commences with a series of stories that shock. "The knowledgeable health reporter for the *Boston Globe*, Betsy Lehman, died from an overdose during chemotherapy. Willie King had the wrong leg amputated. Bob Kolb was eight years old when he died during "minor" surgery due to a drug mix-up" (p.1). The report then transitions to foreboding, "These horrific cases that make the headlines are just the tip of the iceberg," emotionally readying the reader for what is to come next. "At least 44,000 Americans die each year as a result of medical errors […] the number may be as high as 98,000" (p.1). If this is not shocking enough, the cost of lives is layered with even more costs: 17 to 29 billion in total national costs; 2 billion in hospital costs; the opportunity costs of duplicating diagnostic tests and counteracting adverse drug events; and the unmeasurable costs of a public's lost trust in the health care system. Consequently, in a span of three pages, minimizing the risk of error, framed positively as the pursuit of patient safety, becomes a matter of saving lives and saving money, morally and financially binding health care professionals to the conclusion that "[t]he status quo is not acceptable and cannot be tolerated any longer" (p.3).

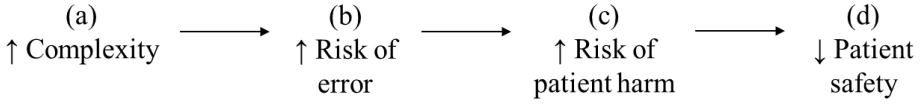
This chapter examines the relationship between standards, risk, and professional vision. Risk, as defined in the International Organization for Standardization's Guide (31000:2018), is the "effect of uncertainty on objectives" (ISO 2018). Accordingly, the production of risk depends on the presence of an objective and the possibility of deviating from that objective, which presumes people agree on the constitution of that objective and the direction and degree of deviation from that objective so as to give rise to an effect. Because reaching an agreement relies on a background of values, beliefs, politics, and structures, risk, as articulated by Mary Douglas and Aaron B. Wildavsky in *Risk and Culture* (1983, 5), is just as cultural as it is material. It is "a

[38] The definition of medical error is provided in the *To Err is Human* report, and comprises of four types of errors: diagnostic errors; treatment errors; prevention errors; and other errors (Institute of Medicine 2000, 36).

joint product of *knowledge* about the future and *consent* about the most desired prospects" (p.5; italics in text).

Professional vision, as articulated by Charles Goodwin (1994), is a stylized way of seeing and speaking about the world and is inextricably linked to power. To exercise professional vision, the person must *code* the perceptual field into categories that coheres with the profession's terms of classification; recognize which event, object, or process should be *highlighted* in the separation of the perceptual field into figure and ground; and *produce and articulate* speech that resonates with the discourse around which her or his profession is organized (c.f. Carr 2010). In this way, professional vision offers a particular interpretation of the world that corroborates, is held accountable to, and furthers the particular vision of a profession and therefore profession(al)'s power.

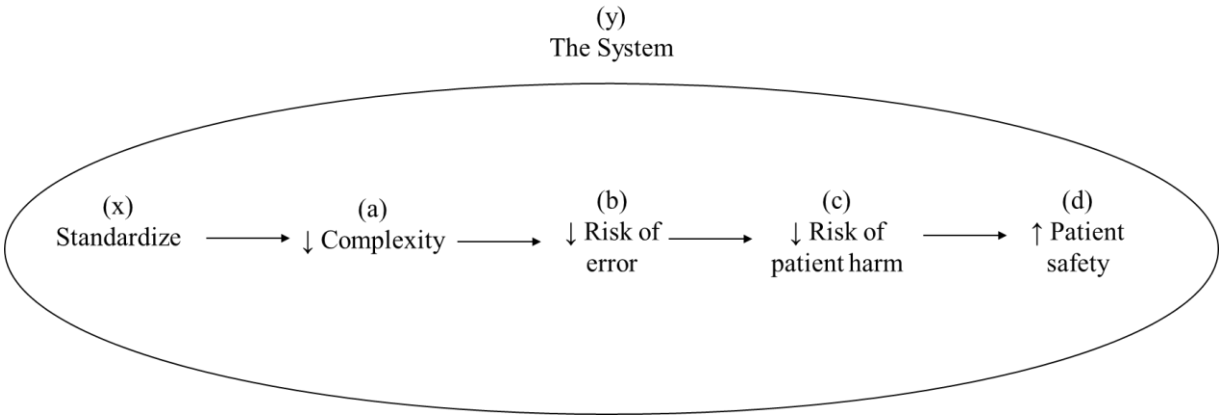
Figure 17: Relationship Between Risk and Patient Safety



In this chapter, I will elaborate on one task that standards are lauded to accomplish in America's health care system—minimize risk in the pursuit of patient safety, which the Institute of Medicine (2000) defines as "freedom from accidental harm" (p.4). The logic that animates this claim is as follows (Figure 17). America's health care system is complex (Figure 17a). To be sure, America's health care system cannot help but to be complex given the sheer number of people, technologies, and organizations involved in running it (Institute of Medicine 2000; Weick and Sutcliffe 2011). Complexity, however, is dangerous when it overwhelms individuals afflicted with limited cognitive capacities who work in complex environments because

presumably, complexity makes individuals liable to the risk of error[39] (Figure 17b). Furthermore, since error can lead to patient harm (Figure 17c), as Evelyn and Taylor articulated in the Grand Rounds presentation, error must be minimized to ensure patient safety or freedom from accident harm (Figure 17d).

Figure 18: Relationship Between Standards, Risk, Patient Safety, and the System



What does it take to ensure patient safety? According to the *To Err is Human* report, the solution lies with the "system"[40] (Figure 18y). Supposedly, a system of safety must be supported by government bodies that regulate and incentivize compliance to safety standards; accreditation and credentialing bodies that assess and reward adherence to safety standards; institutes of higher learning that disseminate the how and why of safety standards; and scientific bodies that refine and expand the knowledge base of safety standards. Together, the system will supply the leadership, funding, knowledge, and tools that enable government bodies, oversight organizations, group purchasers, and professional groups improve, promote, and enforce safety standards inside health care organizations and the health care system itself.

[39] In the *To Err is Human* report, error is defined as is the "[f]ailure of a planned action to be completed as intended or use of a wrong plan to achieve an aim" (Institute of Medicine 2000, 210).

[40] In the *To Err is Human* report, the system is defined as a "[s]et of interdependent elements interacting to achieve a common aim" (Institute of Medicine 2000, 211).

Perhaps this is why America's notoriously complex health care system, made even more complex due in no small part to the regulatory and professional imperatives imposed on health care organizations to be safe, require standards (Figure 18x, previous page). After all, standards simplify. Standards, as articulated in the *To Err is Human* report, are a key way to "respect human limits" in the design of safety systems (p.165). For example, standards explicate the essential steps necessary for the execution of predictable tasks and so relinquish humans from the need to rely on memory, so liable to slips, lapses, and mistakes.[41] Standards create an environment characterized by the standardized arrangement of objects and words and so make errors visible for immediate detection then correction. At least in theory, standards mitigate the risk of error and therefore patient harm by creating an expected order that makes difference from that order salient and available for immediate apprehension and subsequent remedy. In this way, standards mediate professional vision by showing professionals where to see risk. Presumably, all the professionals have to do is spot the difference.

To be sure, proponents of standardization will stress that the standardization of everything is not possible, desirable, nor sufficient for the realization of patient safety. For example, the authors of the *To Err is Human* (2000, 3) report warn that one "cannot focus on a single solution since there is no "magic bullet" that will solve this problem." The authors of the *To Err is Human's* follow-up report, *Crossing the Quality Chasm* (2001, 77), caution that "[t]he commitment to standardizing excellence… does not begin with a slavish adherence to simplistic practice guidelines." It is also well-acknowledged that standardization diminishes clinical decision-making and autonomy, contributes to physician burnout, and is of limited use in

[41] These terms are defined and distinguished in the *To Err is Human* report, on page 54. "A slip or lapse occurs when the action conducted is not what was intended. It is an error of execution. The difference between a slip and a lapse is that a slip is observable and a lapse is not. […] In a mistake, the action proceeds as planned by fails to achieve its intended outcome because the planned action was wrong."

complex cases (Institute of Medicine 2000; Timmermans and Berg 2003). Perhaps this is why standards have been discursively placed in a system (Figure 18y), as if to make clear that standards in and of themselves cannot minimize the risk of error.

Even so, if the risk of error needs standards to be tamed, then the activating logic to prevent risk from escalating to error is to standardize. To standardize documents, technologies, and processes; to hire personnel to overlook, manage, and enforce standards; and to make health care professionals demonstrate their adherence to standards through routine documentary practices, competency assessments, and training endeavors, and not least because these activities are required by the regulatory, licensing, certification, and accreditation bodies that make up the "safety system". In this way, perhaps the safety system also needs risk and standards for its own continuation and expansion.

In this chapter, I will argue that standards do not simply mitigate risk, they mediate a professional vision that create risk. I will further argue that standards, as well as the "safety system" of professionals and institutions that enforce them, need risk for their own continuation and expansion. To develop those arguments, I will take you on a "Mock Survey" walk with members of the Risk and Compliance Team, who routinely go on these walks in preparation for The Joint Commission audit.

The Mock Survey Walk

Documenting Risk with Standards

The Joint Commission is an active player in America's health care safety system. Since its establishment in 1951, it has accredited or certified[42] over 22,000 health care organizations and

[42] The Joint Commission also partners with the State. In particular, it is recognized by the Centers for Medicare and Medicaid Services (CMS), which is part of the Department of Health and Human Services and

programs in the United States using its own set of safety standards (The Joint Commission 2021a). As part of its accreditation process, "surveyors" are deployed to health centers to conduct "The Joint Commission Survey" to determine health centers' compliance to the Commission's standards. They do so through activities such as the "Tracer methodology," which involves randomly selecting patients and following them through their health care experience, and an "Environment of Care Session," which entails inspecting the safety of buildings that patients visit.

Paraphrasing Harry, the newly-hired Process Improvement Engineer who was being trained to assume the duty of ensuring the "Environment of Care's" safety, the Network 'pays a lot of money to get audited.' In particular, the Network must cover the cost of the survey, the annual fee to keep its accreditation status, as well as all the costs involved in upholding, enforcing, and staying abreast of the Commission's safety standards. 'The Commission creates boxes that needs to get ticked,' continues Harry while sighing that he is in the unfortunate position of having to enforce those ticks, for despite having "no clinical experience," every time he implements a safety standard, he essentially "tell[s] them [the clinical staff] what to do" and "control[s] how that person operates."

Despite Harry's concerns about the cost of accreditation, the control of standards over clinicians, and his forthcoming role in enforcing those supposedly controlling standards, he concedes that getting accredited by The Joint Commission is worth the trouble. Harry explains that accreditation tells outsiders that their little community health center is on par with fancy

administers the State's major healthcare programs such as Medicare and Medicaid, as having standards and a survey process that exceeds CMS's own health and safety requirements. Consequently, health care organizations that have received accreditation through a Joint Commission "deemed status" survey can also receive Medicare certification, allowing it to participate in and receive federal payment from Medicare or Medicaid programs (The Joint Commission 2018).

hospitals that are bigger, better resourced, and have more money. Furthermore, accredited organizations receive the covetable *Gold Seal of Approval*, which The Commission encourages them to display in waiting rooms and on marketing material. According to The Joint Commission, the gold seal declares that accredited organizations are "choosing to pursue a commitment to excellence across the spectrum of care that will help attract more patients and elevate your organization," which promises to provide "a competitive edge in the marketplace" (The Joint Commission 2021b). Perhaps this is The Joint Commission's admission that paying an institution in exchange for a gold seal and the designation of excellence is not financially sensible unless it yields a positive return on investment.

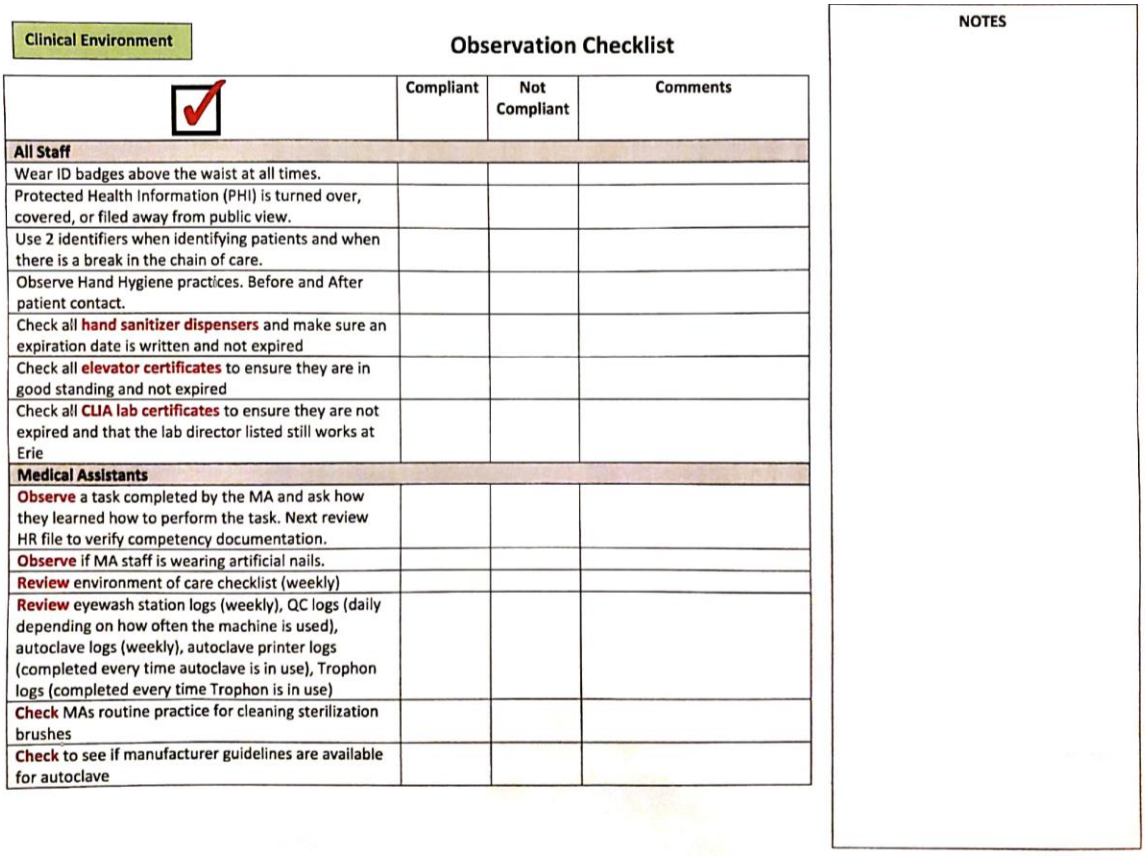
The Network therefore does not slack in its efforts to maintain The Joint Commission's standards, which it demonstrates by conducting Mock Surveys on a monthly basis. Despite my initial confusion with the word mock (why is the survey being mocked, who is doing the mocking?) the professionals delivering the Mock Survey exhibit little ridicule or scorn. Instead, Mock Surveys are a physically-intense, visually-rich, investigatory walk. It involves surveying—to thoroughly inspect and carefully scrutinize people, documents, work processes, and buildings—to ensure that standards are maintained and that the professionals remain in a constant state of preparedness; namely, preparedness to catch any errors that run the risk of patient harm, and preparedness to meet the Commission's safety standards when the real surveyors come on site.

Let us now go on a Mock Survey walk to observe professional vision, colored by risk and mediated by standards, get mobilized into action.

Seeing Risk with Standards

Ana is the Risk and Compliance Officer. She oversees Mock Surveys, champions hand hygiene, and manages the Network's risk incident reports. Between dividing her free time between her boyfriend and selling personal hygiene items on Etsy, she hones her professional expertise by taking a course, delivered online by Johns Hopkins University, on patient safety. Abigaelle is the Infections Disease Control Officer. She is responsible for all matters concerning infections, which includes educating staff on infections and ensuring infections control policies remain up-to-date with prevailing standards. In her recent past-life as a practicing registered nurse, she concedes that she along with her colleagues dreaded The Joint Commission Survey. But how the tables have turned. 'I'm now doing the Surveys,' she hesitantly chuckles.

Figure 19: Excerpt from the Mock Survey Checklist



Clinical Environment

Observation Checklist

	Compliant	Not Compliant	Comments
All Staff			
Wear ID badges above the waist at all times.			
Protected Health Information (PHI) is turned over, covered, or filed away from public view.			
Use 2 identifiers when identifying patients and when there is a break in the chain of care.			
Observe Hand Hygiene practices. Before and After patient contact.			
Check all **hand sanitizer dispensers** and make sure an expiration date is written and not expired			
Check all **elevator certificates** to ensure they are in good standing and not expired			
Check all **CLIA lab certificates** to ensure they are not expired and that the lab director listed still works at Erie			
Medical Assistants			
Observe a task completed by the MA and ask how they learned how to perform the task. Next review HR file to verify competency documentation.			
Observe if MA staff is wearing artificial nails.			
Review environment of care checklist (weekly)			
Review eyewash station logs (weekly), QC logs (daily depending on how often the machine is used), autoclave logs (weekly), autoclave printer logs (completed every time autoclave is in use), Trophon logs (completed every time Trophon is in use)			
Check MAs routine practice for cleaning sterilization brushes			
Check to see if manufacturer guidelines are available for autoclave			

NOTES

As the rising sun peeps through the windows of the conference room, Ana places her nibbled bagel on a paper bag, freeing her hands to retrieve the *TJC* [The Joint Commission] *Mock Survey Checklist* which she then distributes Abigaelle and myself (Figure 19).

Let us first get acquainted with the *Mock Survey Checklist*. The checklist is a type of standard that enumerates the standards set forth by The Joint Commission. It is composed of an array of rectangular boxes, placed side-by-side and stacked one upon the other, covering a total of twelve pages. The headings "Compliant," "Not Compliant," and "Comments" organize each column of boxes. Each row specifies a standard that the Mock Surveyor should look out for in the "Clinical Environment." Most standards are written in imperatives, commencing with a verb that gives a command: *wear* ID badges, *use* 2 identifiers, *observe* hand hygiene practices. Like the clean lines separating each standard, who is responsible for meeting those imperatives are

also separated into discrete professional roles: “All Staff,” “Medical Assistants,” “Physicians.” In this way, the form of the checklist also reflects the social order that the Network seeks to maintain: each role is defined, separated, and carries distinct responsibilities.

At least in theory, standards like checklists have two advantages. First, they bolster bumbling humans, so liable to lapses in memory and gaps in experiential knowledge, with explicit rules that stipulate what needs to be done. Indeed, who in good faith can trust humans to remember the 169 standards spanning twelve pages long in the *Mock Survey Checklist*? Second, with the right sort of training, (because training is always effective when preceded with the word, “right”), checklists are available for almost anyone to execute. They permit the continuity of tasks based on the routinized and repetitive sequence of actions. For example, the *Mock Survey Checklist* has been condensed into the *Environment of Care Checklist,* which the Site Operations Directors and medical assistants are required to complete on a monthly and weekly basis respectively. This means that if the medical assistant who normally checks the *Environment of Care Checklist* is off sick, another medical assistant or even Site Operations Director can replace her by simply complying to what is inscribed on the checklist.

With checklist in hand, Abigaelle leads our walk from the conference room through the narrow hallway to the waiting area. Before reaching the waiting area, Abigaelle abruptly pauses by a wall, creating a cascade of pauses behind her. She opens a beige door, camouflaged against a beige wall, which exposes a fire extinguisher. She inspects the sky-blue tag attached to its nose, labelled “Monthly fire extinguisher inspection log.”

‘The most recent update was more than thirty days ago, which is a risk,’ she flatly states. She slams the door shut, whips out the checklist, marks a cross in a box, removes her cell phone from the side-pocket of her charcoal slacks, then takes a photo of the tag.

Let us appreciate the checklist's capacity to categorize and transform. The checklist identifies objects-in-world for us Mock Surveyors to inspect, specifies their ideal state, then categorizes them into compliance or non-compliance with this ideal state. Then, with Abigaelle's two strokes of the pen in the non-compliance box next to "Fire extinguishers are inspected monthly," this object-in-world transforms into meaningful sign, becoming evidence of non-compliance that is worthy of being photographed. With this photograph, Abigaelle can reproduce and circulate at little cost evidence of non-compliance to people such as the directors and medical assistants at the Network (Latour 1999; 1990).[43]

Then, with Abigaelle's abrupt declaration, 'which is a risk,' evidence of non-compliance becomes a risk. For what is riskier than needing a fire extinguisher amid an emergency only to discover that it does not work? Perhaps getting 'dinged' by the Joint Commission for something as simple as not maintaining monthly inspections. So with this possibility of risk, what was once a mere object-in-world may even become locus-of-action, giving professionals like Ana and Abigaelle reason to investigate and usher in change to the Network. In fact, after discovering a slew of incomplete and inaccurate logs in their Mock Survey walks, Ana and Abigaelle delivered a special presentation to the Site Operations Directors where they reminded the directors that these errors have led to "delays in addressing equipment failures" and "missed opportunities to address potential breaches early on," which threatens patient safety because "documentation that indicates equipment is safe to use may not be safe at all."

Since Abigaelle has nothing more to add, we march down the hallway to the waiting room. With Ana's beckoning hand, we gather around the purple vinyl waiting room chairs.

[43] In fact, this photo was reproduced in: (1) an email to the Site Operations Director of the health center that we mock surveyed; (2) a PowerPoint presentation delivered to the Site Operations Directors of the Network on common instances of non-compliance, and (3) stored in a folder on a desktop folder in case some external auditor suddenly calls for it.

‘The fabric is torn,’ Ana declares as she points to the chairs. She then takes a photo.

‘Why is this a risk?’[44] I sheepishly ask, to which no one responds, for as soon as Abigaelle sights the breastfeeding station room from the vantage point of the chairs, she immediately marches towards it with us following suit.

While looking at the bassinet in the breastfeeding station room, Abigaelle calls out from the back of her head, ‘There should always be a roll of paper.’ She marches towards the automatic sanitizer dispenser and places her hand under it. ‘It’s jammed.’ She squints her eyes and leans towards the dispenser. ‘Expired!’ she shouts. She then takes a photo and provides a brief education, ‘It’s rooms like these where people rarely use that are bound to have expired items.’

In the breastfeeding station room, we have encountered a challenge that neither the checklist nor Ana or Abigaelle are qualified to answer: who is responsible for maintaining automatic sanitizer dispensers and restocking paper towels in rooms that people rarely frequent? Perhaps an outsourced company paid to audit those objects, a medical assistant tasked to track inventory, the Site Operations Director who failed to delegate someone to be responsibility for those tasks, the purchasing department who failed to repurchase sanitizing gel or paper towels, the supply company who did not deliver the items in time, or some combination of the above? More crucially for Ana and Abigaelle, how can risk be mitigated with no one identified as responsible and therefore answerable for each standard on the checklist? Regrettably, assigning responsibility is outside the purview of their job description; the Operations Directors are responsible for that instead, and so we move on.[45]

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[44] For the curious reader, torn fabric poses a risk because it can become a carrier of contaminants that cannot be cleaned and disinfected.

[45] Incidentally, the Site Operations Directors spend an inordinate amount of time in meetings discussing who should be responsible for what. In fact, they are encouraged to use a document called *The Accountability*

With our expedient inspection of the waiting room and breastfeeding station over, we proceed to the clinical area. With the gusto of well-seasoned snoops, we enter rooms and swarm towards cabinets and drawers, opening their innards to check that inventory is neatly organized and placed in labelled boxes, appear clean and free from moisture and dirt, and have not passed their expiry date. We scurry towards medical equipment to check whether their logs are present and up-to-date with their requisite blank spaces filled in.

Order. Neatness. Cleanliness. Little objects placed in slightly larger boxes and larger machines placed in designated corners. Inventory have their own place in each type of room: the "clinical room," "immunization room," "vitals room," and "laboratory." In each place in each type of room, the same kind of object should be encountered: little vials in little boxes, pharmaceuticals in boxes stacked one upon the other, machines tucked in corners, all neatly labelled and arranged in their designated cabinets, drawers, and crevices in the wall. These rooms are standardized to facilitate health professionals' effortless retrieval of objects, smoothing their flow from room to room in order to give way to efficiency.

Since the beginning of America's railroad industry and flourishing with the popularization of Frederick Taylor's Time Motion Studies and Henry Ford's assembly line, managers have placed their faith in standardization to increase efficiency (Yates 1989). In healthcare, the promise of standardization has found its home in the managerial principles of "Lean" and "Lean Six Sigma,"[46] which harks back to Japan's Toyota production system in the

Matrix to guide how they delegate responsibility. In the document, *responsibility* is defined as who carries out the task, which should not be confused with *accountability*, defined in the document as who is ultimately liable for the execution of the task. Added to this complexity is the need to identify who should be *consulted* and who needs to be *informed* once the delegation decision has been made. These definitions are defined in square boxes in *The Accountability Matrix* document.

[46] Lean and Lean Six Sigma are slightly different. Lean focuses on reducing waste to improve timeliness; Lean Six Sigma builds upon Lean by adding the imperative to reduce variation in production to yield consistent output (i.e., to reduce error).

1950s and America's Motorola Company in the mid-1980s. These principles work by tightening the links between organizational processes and operational parts by removing "waste," or anything that adds time and inconsistency to the completion of work processes, so as to increase efficiency and ensure the consistent execution of tasks (Black, Miller, and Sensel 2016).[47] Efficiency is therefore one reason why standardization matters. Standardization ensures that objects are in the same place and at one's fingertips in order to save time when health professionals retrieve the objects necessary to complete tasks. More importantly, saving time is crucial because time is money and medical visits are billable.[48]

On the other hand, standardization smooths these mock surveyors' flow from room to room. It acclimatizes us to which drawer to pull, cabinet to open, and corner to peer into while sensitizing our sight to where non-compliance might show up: an unlocked cabinet door that should be locked, a misplaced machine that presents a trip hazard, or even a room filled with mess. Perhaps this is why the "dental room" and "dental processing area," with plasters of mouths in dirt-filled zip-locked bags, records strips, and delivery boxes lying haphazardly on a clay-covered countertop, incite our unified horror.

[47] In fact, standardization to increase efficiency is patently expressed in James P. Womack and Daniel T. Jones' essential business text, *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*, where they write lean is "a way to do more and more with less and less – less human effort, less equipment, less time, and less space" (2003, 15).

[48] In *Time, Work-Discipline, and Industrial Capitalism*, E.P Thompson (1967) explains how the proliferation of cheap, personal watches coincided with the dawn of the industrial revolution in the late 1700s and greater demands for the synchronization of labor. Factories changed their machinery and tools to demand greater precision in time-routines, including time clocks, time-sheets, and time-schedules, which acclimatized workers to labor timed by the clock. With these changes, workers' time could be intimately monitored, regulated, sliced, and budgeted, allowing it to be exchanged for money – time could be *spent* rather than *passed*. In the clinic, each medical visit is governed by a schedule which ensures that time is not wasted but made billable. With time as money, it is no wonder the Network is so concerned with standardization – rooming procedures, the spatial configuration of rooms, and the physical positioning of objects -- so as to ensure that space, tasks, and motion can efficiently fit within time.

‘JC [The Joint Commission] would pick this apart!’ gasps Abigaelle upon entering the room. She swiftly moves to the drawer, removes a dental mirror with fraying tape wrapped around its handle, and holds it in the air for us to see. ‘Dirty!’ she exclaims.

‘Never leave packages on counters and clean areas,’ Ana gasps while pointing to the delivery boxes on the counter. ‘They might have gone through dirt and rat feces!’

‘Rat feces?’ I gasp in equal measure.

‘Yeessss!’ cries Ana. She then rushes to the countertop to pick up a handful of record strips lain strewn on the surface. ‘The paper should be logged somewhere,’ she exclaims.

Figure 20: Recreation of Medication Dispensing Log

Medication Dispensing Log

Medication : _____ Manufacturer: _____ Lot # _____ Exp. Date _____

Sheet Start Date: _____ Starting Quantity: _____

Date	Patient Name	DOB	Ordering Provider	Initials of Dispenser	Quantity Dispensed	Quantity Remaining

Health care professionals at the Network do a lot of paper-based logging (e.g., see Figure 20). They log the daily point of care testing, daily distribution of emergency medication, daily glucometer and hemoglobin results, daily autoclave maintenance for cleanliness, daily emergency box review, weekly biological testing of autoclave, weekly eyewash station test, weekly oxygen tank inspection, and many more. Consequently, we Mock Surveyors spend a good portion of the Mock Survey inspecting those logs.

Logs are often found in large heavy binders tucked neatly away in crevices in cabinets. Like the checklist, logs are composed of multiple boxes stacked side-by-side and one on top of the other. The inscriptions placed in these boxes are repetitive and standardized, allowing in

theory anyone to fill in the boxes and anyone to deduce whether those boxes have been filled-in correctly.

Logs perform multiple functions at the Network. At the minimum, they perform a referential function. The string of letters, words, checks, and numbers in logs point to a specific time and place in the clinical environment. Take, for instance, the inventory log, which keeps track of the movement of inventory. The log tracks inventory type, manufacturer, lot number, expiry date, quantity dispensed, and quantity remaining, and so point to the corresponding inventory found in cabinets, fridges, or drawers. The inventory log therefore offers a direct correspondence between what is on paper and what is in the room.

Inventory logs do more than just refer, however. They can tell the health care professionals depleting the inventory to anticipate the potential repurchasing of said inventory, alert purchasing personnel to buy more of said inventory, structure how the Finance Department budgets for inventory in the next fiscal year, and when there are mismatches between the quantity written in the log and the quantity of inventory found on shelves, the observer, irrespective of whether she is a medical assistant, registered nurse, purchasing personnel, external auditor, or mock surveyor, should in theory suspect that a breakdown, somewhere, occurred.

For Ana and Abigaelle, this is one of the most crucial function of logs—detection. For presumably, logs can detect potential problems in processes and systems such as shortages in inventory and breakdowns in the supply chain. Detection must be straightforward, however, because there is so much logging and detecting to be done in this fast-paced, efficiency-driven environment of the clinic. Conveniently, the visual presentation of the log, with austere lines separating space into boxes that demand the repetition of input, creates a form of detection that

the eye can swiftly see. All you have to do is spot the difference from the expected order. For example, no space should ever remain blank between lines of input for the glucometer and hemoglobin machines. Results must always follow the pattern "-", "-", "+" for the autoclave machine's biological test indicator results.

We have now entered the "immunization room." Not surprisingly, patients get immunized in this room. The room contains multiple fridges containing medication and vaccines as well as multiple logs to track the movement of inventory and temperature of fridges. Ana reaches for three logbook binders and hands a binder each to Abigaelle and myself.

'Gasp,' exhales Ana as she notes a mismatch between inventory-in-cupboard and inventory-documented-in-log. 'Gaasp,' repeats Ana as she notes another mismatch. 'Gaaassp!!' cries Ana with greater fervor, noting once again a mismatch between what is in the cupboard and what is in the log. 'I just want a match!' she wails as she frantically flips through more pages in the binder while taking photographic evidence.

Fortunately for gasping Ana, she finds a binder with cause for celebration. She raises a large, navy-blue binder in the air for us to behold. This binder contains the *Vaccines Fridge Log*. Every morning and afternoon, a medical assistant is required to document the temperature displayed on the electronic measurement gauge attached to the top of the fridge to an empty cell in the log in the binder. This binder is celebrated because it has a white piece of paper stuck on its front with the text, "2-8℃," in gigantic print.

'This is best practice! I haven't seen any other site label their folder like this,' Ana calls out.

According to the *Mock Survey Checklist*, the temperature of the fridge cannot be "out of range," which is defined as above 8 or below 2 Degrees Celsius. Ana has therefore given the

binder the name, best-practice, because surely, clear signage will remind the logger of this temperature range and spur the logger into action if the temperature moves "out of range."

Alas. The best-practice clear signage did not work.[49] According to the written traces left on the log, the temperature reached 9.3℃ on September 24.

Ana releases her biggest gasp yet. She beckons us over to look at the 9.3℃, wordlessly asking us to verify what her disbelieving eyes beheld. Abigaelle and I release a synchronized gasp, wordlessly confirming her sight. Ana then reads the initials of the logger who penned the 9.3℃.

'B.P.'

In this moment, we encounter another function of the log—accountability. Health care organizations are increasingly required to write in logs. They are mandated to fill in logs by regulatory, professional, and funding bodies and are appraised by auditors like The Joint Commission Surveyors based on these filled-in logs, often in the name of safety, quality, and accountability. Moreover, the log keeps the logger accountable. Promptness, timeliness, consistency, and compliance are detected by the logger's own handiwork, who marks her physical presence and identity through writing her initials next to each log-entry she fills in. With her initials, individual accountability is fixed to each logging action, granting us Mock Surveyors the ability to locate the logger for questioning.

'We must find this B.P!' Ana calls out as she takes a photo of the log-entry. She asks the professionals in the immunization room for the identity of this B.P but they do not know who she

[49] Unfortunately, too many safety signs can also pose a risk. For example, a frivolous safety sign amid a collection of well-intentioned signs may throw the sign system into disrepute. Workers who encounter the same signs might grow accustomed to them and eventually ignore them, as do many during in-flight safety presentations. And too many signs may cause the observer to ignore them, just like I did when I overlooked the surfeit of signs in the waiting room. That is, until the Operations Manager told me that they were a problem.

or he is. We therefore exit the room and return to the conference room because it is noon and the culturally-appropriate time to eat lunch. Our eating is short-lived, however, because Ana begins to think small, uncertain, thoughts, each beginning to bump into each other until they reach a level of concern that demands immediate attention.

'I'm having a mini freak-out about the 9.3. The vaccines could have been compromised,' Ana cries out mid-way through our meal.

In announcing '[t]he vaccines could have been compromised,' the entry in the log has become a critical finding. Following the standard story for proper vaccine storage and handling, Ana is anxious because compromised vaccines may offer less potency. Vaccines that fail to protect can undermine the Network's credibility to provide safe care (Centers for Disease Control and Prevention 2021). If the vaccines have been compromised, patients who were administered a dose between the fateful September the 24th and the day of this mock survey occurring thirty days later may need to get called back, checked, and readministered the vaccine. However, readministering vaccines is financially consequential because compromised vaccines must be disposed of, a new set of vaccines must get purchased, and legal action may ensue. Therefore, like an infectious disease, risk has a contagious quality, spreading the possibility of harm from objects to patients to money to the organization's credibility and beyond.

This is the irony of standards. Though maintaining standards contributes to the vision of minimizing risk for the sake of patient safety, standards dash this vision because they produce risks that may not have appeared if not for their existence. Consider, *Vaccines Fridge Logs* are rarely read for their content or authorship. Furthermore, the abnormal temperature occurred thirty days in the past. Yet, at the randomly appointed hour of the Mock Survey walk, a randomly selected line in a randomly selected log which was written on a flimsy piece of paper, placed in a

heavy binder, and tucked in the cavity of a cabinet, got pulled out and read. Then, over the course of lunch and a gradual build-up of thoughts, the line in the log developed into a "critical incident," permeating its surrounds with the risk of patient, professional, and financial harm. And with this new-found possibility of disaster despite it occurring one month in the past, Ana exclaims,

'We need to find out who this B.P person is.'

Spurred by the desperation in her voice, we pack our unfinished lunch, exit the conference room, and return to the immunization room in hot pursuit of B.P. Unfortunately, B.P still cannot be found. Unwilling to give up, Ana marches to the Site Operations Director's office to explain our search for B.P, or the lab manager, or anyone who might help us identify who this mysterious B.P is. The Site Operations Director, too, does not recognize the initials, but aids us on our quest by offering the name and location of a medical assistant who might.

We find the medical assistant sitting behind a high countertop along a narrow hallway. Leaning her body against the countertop, Ana skillfully shifts back to the cool-headed Compliance Officer that she thinks her organizational role demands, and announces our search for B.P. She retrieves her phone and locates the image of B.P.'s initials. She applies her fingers to the screen, expands, zooms in, and shoves the image in front of the medical assistant's face. The medical assistant looks penetratingly at the screen.

'It says J.P, and it is me,' she declares.

Silence. Then sideward glances, with eyes speaking of our discomfort with the unanticipated turn of events, or perhaps embarrassment at our collective misreading of the signature, or perhaps irritation at the medical assistant's illegible handwriting.

‘The fridge is meant to be between 2 and 8 Degrees Celsius. That day it reached 9.3. When you documented the temperature that day, did you file an incident report?’[50] asks Ana.

J.P shakes her head in the negative.

‘Did you alert anyone of this abnormal temperature?’ Ana continues.

J.P shakes her head again. ‘I was filling in for the day and didn’t know what the temperature should be.’

Another pause.

‘Well, the fridge should have alerted someone in facilities that the temperature exceeded the threshold. So it was a system error,’ Ana states with confidence.

In this sentence, Ana creates an interpretative environment that releases J.P from blame. To be precise, Ana does not wholly apportion the blame to the actions of J.P who, according to the log, should be held accountable for blame. She instead spreads it to ‘someone in facilities’ and then the ‘system.’ In fact, ever since health care became part of the system, problems have increasingly become the fault of the system, which is far better than problems being caused by single individuals. Not only does the system relieve Mock Surveyors from having to place blame on individual people such as J.P., it also keeps the professionals who signed their initials next to the error insulated from the full-force of blame and malpractice claims.

This is the kindness of standards. While standards can expose professionals to the threat of sanction, standards can also protect them by shifting the cause of errors to the standards and the systems they are in instead (c.f. Timmermans and Berg 2003). Consider, the ‘best-practice’ signage clearly did not work. So perhaps the culprit is due to a lack of education because J.P.

[50] According to the *Provision of Care Policies* document, personnel at the Network must fill in the incident report within one business day of when an incident, defined as “any event which may have adverse consequences,” or a near-miss, defined as “unplanned events that did not result in illness, injury, or damage, but had the potential to do so,” occurred.

supposedly did not know about the 2-8℃ temperature range. Or perhaps it is a "cultural" problem. For instance, since any medical assistant can fill in the log, another, more experienced medical assistant logger should have seen the deviation and submitted the required incident report. Or perhaps someone in facilities should have known. In particular, the fridge's temperature is linked to the "data logger," a machine-monitor that links the fridge's temperature to an online cloud which sends alerts to facilities personnel when temperatures exceed the preset range. The facilities personnel, in turn, should have submitted the incident report.

Hiring one set of professionals to document temperatures in logs, hiring another set of professionals to check whether those temperatures in logs are documented correctly, purchasing technologies to monitor temperatures, and hiring another set of professionals to monitor those monitoring-technologies. Some might call this a duplication of tasks—inefficient, even—but for proponents of standardization, it is high reliability. Namely, if events are independently documented by distinct professional groups and technologies, a failure in one monitoring process can be compensated for by the success of analogous monitoring processes (Institute of Medicine 2000; Sagan 1993). Inefficiencies, then, are permitted in the presence of risks which can lead to error and therefore patient harm.

This ties to our final advantage of maintaining standards. Standards justify an expensive health system while also protecting professional projects and power. They do so by shielding professionals from individual blame by widely duplicating and distributing the responsibility to be safe to an ever-increasing number people, objects, and technologies in an ever-growing system of safety, thereby making it difficult to attribute a single cause to an effect or to ascribe an effect to the action of a single individual (c.f. Latour 2005). Thus, the system makes it easier for an error to be a "system error."

At this juncture, perhaps you are wondering what came of the abnormal fridge temperature. Upon further investigation, Ana learned that the integrity of the vaccines was not compromised. The fridge was simply getting restocked at the time of the elevated temperature. Upon my own investigation, I learned that there was nothing amiss about the "data logger" and its alarm-alerts. In an interview with the Director of Facilities, I learned that facilities personnel receive alarms and emails to them when temperatures exceed pre-set parameters. As such, the Director has numerous outstanding probe alerts sitting in his inbox because the temperature of fridges regularly increases when they are getting restocked, and so he does not check those fridges unless the alarm runs for at least twenty minutes. So perhaps an incident report was never written because the implicated professionals all knew that the spiked temperature was not cause for concern.

Nevertheless, seemingly small infractions can quickly escalate to disaster. Even the President and Executive Vice President of The Joint Commission, Mark R. Chassin and Jerod M. Loeb (2013), highlight the dangers of ignoring alarms in their highly-cited article, "High-Reliability Health Care: Getting There from Here." Though they concede that up to 99 percent of alarms that sound do not indicate danger, they also write, "turning off the alarms entirely, turning down the sound volume to the point of inaudibility, resetting the alarm to unsafe levels, or ignoring the alarm sounds altogether… If this sounds like a dangerous mix of unsafe conditions, it is" (p.465). To prove their point, they wrote that 80 out of the 98 alarm-related events recorded in The Joint Commission's voluntary adverse event reporting program between 2009 and June 2012 resulted in death. And one death is one death too many.

The Professional Necessity of Seeing Risk with Standards

In this chapter, we examined the ways in which standards can occasion a professional vision that sees through risk-colored glasses. In doing so, we made the following observations.

First, not only do standards prevent the risk of harm, they create them too. With a professional vision that is mediated by standards, a jammed hand sanitizer, an incomplete entry in a log, a tear on a piece of furniture, are seen as deviations from an expected order that can pose the risk of patient harm. If the risk of harm emerges the moment the professional spots deviations from those expected orders, then the very presence of standards sets the conditions of risk's makings. As such, the risk of harm might not have existed if not for the aberrant traces left on documents or mess left on floors.

Second, we witnessed the ease in which deviating from standards, however small, can get escalated in a matter of moments into a cause that inspires passion, provokes fear, and compels the professionals to action. This escalation relies a professional vision that is cultivated and sustained by a safety system that supplies the discourse, resources, and infrastructure to tie deviations from standards to the risk of harm and even death.

Third, this linear logic that ties deviations from standards to the risk of disaster makes standardization morally necessary. In particular, for an industry tasked to save lives, standardization for the purposes of legal protection, efficiency, and compliance simply will not do. Standardization for the sake of safety, however, has a moral legitimacy based on preventing harm and saving lives. Safety therefore provides a rationale for standardization that is almost impossible to refute in theory, which makes standardization in practice just as difficult to refute.

Fourth, we came to understand the ease in which safety, or mitigating the risk of patient harm, can be used to justify the importance of standards. Namely, even if a standard such as

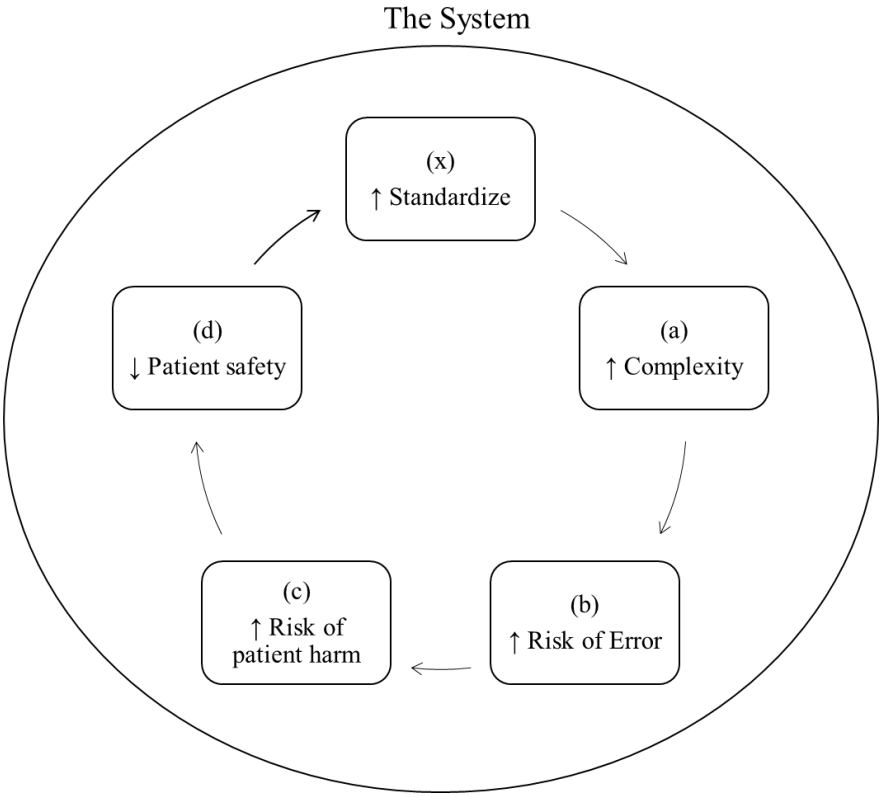
filling in logs is used primarily to demonstrate compliance, that standard can also get coupled to safety. For this reason, one cannot simply remove a standard, however senseless it may seem, because doing so might also remove a safeguard that protects patients from harm.

Fifth, in addition to protecting against patient harm, standards can protect professionals. By distributing risk and the responsibility to be safe across a wider and wider system composed of human, technological, and institutional actors, standards insulate the professionals from a different type of risk—legal liability—by making individual culpability difficult to pinpoint.

Sixth, not only do standards protect professionals, they promote them too. That is, if standards are carried by a system made up of federal bodies, insurance companies, professional groups, and research institutes, each offering a set of standards that mandate and sustain a vision of patient safety, the system requires people like Evelyn, Taylor, Ana and Abigaelle for its own continuation and expansion. In so doing, the system supplies these professionals with the material, cultural, and discursive resources and rationales for their own continuation and promotion.

Finally, our walk with Ana and Abigaelle has allowed us to think with professional vision in two senses. First, a vision through which the professional sees, codes, and interprets the present, situated activity, through risk-tinted glasses. Second, a vision as an ideal, fantasy, dream; an envisioning of a shared mental image against which the real world must always aspire and will likely always fall short. In our walk, we saw these two visions interact to give rise to a relationship between risk and standards that differs from what American health care professionals are taught to see. To articulate this point, let us recall Figure 18 (refer to page 105), which models a relationship where standards mitigate risk. Let us now slightly alter the figure by reversing the direction of some arrows and changing the relationship from linearity to circularity.

Figure 21: A Revised Relationship between Risk and Standards



In this revised relationship between risk and standards, standards need risk for their self-reproduction (Figure 21). If the responsibility to be safe relies on the participation of an increasing number people, objects, technologies, and organizational entities in an ever-growing system of safety, more standardization can increase, rather than decrease, complexity (a). Increasing complexity might increase the number of situations and sites in which risk can emerge, which can increase the risk of error (b) that threatens of patient harm (c) and undermines the goal of patient safety (d). This, in turn, necessitates more standardization (x) to minimize the risk of error that threatens of patient safety. A self-replicating loop is therefore created where standardization seeks a future of patient safety that is almost but not quite there because it creates the conditions for risk through its very existence. That is, the promise of this envisioned, better,

future, one free from preventable harm, is underwritten by the promise that the problems caused by deviating from standards could have been prevented if only standards were maintained today.

Chapter Four: Gaps, with Slips in Standards

Documentary Gaps

In 2018, primary care physician and medical journalist, Ilana Yurkiewicz, published an essay, "Paper Trails: Living and Dying with Fragmented Medical Records." In the essay, she reflects on her first-year residency at Palo Alto's veteran hospital, where she carefully documented Michael's discharge summary: his medical problems, antibiotics plan, insulin regime, and medication list. She must carefully document his discharge summary because when Michael encounters other caregivers and health care professionals as he moves through the health care system, they will most likely only read her discharge summary, and only a portion of their notes will get passed along and read by other caregivers and health care professionals as Michael moves even further through the health care system. However, the exchange of documentation between professionals across organizational borders, so essential to providing continuity of care, can also put Michael in a perilous position. With documentation flying about, some documentation will not reach its intended destination, and documentation that does not reach its intended destination may cause documentary gaps, which puts Michael at risk of falling through.

Yurkiewicz calls her essay "a story about gaps." It is a story about how patients, just like Michael, are liable to fall through gaps because America's health care system is dynamic, where patients and their medical records move across hospitals, wards, primary care settings and more, and where those medical records get fragmented, reshuffled, and go missing along the way. So, when Yurkiewicz was asked to see a new patient just days after she discharged Michael, only to pull back the curtain and see Michael lying on the hospital bed, "frail," "eyes closed," in a "near-comatose state" because the extra insulin she had documented in his discharge summary somehow got lost when Michael left the hospital, her "heart sunk."

"How could this have happened?" Yurkiewicz writes. The answer, Yurkiewicz explains, lies "in the tangled evolution of e-health technology." In 2009, the U.S. Congress passed the Health Information Technology for Economic and Clinical Health Act to encourage the conversion of paper medical records into electronic charts. The Act promised to improve the provision of care and protect patient safety by selling the dream of interoperability: a dream where documentation frictionlessly flows, transcending professional, organizational, and institutional boundaries to enable the timely, cost-efficient, high-quality, and safe provision of coordinated care.

Yet, the promise of interoperability has been blighted by the usual culprits of profits and the government. Namely, profit-seeking private health vendors sell and manage propriety systems that are incompatible with each other. To be sure, declare many health vendors, those systems can be made compatible, though in exchange for a fee (Schulte and Fortune 2019). Furthermore, when the government pays financial incentives to health care professionals and organizations for demonstrating interoperability and gives out financial penalties to those that do not, paying extra money to private health systems to ensure that systems interoperate is often worth the price.[51]

However those systems, Yurkiewicz explains, have overworked and exhausted health care professionals, already so frail and prone to err, and so make them even more prone to err. Inevitably, then, vital information will get missed as health care professionals cobble together a patient's medical history from disparate sources: electronic records, paper records, outside faxes,

[51]In 2011, the Centers for Medicare & Medicaid Services (CMS) established the Medicare and Medicaid EHR Incentive Program (now known as Promoting Interoperability Programs), offering financial incentives to health care organizations to adopt and demonstrate the "meaningful use" of certified electronic health record technology. This involves collecting, storing, reporting on quality measures using certified electronic health record technology. Meanwhile, health care organizations who do not attest to the meaningful use of EHR receive financial penalties. At worst, their Medicare payments will be reduced by 5 percent (Centers for Medicare & Medicaid Services 2022a; 2022b; 2020).

scribbles in notepads, and mouths of family members. Mistakes will be made as they input that information on figurative page 201 of a 200-page electronic medical record where "maybe the middle is mysteriously ripped out, pages 75 to 95 are shuffled, and several chapters don't even seem to be part of the same story" (Yurkiewicz 2018, n/a). How could gaps *not* have happened, Yurkiewicz asks?

Nonetheless, Yurkiewicz continues, there cannot be gaps. After all, where there are gaps, there are medical errors, and where there are medical errors, there are risks of patient harm, and where there is patient harm, death knocks at the door. So even if most, if not all health care professionals know that the health care system is broken, electronic health technologies are flawed, incentives are messed up, and humans will fail, Yurkiewicz's preceptor tells her: "When the system fails you, be more careful. Work harder."

Yurkiewicz, just like many other health care professionals in America, is told to work harder: to exercise greater care, to document all the more vigilantly, to double, triple, quadruple check documentation, lest patients slip through documentary gaps.

This chapter is about gaps. To be precise, it is about two types of gaps. The first gap is a *documentary gap,* which Yurkiewicz describes in her essay. Documentary gaps occur when documentation stops flowing, or when it fails to reach the intended destination. The second gap is an *epistemic gap,* which I introduced in chapter one of the dissertation. Epistemic gaps refer to the perceived separation between a task and the goal(s) the task is supposed to accomplish.

This chapter is about how slips from standards—sending documentation to the wrong place or failing to document in the right place—provoke documentary gaps and epistemic gaps, how those gaps relate to ambivalence, and how ambivalence commits humans to maintaining

standards. In this way, this chapter is also my attempt to answer the question that organizes the dissertation: what accounts for professionals' sustained determination to maintain standards, even when doing so can cause immense frustration and ire?

Table 2: Definitions

Term	Definition
Slips from standard(s)	Deviation from pre-specified standard(s).
Documentary gap	When documentation stops flowing, and so fails to reach its intended destination.
Epistemic gap	Perceived separation between a task and the goal(s) the task is supposed to accomplish.
Plastic Standards	Standards' meanings, practices, and consequences change depending on the situation they are in.
Ambivalent Humans	Humans' possession of mixed stances towards a single object or task

The answer, I will argue, lies in slips from standards, documentary gaps, epistemic gaps, plastic standards, and human ambivalence (Table 2). I will argue that slips from standards occasion documentary gaps, the consequentiality of those documentary gaps can provoke a widening or narrowing of humans' epistemic gaps, the fluctuation of humans' epistemic gaps provokes human ambivalence, and human ambivalence is what commits professionals to maintaining standards. Let me rearticulate this argument by making three claims.

First, standards are plastic. Their meanings, practices, and consequences change depending on the situation they are in. A simple slip from standards can provoke a documentary gap which, at one point in time, seems trivially insignificant yet at some other point in time, becomes immensely consequential, perhaps life-threatening so. In those moments of immense consequentiality, the standard's potential to do what it is supposed to do is realized in the specific site where the standard lands.

Second, the plasticity of standards provokes human ambivalence, the possession of mixed views towards a single object or task, and human ambivalence moves in relation to epistemic

gaps. The person's epistemic gap is narrow when she perceives the standard fulfills its stated goals, such as protecting patient safety, which elicits the person's embracement of the standard. The person's epistemic gap is wide when she does not perceive the standard fulfills its stated goals, which provokes the person's frustration and ire. Consequently, if a standard is plastic, fluctuating in its capacity to do what it is supposed to do depending on the situation it is in, the person's epistemic gap also fluctuates, which causes human ambivalence.

Third, this human capacity to be ambivalent, to like yet dislike, to embrace yet balk at, the same standard is what commits professionals to maintaining standards. With ambivalence, the professional can suspend her frustrations for the standard; she can overlay those frustrations with anticipatory thoughts of what accidents and disasters might ensue if standards are not maintained. In other words, ambivalence helps her rationalize why she must commit to maintaining standards.

To make these arguments, I will take you on an adventure with cervical cancer screening documentation, which is the suite of documentary activities that the professional must perform for the professional to claim that the cervical cancer screening activity was accomplished. In this adventure, we will brush by a series of scenes to observe how slips from standards provoke documentary and epistemic gaps, and what it takes for professionals to prevent or remedy those gaps.

The scenes are lodged in two sets of stories. The first is about quality and money. The second is about patient safety and morals. By articulating these two stories, I will bring together key issues and themes from the preceding chapters: the Network's preoccupation with federal funds; the importance of standardized documentation in getting those federal funds; the Network's concern for patient safety; and the importance of standardized documentation in

ensuring patient safety. From this, I will show how the plasticity of standards provoke human ambivalence and will explain how my own ambivalence, the institutionally-standard way to conduct oneself at the Network, helped me rationalize my own commitment to maintaining standards at the Network.

Story One: Quality and Money

The first story about quality and money intersects with our adventures from chapters one and two. Recall that each year, the Network must fill in a report. The report, also known as the "Uniform Data Systems" (UDS) report, requires the Network to provide information about the clinical quality measures, which are activities that the Network must perform, document, and count. Also recall that doing the clinical quality measures at higher rates than that of peer health centers is consequential because organizations that do the clinical quality measures at comparatively higher rates are designated the title, "Health Center Quality Leader," and are rewarded with special gold, silver, or bronze badges which come with varying levels of monetary rewards. However, to get the special title, better badges of quality, and more money, the professionals at the Network must at least in theory do two tasks.

First, they must *do* the clinical quality measures. To do the cervical cancer screening measure, in particular, the physician must perform a cervical cytology once every three years or a cervical cytology/human papillomavirus co-testing once every five years on women between 23 and 64 years of age. To be sure, plenty of drama surrounds the doing. Not all patients are keen to get poked by a speculum and swab. Not all physicians wish to goad patients to get screened in the name of prevention and federal dollars. Furthermore, the professionals must sensitively

handle those dramas lest they tarnish patients' perceptions of the Network's quality of care and, incidentally, the Network's patient satisfaction scores.

Yet our adventures so far have focused on a different type of drama, occurring outside the physician-patient encounter and in relation to the second task the professionals must do: *documenting* their doings. As we learned from chapter one, for events to exist in the world of the Network, they must be documented, and for documentation to have a successful bureaucratic life beyond the two-dimensional surface it was inscribed on, documentation must also be standardized. This is because only standardized documentation can get accurately picked up by a computer script, transformed into 0s and 1s, rendered into a percentage, and placed on the UDS report for bureaucratic appraisal and reward. So, let us re-enter our adventures from chapter one, but with honed-in focus on cervical cancer screening documentation.

The hysterectomy and the code

With the UDS report submission deadline fast approaching and money on the line, the Network must seize any opportunity to improve compliance on the cervical cancer screening measure. Recall that an efficient way to do this is to bypass the management of the frontline workers, who are so prone to talk back with complaints of lack of time and so difficult to convene in the same conference room for training events, by changing documentation in the electronic medical records instead.

On a violently windy November's afternoon three months before the UDS submission deadline, Evelyn, the Senior Manager of Process Improvement, convenes the Process Improvement Team for an impromptu meeting. With the team members seated on swivel chairs, looking up at Evelyn

who is standing, leaning against the panel of her office cubicle, Evelyn reveals their forthcoming task. They are to audit the clinical quality measures.

Call it a hunch, an intuition, or a recent memory where the Chief Clinical Officer 'single-handedly increased compliance by around 10 percent by manually updating the electronic medical records,' the Chief Clinical Officer knows that frontline workers do not document the clinical quality measures in the right, standardized way. She therefore knows that there are low-hanging opportunities to improve the Network's compliance on the clinical quality measures, including the cervical cancer screening measure. Thus, the Chief Clinical Officer sent Evelyn an email composed of five, succinct, dot points with instructions on how to audit, or more aptly look for opportunities to change documentation into standardized form, which then Evelyn printed out and dispatched into the hands of the Process Improvement Team. To honor my expressed interest in studying the clinical quality measures while taking advantage of the truism that nonprofit organizations are perennially understaffed and underfunded, Evelyn enlisted me to audit, giving me jurisdiction over the cervical cancer screening measure. The fifth dot point on the Chief Clinical officer's email subsequently became my charge:

> "Cervical cancer - check a sample, focusing on older women on the non-compliant list, to check if they've had a hysterectomy."

Patients with a hysterectomy do not have a cervix, which means they cannot get cervical cancer. This also means they cannot belong to the so-called "universe" of cervical cancer screening which, if you recall from chapter one, is the count of all the patient records that meet the definition of the measure. As such, patient records with evidence of a hysterectomy cannot count; they should not be included in the universe. For patients records with evidence of a hysterectomy to get excluded from this universe, however, physicians must comply with

documentary standards by attaching the right hysterectomy procedure to the right International Classification Diagnosis 10 (ICD-10) code in the electronic medical records, which some physicians did not do. The ICD-10 codes, explained the Chief Financial Officer in an off-the-cuff lesson, were designed to 'get everyone on the same page.' He then continued, 'people use them in different ways': members of the Finance Team use the codes to ensure the Network receives the correct reimbursements for the services rendered; physicians use the codes to understand what diagnoses and treatments have been provided; and Process Improvement personnel use the codes as they prepare the UDS report to ensure that the clinical quality activities rendered get correctly counted then credited to the Network.

Electronic medical records that do not talk

Changing those records was not the only low-hanging opportunity to improve compliance. With time marching forward and one month left until the UDS report submission deadline, the Chief Clinical Officer reappraised the cervical cancer screening measure because the measure's compliance rate did not look right. It dipped too dramatically from the previous year's compliance rate. The Chief Clinical Officer subsequently descended from her station up high to investigate the cause of the aberrantly-low number through an audit. She then delivered her auditing findings via email, which landed in Evelyn's inbox and Evelyn forwarded to me:

> "[O]ur cervical cancer screening #s have dropped substantially. […] We had the, very expected, drop in #s at [the Network] due to the influx of new patients and new [physicians]. I know there are many of those patients who had documentation of screening already in their charts from [previous health center's name], but it hasn't been captured in the format that is able to be captured."

The Network recently merged with another health center, the merger came with an influx of new patients and physicians, and the influx of new people created new problems. For example, the recently-acquired physicians were unfamiliar with the Network's electronic medical records; they consequently did not know how to input documentation in the electronic medical records in just the right, standardized, way. More pressingly, though, the merger was encumbered by technological problems. In particular, the newly-merged health center's electronic medical records and the Network's electronic medical records failed to talk.

As the Chief Clinical Officer explained in her email, documentation of cervical cancer screening had been imported from the previous health center's electronic medical records to the Network's; however, it "hasn't been captured in the format that is able to be captured." Specifically, documentation was typed on a single line in a scanned-in document that floated as an attachment in one of the many tabs in the Network's electronic medical record. Since the sentences in the scanned-in document were not formatted with the right shapes, size, and spacing, they were not captured by the Network's "auto-indexing" software, a computer algorithm that automatically extracts then places documentation in the right boxes with the right codes in the Network's electronic medical records. Since the auto-indexing software could not place cervical cancer screening documentation in the right boxes with the right codes in the electronic medical records, documentation of screening could not get captured, extracted, then rendered by the computer script as "compliant." Instead, those patient records were marked, "non-compliant." If, however, the attending physician followed documentary standards, she or he should have read the appended document and inputted all the relevant information in the right places in the electronic medical records so that documentation would get accurately rendered as

"compliant," but the physicians did not. And so, the Chief Clinical Officer continued in her email,

"This would be an opportunity for one of our stellar interns or other staff who had the bandwidth - to target the [Network's] non-compliance list, specifically, to find those patients who can have their screening data entered in a retrievable way to improve those #s."

I was that stellar intern.

An Interlude

When I first commenced my forays into auditing, of literally checking whether documentation in the electronic medical records contorts to standardized form, I was cynical of the practice. Just like my fellow auditors from chapter one, I experienced the occasional shock from epistemic gaps. I suspected that the tasks the Network, the professionals, and I were doing were unhinged from the goals that those tasks were meant to accomplish. I thought that our engagements in audits seemed like the text-book definition of "myths and ceremony," an activity that serves to create a positive impression of an organization's identity, such as "high quality," but with little relation to that identity (Meyer and Rowan 1977). I questioned, if cervical cancer is being screened to ensure that the Network provides high quality care, why divert time and energy to ensure that documentation is rendered in just the right, standardized, way? In fact, how is it possible for a system, where organizations get financially rewarded based on their ability to get some workers to document and other workers to check whether that documentation contorts to standardized form, to even exist?

This is a major drawback of standards. Following standards does not magically transform the professional or the organization into a quality one. Following standards does not even make

the actions of the professional or organization clinically right. Following standards, however, does make them compliant and compliance, especially bureaucratic compliance, often comes with money. After all, when the Network is bureaucratically known and rewarded through the concatenation of standardized documentation, as one fellow auditor reminded, "documentation has to be impeccable for the system to pick up"; otherwise, "the system does not know."[52]

Story Two: Patient Safety and Morals

From chapter three, we learned that in America's health care system, standards are lauded to safeguard patient safety, defined as "freedom from accidental harm" (Institute of Medicine 2000, 4). The logic that animates this claim is as follows. America's health care system is complex. Complexity is dangerous because it can overwhelm individuals, afflicted with limited cognitive capacities, by increasing their likelihood of making errors and errors, such as misdiagnosis or delayed diagnosis, can lead to patient harm. Standards, however, reduce complexity because standards simplify. Supposedly, by explicating the essential steps necessary to execute simple tasks, standards relinquish humans from the need to rely on memory as they engage in those tasks. Adhering to standards, then, reduces the individual's likelihood of making errors, which then reduces the likelihood of causing patient harm. Also from chapter three, we learned that when maintaining standards gets discursively and technologically tied to protecting patient safety, health care professionals must commit to maintaining standards. This is because

[52] As I spent more and more time at the Network, I noted my own prejudices towards standards changing (c.f. Cohn 1987). I began to see one's adherence to standards not merely as a matter of money and so-called "quality," but as a matter that can make you right, and not merely right in the compliance or even clinically-correct sense. Rather, following standards can make you morally upright, which we will better understand in our next story about patient safety and morals.

maintaining standards is no longer simply a matter of compliance and money; it becomes a moral imperative.

In this story about patient safety and morals, I will meditate on another way that standards are lauded to protect patient safety: standards enable interoperability, or the seamless flow of documentation within and across organizations (Schulte and Fortune 2019). Interoperability dreams of a world where documentation transcends professional, organizational, and technological boundaries. It dreams for documentation to flow across to different units within and across organizations so that professionals can provide coordinated care to patients, to flow down to patients to empower them to take charge of their own health, and to flow up to bureaucrats, insurance companies, and other interested parties for organizations to demonstrate accountability and cost effectiveness.

Yet, as we learned from the opening story with Yurkiewicz, the dream of interoperability can easily slip into a nightmare. That is, when interoperability fails, when documentation stops flowing as it fragments, frays, then fails to reach its intended destination, patients can slip through gaps. In the scenes we are about to enter, we will learn that documentation can cease to flow when it does not conform to standards, which is why professionals must always commit to maintaining standards.

Flags and Desktops

Twelve members of the Staff Quality Improvement Team are seated around a conference table, discussing an incident report about cervical cancer screening. The details of the incident are as follows. October 2018. A physician sent a “flag” to a “desktop” in the electronic medical record, documenting that a patient received an abnormal pap result and requires follow up. The desktop

is like an inbox. The flag is like an email in an inbox. The flag, however, was sent to the wrong desktop, the desktop in question was left unattended for ten months, and so the patient was not informed of her abnormal pap results for ten months.

The objective of the meeting item is for Lucy, the Director of Clinical Operations, to present a way to curb similar incidents from occurring again at the Network. To this end, she unveils a draft of a workflow diagram made up of oblong bubbles and connected by arrows. With this workflow diagram, Lucy aims to standardize cervical cancer screening documentation across all the health centers at the Network because "each and every site is different" and so, continues Lucy, "this is a really great opportunity to standardize across [the sites]."

The stakes of not standardizing the desktops were not explicitly stated in the meeting; however, the meeting participants know what they are. They know that having too many desktops increases the risk of flags getting sent to wrong places, and flags getting sent to wrong places may create documentary gaps, which patients are liable to fall through. As such, the meeting participants must express their support for the solution to standardize, with one Senior Leader even calling the current unstandardized state of affairs "nuts."

Thirty minutes later, a far cry from the fifteen minutes apportioned to the meeting item and institutional norm for meetings to run on time, the meeting participants are still discussing the workflow diagram. They have only reached the second bubble of the workflow, 'flag the desktop,' because they cannot agree on how to categorize the cervical cancer screening desktops, let alone on what to name the desktops. However, with time ticking forward and the meeting facilitator's unwavering commitment to end the meeting on time, even amid one participant's cry that "people are falling through the cracks, we want this rolled out!", the discussion ends, the

meeting comes to a close, though with dissatisfaction towards Lucy's workflow and her concession that "the details of the [work]flow haven't been worked out" simmering.

Lucy subsequently stepped down from the project. In her stead, a new sub-committee was formed with Harriet, another Director of Clinical Operations, leading charge. In consultation with key stakeholders including the Senior Nurses, leaders of the Women's Health Promoters Team, and the esteemed Director of Reproductive Health, Harriet unveiled a new workflow at a series of meetings three months later. One of those meetings was with the Site Operations Directors.

At 9:05am sharp on a crisp, December, morning, Harriet marches into the conference room filled with the Site Operations Directors. With big blue eyes, brown shoulder-length hair, and a deep, booming voice, Harriet commences her presentation by establishing the problem: "The workflows across the sites are inconsistent," she declares. They are "all over the place!" and the "desktops are messy!" waving her hands and shaking her body as if to emphasize the messiness of it all. She delivers the warning, "[Patients] significantly fall through the cracks," then moves to the solution: a new, standardized, workflow with three, new, desktops. She provides technical details about the solution, responds to questions from the audience, then ends the presentation with an obligatory statement about the project's significance. It is a "high level of risk," Harriet states, which she then escalates to, "it's critical," and then escalates once again to the declaration, "this area is identified as extreme risk."

Harriet receives the claps and gushing accolades of the meeting participants. "Love this! Love this!" cries one director. "Great job" exclaims another. The Site Operations Directors as well as the Senior Leaders, Middle Management, and most physicians at the Network

enthusiastically received the new, standardized, workflows and desktops. Indeed, having too many desktops is extremely risky. As one physician commented in a following meeting where the new workflow was briefly discussed, “there are a zillion of desktops, a third of them, nobody checks,” to which another affirmed, “Some might have patient info in there, and that’s scary that no one is looking at [it].”

On the other hand, perhaps the Senior Leaders, Middle Management, and most physicians could embrace the new standards because they were not assigned the work of ensuring that people comply to those standards. The Director of Reproductive Health even clarified this point in a Staff Quality Improvement meeting, stating “It’s not going to be a giant leap for the [physicians]. It’s going to be a bigger leap for [those] managing the desktops,” before conceding, “[Physicians] are going to mess up.” Fortunately, Harriet created controls to safeguard physicians and their unavoidable mess ups. In particular, she assigned the nurses the duty of double checking whether the physicians sent the right flags to the right desktops, and if that fails, she assigned the newly-formed team, the “Reproductive Health Specialists” (RHS), to triple check whether the right flags were sent to the right desktops. But “shhhh” Harriet cautioned across the meetings with Senior Leaders and Middle Management, “If you bump into the RHS team, they don’t know that they’re doing it yet!”

The Problem List

Despite the leaders and managers’ best efforts to prevent slips from standards, slips remained an ever-present concern. To illustrate, five months later at another Staff Quality Improvement Team meeting, the meeting participants were, once again, discussing an incident about cervical cancer screening documentation. This time, an abnormal pap result was not documented on the

"problem list" in the electronic medical records. The problem list contains the most important active and past diagnoses afflicting a patient; frontline workers therefore use the problem list as an efficient way to obtain an overview of the patient's medical history. Because the abnormal pap result was not documented on the problem list, the physician did not know about the abnormal pap result. Consequently, the patient was not informed of her abnormal pap result.

The heart of the problem, announces the Director of Risk and Compliance at the Staff Quality Improvement meeting, is that documentation is not standardized across the health centers. In fact, the meeting participants are at a loss for words as to how physicians are trained to document abnormal pap results or who exactly is responsible for providing that training at each health center. They do know, however, that the lack of standardization cannot persist because unstandardized documentation increases the likelihood that physicians, as the Chief Clinical Officer phrased it, "get lost in documentation."

The solution, unsurprisingly, is to standardize, as implied in the desired outcome of the meeting item which is to "discuss standardizing problem list." And so the meeting participants embark on the same, familiar, journey to come up with a plan to standardize. They must "create a standardized problem list," asserts the Director of Risk and Compliance, to ensure that cervical cancer screening results are always added and appended to the problem list. "Someone else [but] not me," declares the Chief Clinical Officer, must "update the [problem] list" because she "continually run[s] into these descriptions for paps where it's not added to the problem list." Someone must develop standard operating procedures to train the professionals to do those standards, affirms almost everyone around the table. Though clearly, asserts the Chief Clinical Officer, they will have to delegate the training to a centralized team to really make sure that the

training is standardized. Finally, they must establish controls to fix the mistakes that the physicians, who are so prone to error, will unavoidably make.

Due to Harriet's excellent efforts in tackling flags and desktops, the Chief Clinical Officer volunteers the newly-established team, the Reproductive Health Specialists, the task of checking whether cervical cancer screening is documented on the problem list in line with standards. Unfortunately, Harriet replies, the specialists might not have the expertise to decode the problem list. She lowers her voice to share, "we're kinda figuring out what their level of," then pauses ever so slightly, "knowledge is," which is followed by a muffled chorus of "yeah['s]" of seeming understanding. At any rate, Harriet continues, the specialists are not authorized to change the problem list. Rather, to change the problem list, they will have to send her a flag saying, "problem list not updated," and then she will have to send a flag to the relevant physician with instructions to update the problem list.

The Chief Clinical Officer sighs. The problem, she explains, is that "some of our [physicians] are very stuck in their habits and who have not, who have been hard to get to change even when we've invested a lot of time and energy [in them]," which receives the affirming "mm hmm"'s from the table. Fortunately, the Chief Clinical Officer immediately recalls the soon-to-be-hired medical scribes. The medical scribes will be hired in response to physicians' complaints of spending too much time documenting. In particular, they will virtually shadow the physicians through electronic ear piece and microphone, handling most of the documentary tasks in physicians' stead. Therefore "the change could be with the scribes," the Chief Clinical Officer muses out loud.

An Interlude

As I sat in more and more meetings and listened to leaders, managers, administrative workers and frontline workers talk time and again about the same problem (lack of standardization) and the same solution (more standardization), I found my thoughts floating to the Myth of Sisyphus. Sisyphus tricked Hades and Death by escaping death. He was therefore condemned to the never-ending task of rolling a rock up the top of a hill, yet every time he reached the top of the hill, the rock would come rolling back down the hill again.

I thought that the people at the Network were similar to Sisyphus. They were trying to trick, or perhaps "prevent," accidents and death from occurring. Often, they would go about this preventative trickery through standardization. To this end, they would often embark on the same standardizing trip of ensuring that people conform to standards in pursuit of a risk-free future of patient safety or freedom from accidental harm and death. Yet once they reach the top of the hill to glory in all their hard, standardizing work such as rendering the cervical cancer screening workflow on a nice piece of paper then circulating it to all the relevant professional groups to imbibe and enact, they would see their hard work come tumbling down because someone, somehow, has once again slipped. In this way, standards are slippery; they create the gaps that they are meant to prevent. And so the future is predestined to stay the same because to err is human, standards are slippery, and the health care system they work in is complex, fragmented, and broken.

Nonetheless, standardization is essential to smoothing documentation's long and fraught journey to a crucial destination: the consultation room wherein the physician is providing care to the patient. As Abigaelle, the Infections Disease Control Officer and member of the Staff Quality Improvement Team, explained to me in an interview, "Documentation exists so we can continue

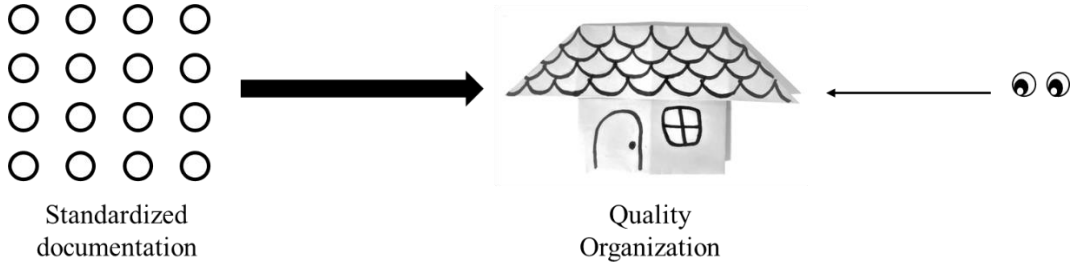
care. And if documentation does not flow continuously […] that's where we see breakdowns in care," for if there are significant variations in documentation, how, then, can health care professionals swiftly take in all the tiny, fractured, documentary pieces and build a fulsome picture of the medical patient and provide high quality care in the fifteen, sometimes twenty minutes apportioned to the medical visit? For this reason, Abigaelle later stated, "everyone should be doing very clear, very consistent, very standardized documentation." Indeed, standardization helps physicians find all the pertinent bits of information to make safe and sound clinical decisions, which is why a slip from standards—sending documentation to the wrong place or failing to document in the right place—can be so detrimental. One person's slip can destroy another person's life.

Therefore, the professionals at the Network cannot stop standardizing because they know, or at least are educated to know, that standardization can and does save lives. Standards do possess a magic that keeps patients safe, even alive, before patients can get threatened by documentary gaps. And perhaps this hope of saving a life before that life was threatened is what spurs the professionals to recommence the arduous journey of pushing the rock back up the hill again because this time, perhaps this time, the future will be different.

Plastic Standards

Returning to the question that organizes the chapter, what accounts for professionals' sustained commitment to maintain standards? For now, I will offer a partial answer based on a few observations about slips from standards and documentary gaps. From those observations, I will clarify how standards are plastic and how the plasticity of standards can account for why professionals maintain standards. The observations are as follows.

Figure 22: Standardized Documentation Constructed the Quality Organization

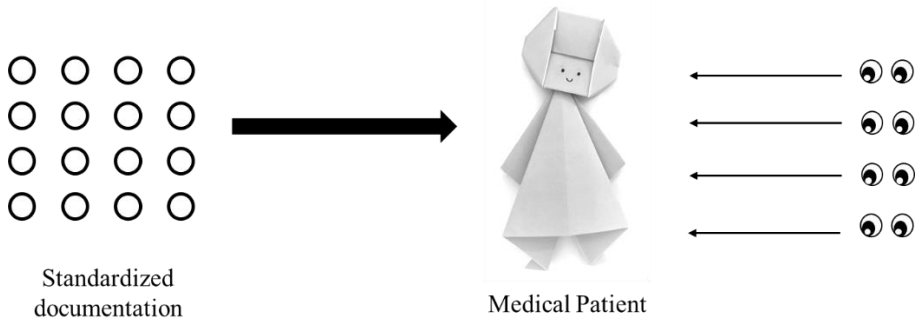


The concatenation and circulation of documentation *constructed* the organization and medical patient. However, for documentation to construct the organization and medical patient as the professionals desired, documentation required *standardization* (Latour 1990; Berg and Bowker 1997; Hull 2012).[53] Let me explain. In story one about quality and money, the Network was constructed as a quality organization from the aggregation and arithmetic manipulation of documentation. Documentation accomplished this by connecting on-the-ground organizational action to a bureaucrat sitting at a desk in some far-flung office who rewarded the Network's documentary efforts with money and the identity, "high quality" (also see chapter one). Documentation had to be standardized, however, to fit, flow, concatenate and circulate through various information and accounting technologies, just as the Network professionals desired, to an anonymous bureaucrat stationed across institutional borders (Figure 22).

[53] This claim is inspired by Bruno Latour's (1990) notion of "inscriptions," which he defines as "paper, signs, prints and diagrams" (p.21). Note, then, that documentation are inscriptions. In particular, Latour argues that the concatenation of inscriptions is necessary for "macro-actors" such as the state, law, and even society to exist. Inscriptions do this construction work by bringing together different objects and events from different times and places and flattening them to the same cartesian plane—to a UDS report to be sent to a government bureaucrat, for instance—which renders those big macro-actors digestible by sight. Thus, by simply reading an inscription (made from the concatenation of tiny little inscriptions, of course) from the comfort of one's chair, those big macro-actors are apprehended by sight. The inscription speaks for the multifarious institutions, practices, and norms that went into its production as one, unified, macro-actor.

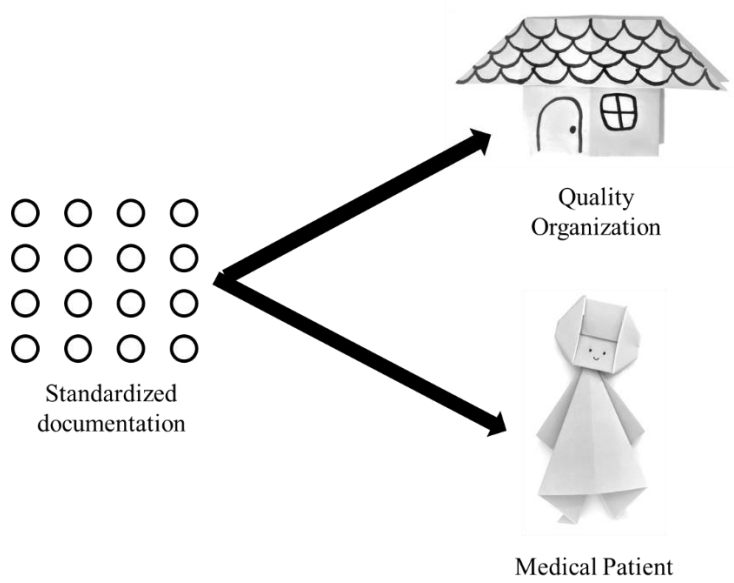
Furthermore, because inscriptions can be reproduced at little cost, they can easily circulate, extending their reach to other people and places while solidifying the presumed facticity of whatever is being circulated. Consider the organization that is given the bureaucratic designation, "high quality," for instance. The organization might place the designation on its marketing materials to be sent to patients, funders, and peer organizations. Insofar as the reader honors the inscription by calling the organization, "high quality" or rewarding the organization with money for its high quality-ness, the organization is high quality.

Figure 23: Standardized Documentation Constructed the Medical Patient



In story two about patient safety and morals, medical patients were constructed by documentary fragments. Medical patients were the multi-participant cumulation of documentation about the patient's history, brought together from within and across organizations from different times and places. Documentation therefore made the medical patient knowable, intervenable, and rewritable, and was "fundamental to the everyday production of that contemporary body" (Berg and Bowker 1997, 514). Yet at the Network, documentation had to be standardized to ensure that health care professionals were "on the same page," so to speak, reading, assessing, diagnosing, and treating the same medical patient into safe and sound clinical life (Figure 23).

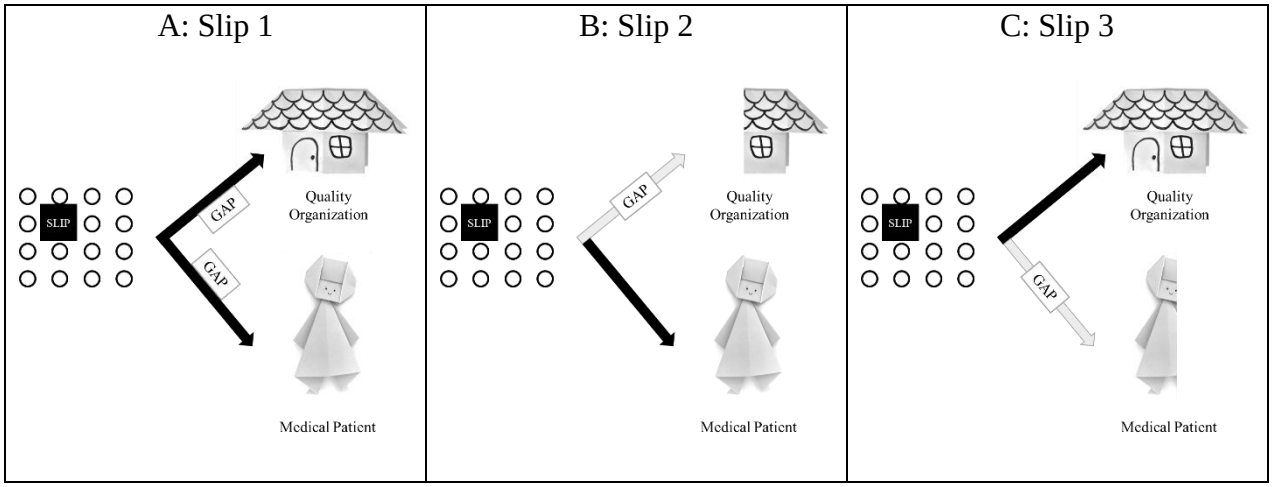
Figure 24: The Same Set of Standards Constructs the Quality Organization and Medical Patient



Furthermore, we observed that the concatenation and circulation of standardized documentation did not stay in distinct lane; they did not merely construct distinct entities. Rather, the same set of standardized documentation constructed *both* the organization and medical patient (Figure 24).[54] Attaching the right code to the right diagnosis, inputting the right results in the right boxes, sending the right flags to the right desktop, and documenting results on the problem list in the right, standardized, way, were all part of the same suite of standardized documentary practices that constituted cervical cancer screening, which were constitutive of both the quality organization and medical patient.

[54] The observation that the same set of standardized documentation can construct different entities is inspired by Star and Griesemer's (1989) boundary objects, which they define as objects that are "adaptable to different viewpoints and robust enough to maintain identity across them" (p.387). Thus, the meaning, politics, and practices of boundary objects change depending on how they are used within communities, just like plastic standards.

Figure 25: Plastic Standards



From this, we learned that because the concatenation and circulation of *standardized documentation* constructed entities such as the organization and medical patient, a slip from standards could result in widely different consequences (Figure 25).[55] Some slips might go unnoticed, not even eliciting a glance (A). Other slips might threaten the money and so-called quality of the organization, just like in story one about quality and money (B). Yet others might be hugely consequential, threatening to enter the moral grounds of life and death by jeopardizing the health and safety of patients, just like in story two about patient safety and morals (C).

This is the plasticity of standards. Standards are, despite their stated goals, creatures of their environment because their meanings, practices, and consequences change depending on the situation they are in. What is more, some standards are *ambivalent*. That is, if ambivalence describes a condition of contradiction relative to a fixed point such as a fixed object (e.g., a single standard) or a fixed activity (e.g., maintaining a single set of standards), some standards harbor oppositions. In our example, the concatenation and circulation of standardized

[55] As Bruno Latour (1987, 244–45) writes in *Science in Action,* the "*smallest change* in the geometry of projection might have enormous consequences since the flow of forms coming from all over the planet and back to all the navigators will be altered."

documentation constructed both the organization and the medical patient; thus, a slip from the same set of documentary standards could create gaps that vary in effects, ranging from the trivially insignificant to the life-threatening consequential. In other words, not only were the cervical cancer documentary standards plastic, they were also ambivalent.

The Final Scene: When Moral and Morals Meet

How does the plasticity of standards provoke human ambivalence, and how does human ambivalence commit professionals to maintain standards? In our final scene with cervical cancer documentation, I will argue that the human capacity to anticipate slips and gaps moving from the realm of triviality to the realm of consequentiality is what commits professionals to maintaining standards. To make this argument, let us return to a problem that afflicted the Network from story one: electronic medical records that do not talk. Recall that the Network recently merged with another health center, the merger was accompanied by an influx of new patients, and that there was a technological problem. Although the new patients' documentation was added to the Network's electronic medical record, documentation was not added in a way that could be captured by the computer script and accurately rendered, "compliant," for bureaucratic consumption and appraisal. Consequently, the Chief Clinical Officer called upon Evelyn to call upon a "stellar intern" to go into the new patients' electronic medical records to identify patient records marked as "non-compliant" by the computer script but documented, "compliant," in the electronic medical records, and I was that stellar intern.

Four weeks before the UDS report submission deadline, Evelyn asks me to present my cervical cancer screening auditing findings at a specially-formed meeting devoted to the UDS report. I

accept Evelyn's request, then spend the morning of the presentation in a flurry, retrieving traces of my auditing findings and fashioning them into a PowerPoint Presentation.

Before the clock ticks to 1pm, I walk into the small conference room and take a seat. As soon as the conference room is inhabited by Evelyn, the Chief Financial Officer, and the Chief Clinical Officer, the meeting commences, though I do not pay attention to what is happening in the meeting because I am too preoccupied with my impending presentation.

At the appointed time as per the meeting agenda, I stand up, move to the front of the conference table, project my PowerPoint presentation against the screen, and begin to talk. As I talk, I inhabit my presenter self. When I am my presenter-self, people become a blur and what I say becomes a blur as some other-worldly, self-assured spirit speaks on my behalf. In a total of eight slides and five minutes, I say what I need to say. I declare that I audited a total of 289 so-called "non-compliant" patient records, but 58 or roughly 20 percent of those audited records were actually "compliant." I caution that I focused on cases where the Chief Clinical Officer rightly suspected that documentation of screening does exist but was not picked up by the computer script, which means that the 20 percent error rate is not representative of the quality of cervical cancer screening documentation as a whole. Nonetheless, I continue, my findings reflect a bigger problem. Namely, if cervical cancer screening is not properly documented in the electronic medical records, what else is not properly documented? However, documentation that is not properly documented, that remains unstandardized, makes work difficult for frontline professionals and dangerous for patients. Then, I cast my eyes at the last dot point on my PowerPoint slide and read the words in the privacy of my mind, "It is a patient safety issue," and the presenter-spirit departs.

In my fieldnotes, I later reflected that I had to muster my strength to stop myself from saying, "for the sake of patient safety," out loud in the presentation. For to say those once strange, unfamiliar words out loud would imply that patient safety had become my own reason for engaging in the stupidly frustrating yet secretly pleasurable task of auditing. Yet by not saying those words out loud, I proved to myself that I am no fool who has been fooled by the absurdity of my task. I have not wholly embraced audits with the dedication of someone who might save a life by papering over gaps, even if I did write, "It is a patient safety issue," on the PowerPoint slide.

On the other hand, perhaps thinking these clashing thoughts is simply part of the job (Lea 2008; 2021; Goffman 2013 [1961]). I was simply rearticulating the thoughts and feels of other professionals at the Network who embrace serious discourses about the criticality of standards, the dangers of documentary gaps, and how we must all mobilize a moral commitment to pursuing a glorious, risk-free future of patient safety through maintaining standards and preventing documentary gaps, yet who also balk in horror at what it takes and all that waste involved in reaching that risk-free future that always seems to evade their grasp. Perhaps, then, I was ambivalent, just like most other professionals working at the Network.

Ambivalent Humans, Plastic Standards

Let us return to the question that organizes this chapter and dissertation, what accounts for professional's sustained commitment to maintain standards, even those they are frustrated with? I have already offered a partial account based on the plasticity of standards and documentary gaps. I will now offer a more comprehensive account that considers human ambivalence and epistemic gaps. The account rests on two claims. First, the plasticity of standards provokes

human ambivalence. Second, human ambivalence commits professionals to maintaining standards.

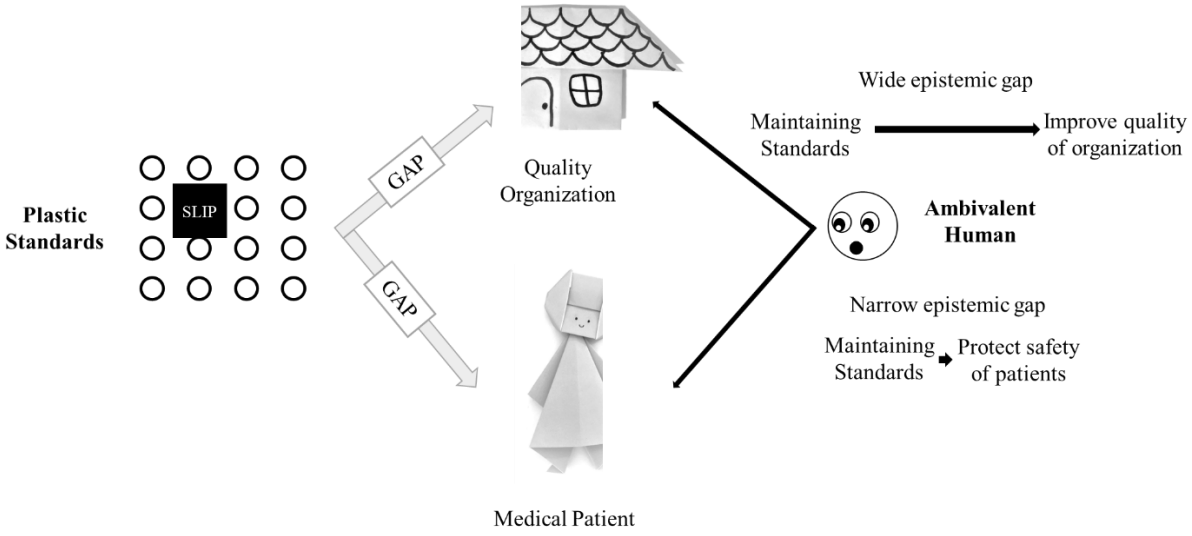
Plastic standards provoke human ambivalence

At the Network and in bureaucratic life more generally, it is widely assumed that the success of standards relies on the satisfaction of at least two conditions. First, how well standards reflect the structure of the problem(s), solution(s), and task(s) they are meant to represent. Second, how well standards accomplish the goals they are meant to accomplish (e.g., see Stinchcombe 2001; Lampland and Star 2008; Timmermans and Berg 2003). I suggest that epistemic gaps move in relation to the extent to which standards fulfil those assumptions. Epistemic gaps are wide when standards do not do what they are supposed to do, and this can provoke frustration, anger, and even the feeling that what one is doing is "bullshit" (Graeber 2018). Epistemic gaps are narrow when standards do, in fact, do what they are supposed to do. When epistemic gaps are narrow and directed to noble ends such as the provision of quality care and the protection of patient safety, standards can elicit a sense of duty, calling, and even a hope of a better future.

We observed those relationships play out in our previous adventures with standards. In chapter one, we witnessed members of Process Improvement call audits, or more literally the task of contorting documentation into standardized form, a waste of time and resources because those audits were experienced as unmoored from the goals of quality improvement and quality assurance that they were meant to accomplish. In chapter two, we observed leaders, managers, and residents call the depression screening box-clicking measure "dumb" and "made up" because clicked boxes are supposed to reflect quality yet surely, getting frontline workers to subscribe to standards by clicking boxes does not and cannot render those activities, quality. In chapter three,

we examined members of the risk and compliance team mobilize a commitment to patient safety by escalating a slip from standards in an entry in a logbook into a matter of critical risk. By linguistically scaling a standard into a tool that accomplishes what it is supposed to do—to protect patient safety—the professionals elicited a sense of duty as well as cause (c.f. Carr and Lempert 2016).

Figure 26: Ambivalent Humans



Because standards vary in meanings, practices, and consequences depending on the situation they are in, the same set of documentary standards can seem both far away yet intimately connected with the goals they are supposed to accomplish (Figure 26). As our adventures with cervical cancer screening documentation showed, a slip from standards—not using the right words, the right code, or sending documentation to the wrong place—can lower the organization's so-called "quality" and therefore receipt of money, which may seem far removed from the goal of providing quality care that those standards are supposed to achieve. This widens the professional's epistemic gap.[56] Yet, slipping from those very same set of

[56] Of course, as we learned from Chapter two, this epistemic gap can be linguistically bridged by the following rationalizing logic: getting that money is necessary for the provision of costly care that patients deserve

standards can lead to patient harm, such as not being informed of an abnormal pap result for ten months, as well as a lifetime full of regrets for the health care professional. In those moments, standards do what they are supposed to do and so the professional's epistemic gap collapses. Since the plasticity of standards can provoke the narrowing and widening of epistemic gaps, and since the narrowing and widening of epistemic gaps is accompanied with complicated feelings and expressions of likes, dislikes, pains and pleasures for those standards as well as the tasks associated with maintaining those standards, the same set of standards that caused estrangement can suddenly become embraced. In other words, the plasticity of standards can provoke human ambivalence.

Perhaps I might be accused of being imprecise with what I mean by standards. Am I referring to a single standard, a set of standards, a class of abstractions that specifies means-ends relationship, or all of the above? Moreover, if I am not precise with how I am referring to standards, how, then, can we possibly know what type of standard (singular, suite, a generic term) provokes human ambivalence? My answer is this. In the real, papery, world of practice, one does not always need to adhere to a strict system of logic and precision. It does not really matter whether the slip from cervical cancer screening documentary standards occurred at the level of code, communication between electronic medical records, a flag and a desktop, and the problem list, for when a multiplicity of standards offers the edifice for entities such as the organization and the medical patient to exist yet possess a wobbliness like a house of cards, always at risk of being one slip away from tumbling down, there is no need for that kind of

but cannot afford. Thus, standardizing documentation for the purposes of compliance money ultimately does lead to better quality care. A long, rationalizing journey must be taken to bridge that gap.

linguistic and conceptual precision. This is because all slips have the potential to be the consequential slip, no matter how mundane.[57]

Ambivalence commits professionals to maintaining standards

When a person first enters the Network and is exposed to the professionals' hard, standardizing work to ensure that documentation contorts to standardized form, she might be forgiven for viewing that work as absurd. However, she cannot wallow too long in the absurdity. For when that same person encounters something as big and terrifying like sickness and death while engaging in something as banal as documenting or ensuring that documentation contorts to standardized form, she must find little ways to cope with the absurdity lest she succumbs to cynicism and despair. She might even tell herself little stories. One story is, if medical patients are made from the concatenation and circulation of documentation and standardization is the lubricant that ensures documentary flows, patients' lives are always at the precipice of being one slip away from falling through the gap, which is why the professional must commit to standardization and maintaining standards. By accepting such stories, the person is able to

[57] Which is perhaps why this ethnographer-cum-auditor was incredulous about standardizing cervical cancer screening documentation for the purposes of getting money and badges of quality yet mobilized a commitment to ensuring that the same set of documentation were standardized for the sake of patient safety. And why, when I interviewed a Director of Operations about her efforts to ensure that the Medical Assistants follow standards to comply with the clinical quality measures, our conversation abruptly veered towards 'envisag[ing] a world where health care operations, including room procedures and standardization of pretty much everything you do really does prevent errors and risk ultimately.' And why when the Chief Clinical Officer delivered a speech, preempting why it is time for the Network to migrate to a new electronic medical records system, she commenced with the consequences of documentation that do not flow: it has led to "significant staff dissatisfaction," "patient dissatisfaction," "risk to our patients," "two large pending lawsuits," "permanent injury to our patients," the "premature death of one of our patients," and "less importantly, but for those of us who cared for them, [we] would have to live with the reality that we would have made different decisions if we had different information at hand." Then swiftly added, "And not to end on a down note, we have worked very hard the last several years to improve our own internal data reporting […] And this year as [CEO] alluded to, I believe for the first time we're awarded a gold category for overall quality." It seems as though the leaders and managers at the Network were slippery with how they rationalized the needs for standards, fluctuating between compliance money and stars of quality and patient safety.

transform the absurdity of that once, seemingly bullshit, work into a series of purposeful adventures, perhaps even cause.

After all, even if a slip from standards was really just an accident, dare I say a random event, when all those slips get aggregated, they become a statistic. When that statistic is given a name, such as "medical error," and gets thrown into a discourse, such as patient safety, it becomes part of the third leading cause of death in the United States, right after cancer and heart disease (Institute of Medicine 2000; Makary and Daniel 2016; but see Shojania and Dixon-Woods 2017). And when preventing slips and fixing gaps enter the unquestioned moral domain of life and death, maintaining standards becomes a pressingly urgent matter that demands intervention. Perhaps this is why all health care professionals must always exercise a deep, standardizing, discipline because, in an odd sort of way, maintaining standards can and does lead to better care and protect patients' lives.

This is ambivalence. The ability to bridge epistemic gaps. The mental dexterity to make an epistemic leap from viewing the mostly senseless task that you are doing into something almost sensible. The rationalizing flexibility to contrive a story about your crucial role in making a broken system less broken. A system where money is spent on sustaining a safety economy but the provision of universal health care is still out of the question. A system that embraces the ideology that death can and should be prevented which is why people rarely die from natural causes but do die from medical errors. A system where medical errors, at least at the Network, cluster around activities that are federally-mandated and rewarded such as screening for cervical cancer. A system that dreams of perfecting information exchange but knows that perfection will always get blighted by private vendors who sell incompatible technologies unless one pays a fee as well as fumbling, fallible humans who inevitably will err. A system that you, no we, the

romantic professional, academic, or student who simply wants to make a little bit better are actively involved in maintaining (Lea 2021). Indeed, how is it possible for us to be acutely aware of the absurdity, brokenness, sometimes even violence of the system we are in yet somehow find ourselves mobilizing a bodily, linguistic, and affective commitment to maintaining that system?

Yet, in those moments of painful, epistemic shocks, the person must accept what she cannot control and focus on those things that she can. One thing that the professionals can control is documentation. Specifically, documenting in line with standards. So as I read over my fieldnotes, including my exchange with Abigaelle as we paused in the hallway to dolefully reflect on Yurkiewicz's (2018) all-too-real essay about "Living and Dying with Fragmented Medical Records," I knew that I had made an epistemic leap by becoming ambivalently attached to the terms, theories, and practices of the Network. That is, I had been telling myself little stories to make my own involvement in maintaining documentary standards which, for the most part, I consider senseless, almost sensible.

Conclusion

This dissertation offered an ethnographic account for why professionals, many of whom joined the health and human services to make a positive contribution to the world, remain resolutely committed to doing seemingly trivial, mind-numbingly boring, even potentially soul-destroying work. To this end, we entered the Network, a large, federally-funded health care organization in the United States, to observe health care professionals engage in one of the most despised activities known to organizational life—maintaining documentary standards.

The question that organized the dissertation was: what accounts for professionals' sustained determination to maintain documentary standards, even when doing so provokes immense frustration and ire? To answer this question, we embarked on a series of adventures with a wide variety of professionals, ranging from the auditors who check the accuracy of documentation in the electronic medical records to the Chief Clinical Officer who steers the goals of the organization. Our adventures commenced with the seemingly trivial. We witnessed process improvement personnel audit electronic medical records to contort documentation into standardized form (chapter one) and leaders and managers devise strategies to get frontline workers to click boxes (chapter two). Despite questioning whether those tasks have much to do about quality, the professionals valiantly pursued those tasks to demonstrate a bureaucratically-defined notion of "quality." Soon, however, our adventures veered to the land of the consequential. We witnessed how an aberrant entry in the vaccines fridge log (chapter three) and slips in cervical cancer screening documentary standards (chapter four) could and did lead to patient harm, thereby drawing the professionals to the inescapable conclusion that standards must be maintained for the sake of ensuring safe and quality care.

Drawing from those adventures, I argued that ambivalence can account for why professionals remain resolutely committed to maintaining standards. Namely, because standards are plastic, doing and not doing what they are supposed to do, oscillating between the trivial and the consequential depending on the situation they are placed in, professionals are ambivalent about standards. I subsequently argued that human ambivalence, the recognition that a standard that was once experienced as trivially banal can at any random moment topple into the realm of the consequential, is what commits professionals to maintaining standards.

The Social Consequences of Ambivalence

Ambivalence offers a reasonable account for a cute theoretical question; namely, why do professionals remain committed to doing things that they do not really want to do? However, the reason why we should care about studying ambivalence as an object of inquiry is because ambivalence carries social consequences. Let me explain.

In chapter one, we witnessed process improvement personnel collectively work around their ambivalence through *avoidance.* Specifically, they were tasked to identify patient records that do not adhere to documentary standards for manual changing into standardized form. While some members privately expressed misgivings about the task because it seemed unhinged from its ostensive goals of quality assurance and quality improvement, they were sure to *avoid* expressing such opinions in settings such as public office spaces and the lunch room. After all, any public admission that the task does not work as it ought to work may jeopardize their professional fate as well as the team's careful cultivation of confidence and consequence.

In chapter two, we observed the Network leaders and managers showcase their own ambivalence as they devised strategies to get frontline workers to click boxes in the electronic

medical records. As if to preface their strategizing work, the Senior Clinical Leaders and Site Medical Directors expressed *rote outrage* and then *laughed*, conveying that it is the silly funding system and not their personal preferences that compels them to do things that they do not really want to do, including getting people to click boxes (Goffman 2013; Coser 1966). The Operations Directors in contrast, were less likely to express rote outrage and laugher, perhaps because they were specifically hired to implement and enforce strategies such as the box-clicking initiatives.

In chapter three, as Evelyn and Taylor delivered a presentation on patient safety and Ana and Abigaelle went on a risk assessment walk to ensure the clinic complies with safety standards, we witnessed the collective suppression of ambivalence through *anticipatory thinking*, a "thinking and living toward the future" and "a moral economy in which the future sets the conditions of possibility for action in the present" (Adams, Murphy, and Clarke 2009, 246, 269)[58]. By framing America's health care system as always at risk of disaster, Evelyn, Taylor, Ana and Abigaelle escalated slips from standards into the possibility of patient harm, even death. In so doing, they educated their audience to hold a deep fear of the consequentiality of standards, teaching them to always be prepared for potential disasters and to always work towards securing the best, possible, risk-free future through, in particular, maintaining standards.

Ambivalence, then, is not merely a condition that is lodged inside the person's head. At the Network, ambivalence was collectively mobilized, avoided, or suppressed in specific situations in the company of specific others along socially-structured lines. For example, when standards were viewed as tenuously-linked to the goals they were meant to accomplish, professionals in clinical roles and stationed higher-up on the organizational hierarchy could

[58] Anticipation is different from risk, which imagines a future with a predictable range and is based on actuarial measurement and control. Anticipation eviscerates risk by empowering professionals to think beyond the measurable and historical, replacing historical precedent with expansive possibilities of worst-case futures (Amoore 2013).

publicly express ambivalence (c.f. Coser 1959). They could openly mock, laugh, and jest about standards, then gallantly work towards enforcing those standards. Professionals who were paid to implement standards and/or were situated on the lower-rungs of the organizational hierarchy, in contrast, could be ambivalent about standards, though only at their own professional risk. Yet, when deviating from standards was framed as life-threatening consequential, ambivalence was collectively suppressed as everyone, irrespective of their organizational and professional role, had to mobilize a lopsided commitment to maintaining standards.

Nestled in the everyday activity of maintaining standards is the dream of reaching a glorious, risk-free future of patient safety, which is why any slip from standards that threatened the dream invariably produced a flurry of activity. At the Network, the flurry of activity often fell back on the same set of predetermined solutions—create better standards, implement better technologies of standardization, and ensure better human compliance to standards—which often relied on the same predetermined distribution of labor. For example, leaders and managers must strategize, direct, and delegate, physicians must do the standards, and a host of background workers must ensure that the physicians did those standards such as the medical assistants who click the boxes that the physicians are too busy to click and the auditors who fix the documentary slips that the physicians will inevitably make. And, once whatever desired outcome was achieved, with an eye on time and a million other things to do with, the leaders and managers would move on to the next task.

Perhaps leaders and managers' ambivalence towards standards inclined them to engage in little theorizing or follow-up once the desired outcome was achieved, thereby enabling the reproduction of social and power relationships. For consider, with the predetermined set of solutions and distribution of labor, who and what were the primary beneficiaries from

maintaining standards? The Network which got money, members of the Executive Leadership Team who received bonuses, physicians who got paid financial incentives? Yet which groups were responsible for maintaining standards? The medical assistants who covered gaps, the auditors who fixed slips, the reproductive health specialists who checked flags? And where were the patients in all of this?

Although ambivalence oiled the reproduction of social and power relationships, ambivalence also reshuffled them, momentarily fulfilling individual fantasies of power and agency (see chapter four). With ambivalence, the Chief Clinical Officer condescended from her lofty position to audit with process improvement personnel to improve the Network's compliance rates, thereby flattening hierarchical relationships as differently-situated roles joined forces in the pursuit of a common goal. With ambivalence, the professional could feel the temporary thrill of wielding power over the bureaucracy, winning more money and even changing the so-called "quality" of the organization by contorting documentation into standardized form. With ambivalence, the professional could even trick death into submission. She could make things that could happen such as medical errors that could lead to patient harm not happen, simply by maintaining standards.

Many of those fantasies were fulfilled when there were slips from standards. In slips, the professional was empowered to take charge of the situation. She could exercise power despite feeling powerless most of the time. She could be an agent of change (or prevention) despite feeling deprived of agency most of the time. When slips were combined with ambivalence, the professional could even bridge her own epistemic gap, the perceived distance between the task she is doing and the goals that the task are meant to accomplish, reasoning through and perhaps even resolving the contradictions of her work. In this way, ambivalence could act as a substitute

for standards. No longer are standards required to bridge mean-end relationships when there is ambivalence to forge those rationalizing links. Ambivalence, then, is able to endow the professional with rhyme and reason to do what she previously did not want to do or see the sense in doing.

Limitations of Ambivalence

The strength of my ethnographic analysis is that you see ambivalence crop up whatever page you turn. Likewise, the weakness of the analysis is that you see ambivalence crop up wherever you turn. Using ambivalence as the central analytic has its limitations. For example, perhaps because ambivalence is commonly used in relation to individual-level processes, I discussed the power implications of ambivalence primarily in relation to individuals (refer to the preceding two paragraphs, in particular). In so doing, I have unwittingly downplayed the structural power implications of my data such as the stratification of authority, agency, and rewards inherent in bureaucratic organizations and America's health care system more broadly. Why, then, did I embrace ambivalence and not some other analytic such as "compliance" or "control"? What is gained and what is lost by using ambivalence as my analytic? To answer those questions, let us briefly reanalyze a portion of the data. Let us return to chapter two, which is about leaders and managers devising strategies to get frontline workers to click the depression screening boxes. Let us specifically focus on the scene with Senior Clinical Leaders, the directors of each medical specialty at the Network, who have decided that the physicians will receive financial rewards based on whether the medical assistants click the depression screening boxes.

How might we reinterpret the data using a lens of compliance? By compliance, I mean conformity to regulations and laws in order to achieve organizational rewards such as money and

the organizational designation of "high quality." With a lens of compliance, crudely applied, we might view the Senior Clinical Leaders as straitjacketed by the regulatory and funding system. Power resides in the "system," the agency of organizational leaders to change the system is impaired, with the effects of making the leaders feel alienated or detached from the system. We might consequently absolve the leaders' decision to reward the physicians for an activity that the medical assistants are tasked to do; we might blame the "oppressive" system for their behavior instead.

From my analysis, however, I show that the system does not merely oppress. Instead, the system can protect and promote. By shifting the responsibility for action from oneself to the "system," the leaders can distance themselves from their own participation in the system, thereby protecting themselves from the moral contradictions and ambiguities of their work. What is more, the system supplies the leaders with monetary and discursive resources to help them carve out meaning from their work, allowing them rationalize that the receipt of money is necessary to cover the cost of care that patients deserve but cannot afford. By using ambivalence rather than compliance as an analytic, then, I have shown that the leaders, even when they cry powerlessness, are not so powerless after all. Not only are they implicated in making morally-charged decisions, they can imbue significance and meaning to their work by submitting to the system.

What if we reinterpreted the data through the lens of control? By control, I am referring to the control of leaders, authorized by their position in the organizational hierarchy, to make decisions and delegate responsibilities to other professionals in the Network. Using a blunt lens of control, we might cast the leaders as powerful, medical assistants as powerlessness, then focus our analytical gaze to intraorganizational relationships, especially that between leaders and their

subordinates. In so doing, we might downplay the fact that the leaders work in a highly-regulated health care system where money is at stake, endow the leaders with more agency than what they profess they have, and shift the locus of control from the "system" to the leaders working at the Network instead.

Yet as I have shown through my ethnographic material, leaders' interactions with boxes, the box-clicking measure, and other professionals at the Network are much more complicated than what an analytic of control can offer. For one, the leaders are not strategic rationalists always seeking to manipulate the situation in order to maximize the Network's resources. Likewise, the medical assistants are not wholly powerless. They do not always acquiesce to the leaders' dictates; they can even exercise their own form of power by not clicking the boxes in the electronic medical records. Consequently, the analytic of control presumes too much about the motivational structure and action-set of leaders and not enough attention to the everyday social cues and ticks that guide their decisions, which ambivalence seems better able to handle. Recall, for instance, that social processes such as the joint performance of cynicism or collective laughter seemed crucial in helping the leaders persist in making morally ambiguous decisions. Those social processes, in particular, allowed them to detach their "truer" selves from the organizational role that they might have felt obliged to enact.

I was attracted to ambivalence because it was conceptually loose. It seemed to contain a flexibility that captured professional and organizational behavior that other concepts such as compliance or control could not, while also allowing me to skirt around the edges of those very same concepts. Or perhaps, as a keen reader of my dissertation pointed out, I used ambivalence because it is a somewhat neutral term. It is uncontroversial enough to sidestep my own discomfort of making the kinds of critiques that a compliance or control lens would point to,

such as the stratified distribution of power and labor in organizations. As such, I could readily share my ethnographic findings to my interlocuters and other practitioners without causing them (and myself) offense, though at the cost of avoiding my own confrontation with the political and ethical stakes of my research as well as the mundanities of everyday organizational life. My next step for this research, then, is to retain the analytic kernel that is ambivalence but shade the analysis with other dominant themes that arise from the data, including that of compliance and control.

Ambivalent Implications

I commenced the dissertation with the assumption that many people join the health and human services to make a positive difference to the world, but when they do join, they might experience a feeling of powerlessness. They might feel bureaucratically compelled by the strictures of standards and rules to do things that they think are a waste of time and counterproductive to the tasks they passionately wanted to do, and this can lead to cynicism and burnout.

I have consequently been asked, if cynicism and burnout is the result of standards not working as they should, should not policy-makers and researchers just work harder at making standards better? I have little doubt that organizational life would be better if standards worked as intended and so urge policy-makers and researchers to continue finding and refining standards into some better notion of success. Yet I also respond that if standards are plastic, changing in meanings, practices, and consequences depending on the situation they find themselves in, defining success becomes complicated.[59] In particular, recall from chapter four and our adventures with cervical cancer screening documentation that a slip from the *same* set of

[59] Clearly, when we define success, we must also consider the stock-standard political questions of: success for whom, for what, and how?

standards can affect widely different entities with widely different consequences: it can have no effect, an effect on the funds and reputation of an organization, and an effect on the health and safety of patients. For this reason, a set of standards that is routinely viewed as trivially banal and therefore unsuccessful might suddenly, in a moment, be viewed as immensely consequential and a success. What, then, makes a standard successful, unsuccessful, or perhaps even both?

Standards that routinely do not do what they are supposed to do are considered seriously flawed. Though perhaps what is really flawed are our assumptions about standards and what constitutes their success. After all, standards are merely maps, slippery maps at that, always approximating problems and solutions in the world, always providing room for improvement. Thus, when there are slips from standards, there are always opportunities to map out the world differently. Who gets a say in making and organizing those maps and who does not? How are the costs, benefits, risks, and responsibilities of maintaining those maps distributed across different professional and organizational groups? Perhaps the processes by which people and objects map out the world as well as all the hard, standardizing work that goes into sustaining those maps should count towards success just as much as the maps themselves.

One might subsequently jump to the conclusion that leaders and managers should, irrespective of how time-poor people are, gather workers from a wide cross-section of professional groups and organizational roles inside a room to talk: to deliberate on what is helpful and harmful about engaging in standardizing work, to tackle their cynicism and frustration towards standards by discussing what and why standards do not accomplish the things they ought to accomplish, and then collaboratively work together to figure out what can be done about the situation and to envision a different future.

Providing a place to talk might offer some comfort and cathartic release for some professionals. Throughout the dissertation, however, I have highlighted the perils of talk, especially when social standards must be respected and there are sanctions when they are not. The perils of talk is why, for instance, the auditors from chapter one took care to suppress their epistemic gaps in settings where their reputations and jobs were at stake, lest they end up like Harry who was "let go." For this reason, when leaders, managers, or even outside "independent" consultants organize meetings for professionals to talk, they must also be wary of who's in the room and what social norms organize their interactions, for not all subordinates are willing sacrifice their thoughts or professional fates to the sacred altar of talk.

What sort of talk is appropriate, then? Let us turn to Evelyn, the Senior Manager of Process Improvement and constant companion throughout our travails, for inspiration. I often thought, and indeed told, Evelyn that she is a good manager. She had a special ability to sprinkle our humdrum activities with a sense of delight, whether it was getting the team to dream up designs for a process improvement lanyard with some cringy tagline or commencing each meeting with an ice breaker game to get the team laughing while offering a lesson on what effective meeting facilitation entails. In a sense, Evelyn was ambivalent. Evelyn cultivated an environment of fun and games and utmost seriousness. For every meeting facilitated, medical record audited, box clicked, no matter how tedious and far removed from some higher-order goal the task seemed to be, Evelyn could laugh at its silliness then offer some serious story about how the task is connected to the good of the team, other professionals, the Network, or patients. She could explain what a task was doing and where it could go, including what great things could happen (or be prevented) through the task. Then, by giving each team member jurisdiction over a task, she empowered them to see themselves as little agents of change, at least within the

organizational life of the Network. Perhaps, then, her ambivalent attachment to her job and tasks helped the team members bridge their own epistemic gaps about their jobs and tasks.

To be sure, Evelyn had her faults. By virtue of being the boss, she was responsible for delivering the dictates, for deciding on whether people should stay or get "let go," and was permitted to joke about tasks while her subordinates could not. Unavoidably, she was complicit in reproducing the organizational inequalities that we, and even she, is socialized to hate. Though I suppose that as the Senior Manager of Process Improvement, Evelyn had to make tough decisions. Perhaps people who cannot adapt to standards, who cannot mobilize an embracement of whatever task they have been given, who cannot find pleasure in the pain, who cannot acquiesce to fantasies of power, agency, and making a difference to the microcosm of the world that is the Network, cannot stay, especially since Evelyn is also responsible for maintaining the team's cautiously optimistic air that they can and are making the organization, other professionals', and even patients' lives, better.

Embracing Ambivalence

Having presented some of my findings to different audiences, I have been asked, do you think the professionals are trapped in a system that they cannot change? To my disappointment, I answer yes. I do think the professionals are trapped in a system that they cannot change. They work in powerhouse bureaucratic, capitalist, technological, and ideological systems with seeming agencies of their own. Even if change is happening all the time within the Network, it is not the type of systemic change that many of the professionals so desire. For when professionals and organizations are time- and resource- poor and are denied formal opportunities to change the system, including the manner and flow in which federal funds are allocated, there is little reason

to protest or make appeals for change. Organizations, professionals, and even this ethnographer may therefore find themselves collapsing into a sense of helplessness, an impaired sense of agency, where we throw our hands up in the air and go, well, we can't do anything about the situation anyway.

I have subsequently been asked, do you think it's bullshit?[60] Do you think that many of the tasks that the professionals, employed at the Network and in the health and human services more generally, do, are unnecessary and should not exist? My answer is no. Their tasks are not bullshit. They are meaningful. It's just that sometimes, you must take a giant epistemic leap of ambivalence to find the meaning. To know when to make sport of the situation and when to approach the situation with utmost seriousness. To hold on to the thought that even if what you're doing might not seem to have any real significance, by the off chance, it might have immense significance. To allow yourself to feel the thrill of doing a seemingly silly task to game the system so that the organization gets more money which is so essential for covering the cost of patient care and the wages of workers so that they can continue to provide that care. To continuously exchange stories with each other, weaving the banalities of bureaucratic life into larger discourses like the glories of patient safety and the horrors of risk so as to momentarily realize fantasies of agency, power, and of someday accomplishing the goal, whatever that goal may be, because everyone can carve out and inject meaning in the current situation, sparking it with pleasure, excitement, and even hope that this time, perhaps this time, the situation be different.

[60] Recall that Davis Graeber (2018, 9-10) defines a bullshit job as a "form of paid employment that is so completely pointless, unnecessary, or pernicious that even the employee cannot justify its existence even though, as part of the conditions of employment, the employee feels obliged to pretend that this is not the case."

To be sure, embracing ambivalence takes more than just telling the person to close her eyes and imagining the situation being a little more tolerable. Many realities are bullshit, unfair, and oppressive and cannot be willed away with delusional incantations. Making organizational life better therefore requires the efforts of leaders and managers, the people who are sanctioned to wield power in organizations, to make work conditions better. To ensure that the people who get assigned the work have a say in how that work gets organized, that the people who are responsible for the work get financially rewarded for doing that work, and that the people who do the invisible work of cleaning data and duct-taping over other peoples' mistakes get publicly recognized for their work. Leaders and managers of organizations that supposedly represent the highest ideals of society, including safety-net health and human service organizations, should run the organization in line with the idealized world that they want to live in. And not just a risk-free world of patient safety, but a kind, fair, and inclusive world where the highest, most cherished, social standards are practiced. Indeed everyone, especially those who are endowed the authority to exercise power, can change the current situation into a better situation, even if they cannot change the leviathan that is the system.

Afterwards

On March 11th 2020, the World Health Organization declared that COVID-19 is a pandemic. On a Black Friday, March 13th, I received a text message from Evelyn:

> "Hi. We are lock down now. I've told my team to work from home indefinitely and we are working to get as many teams as possible to also work from home starting next week."

The research came to a pause due to COVID-19. As I sat in my apartment in front of my computer, rushing to amend my ethical review requirements and reconfiguring my research plans, the Network was scrambling to make changes to their organizations. I consequently lost contact with my key informants for roughly two weeks. Then, having receiving ethics approval for my amended project, permitting me to collect data on the Network's response to COVID-19, I reengaged with Evelyn for permission to return to the Network.

When the pace of organizational changes diminished so as to give Evelyn time to interact with to me, I reentered the Network on March 25th, albeit virtually and in a highly-structured manner. I was permitted to participate in meetings such as the daily COVID-19 clinical operations meetings, weekly health center operations meetings, and monthly site management meetings. I was also permitted to read various types of documents such as all-staff emails and documents housed in an online shared repository, which stored protocols, meeting minutes, and spreadsheets tracking daily COVID-19 data such as the depletion of personal protective equipment (PPE) and number of available rooms at each site at the Network.

The move to virtual ethnography influenced the type of data I obtained. For one, it severely limited my ability to conduct interviews. I had no opportunity to casually walk into someone's cubicle to strike up a conversation that might conveniently unfold into an audio-

recorded interview. More importantly, though, with the fast-paced changes occurring at the Network because new information about COVID-19 was constantly flowing in as well as the despair of living through a pandemic where its causes, spread, and effects were still unknown, I thought it unfeeling to ask the professionals for an interview. This was especially true for the professionals I had developed the closest relationships with, who were responsible for facilitating daily COVID-19 meetings at 8am and 6pm and so worked before and after those hours to prepare or tidy up the meeting notes. In a word, they were exhausted.[61]

When I was physically present at the Network, I collected interactional data; namely, the seemingly spontaneous, in-the-moment interactions between people such as an eye roll or sudden burst of laugher. I also paid attention to informal interactions such as pre-, post-, side-, or between-meeting talk within cliques and casual chatter along the hallways. I was limited in my ability to capture this type of data when the ethnography transitioned online. In most meetings I was permitted to join, the majority of meeting participants switched their cameras off and muted their microphones despite being encouraged to turn their cameras on (though keep their microphones off). Even if they turned their cameras on, the meeting facilitator would typically share her screen to display a meeting agenda or PowerPoint presentation, thereby consuming most of the space in the virtual meeting room while relegating the meeting participants, irrespective of whether their computer cameras were on or off, to a little tiled box stacked one upon the other at the side of the computer screen.

Due to the move to virtual ethnography, my access to the putative "backstage" of the Network was eclipsed by people turning off their cameras and microphones. Likewise, most of the documents that I received and read were official accounts of the Network's happenings,

[61] In fact, I only conducted my first formal interview in June 2022, once the pace of organizational changes slowed down and the leaders declared in an all-staff meeting that the Network was finally returning to "normal."

edited by the Senior Manager of Marketing and delivered through the text of email to all-staff. I felt as though I had lost access to the "backstage" of the Network.

It is a trope in ethnographic research that all data, no matter how disappointed the ethnographer may feel about its depth, reach, and appearance, is telling of some larger phenomenon. Perhaps by allowing the professionals to turn off their cameras without overt social sanction, the leaders implicitly permitted the relaxation of social standards at the Network. And perhaps by turning off their cameras, the professionals at the Network did indeed relax their own social standards in the privacy of their own homes. After all, by turning off their cameras, the professionals could effectively leave the stage, front or back, altogether.

Social standards were not the only type of standards that the Network professionals were permitted to relax. They were also permitted to relax their compliance to formal standards. Let me explain using the case of protocols, a type of standard that formulates the steps to be taken when antecedent conditions are met.

In January and February of 2020, COVID-19 was, by scientific accounts, low-risk and posed little concern. Its insignificance in the Network's hierarchy of concerns was evidenced in its terse rendering in the COVID-19 Screening Protocol, which specifies how to screen and treat patients suspected of COVID-19. In late-January, the protocol comprised of a single paragraph with two sub-dot points on travel history and symptoms, signaling to staff that the virus is sufficiently serious to warrant its own system of rules. Yet the protocol was delivered through the text of an email, an aberration from how other infectious diseases such as influenza and varicella are disseminated, whose protocols are carried as pdfs and stored in designated folders in

the Network's intranet and so cannot be deleted amid a mass of other emails by an accidental click of the mouse.

The Network's approach to COVID-19 throughout January and February was of anxiety management. Staff were reassured in a series of 'Coronavirus Update' emails that the risk of infection is low because the experts in the field declared it as so: "Experts agree that the general risk to those living in the US […] remains low"; "the [public health department] has communicated again that the risk to the general public is still low." The facticity of those statements was reinforced by comparing the severity of COVID-19 to the common flu, which at that moment paled in comparison.

With the first case of state-wide community transmission reported in early-March, the Network's response to COVID-19 changed. Patients with known or likely COVID-19 were directed away from the Network to emergency departments while those experiencing mild illness were instructed to self-quarantine for 14 days. Personal hygiene was duly stressed, "sanitize your hands frequently, cover your mouth when coughing or sneezing and stay home if you are sick," while the Network's inventory of personal protective equipment including gowns, masks, and alcoholic wipes, were dangerously depleting.

Meanwhile, the COVID-19 Screening Protocol was encumbered by "daily, hourly, even minute-by-minute change." The Director of Nursing warned at a meeting, "rapidly changing protocols will be a feature, not a bug, of our response to this public health situation." By March 3rd the COVID-19 Screening Protocol grew from a single paragraph to 3 pages. It moved from being delivered through the text of an email to a stand-alone pdf with the trimmings of officialdom, featuring the Network's logo, a preamble stating its purpose and scope, a header declaring its approval by Senior Leaders, and a place in the Network's intranet where pre-

existing infectious disease protocols are stored. In a period of nine days, the protocol was amended 4 times and grew from 3 to 13 pages.

The Network's approach to COVID-19 subsequently moved from anxiety management to urging staff to "read read read!" the protocol. Leadership repeatedly reminded staff that the protocol contains the most recent information on COVID-19, filtered, distilled, and rendered in writing. Emails to staff implored: "we ask that everyone first review the latest coronavirus protocol before calling or emailing our infection control leaders." Meetings were also employed to articulate the message. In a special all-staff meeting on COVID-19, Abigaelle, the Infections Disease Control Officer, recounted the content of the COVID-19 protocol in a fast-paced manner, tumbling with details which prevented even the most assiduous of listeners from following. At a pause in her speech, the Chief Executive Officer offered his thoughts. Looking squarely at the camera that delivered the speech to the various conference rooms dispersed across the health centers that make up the Network, he playfully exclaimed with a touch of exasperation, "Gosh! That was so much information! How am I going to remember this? Guess what? You can read the protocol that was updated last night."

Meetings, as well as informal gatherings in hallways and lunchrooms, presented opportunities to shame staff who failed to read the protocol. In response to a question asked by a physician at a Grands Round about COVID-19 procedures, the Director of Nursing abruptly stood up from her chair, turned her head to the audience, and growled "that question had been answered!" One Site Operations Director offered a dramatic recounting of a fumbled COVID-19 test. The patient made an appointment with complaints of knee pain. During the visit, she reported a slight fever, a symptom of COVID-19. The physician subsequently panicked, thinking that the patient might have COVID-19. He frantically asked others for help because he was

unaware of what to do or who to contact because he had failed to read the protocol. The Director then delivered the punchline. In fact, the patient did not qualify as a person under investigation for COVID-19 because she did not meet the 100.3 degrees definition of an *active* fever; she instead *subjectively* complained of a fever. The listeners, myself included, gasped and shook our heads with indigent glee at the chaos brought forth from not reading the protocol.

On March the 11th, the World Health Organization called COVID-19 a pandemic. The Network responded on an ominous Friday the 13th. Non-patient facing staff were instructed to work from home, appointments with patients were canceled, and the hours of site operations were dramatically reduced. One week later, the Network rolled out telehealth visits to protect the safety of patients and staff by limiting unnecessary exposures to COVID-19. The week after, the multiple health centers that make up the Network were re-classified into three: "telehealth" sites, "well" sites, and "sick" sites. Patient-facing encounters were not permitted in "telehealth" sites, patients with COVID-like symptoms were permitted in "sick" sites, and "well" sites were designated for patients without COVID-like symptoms but required face-to-face routine care. Staff were subsequently placed in new teams that rotated in two-week intervals across the three sites, which necessitated the formation of new teams, new schedules, new room utilization rules, new cleaning rules, and new rules on the use of personal protective equipment. At the same time, door screeners were armed with scripts and thermometers to prevent patients suspected of COVID-19 from entering the centers, call center staff were given revised protocols to ascertain which of the "telehealth," "well," and "sick" sites that patients should visit, the electronic medical records were revised to support new documentary processes on COVID-19 tests and telehealth visits, the dress code was relaxed so as to allow staff to wash their clothes on a daily basis to remove potential COVID-19 contaminants, among many other changes.

With the quickening influx of new information and organizational changes, what commenced as a single protocol grew and multiplied. By March 23rd, the COVID-19 Screening Protocol grew so large that it was separated into three stand-alone pdf documents, the "COVID-19 Screening, Testing, and Treatment Protocol," "COVID-19 Staff Monitoring and Exclusion Protocol," and "Extended use of PPE [Personal Protective Equipment] protocol," and were revised a total of 20 times between March 13th and April 30th alone.

The constant changes to protocols overwhelmed staff. It caused them to feel "change fatigue," "going round and round in circles," and "information overload," complained multiple leaders across various meetings. Yet, "not much is going on in the clinics right now," articulated the Director of Adult Medicine at a meeting, for "our goal is keeping patients out of the health centers" in order to curb the spread of COVID-19. Despite her claim that "not much is going on," another Director explained that COVID-19 brought "a lot more screaming, yelling, name calling" because patients were frustrated with the Network's new COVID-19 protocols. Some patients, for instance, refused to wear masks because they believed it violated their liberty. Others refused to get their temperature checked due to fears of conspiracies regarding 5G networks and microchip implants. The Director further explained that because physicians were placed in new teams as part of the Network's COVID-19 care model, patients could not see their regular physicians. The physicians, in turn, spent protracted lengths of time with patients they never encountered, causing delays in the schedule while "being mad because they didn't want to deal with COVID patients." All the while, deescalating patients' anxieties became all the more difficult due to protocols mandating staff to stand at least six feet apart while speaking and sweating through layers of personal protective equipment.

The fast-paced changes caused people to slip from standards. “People didn’t read all 30 pages [of the protocol]. It was too much to absorb everything. They did the best they could with the information, but there were pieces that got missed,” explained an Operations Director in an interview. Unlike the beginning of the pandemic where staff were urged to “read read read” the protocols, the leaders were resigned to the fact that protocols, while helpful, are less effective in the midst of frequent and fast-pace change. Abigaelle, the Infections Disease Officer, summarized leadership’s altered approach to the protocols as follows: “what is the best way to really help support staff to get through this thirty-page document and feel like they have a good handle on it when they have so many competing priorities, patients in front of them, and different scenarios and nuances that may not be specifically addressed in the protocol as well?”

As Spring transitioned to Summer, the Network gradually expanded its face-to-face encounters by re-designating the space used for telehealth visits for in-person visits, physicians returned to their home sites, and some administrative staff were permitted to go on-site. At the same time, the speed of change to protocols decelerated, giving staff time to read the protocols and leadership the opportunity to communicate with lead-time changes made to protocols. Leadership subsequently returned to their previous expectations for staff to read the protocols. In early May, for instance, the Network dramatically revised its protocol because it switched COVID-testing partner, citing issues with the previous partner’s slow processing time. For the first time since March, a one-week pilot was conducted to test the newly-revised protocol and the content of the protocol was reinforced in several medical educational lectures before and after the protocol was rolled-out. Thus, the Network gradually returned to its pre-COVID operational model, or what the leaders called “normal.”

The COVID-19 pandemic offers a case study on how organizations might persist amid great uncertainty, when social and formal standards are rattled. Let me explain. Social standards provide informal rules that prescribe appropriate action. They supply information about the norms and practices that inform how people should behave in particular circumstances. They are therefore presumed as necessary for organizational stability, continuity, and predictability (March and Olsen 1996). Likewise, formal standards provide formal rules that prescribe appropriate action. Consequently, they are also presumed to supply the organization with stability, continuity, and predictability. The COVID-19 pandemic throws into disrepute the idea that standards, both formal and informal, are necessary for the smooth ongoing continuity of organizations. It invites theorization on what else is necessary for organizations to persist when standards are shaken, and so elicits the question: how does an organization persist when members of the organization do not act in line with social and formal standards? The answer to this question, however, must be saved for a future research project.

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