THE EXPERIENCE OF ERROR ON THE FRONT LINE OF CARE IN THE CONTEXT OF A HOSPITAL ORGANIZATIONAL CULTURE CHANGE INITIATIVE

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The Experience of Error on the Front Line of Care in the Context of a Hospital
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ABSTRACT OF THE THESIS

The Experience of Error on the Front Line of Care in the Context of a Hospital Organizational Culture Change Initiative
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In the United States today, experts estimate that more than fifty thousand people are killed by medical error annually; many others are injured. One of the ways hospital organizations have attempted to reduce medical error and increase patient safety is the adoption and promotion of a culture of safety, in which staff feel comfortable disclosing errors and empowered to take action to prevent them. My research explores how organizational patient safety efforts related to the culture of safety affect the care delivery practices of frontline healthcare personnel. This research evaluates the implementation of a local hospital’s Just Culture initiative (designed to help the hospital improve patient safety by encouraging staff to feel more comfortable reporting events). It also analyzes findings in regard to organizational culture change efforts aimed at mitigating the effects of error in healthcare more broadly. It examines and then augments existing Hospital administrative survey data with data from ethnographic observations and interviews with frontline hospital staff in two different departments in order to gain insight into how healthcare providers perceive error as well as organizational efforts to address it. In doing so, it provides a richer understanding of the realities behind the statistics and rates upon which established patient safety culture analysis currently relies. Such an understanding may enable an increase in error reporting and make organizational culture change efforts more successful.

Keywords: Patient safety, culture of safety, organizational culture, evaluation
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CHAPTER 1

INTRODUCTION

Medical error occurs either when the proper actions are not taken or improper actions are taken that result in patient harm or heightened risk of patient harm (Wachter 2008:4). In the United States, studies have shown that medical error results in 44,000-98,000 patient deaths annually, which is more than “motor vehicle accidents (43,458), breast cancer (42,297), or AIDS (16,516)” (Institute of Medicine [IOM] 2000:1). The number of deaths from medical error is comparable to those of diabetes (73,282) and the flu (53,667) (Hoyert and Xu 2012:4). The annual number of injuries from medication related errors alone is thought to be over 1.5 million (Committee on Identifying and Preventing Medication Errors 2007:4-5). In response, the healthcare industry has embraced patient safety practices and programs.

The term patient safety refers to national, organizational, departmental, and individual actions to reduce errors in healthcare delivery and rectify structures and processes conducive to error by design. In recent years, we have recognized the urgent need to develop patient safety strategies. The report To Err is Human: Building a Safer Health System (IOM 2000), written by experts assembled by the United States Institute of Medicine, a non-government organization that provides leadership through its publications on health and medical knowledge, remains one of the most significant publications to date in publicizing patient safety concerns (Wachter 2012:3). It highlights the fact that the design of the American healthcare delivery system is contradictory to the mission of biomedical healthcare because it invites injury upon patients in the process of delivering health restoring care (3). Its authors point out that at the time of writing, healthcare lagged about ten years behind other comparably dangerous industries (e.g. air travel, nuclear power) in achieving even rudimentary safety structures (IOM 2000:5). Since then, much has been published concerning possible ways to enhance patient safety, with contributions from physicians, nurses, pharmacists, as well as cognitive psychologists, industrial engineers, business and ‘organizational’ scholars.
One of the methods healthcare organizations adopt at the organizational level to address patient safety is to attempt to foster a *safety culture* or *culture of safety*. Cultures of safety recognize the fact that errors inevitably occur. In a *safety culture*, employees are not only comfortable reporting errors or near errors, but also feel a responsibility to proactively prevent errors. Yet, like corporate cultures, *safety cultures* are most highly reflective of management concerns (Wachter 2008:276). Whether and how much *safety cultures* (as forms of corporate culture) spread down to staff is an open question and one this research examined with mainly qualitative methods.

Patient safety literature strongly emphasizes positivism and empiricism, so it is unsurprising that *safety culture* is often understood quantitatively and as reducible to component categories. Qualitative investigations that capture the perspectives, experiences, and interpretations of clinical staff would augment ongoing quantitative efforts to increase patient safety through organizational culture change. Quantitative data must be interpreted if program planners or theorists wish to use it accomplish anything (Gravlee 2011:70; Sobo 2009:126). Patient safety literature has recognized that local culture greatly influences staff behavior, and the survey method currently in use to examine it is ill suited for exploring how this is so and what impact it has on error.

To begin to address error qualitatively, this thesis has two major components. The first was to examine how frontline healthcare providers at a hospital in Southern California (henceforth referred to under the pseudonym of Mesa Hospital) perceive two major types of error, medication administration error and patient misidentification. An IOM report combined the results of five studies to conclude that a rate of between 2.4 and 11.1 medication administration errors occur per 100 doses (Committee on Identifying and Preventing Medication Errors 2007:109, 111). A World Health Organization leaflet similarly reports over two hundred documented cases of misidentification (both occurred and near miss) between 2003 and 2005, as well as over one hundred citations in Veteran’s Affairs root cause analyses over a three-year period (World Health Organization 2007). While these numbers may appear low over several year periods, the number that actually occurs is much higher than reported. Thus, these two were chosen because medication related errors are among the most common types of error to occur, and patient misidentification is a precursory cause to many types of error (Wachter 2008:49-50; World Health Organization 2007). They
were also chosen because care providers would be more likely to openly discuss them due to their commonality.

The second component of the project is an evaluation of Mesa Hospital’s Just Culture Initiative, which is an internal campaign based on David Marx’s popular proprietary program of the same name that is being widely adopted in healthcare nationwide. The program is intended to make error response consistent throughout an organization and hold staff accountable without being overly punitive (Wachter 2012:348). The Just Culture is a tool provided to supervisors and managers responsible for investigating reported errors that is intended to standardize outcomes for involved staff and help discover systems issues. Specifically, it is an algorithm from which the supervisor asks questions about intention, whether policies and standards were followed, and the susceptibility of peers to the same incident. The answers to these questions are used to classify that event as “human error,” “at risk behavior,” and “reckless behavior.” The designated responses to these are “consolation,” “coaching,” and “discipline,” with the possibility of reeducation as well (Marx 2001 as cited in Wachter 2012; Marx 2009; Wachter 2012:348-349). While it is not necessary to publicize Just Culture to staff, the promise of fair response could encourage more errors and near misses to be reported. Mesa Hospital’s Just Culture Initiative officially began in September of 2011. Because the campaign is still underway, Mesa Hospital was an ideal study site.

To complete both of these aims, I used observations, semi-structured interviews, and existing administrative survey data to examine how staff members of selected departments at Mesa Hospital understand medical error, and I analyzed the relationship between administrative efforts to engineer organization culture change and patient safety as it appears, or does not appear, in the narratives and self-reported practices of deliverers of care. In doing so, I demonstrate that the addition of qualitative methods to analyzing the safety culture movement can enhance efforts to make healthcare safer at the organizational level.
CHAPTER 2

LITERATURE REVIEW

PATIENT SAFETY

Although *To Err is Human* is widely recognized as a benchmark for patient safety, it was predated by the 1991 Harvard Medical Practice Study, and much of what it reports is the same. The Harvard Medical Practice Study was among the first to bring attention to the fact that 44,000-98,000 patients die annually as a result of medical error. This statistic remains a motivational factor for patient safety (Wachter 2008:3, 281). The Harvard study is also significant in that it is among the first to categorize types of errors (Performance, Prevention, Diagnostic, Drug treatment, System) (Leape et al. 1991:381).

Three years later one of the Harvard Study’s authors, physician Lucian Leape, would publish “Error in Medicine” in the *Journal of the American Medical Association*. In this article, he calls for rethinking the way medical providers are trained to deal with error. He writes that error is generally viewed as an offense on the part of an individual care provider, and argues that it would be more productive to view it more as a systems failure, and thus as an opportunity for organizational improvement (Leape 1994:1857). To accomplish this shift in medical culture, which challenges the individualistic focus of Western thinking, he proposes drawing from *human factors* studies and the cognitive psychology of James Reason, whose work provides a backbone even today for safety practice in all fields.

According to Reason, predicting error requires sufficient knowledge of both the circumstances from which error emerges and the possible ways it might manifest (Reason 1990:4). In healthcare then, to reduce the frequency and damage of errors, it is necessary adopt a systems perspective. We must collect information on practices and procedures of care delivery and the potential errors which may occur at each step along the way and attempt to figure out why failed systems are designed as they are. This assessment would include data on whether or not the patient is likely to be harmed and the extent of injury as well as how some errors are recognized by care providers and how some averted. Patient safety requires gathering and organizing significant amounts of data on patient care practices.
Patient safety is closely related to the longer established field of healthcare quality. Hospital quality is rooted in a model proposed by Avedis Donabedian, who introduced the kinds of measures so often used: outcome measures, process measures, and structural measurements. Outcome measurements are of results, process measurements are of how care is provided to patients (the actual steps taken), and structure is the organizational context in which care occurs, including physical spaces, technologies, staff credentials, paperwork, and policies (Donabedian 2005:694-695). As with patient safety, healthcare quality has received significant attention in recent years. In Crossing the Quality Chasm, a follow-up to 1991’s To Err is Human, six goals of quality are argued for: safety, effectiveness, patient-centeredness, timeliness, efficiency, and equitability (IOM 2001:5-6). It is easy to see that considerable overlap exists between these categories. While most endeavors to improve quality will increase safety, some, such as efforts to change culture, will likely require specific emphasis on safety (Wachter 2008:36).

Patient safety occupies an intersection or convergence between the domains of clinical quality improvement and safety as in hazardous industries. According to British patient safety expert Charles Vincent (2010), hospital quality is modeled on manufacturing, while patient safety draws from hazardous industries, which must meet external safety standards and in turn draw from human factors, a field that combines “ergonomics, psychology, and practical experience in safety critical industries” (21). Many discussions of safety culture in American literature cite aviation safety in particular, and Wachter (2008) warns that contextual differences must be considered when healthcare draws from aviation (170).

Demand for increased error reporting went up in the 1990s, pushed by forces from within healthcare (as evidenced by Leape), the media, and from new legal requirements (Wachter 2008:153). In 1998, a commission established by the Clinton administration recommended that American healthcare adopt a single mission: “The purpose of the healthcare system must be to continuously reduce the impact and burden of illness, injury, and disability and to improve the health and functioning of the people of the United States” (President’s Advisory Commission on Consumer Protection and Quality in Healthcare 1998). The third chapter of their report outlines how the Federal government should be at the forefront of improvement efforts. Specifically, the authors write that the government should
assist in the achievement of the aforementioned mission by setting objectives and determining ways of gauging whether they are being reached, citing the Healthy People 2000 public health initiative as a model (Healthy People are public health outlines that specify ten year goals initiated since 1980; their scope has expanded with each successive plan) (Shi and Singh 2012:64-66). Included in their list of suggested goals is the reduction of error (President’s Advisory Commission on Consumer Protection and Quality in Healthcare 1998). More recently, Title III of the Patient Protection and Affordable Care Act of 2010 is dedicated to the improvement of healthcare quality, including safety (U.S. Department of Health & Human Services n.d.).

**SAFETY CULTURE**

It is the responsibility of healthcare delivery organizations to try to combat errors by collecting safety data and using knowledge gained from analyzing the real and actual practice of care delivery. Much patient safety work focuses simply on encouraging the flow of information that is easily deciphered, such as ensuring supervisors and quality departments are made aware when errors occur and of the circumstances in which the error occurred. How this happens, and how workers respond to it, varies. According to a 2001 report by the Agency for Healthcare Research and Quality (AHRQ), organizations with safety cultures generally recognize that errors will occur, are prepared to respond to them non-punitively, and recognize that employees at all levels can contribute to the effort (Pizzi et al. 2001:448). In this we see that safety cultures are usually established through organizational policy amendments, management-generated messaging, and educational initiatives. As such, safety culture is a form or facet of organizational culture. In organizational studies, corporate culture is often “considered to represent values, beliefs, and shared understanding in an organization and is considered to be intangible and difficult to define and measure” (Jordan 2002:395). Although they may be considered difficult to define and measure, this has not stopped hospitals nor any other ‘high risk’ industries that have raised safety as a primary concern from ceaselessly collecting numerical data. As Provonost et al. (2006) conclude, a culture of safety can be considered “a summary variable of patient safety” (698). Thus, a culture of safety is something that is believed to exist as a concrete reality and is quantifiable or at least potentially quantifiable. AHRQ publications focused on safety culture accept that
organizational culture descends from upper levels of administration through department heads, flowing down the organizational hierarchy (Pizzi et al. 2001:448). Safety culture and efforts to institute safety culture are highly political. In general, organizational culture is treated as an object and variable that can be manipulated provided the right level of background intelligence is collected (Hudelson 2004; Sobo 2009; Sunderland and Denny 2007).

Provonost and Sexton (2005) define culture as the “values, attitudes, norms, beliefs, practices, policies, and behaviors of personnel,” and keenly observe in their review of available survey tools that it is the cultures of specific departments that are relevant to the safety of patients rather than that of the whole organization (231). They compare two surveys in particular, analyzing their scientific accuracy in gauging safety culture, concluding that organizational efforts to change culture must be focused at the departments and unit level rather than to take a top-down approach, attempting to change culture through policy alone (Provonost and Sexton 2005:231-232). A unit or department level approach provides a greater sense of control to those healthcare practitioners “on the ground,” who thus feel agentive in creating their own safety environment rather than having to bend to external forces being entirely imposed from above. Accordingly, organizational administrations must find a balance between supporting and dictating patient safety structures and systems. In a subsequent publication Provonost et al. (2006) affirm that approaching safety from a policy perspective alone only achieves an image of safer systems through the presentation of data collected, rather than the reality of one grounded in the agency of providers (698).

A further complication is that hospital management can exert more power over nurses than over physicians because physicians are generally not employed by hospitals (Shi and Singh 2012:320). Accordingly, a third IOM publication, Keeping Patients Safe: Transforming the Work Environment of Nurses, adds to the 2001 AHRQ criteria of a safe culture that an organization seeks to learn from errors and near errors (IOM 2004:14). This means that not only must management encourage error reporting by frontline providers, but management must also ensure that this information is analyzed and requisite changes to policies or standards adopted so as to prevent or reduce the chance of the same or similar errors from occurring in the future.
MEASURING CULTURE

Organizations can attempt to measure their own reified safety culture through surveys and other currently available tools, including AHRQ’s own popular, highly utilized survey. There have been many articles published on the available tools. Britain benefits from a centralized healthcare system that has enabled far more standardized efforts to enhance quality and safety (Shi and Singh 2012:20). Accordingly, the majority of these appear in the British Medical Journal, and its offshoot, BMJ Quality and Safety, though not exclusively.

How useful are the new tools? Nieva and Sorra (2003) (who echo Leape’s earlier call for abandoning the expectation that providers simply should never err) observe that many are easily integrated into Donabedian derived quality improvement projects. Many utilize Donabedian’s framework to categorize all aspects of healthcare delivery as either outcomes, processes, or structures. The proven creation and maintenance of a safety culture would be a measure of outcome in the Donabedian framework. Nieva and Sorra (2003) indicate that culture is a thing that can be broken into subcategories. In their guide to choosing a survey or method to use to collect data before attempting culture change, they say the most important factors of a safe culture appear to be “teamwork, leadership support, and communication” (Nieva and Sorra 2003:i22). While quantitative data is most important they call for triangulation with some forms of qualitative information (Nieva and Sorra 2003:i22).

In regard to said data, healthcare organizations have been criticized by social scientists for relying completely on statistics compiled from surveys. Because they are presented as rates couched in biomedical phrases, such studies say little to nothing on the normal delivery of care, and have little meaning to outsiders unfamiliar with medical terminology who are healthcare’s usual recipients (Finkler et al. 2008:48). Additionally, the idea that statistics have any meaning on their own is false: even within patient safety literature, statistical arguments are usually supported with moral and ethical appeals (see Berwick 2002; Nieva and Sorra 2003; Wachter 2004, 2008). So although statistics alone are overtly thought of as meaningful or powerful enough evidence, in actuality qualitative findings carry more weight in that they are more likely to inspire action (Sobo 2009).

Many of the most vocal proponents of patient safety are driven by personal emotional experience with serious medical error. In his patient safety textbook, Wachter (2008) introduces his chapter on medical training with a personal account of his failure as a medical
student to consult a supervising doctor in a timely manner, leading to the death of a patient (190, 192). Likewise, physician and quality expert Donald Berwick (2002) tells in detail the story of his wife’s experience of error as a patient to argue that the healthcare system must be overhauled. During the course of his wife’s care, error was normal, and furthermore not only patients but providers “see it every day, and even if their defensive routines no longer permit them to say what they see, they do see it: errors, delays, nonsensical variation, lack of communication, misinformation, the care environment not at all a place of healing” (Berwick 2002:23, 29).

Ethnographic research (as well as the fact that safety continues to be a problem) has confirmed increased need for unit specific cultural examination grounded in day-to-day practice rather than for hospital-wide, standardized surveys. For instance, staff perceptions of error, and therefore their potential to make, detect, and prevent them, are at least partially shaped by the culture of their department. Indeed, local cultural expectations may be a stronger influence on staff behavior toward perceived threats to safety than organizational protocols: British researchers Dixon-Woods et al. (2009) note the necessity of “understanding how staff identify, classify, and orient toward patient safety risks, not least because such understandings are likely to influence efforts to manage risk and target change” (362, 364). My research suggests that a patient safety program introduced by administration that is too dissimilar to local perceptions of risk and error will likely achieve only limited success.

Underlying safety culture change efforts is the uncritical notion that risk exists objectively and is measurable. Patient safety’s aggressive perspective on the health risks entailed in medical error is, on the one hand, reflective of common sense. However, common sense is culturally shaped, and the idea that risk can in fact be managed is a tenuous fact reached by social consensus. After all, “the perception of risk is a social process” (Douglas and Wildavsky 1982:6). Furthermore, as Rabinow, summarizing Luhmann’s analysis of the modern outlook, states “the more science we do, the more knowledge we make, the more technological intervention becomes possible, the more choices are posed, the more risk there is, the more the imperative to act or not to act imposes itself” (Luhmann 1993:28; Rabinow 2008:28). From this perspective, the increasingly evident risk of harm from medical care created a demand for action.
In fact, as Leach and Fairhead (2007) explain, a “risk calculation” cannot be reduced to a single discrete decision event made by one individual because such calculations emerge from social life, including interpersonal experiences; additionally, most people do not think in terms of populations or statistical normality. Decisions are not events but an agglomeration of processes including personal and social experience and connections. Furthermore, risk may not even be a factor in many decisions purported to involve risk (Leach and Fairhead 2007:26-27). As far as public, societal dangers, Douglas and Wildavsky (1982) have argued that some risks are privileged because they are rendered more visible as a projection into the future:

The choice of risks to worry about depends on the social forms selected. The choice of risks and the choice of how to live are taken together. Each form of social life has its own typical risk portfolio. Common values lead to common fears (and, by implication, to a common agreement not to fear other things). There is no gap between perception and reality, and no correct description of the right behavior, at least not in advance. The real dangers are not known until afterward (there always being alternative hypothesis). In the meantime, acting in the present to ward off future dangers, each social arrangement elevates some risks to a high peak and depresses others below site. This cultural bias is integral to social organization. (8)

That is, risks are arranged in a spectrum of significance (and visibility) and used to maintain the current social arrangement. Furthermore, many authors have now described how risk as “a way of knowing,” and risk evaluation as a “technique for living” for modern individuals have become a framework for modern life and being (Kaufman 2010:9). Risk and the perceived ability to determine it are conditions of contemporary living for individuals.

Of course, these analyses focus on how individuals manage their own lives or those of dependents in the familial sense, rather than when they are healthcare providers with responsibility over the health of their patients. For example, healthcare providers are ‘experts’ responsible only for the domain of medical care of their patients. While some patients with chronic diseases (“frequent fliers”) do become friends with providers, many patients are only temporary parts of clinician’s lives. Furthermore, many medical decisions (made by physicians who are in minimal contact with patients) are in fact rooted in statistics. Nurses and allied health staff must follow these decisions. Of course, in practice providers must hierarchize the importance of their patient care and administrative duties, developing
workarounds that subvert calculations. For example, one risk in day-to-day work that nurses may face is having enough time to complete an incident report at the end of their shift.

Risk, of course, is not the only area of concern for my project. Another issue is the ineffectiveness of the most frequently used tools and methods in patient safety to gauge certain factors that may strongly influence the safety of patients. This is partially due to the perception that culture is an object, and also due to the simple fact that many responsible for patient safety assume that they already know what they are looking for when they design surveys.

One straightforward example of executive-worker disconnect comes from research done in the US Veterans Health Administration (VHA). Using ethnographic interviews, GAO evaluators found that VA clinical staff frequently spoke of “mutual trust among staff” as vital to patient safety, yet the VA’s internal survey lacked a specific means of gauging such mutual trust (U.S. GAO 2004:6, 42). Ethnographic approaches can therefore help increase the local relevance of surveys.

Standardized hospital-wide surveys not informed by ethnographic research also can be inadequate for assessing the effects of local departmental attitudes and practices related to error and error management because they omit the possibility of discovering anything beyond what they are designed to study. Moreover, comparing ethnographic data from four hospitals, researchers in the UK found that frontline care providers generally cannot accept responsibility for faulty processes because in many cases they are too ill-defined, and no single provider feels as though he or she possesses enough authority to do so. A further challenge to accepting responsibility is that care providers view maintaining a professional reputation amongst peers as vital, which must be noted in all culture change endeavors because it affects all perceptions and practices (Dixon-Woods et al. 2009:368).

In sum, in order to be effective, any organizational culture change endeavor must begin with a more nuanced understanding of each of its departments. Managers must recognize that they cannot engineer culture, and will only be able to change it if they first gain a sense of the distinction between the idealized organizational culture and the day-to-day experiences and practices of frontline employees (Jordan 2002:396-398).
JUST CULTURE

The push against individual fault or blame for error within healthcare organizations is countered by the idea that, at times, punitive action will be necessary. The fear of punishment can scare employees and result in silence when errors or near errors occur (Vincent 2010:277). In part responding to this, Outcome Engenuity LLC has adapted from James Reason’s work, and will sell to organizations at a variety of packaged prices ($150 for one complete pack per manager, $25 for a single copy of the algorithm), their Just Culture system.

In a Just Culture, a manager or team analyzes and breaks down the circumstances from which an error occurred and determines whether responsibility for error rests predominantly with technology, protocols, or employee (mis)behavior, and acts accordingly (Outcome Engenuity 2013). In a Just Culture system, there are categories of incidents, “human error,” “at-risk behavior,” and “reckless behavior,” and organizational responses to cases of them are tailored to match (Wachter 2008:215). The UK National Patient Safety Agency has a similar algorithm adapted from Reason. Using such a chart, a supervisor meets with a staff member (or members) involved in an incident of error or near error and determines intentionality, whether policies and standards of care were followed, and whether the event would have occurred to a peer (Vincent 2010:275).

Locally, Mesa Hospital had recently adopted its own version of this system in its own efforts to reduce medical error, due to AHRQ Hospital Survey on Patient Safety Culture responses indicating low staff confidence in the organization’s extant nonpunitive error response methods. Accordingly, Mesa Hospital provided an excellent site for research into Just Culture implementation.

HOSPITAL ETHNOGRAPHY

Hospital ethnography is challenging for a number of reasons. Within the U.S. and elsewhere, hospitals are highly regulated institutions.

To gain access to hospital sites, it has been necessary for anthropologists to accommodate the demands of organizational gatekeepers. As mentioned previously, a U.S. Government Accountability Office team has used a form of rapid assessment to evaluate the Veterans Administration Hospital system’s patient safety program. The research questions
the team used directly served the purposes of the administration, including: “to what extent has VA’s patient safety program been implemented” and “What are the obstacles and incentives for improving VA’s patient safety culture?” (Goodman et al. 2005:66). Therefore, the design of their project suggests a willingness to satisfy the structural expectations of the VA (and the GAO); that is, giving precedence to staff opinions thought to be the most relevant to the situation and thereby limiting their scope.

In recent years, rather than trying alone to break through the gates of hospitals, many within the discipline of anthropology have pushed for greater interdisciplinarity, and medical anthropologists have begun partnering with members of other disciplines to enhance their potential for impact. Hunter et al. (2008) provide an example for the role anthropologists can play on interdisciplinary research teams in enhancing patient safety through their analysis of the emotional experience of providers involved in critical incidents. Comparing several events, they found that the emotional fallout from an incident can take drastically different forms depending on the particular culture of the unit, and that hospital-wide regulations and standards cannot account for the very tangible effects on care from such fallout (Hunter et al. 2008:101).

**Hospital Ethnography: Challenges and Potential Benefits**

As we have seen, patient safety experts have recognized that culture exists at both the organizational and departmental level. As Dixon-Woods et al. (2009) state of their practitioner respondents, their “practices and reasoning in relation to risk emerged through their practical engagement in the everyday work of their wards” (364). Patient safety officers may benefit from increased awareness of the variations in departmental culture because everyday care will vary based on these differing perceptions of risk. It is qualitative methods that will enable awareness of such variation. Nonetheless, some of the strongest advocates for patient safety favor greater emphasis on statistics, showing a fondness for the phrase “epidemiology of errors” (Provonost et al. 2006; Wachter 2008).

Anthropologists have therefore been forced to adopt a wide range of techniques to influence biomedical practice. Some anthropologists have called for greater involvement of anthropologists in hospital culture change as related to quality and safety improvement.
through editorials in journals with medical audiences (Hudelson 2004). Anthropologists have also worked as employees in hospital settings, doing both in-house research themselves and contributing assistance to outside researchers working at their institution. Deitrick et al. (2010) recommend working with the biomedical authority structure, and note the necessity of making clear the potential of the anthropologist’s work to enhance patient satisfaction, quality and safety, or other patient outcomes (20-21).

In doing so, anthropologists must heed Donabedian’s (2005) warning that physicians, and, by implication, others at work will likely change their actions if observed at work directly (698). Wind (2008) elaborates on the challenge of hospital based research in her discussion of her experience working in a European clinical context. Despite her credential as a nurse, her presence in the unit she studied was seen as intrusive and staff were suspicious of her reasons for being there (Wind 2008:83). Hospital ethnographers must realize and be sensitive to the fact that care providers are likely to be wary of researchers in their work space. Hospital staff members are not only vulnerable as representatives of their organization. They are also vulnerable as individuals to administration and to their peers.

Nonetheless, anthropological methods are far better suited to the study of provider perspectives of error than the most finely tuned of surveys because they are capable of documenting experience beyond predetermined categories of safety culture by enabling the treatment of provider narratives as data for safety improvement. According to Plumb et al. (2011), ethnographic methods can help rebuild clinical patient safety by providing in depth information on the context of practice in healthcare. Ethnographic methods enable the untangling of “the assumptions about safety which are embedded in professional practice and in the actions, interactions, discourses and materials which comprise it,” and a movement from away from viewing patient safety as a singular integrated object to examining forms of patient safeties (Plumb et al. 2011:2).

**Hospital Ethnography: Acknowledging Fluid Entanglements**

The notion that a culture of safety is an object is, in part, evidence of Western dualism’s legacy. Biomedical thought itself is firmly rooted in Cartesian philosophy. As such, it assumes that the body, like any object, “be known and mastered” (Krakauer
The Cartesian model is evident in patient safety, where errors are categorized by type and conditions. The model is also apparent in the development of the surveys designed to gauge an object safety culture by its component factors. Patient safety could therefore be said to (at least at some times and some places) seek to conquer medical error by understanding it as an object that can be known entirely.

However, it is of concern to ‘the anthropology of the contemporary’ discussed by Rabinow (2008). In the anthropology of the contemporary, Rabinow (2008) says, rather than approach culture as an object of study, we must take:

the object of anthropological science (Wissenschaft) to be the dynamic and mutually constitutive, if partial and dynamic, connections between figures of anthropos and the diverse and at times inconsistent branches of knowledge available during a period of time; that claim authority about the truth of the matter, and whose legitimacy to make such claims is accepted as plausible by other such claimants; as well as the power relations within which and through which those claims are produced, established, contested, defeated, affirmed, and disseminated. (4)

This means that instead of trying to discover a culture existing in a place, we must examine entanglements of people and fluid arrangements of ideas that are never concrete or absolute. Contemporary, as Rabinow (2008) uses the term, does not refer to now as a point in time, but to where new and old systems and arrangements converge, alter one another, and manifest (2-3). With the intense pressure on healthcare in the United States, from demands for greater quality, fewer errors, and less cost, the frontline practice of clinical care seems an ideal arena to examine from this theoretical frame. The anthropologist of the contemporary focuses not on what is strictly novel but rather takes as his or her concern “the emergence and articulation of forms within which old and new elements take on meanings and functions,” (Rabinow 2008:24). For this project, this means attempting to track alterations of frontline care delivery practice and thought brought about by the institution of a safety culture.

In the framework of the anthropology of the contemporary, patient safety must not be viewed as an integrated and fixed series of literature, theories, data, and practices but a more fluid system with ill-defined edges and at times contradictory rules; and a system that overlaps with other arrangements. In this sense, the introduction of safety culture into hospitals will not merely replace older ways of doing and thinking about things, but it will converge with and at times alter the composition of patient safety. The composition of
patient safety can be partly attributed to the Cartesian legacy of biomedicine, and its rules distinguishing between subjects and objects are still highly significant. However, using an approach informed by ‘anthropology of the contemporary should enable us to bypass some of the limitations this sets on understanding. It provides a perspective that helps us understand what patient safety is, how it works in the actual context and practices of a hospital beyond its own provided framework.

A study of errors as experienced by providers also requires a framework to examine provider subjectivity. Biehl et al. (2007) write that “only through explicating the logic of key emotional and intersubjective constructs do major social dramas become intelligible; likewise, only amid such contemporary social enactments can we understand particular domains of affect and agency” (10). Experience is collaborative and cross-personal, shaped by convergence with other experiencers (Kleinman and Fitz-Henry 2007:53). Emotions and attitudes are both individual and socially shared.

Analysis of medical error as a socially experienced phenomenon requires untangling the relationship between error and practitioner identity. Patient safety literature may objectify error, but when errors emerge into the actual delivery of care, they carry with them an affective payload. The observations of Leape, Hunter and colleagues provide evidence of the emotional toll on providers, as does Wachter’s personal account (see above). When safety literature does discuss emotion and affect, discussion is limited to the effects of guilt on the part of providers as individuals who have made errors. This study extends the discussion to include not only the emotions associated with ‘committing’ error, but also those more generally associated with error or near error as well as those emotions that accompany efforts to combat or rectify errors.

APPLICABLE ANTHROPOLOGY

The applicability of any anthropological work—its ability to affect policy and/or standards of practice—depends strongly on the audience it reaches. Whiteford and Bennett (2005) argue that medical anthropology is by definition applied due to its relevance to health. I argue that all medical anthropology (specifically research focused on biomedicine) may have the potential to be applied, but may not in fact be applied unless it is either performed in collaboration with or reaches audiences with the direct capacity to influence changes to
practice. This project seeks to be directly applicable to patient safety initiatives at the level of the organization and clinical department by providing Mesa Hospital with an evaluative report in addition to serving a research function.

Technically speaking, evaluation differs from research in that it gauges the value of a specific program, and is unconcerned with broader relevance (National Institute of General Medical Science 2011). Nevertheless, because of its direct, on-the-ground orientation, evaluation has been found valuable in improving quality improvement efforts (Dixon-Woods et al. 2012). Its immediate potential utility aside, there is little guarantee that evaluation will be accepted and its recommendations put into practice on a wider scale (Ervin 2005:101). For one thing, by definition, evaluation work is not meant for dissemination. Moreover, evaluation uses methods that many within healthcare would deem unscientific in that they do not meet standards of evidence.

This stigma has been applied by some to qualitative academic research as well. This poses a significant challenge to qualitatively oriented anthropological efforts to improve biomedical healthcare. Many medical anthropologists are therefore forced to adopt positivist or empiricist theoretical approaches to legitimize their work in the eyes of medical audiences (Trotter 2011:52). Similarly, the majority of organization studies research projects take an etic perspective as required by the scientific method as well as to enable generalization (Jordan 2002:399).

Accordingly, to be intelligible to a variety of medical audiences, and thereby applicable, this project begins from an empirical perspective. It expands on the positivist methods (surveys) in place within hospital organizations by carefully augmenting those findings with firsthand accounts from practitioners themselves. Because these accounts revealed information that the surveys cannot account for, they are and will continue to be relevant to Mesa Hospital’s local efforts to implement a safety culture. More broadly, I considered the relations between healthcare providers at Mesa Hospital and shifting knowledge concerning medical error and safe healthcare. I also examined how views on error and changing institutional responses affect provider perceptions of themselves and their work. To ensure that the project’s evaluative function is fulfilled, a chapter in this thesis is specifically dedicated to analyzing whether the campaign is progressing toward its goals (see Ervin 2005:98-99).
CHAPTER 3

MAJOR QUESTIONS

In light of the foregoing, the research poses three major questions, whose justifications follow here:

1. Given exposure to a Just Culture initiative, what are frontline practitioner perspectives on and experiences of medication administration error or patient identification error and how do they differ or not from those that would be predicted by the patient safety literature?

2. How (if at all) do practitioners say that on-site organizational efforts at culture change (e.g. via the introduction of the Just Culture Algorithm and philosophy) have affected their perceptions and experiences of error (e.g. from indexing a personal failure to representing an opportunity for organizational improvement)?

3. How can the implementation of Just Culture be improved or altered so as to accomplish its goal of changing provider perceptions of error to match those intended?

Recall that according to patient safety literature, medical error occurs either when the proper actions are not taken or improper actions are taken that result in patient injury or heightened risk of patient injury. What has not been established is whether this is the only perspective practitioners take when speaking and thinking about error. It is not the validity of safety’s definition of error that is in question. Whether or not that definition matches the way providers understand error, and whether other definitions also are active, instead of or in addition to the one posited is what is in question. As we have seen in the literature staff perceptions and practices in relation to errors vary between departments. Because there are so many specific types of error, this project focuses on a select few. Because medication errors are among the most common, this error type is selected based on the assumption that it is easier for practitioners to openly discuss than other types of error. Patient identification error was requested by the hospital’s Medical Safety Officer as another type of error to examine because it is a precursory cause of a variety of error types (including medication errors) (World Health Organization 2007).
My second question examines whether staff indicate any changes in their thoughts and practices (not limited to patient safety) that may be related to the Just Culture campaign. It is unlikely that patient safety is the first thing on practitioner’s minds at all times due to the demands of patient care. At what point is care delivery altered by patient safety theories, definitions, or practices? If Mesa Hospital’s Just Culture initiative is effectively changing perceptions of error, it might be expected that staff report greater comfort in reporting errors and near errors when they occur. One of the characteristics of a safety culture, we have seen, is that (when it is working) staff members feel comfortable reporting errors because safety is seen as an obligation that staff perceive as greater than self-preservation. The evaluators of the VA’s Patient Safety Program found that providers reported an ethical responsibility to protect patients from error (U.S. GAO 2004:42). If Mesa Hospital staff report an error, the decision may be based on a feeling of moral obligation to patients, but may also be based on a political obligation to the organization as an employer. However, even if Mesa Hospital’s Just Culture initiative is successfully increasing error reporting, providers may still feel guilty when errors occur. Certainly, it appears that error as personal failure and error as an opportunity for organizational improvement are not mutually exclusive. To a care provider, error can be a personal failure while simultaneously representing an opportunity for organizational improvement.

Special attention has therefore be paid to whether practitioners indicate changes in the way they provide care as a result of increased awareness of patient safety. This information has helped enable examining whether the Just Culture initiative is succeeding.

The third question is included in part to repay the organization, particularly the Department of Quality, for providing the opportunity to conduct the research. Another reason is that the research has the greatest potential for applicability at the site it is conducted.
CHAPTER 4

METHODS

To enhance the potential for applicability, this project was designed with input from Mesa Hospital’s Medical Safety Officer, who has served as a key gatekeeper (having supervised me during an internship at the hospital in the Fall of 2011, which is where I began to learn how patient safety is practiced). I have followed a cross-sectional observational research model, with data collected representing a single point along the hospital’s path towards changing its culture (Gravlee 2011:75). The main method was semi-structured interviews with frontline clinical staff, supported with minimally intrusive observations of normal care practices. These observations oriented me to basic clinical practices and helped expedite the interviews. I originally intended to complete these observations first. Because most participants wanted to be interviewed very soon after initial appointments were made I was forced to begin interviews early.

I intended to recruit thirty interview participants and twelve to fifteen observational participants (see Table 1). To help maximize the potential participant pool, there was no requirement that the interview participants also be observational participants. Thus, some observational participants were interviewed and some were not. This number of interviewees was chosen because ten interviews from each unit would provide me with sufficient data to analyze and begin to answer my major questions discussed above. A sample size of twelve to fifteen observational participants was chosen to orient me to the work environment, local clinical jargon, and work flows through two hour sessions adding up to twenty four to thirty total hours (see Table 2).

Table 1. Ideal Interview Participants (Intended n=30)

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<th>Unit</th>
<th>A</th>
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<tbody>
<tr>
<td>RN (n)</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Allied Health (n)</td>
<td>N/A</td>
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Patient safety literature recognizes that there will be great variance between departmental cultures, so it is necessary to analyze the defining differences between them. Thus, participants were to be drawn from three departments (four to five participants per department) to enable comparison across several different contexts, chosen in collaboration with the hospital’s Medical Safety Officer: one outpatient unit, Unit A, and two inpatient units, Unit C and Unit B. These departments were chosen because there is less risk to patients posed by the presence of a researcher than in other units. The type of error in question for Units B and C is medication administration error, as this is quite common.

While physician perspectives on error are certainly important, doctors in hospital organizations are subject to different rules than other types of healthcare personnel because they are usually not employees; and instead they are subject to their own parallel authority structure (Shi and Singh 2012:320). Their inclusion was highly desirable, but overly complicated for the scope of this study of organizational efforts to combat error. Nurses are the primary class of healthcare personnel targeted by organizational safety efforts and are in the most contact with patients. Indeed, they (along with physicians) are the focal occupational category of most patient safety literature. Therefore, I prioritized their inclusion.

In the literature, less attention is given to allied health personnel such as therapists and technologists. For this reason, and to have a class of healthcare workers to compare to nurses, I decided to include one category of allied health staff. The hospital’s Medical Safety Officer suggested that a certain type of allied health provider (my IRB agreement states I would not reveal which) might hold quite different views of error and error response than nurses due to differences in education and experience and so they were included. These allied health providers have their own department and are assigned at the beginning of each shift to a unit or several units, so I recruited those who are frequently assigned to the units under study.
I have also had continuous access to all of the hospital’s AHRQ *Culture of Safety* Survey data, with the approval of the hospital’s Quality Department. This de-identified data consists of spreadsheets and graphs of question responses categorized by department and categories of *safety culture*. I initially accessed this data for study planning purposes (I had organizational clearance to do this because I was an intern in the Quality Department; data analysis for improvement was part of my job). I used the data to inform the development of my interview prompts and it has grounded my observations and interpretations. For instance, I have used it to generate relevant recommendations in the evaluation portion of my project.

**RECRUITMENT**

As per my IRB authorization, recruitment began in department staff meetings, where I presented the project with a brief announcement and handed out invitation letters (Appendix A). I did this with the assistance of educators if available. Educators are healthcare providers responsible for the training of their colleagues within a hospital unit. While not technically above frontline staff in an organizational political sense, they are quite experienced in their field and thus respected. Each department has at least one educator, but one educator may or may not be responsible for more than one department. Typically, participation in a project like this might have been encouraged by managers rather than educators, however, having educators assist bypassed the potential problem of coercion that using managers might have entailed. After each presentation potential participants were invited to ask questions about participation. Most did not ask any questions. A very small number asked for reassurance of their confidentiality, but needed no additional information about the study.

After presenting, I documented in code the unit and each interested provider’s profession or license type, and I used participant numbers for record keeping upon participant’s IRB-approved oral consent process (all participant names are pseudonyms). Appointments for shadowing and interviews were then made. Managers were not informed of who participated or not.

In total, I attended seven separate meetings for nurses (four for Unit C, two for Unit B, and one for Unit A). In addition, I attended six allied health meetings. Due to time constraints at the meetings, I was forced to return to nursing floors later to pass out invitation
letters and officially recruit participants. Reception was positive, with only one allied health professional refusing to participate after reading the recruitment documents, expressing fear of any kind of repercussion due to involvement.

Unit A was thought to be the ideal setting for querying patient misidentification because medications are almost never administered in this outpatient clinic. It was also going be useful to have another type of error for comparison. None of the allied health providers I was including work in Unit A because it is an outpatient unit, so both participants from this department were nurses. After shadowing and interviewing two participants from this unit, however, I decided to cut the unit from further study due to the extremely routinized nature of work in the unit and the fact that very cramped physical workspace meant I would consistently be in someone’s way.

The total number of participants was twenty two (n=22), with one interview being disqualified due to focusing too much on experience from units not approved for the project (see Table 3). The interviews were supported with minimally intrusive observations of interviewed subjects’ normal care practices (total hours = 19) (see Table 4).

**Table 3. Interview Participants Actual (n=22)**

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<th>Unit</th>
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<th>C</th>
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</thead>
<tbody>
<tr>
<td>RN (n)</td>
<td>2</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Allied Health (n)</td>
<td>N/A</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

**Table 4. Observation Participants Actual (n=10)**

<table>
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<th>Unit</th>
<th>A</th>
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<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN (n)</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Allied Health (n)</td>
<td>N/A</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

**DATA COLLECTION**

Research began with observations in the units. I observed care processes to better understand ‘normal’ care delivery by shadowing ten participants for two hours each. Originally, a range of twelve to fifteen participants was chosen because shadowing four or five staff members per department enabled observations of morning, afternoon, evening, and night, and thus allowed me the opportunity to note shift variations in practice. Observations
were two hours so as to not burden care providers while providing enough time to gather enough data for the narrow purpose of informing my interview protocol and data analysis. Ultimately, I was able to observe allied health providers at different points during the day as intended. Nurses were less flexible due to the demands of their work, and I was unable to observe them during the first two or three hours of either the day or night shifts. I was similarly unable to observe the last few hours of either shift.

As discussed in Chapter 2, participation in hospital environments as a staff member is impossible for legal, ethical, and practical reasons. However, because my hospital hosts medical and nursing students, its staff members are accustomed to being followed and observed while performing care activities. I assumed, and was largely correct, that shadowing as the mode of observation would minimize feelings of intrusion and encourage participation in the research. Indeed, all of the participants that I shadowed were extremely open and helpful, taking the time to narrate what they did and answer questions that arose while they worked.

I took open-ended jottings using a pen and notepad. Because I was not participating, I was able to make ample notes during each observation period. Following the recommendations of Emerson et al. (1995), I used these jottings to write full fieldnotes quickly after leaving the hospital (40, 49-52). I did not include any identifying patient information in these notes.

Although I had planned to complete the shadowing sessions before beginning interviews, I found most participants requested to just be interviewed to reduce their time commitment. To address the major questions discussed in Chapter 3, I conducted semi-structured interviews consisting of eight guiding questions, starting with four open-ended questions concerning their views on medication administration error or patient identification error.

As shown in Appendix B, the first interview question asked participants to share an experience with error they had read or heard about that affected them personally. The goal of asking this question was to enable examination of how providers situate themselves in relation to error. By requesting a story about a real experience I hoped to evoke personal accounts of provider engagement with error, rather than general responses that parrot literature.
The second question asked how serious a problem the type of error was. This would help me gauge how pressing of a priority reducing errors is to providers compared to other situational needs.

The third and fourth asked for thoughts on major causes and the best ways to reduce the impact and frequency of that error type. Answers to these questions enabled me to compare frontline perspectives with those of safety literature, addressing my first major question. While participants responded to these questions, I used categories from the AHRQ Hospital Survey on Patient Safety Culture, including but not limited to “handoffs and transitions” and “feedback” as prompts when the opportunity arose. I predicted that responses to these prompts would include information not covered by the survey or commentary that the survey cannot gather. In most of the interviews, I asked participants what the AHRQ categories brought to mind when I mentioned them. In order to see if it would change the type of responses I received, for the last few interviews I asked participants how they would relate the categories to error response and prevention.

The next four open-ended questions asked participants to discuss their views of my hospital’s Just Culture Initiative, including their thoughts on its effectiveness. Prompt five asked hospital staff members to compare how the organization responds to errors now versus error response before the introduction of the Just Culture. Because the organization presented the Just Culture as a solution to staff complaints of an overly punitive work environment, one would have expected that if the system is being used as prescribed staff would express satisfaction with the changes. This question helped me test that assumption.

The sixth and seventh questions asked if front line providers would change anything about the way the organization responds to error and whether any steps could be taken to increase error reporting. At this point in the interviews, I also usually asked whether respondents report near misses or what would lead them to report near misses.

The final question, included at the request of my hospital’s Medical Safety Officer, asked providers to describe their idea of a non-punitive work environment. It also asked whether or not they believed they do or should work in such an environment.

In addition to taking written notes regarding responses, I took audio recordings of the interviews with a recording device and produced simple verbatim transcriptions on the same day, or the next morning in the cases of some night interviews. Because I expected each
transcription to take three to four hours to produce, I limited myself to doing one interview per day. However, the methodological benefits of transcribing on the same day were immediacy and practicality: my initial analysis of participant responses (see below) was done while they were fresh, and efficiency of data reduction (to transcript form) also was ensured.

To augment interview findings, I reviewed the results of a national safety survey (AHRQ Hospital Survey on Patient Safety Culture) administered to the hospital’s employees in 2012, 2010, and 2009. The survey data set is entirely de-identified, and consists of rates of responses to the survey question categories broken down by department. The survey asked departmental staff questions covering eight categories making up safety culture at the unit level and two categories at the hospital level (along with four outcome measures). Those categories are:

- supervisor/manager expectations and actions promoting safety, organizational learning,
- continuous improvement, teamwork within hospital units, communication openness,
- feedback and communication about error, nonpunitive response to error, staffing,
- hospital management support for patient safety, teamwork across hospital units, and
- hospital handoffs and transitions (Sorra and Nieva 2004).

I was given access to the data collected by the hospital’s Quality Department for study planning purposes (see above), and used the data to inform the development of my interview prompts. Before I began interviewing, I reviewed in detail the data collected from the three departments where the study focused. Once observation and interviews were completed, the interview findings were compared with the survey data. The survey results were also treated as additional outcome data for the purposes of my evaluation of the Just Culture campaign.

DATA ANALYSIS

I analyzed my field notes and interview transcripts to identify salient themes on error and my hospital’s Just Culture program. For my analysis, I used qualitative analytical methods combining a search for indications of how participants engaged with established themes from the safety literature with a search for new themes (i.e., those emergent from the data collected). The former (a priori issues) were drawn from the AHRQ Survey on Patient
Safety Culture categories of safety culture and the questions that fall under them (Agency for Healthcare Research and Quality 2012). They were prompted for in the questions that cover specific classes of error in practice, Just Culture, error reporting and error response. Emergent themes were examined using methods described by Strauss and Corbin (1998).

I began with open coding, taking my data as an object and identifying components within. Open coding begins with a close reading of each transcription, asking of each line “what is this about? What is being referenced here?” (Borgatti n.d.). That is, at first, I looked for and carefully noted concepts that are addressed within the data, and created a range of possible codes within which they may fit (Strauss and Corbin 1998:109). For example, one code I used was NURSE BARRIERS TO SAFETY REPORTING, which included reasons named by staff for not doing reports, such as lack of time and the non-reportability of near misses.

To identify themes from the data gathered from interviews and observations, I also relied on several techniques described by Ryan and Bernard. Ryan and Bernard (2003) recommend searching for repetitions and comparison/contrasts in all forms of data, as well as transitions when detailed narratives allow (101-102).

Notable metaphors also appear in patient safety literature. In his textbook chapter on medication error, physician Wachter (2008) uses the phrase “dissect the anatomy of an inpatient prescription” (43). It appeared that comparison of the ways frontline practitioners and safety experts use metaphor might be quite fruitful and so I also identified metaphors in the data in order to make these comparisons.

After basic themes (including salient metaphors) were identified, and codes for them created, I organized the codes into broader categories. That is, I grouped like codes together (Strauss and Corbin 1998:113). For example, I grouped NURSE BARRIERS TO SAFETY REPORTING with AVERSION TO REPORTING and other codes under the general category of safety reporting. After discerning themes and categories, I concentrated on interpreting their meanings, both as individual domains and relationally, to each other and to the social structure of the organization as well as its operating environment.

Finally, I used the data I collected and Mesa Hospital administrative materials to evaluate the implementation of the Just Culture initiative. This involved interpreting my data in conjunction with administrative material concerning the development of the Just Culture.
The entire analysis was informed by my experience volunteering at the Department of Quality Management at my hospital, which I began in January, 2011. This experience involved active contribution to the implementation of the *Just Culture* initiative, mainly by processing and summarizing error reports. My early involvement supported my data collection and analysis activities because I was intimately familiar with the campaign and with patient safety literature and techniques. My prior knowledge of the hospital benefited my project in that I have gained some familiarity with the jargon used by frontline healthcare providers, and so parsing the interviews did not take as much time as they otherwise might have.

In crafting my final evaluation report (See Appendix C) for the hospital, I made every effort to ensure local relevance by demonstrating the links between emergent themes and issues I know to be of organizational concern. I also followed Singer’s (1999) recommendation that anthropologists in the practice of evaluation write “a full enough program description to explain how results were produced to allow replication to other sites” (97). In addition, recommendations resulting from the evaluation were separated based on whether they were only relevant at the focal hospital or if they would be helpful to hospital organizations seeking to create a safety culture more broadly. In this way, I was able to meet questions of evidence (and demands for it), as well as its validity in the eyes of biomedical audiences.

**LIMITATIONS**

As a master’s thesis project, one of the most obvious limitations is the small number of participants. With a longer time frame and more funds, I could have included more participants. However, my small sample size provides enough evidence to begin to answer my major questions (see Chapter 3).

Another issue touched upon previously was that I was restricted to studying units housing patients whose care needs would not be infringed upon by my presence as a researcher. It is difficult to address this issue since even a trained healthcare provider doing research in such a unit could pose a risk.

Next, again due to the small scale necessary for a master’s thesis project, the research was conducted at only a single site. A more expansive project would cover multiple sites
state or even nationwide, and involve multiple research teams. Even so, a single hospital is an extremely complex social institution, and a larger project risks losing focus, especially where ‘culture’ is concerned.

Also, as it turned out, no participant wanted to be interviewed outside of the hospital campus despite the option. Furthermore, if more than one participant wanted to be interviewed the same day (most wanted to complete their involvement as soon as possible), I would have to arrange tentative plans to meet with them their next scheduled shift. Because the inpatient hospital staff work three twelve hour shifts a week (not necessarily consecutive), sometimes this meant noticeable delay in my ability to recruit them.

Finally, I was forced to eliminate the outpatient unit, Unit A, from the study as explained above. Prior understanding of these limitations might have led to the selection of a different unit. Further research of this type should acknowledge the differences between inpatient and outpatient environments. A stronger research design would also have planned for the fact that hospital staff at Mesa Hospital have great time constraints and though generally willing to participate, they expect that their involvement be completed as quickly as possible.

**What Is to Follow…**

When all was said and done, for Unit B, I observed three nurses and one allied health provider, because allied health providers are less often assigned to patients in this unit. For Unit C, I followed one nurse and three allied health providers. Unit C actually consisted of two separate areas, a general care area in an older building and a pulmonary and overflow floor in a separate, newer building connected by bridges and elevators.

The following chapters show my findings, beginning with an initial comparative chapter that highlights similarities and differences between the views of my respondents and those of safety experts. The next two chapters explore how hospital staff learn from errors, first as individuals and then from the administrative perspective. Rumors, secrecy on the part of administration, and transient interconnections within the hospital are the focus of the subsequent chapter. The final findings chapter provides a detailed discussion of my participants’ interview responses.
CHAPTER 5

HOW FRONTLINE PRACTITIONERS THINK ABOUT ERROR AND PATIENT SAFETY

In this chapter I discuss how providers view error, including culpability. The issue of culpability in patient safety has been significant since Leape’s (1994) “Error in Medicine”. At Mesa Hospital, nearly every clinician that I interviewed indicated that most errors are caused by individual choices and actions rather than by systems issues. Error is ultimately viewed as a personal failure despite efforts to reframe error as a systems failure. This seems to be the case even when providers acknowledge the need to document and learn from errors to prevent their recurrence. And internalization of culpability gives errors power to influence future practice.

I begin this chapter with an error narrative that shows how errors with even minor adverse effects can shape how providers practice. I follow with a discussion of individual responsibility for error, and then a brief discussion of guilt in relationship to the idea that individuals are responsible for errors. I next examine near misses as non-events since they did not actually occur and thus are not viewed as reportable. I conclude with a discussion of how frontline personnel at Mesa Hospital perceive the magnitude of medication error.

ERRORS INFLUENCE PRACTICE LONG AFTER THEY HAPPEN

Just as Patient Safety experts have emotionally moving personal accounts of error events (discussed in literature review), so too do regular clinical staff. One nurse, Jessica, from Unit B shared this story from quite early in her career:

8 AM. I had two patients at the end of the hall. They were both boys younger than five, and they were both Asian. I won’t give you names. I went into the room on the left instead of the room on the right. The dad- I introduced myself, I told him that I’d be his nurse today. He said ok what do you have there. It was Colace which is just a stool softener, so it’s not a big deal. What do you have there, I said I have his Colace, he said ok. He took the medication from my hand, gave it to him, and at the time we didn’t have the dry erase boards at the foot of
the bed. And so I said ok how is [name]- how is this patient doing, I said the first name. And he said that’s not his name. And I went “oh crap.” Because we had just- he [emphasis] had just given the wrong patient Colace.

After a brief interruption in our conversation, she continued:

It was a par- I mean I took it into the wrong room, so I didn’t have an opportunity to look at his wrist band, I didn’t give- I didn’t get that far. And you know they’re- culturally they are very, they’re just ver- kind of a very sharp culture, and it’s fine. He just- he didn’t take it from me rudely but he’s like ok I’ll give it- like here go, done done- take it. And that was my first medication error, so that was a little traumatic for me. I felt horrible, no lasting repercussions, he just had- extra stool, I mean still diapers so it was no big deal, but it was a lot looser than normal, and then I went into the other patient’s room and gave him his medication. So it was a little eye opening, and I think because it happened so early in my practice is has definitely been part of my practice to check and double check and introduce myself and say that I’m taking care of this patient today and just kind of molded who I was as a nurse because it happened so early. I mean, that was minor.

As the above story shows, seemingly trivial mistakes can greatly influence practice long after they occur. While the error narrative reveals obvious systems issues that have since addressed, her focus is her failure to double check the patient’s identity. The story also shows how errors can occur before a provider can react to them.

The hospital now has dry erase boards in proximity to every patient with places for the patient’s name as well as the current nurse. Mesa Hospital policies and good practice require the patient’s identity be verified with the patient or a family member in coordination with their ID bracelet. Indeed, verifying by double and triple checking the patient’s name and medication was frequently cited as an important way of preventing error. Failure to verify (“double checking”) is likewise one of the most important causes given for an error. For example, in the situation above, the nurse failed to verify the identity of the patient, which led to the patient being given the medication intended for another. Because the medication was a stool softener (available over the counter), the effects were minimal. Safety experts would likely categorize this as both an identification and administration error (among other possible types). Not all providers had narratives to share, some provided categorical examples and/or discussed recently implemented technology. Interestingly, in all or nearly all of the detailed personal error narratives shared with me, the patient always ultimately recovered with no lasting effects. Reasons for this could include the low severity
of illness of the patients in the units I was allowed to study as well as concern for professional reputation (Dixon-Woods et al. 2009:368).

Mesa Hospital introduced barcode scanning along with EPIC (a proprietary integrated electronic hospital record system) shortly before my research began. When I asked my first interview question (see Appendix B), many providers credited barcode scanning as an extremely effective means of preventing many medication errors. Some providers named types of medication errors as the most common: delivering the wrong dose of a medication, delivering a medication via the wrong route, administering the wrong concentration of maintenance fluids, and administering at the wrong time. These largely match up with the most common adverse drug events found in a significant 1995 study by Bates et al. that remains a definitive source on adverse drug events (32): Wachter (2012) uses it as a major source in his chapter on medication errors in his textbook (56). It seems that these medication administration error types have not changed in the past twenty years (Bohand et al. 2008:11). Additionally, just as Safety experts point out that great differences exist between the Safety Cultures of different units, there were obvious differences in how providers spoke about error between the units I studied. That is, the hospital did not have a single unified error culture. This is significant because the goal of Just Culture is to create a standardized error culture.

The main difference between the units was the level of openness in discussing errors the participants themselves ‘committed.’ Several providers from Unit B were extremely open to discussing error situations that they had personally committed or witnessed, while clinicians from Unit C either shared categorical answers or stories they were apparently aware of. This is likely related to Unit B’s practices of peer feedback and role modeling (see Chapter 6) that create a sense of openness about error. Finally, the allied health providers included in this study orient to error very differently than nurses, likely mostly due to the more routinized nature of their practice and limited range of medications they work with. These kinds of professional differences are important because they precisely illustrate the complexity of instituting a uniform culture.
PERSONAL RESPONSIBILITY FOR ERROR AND THE UNPREDICTABILITY OF HEALTHCARE WORK

Just as Leape (1994) pointed out medicine’s tendency to blame, responsibility for errors is nearly always attributed (both in literature and by my respondents) to the provider who administered the medication improperly or administered the wrong medication. Nearly every provider named busyness or rushing as one of the most common causes of error. Failure on the part of the provider to verify (checking of identity of patient, drug, dosage etc.) was another of the most frequently named causes of error. However, as Leape (2000) observed, “errors are rarely due to carelessness” (97). As one supervisor explained:

I think just the business of our unit. Time and time again I’ll meet with staff and they’ll just say “gosh I was just so busy”. Or “gosh I just- was just trying to get to my next thing,” and they just rush through things and we really try to just encourage them to take a breath, take a- that whatever you’re rushing to, it can wait. It’s ok. There’s other people that can help you. There’s no reason why you have to it. Just take a minute, take a deep breath, make sure you’re doing things that you should be doing. Cause sometimes you just catch- make- skip steps so you can focus on the more critically ill patient,” said Dave, a young Unit B nurse who began his career at Mesa Hospital and had been there two and a half years at the time of the interview. As another nurse, Jill, succinctly stated on causes of error:

I think also just the nature of some of the unplanned time in nursing, when you can’t- the things that you can’t really account for or try to schedule out. When [patients] start to get in pain and- and I think just sometimes the multitasking and keeping everything going at once and actually still be focusing on that one thing you’re actually doing, but knowing all the twenty other things you have to be doing.
Errors are still thought of by frontline providers as things individual providers do, or don’t do, as every account related errors to actions or inactions made by providers responsible for their patients. The accounts of my respondents suggest that even if there are systems issues, these issues contribute to provider action or inaction and thus personal responsibility. Recall Wachter’s (2008) definition of medical error: when the proper actions are not taken or improper actions are taken that result in patient harm or heightened risk of patient harm (4). In my participant’s minds, actions are made by people, not systems (though they may occur within a system), and it is hard to see how one would not attribute individual responsibility for those actions or inactions and their consequences.

The following story is one of the most detailed error accounts provided to me during my study.

I’ve also had a situation there was a long chain of errors here, it was insulin and it was the wrong insulin given. It was actually done up in the [different unit] where the patient had been up there and came down to me and when I was looking at the insulin I saw regular insulin which you don’t give that subcu- at least we don’t do that here anymore that will go into insulin drips but it’s never used as an injection anymore, it’s used as something called Novolog and Humalog. So I called upstairs and I said there- did you send me down the right insulin and they said yes and I said I’m holding the long acting [?3:14] but I’m also holding a bottle of regular. Now have you guys been giving him this, they go yeah. I said we got a little problem this is the wrong insulin. So it should have been Novolog which is also a little bit confusing but- so that means that the wrong insulin was dispensed by the pharmacy. The wrong insulin had been given I think two or three occasions which requires double checking by nurses. Double verification. And when I got it I saw that it was wrong so the nurse was a mess, I said no harm done, he’s ok. So whole lot of difference but there is difference as far as regular what hits and how long it lasts I think compared with the rapid acting- so I recorded it. She came down and did a report on it but like I said fortunately no harm done. But again, it was a whole line of errors made first of all by the pharmacy dispensing the wrong med, and then multiple nurses double verifying the med and saying it was ok when it wasn’t the right insulin. (Emily)

Despite many systems issues evident in the story, it is ultimately framed as a single provider’s responsibility (she alone filed the incident report). It is evident that the nurse who accepted responsibility for the error felt extremely guilty (“was a mess”), despite not being the only person involved in the incident. Furthermore, the storyteller’s consolation of the nurse was based on the fact that the patient was not harmed rather than on the nurse’s level of responsibility for the error(s).
The nurse who told the story added that not only is her unit, Unit C, more accustomed to patients requiring insulin, but she has familial experience with diabetes. These factors may have made her more likely to notice that this particular series of errors had occurred. This error could have caused severe harm to the patient because different types of insulin work sooner after administration, and lower blood sugar more rapidly than other types, which can cause coma and shutdown of the cardiovascular system (American Diabetes Association, 2014; Spiller 1998:414).

**Personal Emotional Response to Error**

Many errors can be completely unnoticed by multiple providers. As Lucian Leape wrote in a 2004 editorial, “observation studies of nurses drawing up and administering medications, for example, find a high error rate (11%), yet the nurses themselves were aware of none of the observed errors” (1321). In the situation described in the previous section, the wrong type of insulin was administered even though the medication had been confirmed by multiple nurses “double checking.” It was discovered retrospectively, after the patient was transferred to the storytelling nurses’ unit. Only the patient’s assigned nurse came to talk with the participant who shared the story with me and was specifically “written up” (as having a report written about someone is called). Because the storyteller had discovered that the wrong insulin was being given and knew there had been no detrimental effect to the patient, she was likely only concerned with documenting the situation. However, the erring nurse was distressed because of the potential harm that could have come to the patient. This potential harm could very likely gone completely unnoticed.

When errors are noticed, providers feel very guilty, being what patient safety literature refers to as the “second victim” of medical error (Wu 2011 as cited in Wachter 2012). Feeling “horrible” in the aftermath of errors was mentioned by many interviewees in my study. While discussing the effects of the Just Culture, one nurse stated that: “I feel like no one has ever made a med error where they don’t feel like ‘I’m a horrible nurse, what’ll they do.’” After an error is made, erring providers feel guilty for harming (or potentially harming) their patients, and fear punishment from the organization. Although most nurses are well aware that the purpose of reporting is to document issues for correction and the prevention of repetition, this apparently does not change the thinking that errors are personal
failures. The administrative response to error begins with the filing of an incident report that has a single person’s (or those of several) name on it, which reinforces this perception.

**Differences in How Types of Providers Feel About Reporting Incidents and Near Misses**

The allied health providers that I interviewed nearly all reported that they had never used the safety reporting system. In order for them to feel compelled to file an error report, the majority of them reported that the patient would have to have been harmed. Instead of using the incident reporting system, these providers rely on peer interventions if they feel colleagues are practicing inappropriately. I discuss this practice in more detail in the following chapter.

Conversely, most nurses in both Units B and C regularly use the reporting system or are aware of colleagues that do, as some develop reputations amongst their peers for reporting zeal. The vast majority of both types of clinicians interviewed reported that a near miss means an error did not occur, as one nurse from Unit B reported thusly: “If I’m answering honestly, no I would not write a safety report for a near miss. And I think that that’s because the checks that were in place worked, and the medication administration error did not occur” (Jessica). Even among the nurses from Unit B, most of whom freely spoke of reporting themselves, only one reported that she might inform the charge nurse or colleague involved if she observed a near miss. The rest of the nurses, either did not think near misses were a reportable occurrence or stated they do not have enough time to report them.

**Perceptions of the Magnitude of Error and Error Response**

Most nurses reported that when medication errors occur, they have the potential to be very serious, depending on the specific medications, dosages, or route of delivery. A few reported that any medication administration error is a serious issue, regardless of variables. Intriguingly, responses were quite mixed as to the local seriousness of medication administration error at Mesa Hospital. Some felt that they could not address the question at the local level due to lack of knowledge on prevalence, and several reported that they do not occur often: “but honestly medication errors don’t really- they’re not a common thing that happens all the time. [Pause]. At least I’m not aware of” (Randall). Others reported that they
felt that the hospital does well at combating the problem, so do they not view it as a pressing issue. A few nurses from Unit B felt that the administration views medication errors as taboo. As one nurse stated that “med admin error, at least from the way our hospital views it, it’s like a five. That’s like one of the worst things you can do as a nurse” (Dave). One nurse each from Unit B and Unit C, respectively, reported that they do not find medication administration errors a serious problem at all because it is hard to make them, with one stating:

Me, personally, I don’t think it’s very serious, and I don’t mean that we take it lightly, I just mean that it’s difficult with all of the checks that we have in place, especially in the last two years or whatever EPIC has been here, it’s difficult to make an error. So I mean it happens, we are human, we make mistakes. But in-when I come to work making a medication error is not one of the things I’m worried about. (Jessica)

Indeed, provider views of the local seriousness of the problem of medication administration error are quite diverse, ranging from serious concern to minimal levels of concern.

Interestingly, in discussing the topic of medication administration, multiple nurses included the pharmacy in the examples of errors and near misses that they provided (e.g. insulin incident discussed above). For example, a few nurses from Unit C discussed how the medications from the pharmacy could be improperly stocked in the wrong patient’s bin, particularly if a patient’s room or bed assignment changes within the unit without the pharmacy being notified. In the 1995 adverse drug event study, the authors divided the medication process into four main stages: ordering, transcribing, dispensing, and administration (Bates et al. 1995:30). In the second edition of his patient safety textbook, Robert Wachter (2012) outlines the “life of the inpatient prescription” (for a hospital without an electronic system) with seven steps, adding that some organizations have named up to a hundred steps in the medication process (57). I do not know if mentioning the pharmacy was a means of avoiding implicating themselves or peers. In a few later interviews with nurses from Unit B, I specifically asked what medication administration meant to them. They indicated that medication administration could include the entire spectrum of events in the medication process. If unfamiliar with Safety literature, it is very likely that most nurses do not divide the medication process into the same objectifying steps that experts do. Nurses, pharmacists and physicians each see only portions of the entire medication process as defined
by Bates et al. (1995) (nurses administer, pharmacists dispense etc). They therefore have different perspectives.

Views on error response are more uniform, however. The nurses I interviewed from Unit C generally approve of the discussion of major errors at meetings, provided that the identities of involved staff are kept hidden. One nurse from Unit C described how she feels errors should be responded to:

I think the best way to respond to it is definitely to bring it to everyone’s attention and make it an opportunity, and the patient’s name obviously is omitted for HIPAA [federal regulations protecting privacy], and the nurse’s name just for privacy, but just bring it to everyone’s attention because we are humans and everybody makes errors, and so make it a learning opportunity for everyone. And then just make sure that the correct route for the patient is done at that time. So notifying the physician, calling pharmacy if there’s an adverse reaction…

(Tiffany)

After the patient is stabilized and necessary notifications are made, learning should and often is emphasized, according to the participants of my study.

**DISCUSSION**

The challenge of blame and culpability remains extremely significant to patient safety efforts. Although efforts may be made (by organizations or Safety experts) to diminish the idea that errors are someone’s fault, other factors (such as identifiers on an incident report) support workers in returning right back to the idea that errors are caused by individual actions.

The significance of any error or near miss to frontline providers appears to be strongly related to its potential for harm. Relatedly, near misses are not generally seen as reportable because they index errors that did not actually occur. It may be because non-events do not harm patients that providers do not generally notice them. Provider emotive responses to error may be rooted in harm, so it would be beneficial to study this possibility further.

For allied health staff, official reporting mechanisms are viewed simply as a way of informing administration of the transgressions of others. Partly due to this, they cannot use incident reporting as a means of preventing error repetition and do not seem to be encouraged
to either. However, allied health and nurses alike desire to give the best care possible, and thus learning is important to them.

In the following chapters, I will explore different forms the educational opportunity arising from errors can take. These differences depend very much upon the culture, or Safety Culture, of the units in question.
CHAPTER 6
ERROR AS A SOCIALIZED INDIVIDUAL LEARNING OPPORTUNITY

Safety literature strongly emphasizes the need for error to be recast as a learning opportunity. In this chapter, I explore how individual learning in the wake of an error is a very social experience. I will begin by discussing how providers view self-reporting. Next, I examine the role of peer feedback in comparison to administrative safety interventions. I have not found any significant discussion of peer feedback in my review of the patient safety literature. Finally, I analyze how role modeling peer feedback enables providers to take responsibility for their mistakes rather than be “written up” (reported) by colleagues. These practices create an openness around error, an openness that allows events to be cast as learning opportunities. Self-reporting also creates a line of administrative surveillance, as providers become accustomed to documenting themselves.

THE UTILITIES OF SELF-REPORTING FOR FRONTLINE PERSONNEL

Organizational error response generally begins with the filing of an incident report after doctors are informed and patients are stabilized. This brings the incident to another level of recognition: administrative. But in the unit, the immediate concerns of report filers are distinct from those of administrators, who use the reports for statistical tracking and policy needs. Report filers—mainly nurses—have a more direct day-to-day use for incident reports. They use them as personal reminders, and to avoid being cast as neglectful. Again, nurses see maintaining their professional reputation as vital, so incident reports provide both a self-reminder so the provider knows to perform well and also notify the organization that they are performing well.

When interviewed, several providers acknowledged that they “write themselves up” as a reminder to not do again whatever they did that caused the error. As one nurse from Unit A told me:
when I worked inpatient we used to do them all the time on ourselves, like if you hung the wrong fluid you just put it in, and it’s not a matter of—it’s more for your own learning and for reminding yourself [that] you really need to slow down and you need to watch what you’re doing so that you don’t make the mistake again. (Christine)

Documenting one’s mistake in the incident reporting system thus seems to become a ritual to prevent the error from occurring again. By taking ownership of one’s mistake one takes authority over and commits to make the changes in individual practice, such as slowing down and paying attention, that are deemed necessary after an error. Another nurse from Unit B affirmed that “it’s not a punitive thing. I need to pay more attention when I’m hanging fluids. I need to write myself up” (Jessica).

Personal reminders are not the only reason providers may choose to self-report, however.

According to policy, error reports must be filed after an error occurs, and self-reporting thus becomes a means of preservation in that it demonstrates adherence to this rule. Although “writing an occurrence report isn’t supposed to be punishing it’s supposed to be a learning- figuring how to fix the issue at hand,” a nurse from Unit C explained, “it’s safety and it’s covering your butt too. If you don’t write an incident report and they follow back on this and they find out that ultimately it’s you makin’ the error,” there will be major negative repercussions (Randall). An allied health provider, Adrian, likewise responded that the best response to a medication error is to document it. For Adrian this means in the hospital’s integrated electronic records and not in the incident reporting system: “stop it immediately and report it- chart it. Even if you made a mistake, chart it. Because say if you don’t chart it and the patient speaks up, that’s your job [gone].” Judging from his and other participant responses, allied health providers largely avoid using the incident reporting system. Again, they largely view official reporting as simply a way of informing the administration of the transgressions of others, and their leadership does not appear to encourage reporting for preventive purposes.

Incident reports are not always self-generated; in many cases they are written by another staff member (for instance a charge person when involved staff have too many patient care demands). Errors (except minor mistakes that are easily corrected and do not cause harm) must be reported, and in a timely manner. If an error is reported by patients, or
reported (much less discovered) too long after the fact, it may appear to administrators that
the provider (or multiple providers) attempted to hide an error. Serious sanctions can follow,
including probable dismissal.

**PEER VS. ADMINISTRATIVE SAFETY INTERVENTIONS**

Normally, error follow-up is performed by the immediate supervisor of the staff
member or members involved in an error situation. Using the “Just Culture” algorithm, after
investigating the event, the supervisor confers with the involved staff and shows what
category of error occurred. Supervisors are not the peers of frontline staff in a political sense,
given that they have the authority to decide the disciplinary repercussions those involved in
errors will face. According to one allied health supervisor, Gabriel, some staff use the
reporting system to inform management of perceived misbehavior, in order to have peers
reprimanded for interpersonal slights. Most reports of this nature arise from outside of the
allied health department. For example, a nurse may report that an allied health professional
was rude. Gabriel said he had recently seen an incident report for a spelling error. He
claimed these reports are petty and a waste of time. These reports are also a distraction from
the reports that do inform him if any of his staff need retraining.

But every allied health participant in my study said that they preferred to speak to
their departmental colleagues directly rather than file reports if they observed actions that
they felt put patients at risk for harm. For example, one said, “I would never go to
management and talk about another coworker unless I had already gone to the person first,
didn’t get a response, and then I would bring another person” (Chelsea). In addition to not
wanting to report colleagues to administration, peers said that by providing feedback to
colleagues on risky actions, clinicians are helping prevent repetition or future errors: “It’s
better to show the person than having… that person be written up and… even it might help
out the patient later. It might help out the person later [because they will be better prepared
for a similar situation in the future]” (Adrian). In this manner, peer feedback creates a social
learning experience that in most cases would never be officially documented by the
organization.

The two allied health supervisors who participated expressed wariness of filing
reports on their staff for minor incidents or near misses. Both said they felt closer to frontline
staff than upper management, and preferred approaching colleagues as peers rather than supervisors if they could. One, Bill, explained that while he uses the Just Culture algorithm now, he used to be more lenient in that he would handle most events informally with direct conversations rather than the formal meeting called for by Just Culture: “I’m in lower management, and I directly work with these people… and maybe I’m- I don’t wanna see them get in trouble for coming forward with something.” Allied health personnel are aware of the incident reporting system, but try quite hard to avoid using it. One expressed fear of reprisal despite awareness of the Just Culture (he knew about it from a flier in an elevator), while several others simply claimed that they have not needed to (either because they resolved any issue with direct communication or have not encountered an error to their knowledge). They do however, often respond to errors by informing their charge person or supervisor. Hospital administration is universally viewed by nurses and allied health alike as disconnected from the frontline, a topic I will return to in a later chapter. Supervisors recognize this, and actively attempt to engage staff as peers when doing incident follow when they can.

Peer feedback is a powerful way that frontline care providers practice safety. Especially for errors that participants described as minor (meaning those that have no negative effect on the patient and are unlikely to affect future patients) like missed or late medication times, nurses generally expressed a preference to inform colleagues, document changes in the charts, and adjust their activities accordingly without filing incident reports. One specified example of this was changing the medication delivery schedule solves the problem without wasting overstretched administrative resources by making the incident official. Even inexperienced nurses can provide immediate peer feedback that prevents errors. One Unit C nurse described a situation in which a new nurse prevented the delivery of Omegavan (a form of lipids delivered intravenously), which the administering nurse had mistaken for a formula delivered by gastric (stomach) tube:

[T]he nurse was double checking with another nurse and that second nurse was a newer hirer and she had recalled going through that practice in giving that medication with her preceptor. And she wasn’t sure if that was correct because she didn’t have a lot of experience but she felt like something was not right. So then she grabbed another nurse who was more experienced and had worked with this medication and then it was prevented. And then we—because [we] didn’t want it to happen again [we] brought it up in our monthly staff meeting, just as
like an FYI heads up—we try to bring it up—any sort of issues like that to prevent that error. (Tiffany)

No incident report was filed because no error technically occurred, but the event was socially documented through its presentation at the staff meeting, and likely documented in the meeting notes.

Among nurses, peer feedback and self-reporting often come in tandem, as many prefer to give their colleagues the opportunity to self-report rather than “write their colleagues up.” Consider the following description from Dave, a Unit B nurse, of how he was informed during a shift change that he had had an I.V. infiltrate (IV no longer in the vein but under skin):

[D]id you wanna write yourself up for it or should I write you up,” is how she presented it to me. I thought that was a great approach because now I know that—of course I wanna write myself up, it looks better if I write myself up then have somebody else do it cause then it least it shows I have some type of integrity, yeah, own my mistake. So I liked it when she presented it to me that way. And then since then I was like ok well if I ever catch somebody else doing a med error or any type of error I might just ask them if they wanna write themselves up, instead of doin’ it.

He appreciated that he was given the opportunity to file his own report, and thus offers the same opportunity to his colleagues when he discovers their errors.

**HOW ROLE MODELING ENSURES THE CONTINUATION OF SAFE PRACTICES**

The above quote demonstrates how role modeling helps ensure that self-reporting, and encouraging peers to self-report, becomes a regular way that safety is practiced. The moral imperative to self-report is quite evident to clinicians when they are given peer feedback. As Dave elaborated: “I’d feel bad if I told her I would do it and then I didn’t. So I feel like giving the other per- another person an opportunity to write themselves up instead of just goin’ ahead and doin’ it, like ‘hey I’m gonna send you to management’s office,’ it just seems like a better way to do it, cause now at least you know it’s comin’, you know?”

Framed in this way, writing a self-report is a moral obligation rather than simply an administrative one, as well as a social one to the peer who provided the option. As another nurse explained succinctly “I think that a peer has more of an impact on accountability” than managerial feedback does. Managerial feedback often occurs weeks after an event, and she
implied that at least part of the impact of peer feedback is its immediacy. Role modeling thus enables the spread of these practices of peer feedback and regular self-reporting.

Even narratives about minor events that are shared can shape the safety practices of peers. The following excerpt describes how Dave witnessed an experienced colleague publicly announce a timing error in the early years of his tenure at Mesa Hospital:

   Well this nurse that actually gave the medication too soon, she happened to be a really experienced nurse, so she was very honorable about it and she just upright said “ok, well I’m gonna file a safety report against this.” She basically wrote herself up. And she did it like it was nothing, like I mean obviously you feel bad because it’s kinda not what you’re- it means you messed up, but at the same time she just did it, cause she wasn’t really afraid of anything.

Role modeled self-reporting can help alleviate the anxiety young nurses have about error follow-up with managers and ingrain the practice of self-reporting.

In addition to private, one-to-one role modeling of the type described above, public role modeling in the wake of an error is another important influence on frontline safety practice, especially for newer nurses. A Unit B nurse, Sherry, shared a narrative of an event years ago where a nurse had administered an overdose of insulin by using the wrong syringe. In the aftermath of the event, the nurse “took the high road,” by discussing the incident at a team meeting as a refresher on insulin dosage. Not only were unit staff educated on insulin dosage, but also on how error could be a unit wide learning experience. Sherry framed the erring nurse’s decision to share the experience in moral terms, “she took the high road and kinda educated all of us on it.” She cast it as a good decision— something that others could benefit from.

**DISCUSSION**

A clinician’s openness to discussing error is almost certainly related to how their colleagues speak of and understand error. This is evident in the content of their narratives, as well as their willingness to share them with an outsider anthropologist. Nearly every nurse from Unit B had a narrative to share, while nurse responses from Unit C and allied health responses were more mixed between categorical and narrative examples. As shown in this chapter and throughout, error experiences and unit specific narrative traditions shape clinical practice in complex and multifaceted ways.
Medical errors and near misses are social experiences. Peer feedback is an important way safety incidents are made social experiences.

As I mentioned in my review of safety literature, many prominent experts in the field rely on moral appeals to support their statistical arguments. Through peer feedback, frontline staff create moral obligations to and with one another to provide safe care and to take responsibility when they fail to do so. By role modeling, either publicly or one on one, practices like peer feedback can be spread by clinical staff and shape how providers perceive and act in relation to errors and error response. In this manner (among others), the meaning of error to providers is shaped and reshaped through unit practice.

An issue that arises from the encouragement of error reporting is the question of organizational surveillance. In a reply to a letter to the editor concerning blame free versus accountable philosophies in the New England Journal of Medicine, Wachter and Provonost (2010) write that while peer interventions are acceptable for some situations:

it is human nature for colleagues to avoid “ratting out” each other, particularly when there are penalties at hand. The solution is not to abandon accountability, but rather to develop stronger auditing strategies with the use of methods such as video surveillance, computerized triggers, and unannounced, secret monitoring of compliance by hospital personnel. Clearly, we have much to learn here, and we agree that we must be careful to preserve the collegial exchange and openness that are so essential to organizational learning. (275-276)

Thus, patient safety becomes a matter of organizational policing. Given my respondents overall antagonistic view of the administration at Mesa Hospital, it is hard to see how ‘collegial exchange and openness’ could be maintained under increased policing. In Chapter 8, I further discuss the problem of organizational secrecy.

In one of the letters Wachter and Provonost (2010) were responding to, Peled (2010) who argues that “a very clear definition of what is truly a patient-safety practice, scientific criteria, and certainty of evidence are needed to mandate a clinical practice. If not, we will continue to violate the ancient creed of ‘do not harm’ in misguided safety efforts” (as cited in Wachter and Provonost 2010:275). Thus he raises the question of what is and is not patient safety. He calls for greater policing of the patient safety discipline itself, relying again on moral appeals.
CHAPTER 7

ERROR AS AN ORGANIZATIONAL LEARNING OPPORTUNITY

Nursing staff are well aware of the administrative reasons for reporting errors. Sherry, a nurse from Unit B described safety reports as “tool that can help correct things that need to be corrected or, bring to light things that need to be.” Some of these administrative reasons are tied to personal reasons for reporting, most importantly the prevention of repetition. When I asked a nurse from Unit C, Emily, whether she was satisfied with the way the organization responded to errors, she responded “I think the system we have now is good as far as the occurrence reports. I think the hospital’s doing the right thing, they’re trying to track, trying to see if there’s patterns.” Error tracking at the hospital level involves centralizing data and paying attention to frequency. This is also related to the oft stated goal of preventing the repetition of errors, since if an error is repeated it is like to occur with multiple patients. In the previous chapter, I discussed a near miss where Omegavan, IV delivered lipids, was almost delivered by gastric tube. As the nurse describing the event stated, “because didn’t want it to happen again brought it up in our monthly staff meeting, just as like an FYI heads up- we try to bring it up- any sort of issues like that to prevent that error.” In this chapter I will examine the administrative significance of error reporting. I also discuss the relationship between incident reporting and attempt to standardize clinical practices.

DOCUMENTING ERRORS MAKES THE ORGANIZATION AWARE AND ENABLES CHANGE

Errors are also reported to officially document them, and therefore justify policy or practice changes or resource allocation. According to Jessica, a nurse from Unit B, the first thing that must be done after an error is to report it, “so that if- changes need to be made, they’re not gonna be made if we don’t write a safety report because they don’t know that it’s a problem.” A nurse from Unit A, Cheryl, likewise stated that a nonpunitive response to error
“encourages people to report errors. If they know that disciplinary action isn’t going to be coming down on their head immediately then it’s- it’s necessary to document errors so that the system can be tweaked or fixed or counseled, I think that that’s really important.”

Systems issues cannot be altered or repaired unless administration is aware that issues exist.

There are also administrative reasons to document errors for the benefit of the department. Another nurse from Unit B, Kelly, told me a story of an error she was involved in years ago, long before Just Culture was even a possibility. After the incident, she sat down with an educator. She did not recall many of the specifics, but claimed that the sit-down was for staffing purposes. In this respect, documenting errors is a department good since it can be used as justification for the allocation of resources to hire more staff or have more staff at work during a given shift. As another nurse from Unit B, Lisa, further explained, delays from the pharmacy due to short-staffing can cause delays in the delivery of medications to patients, “so we’ve been encouraged to file safety reports if there’s any problems in the hospital so that Quality Management can see where the breakdown is, and it could actually help get more staff.” A Unit B supervisor confirmed that “people have to think of it also as kind of a statistics thing that provides the numbers that we can provide so we can make actions based on it” (Kelly). When a report is filed, responsibility for investigating and responding to the event falls to those with direct authority over those involved in an event, their direct supervisors. One allied health supervisor, Bill, explained that reports often document areas staff from other departments think require improvement, such as through education and training: “I know our Cardiology Department gets us a good share of safety reports. If someone does a EKG and it’s not to their standards or, incorrect they’ll file a safety report. We’ll get stacks of ‘em and it’ll just go to our mailbox and we have to just follow up on it.” In this manner, error reports function as an official mechanism of registering dissatisfaction with how staff from other departments perform. Nurses likewise shared of a frequent need to register issues with the Pharmacy, most often through telephone calls to verbally inform them of mistakes such as filling the wrong medication so as to rectify situations before they require official documentation. While speaking with the Unit B supervisor above, I asked if there was any kind of political competition between departments to file reports in order to procure resources. She responded that interdepartmental error reports are generally taken on offensively by the staff member (or members) the report is
filed on, and though she admitted sometimes reports are indeed personal, “most of the time it’s because they want to improve a process, or improve patient care, or improve whatever” and specifically not a personal attack (Kelly). Thus, interdepartmental error reports can compartmentalize and create distance between different hospital units, even if they are intended to improve quality of care.

There are times when error reports are routed to the wrong department, however. A supervisor from Unit B explained her approach to error report follow-up:

Well I still go in to see the details cause obviously I don’t know unless a staff member comes to me and says oh this is what I did and there’s a safety report coming. I won’t know that necessarily that something’s coming but, you know it’s usually me going through the safety reports, tryin’ to figure out in the chart or in the actual safety report who I need to talk to and to find out what happened. And it’s very interesting because a lot of times when I go into safety reports, it won’t even- it doesn’t even have to do with my staff, but it’ll be sent to me. Or it won’t have anything to do with- it’s just interesting how the system works- the safety reporting system. I just feel like a lot of times I’ll go in and I’ll look in the chart and I’ll find out more details, and obviously it’s based on whoever put in the- the details in the safety report, but I’ll find out more details and know that it has nothing to do with our unit, it should be somebody else but it was sent to me, as my department and I need to follow up on it. And like that’s a waste of my time, spending the fifteen minutes I take to go through a chart to realize that oh it actually needed to be sent to this particular person for follow up in a total different department. (Kelly)

When I asked how the reports are rerouted incorrectly, she responded that:

It’s usually like the kid will eventually have landed on our unit, but the error actually occurred in another department. Or it will be a nurse that floated over to us from another department. I have no authority over that nurse, so if they looked at the nurse and saw what unit they worked in, they should have sent it to that leader. (Kelly)

In other words, the error occurred elsewhere in the hospital at an earlier time before the patient was settled into the unit the report ended up being referred to.

**STANDARDIZATION FOR SAFER PRACTICE**

Another major push by patient safety proponents has been for enhanced standardization of practices and procedures. When I asked allied health staff at Mesa Hospital about handoffs and transitions, most complained of the variation in quality between
different colleagues when giving shift change reports. As one of these staff members explained:

And sometimes if you get a report that’s not that great and you go back and fact check it yourself and sometimes there’s things that are either omitted and or things that have changed recently. So yeah sometimes that would be nice. Since they implemented EPIC, we used to have a pretty detailed shift report and now our shift report is a little- little less detailed than it used to be because they haven’t given us any real clear cut way of making a good shift report to go off of.

(Wilson)

As Bill, the allied health supervisor, explained, the hospital administration has been aware of the handoff issue for a while, but as of yet has not provided a solution. However, a third allied health provider suggested that someone was currently developing a standardized form within the computer system. A full report without extraneous details, after all, could prevent errors. However, since it is reportedly a common practice for allied health staff is to check the computer system for changes in physician orders, little information is probably actually missed due to report variation.

The Just Culture Algorithm is theoretically intended to standardize error response throughout the organization in a manner that is not overly punitive. However, in practice it may not necessarily do so. Bill explained that the introduction of the Just Culture, in his analysis, has made him more punitive. He views his staff as peers, and dislikes being forced to penalize them: “I directly work with these people… and maybe I’m- I don’t wanna see them get in trouble for coming forward with something.” He further explained that the Just Culture is not something any of his staff would have any need to be aware of unless they were “in trouble.” Mentioning he had no prior example from his supervisors before assuming the position, “if you’re in need of that Just Culture, if you don’t get in trouble I don’t know that it should be force fed to you. If you’re holding yourself accountable and doing all that, you don’t need it.” Thus, for the two allied health leaders at Mesa Hospital who participated, the Just Culture is a tool for managing staff who failed to hold themselves accountable.

**DISCUSSION**

Error reports are an important way staff notify hospital administration of issues that need to be addressed. They are also an important temporary connection between
disconnected sections of the hospital organization (to be discussed further in the following chapter). Interdepartmental error reports seem to be viewed more negatively than internal ones, as they are seen as complaints about practice. Indeed reports that provide evidence of the need for reeducation such as the EKG example discussed above can be judgmental in addition to being documentary.

While the Just Culture is intended to function as a tool for standardization, those responsible for using it can come to different conclusions about when and how to apply it, and may not use it for situations that they do not view as errors. Furthermore, they may not all realize the intended ‘cultural’ aspects of the algorithm to the same level. Since the Just Culture is merely a disciplinary tool for allied health supervisors at Mesa Hospital, it does not function in the same way that it might in departments that encourage reporting for prevention.
CHAPTER 8

PARTIAL STORIES AS RUMORS, SECRECY, AND TRANSIENT ORGANIZATIONAL CONNECTIONS

This chapter explores three different accounts of a major incident to show how error stories are partial stories. Then I elaborate on the effects of the spread of partial stories. Following this, I discuss how the political decision by administration not to publicize information after incidents occur can be detrimental to its relationship with staff. I conclude with discussion of the tentative and transient ties that define the hospital.

The Case of the Nebulized Insulin

One of the most detailed and commonly repeated error stories I heard during my research was told independently three times by allied health professionals. None of the clinicians who shared the story were involved in the event. The following is a summary of what the three accounts agree upon:

[A patient] with a chronic illness was undergoing treatment with an allied health provider during a long hospital stay. The staff member somehow delivered intravenous (IV) insulin through a nebulizer, a device that delivers inhaled medications. The insulin was allegedly packaged in a similarly shaped, but much larger, vial than the medicine that was supposed to be administered. Both the insulin and intended medication were stored in the patient’s assigned bin in the medication room of the unit. The patient knew how his medicine was supposed to taste, and immediately reacted to the difference, revealing the error. The provider quickly turned off the nebulizer.

What is particularly interesting about this story is how widely familiar it seemed to be to hospital staff that were not involved in the incident. It is also the only narrative regarding error that any of the allied health staff I interviewed provided me. It is one story that, upon its spread through the department, took on different forms.

According to the first account, the patient was extremely vocal in announcing the erring clinician’s mistake. A second storyteller happened to know the patient involved. His story recounts being called into the patient’s room and being candidly asked him in: “eh, guess what she just did?” (Adrian). A third clinician, also familiar with the patient claimed
the patient did not seem concerned and joked with him about the event shortly after the incident. All three tellers of the story believe the event should never have occurred. The example of this story, in its variations, shows that all stories are partial stories.

Consider the following excerpts, which reveal different explanations for how the insulin ended up being nebulized. Two providers named different medications ordered for the patient that the provider intended to give. One provider was told in more detail about the incident by the patient upon being assigned to him on a later shift. In the interview, they named tobramycin, commonly referred to as toby, as the intended medication:

We give antibiotics, nebulized antibiotics to certain patients. So there’s a few that we do, tobramycin and one is- I can’t remember the name. And it was—it’s something where we gotta powdered— we gotta dilute it. We gotta dilute it with normal saline and we then nebulize it. Comes in little glass vials. Yeah like a vial, glass. Comes from the pharmacy. Draw it up and then- no actually we inject normal saline into the vial and dissolve it, then we draw it out into the nebulizer. So what happened was this particular person, they grabbed an insulin vial, and gave insulin nebulized. And that was a big deal and you know. The outcome was nothing, I mean they caught it because the patient… recognize[d]— this isn’t the medicine. (Joe)

Another participant named a different medication, Mucomyst, as the intended medicine, and the third participant’s account seems to corroborate this:

That was— that’s the worst that I’ve heard. I mean— and you really gotta pay attention to what you’re nebulizing. I mean— I don’t know how you were able to confuse it with any other medication, but- because other medication that’s a big distinctive smell to it. So when you know you’re drawing up that medicine- just by the smell you be like “wait a minute, why doesn’t it smell.” Because that really— I mean it smells like rotten eggs- like stink bomb. (Adrian)

While all agreed it was an improbable event to have occurred, the storytellers seemed to agree that in a rush it is always possible to pull the wrong medication from the patient’s bin. According to the first participant, hearing about the incident “kinda woke me up to really realizing I should look at the vial cause some of them are similar looking. There’s some bigger, some smaller. Just kinda alerted me to be extra careful” (Gabriel). Exhaustion and patient load can increase the risk, as another participants confirmed that “sometimes we’re in a rush we just grab the anything out the patient’s cartridge” (Joe).

Just as each person retelling the story had a different perspective on how the event occurred, each had a different orientation to the fallout. Two of the three clinicians who told
the story stated that they became aware of the incident the very night it occurred, while the one did not provide a time frame. After stumbling in at the aftermath of the incident, the first reaction of one of the participants was to leave the scene, as he states “so when we heard, we didn’t wanna be a part of it because now we know, but we didn’t- they ended up writing an incident report, the nurse. So we didn’t have to write no incident report because it was already being written up” (Adrian).

His awareness of the incident could have led to suspicion on the part of administration that he was involved in the event, hence his initial apprehension. If the organization had needed to investigate the incident, the storyteller may have been called to act as a witness to the event, which he did not actually witness, having only heard his colleague’s confession. The problem, he explained, was that “I didn’t see her draw up the medicine, so it’s not something I’m gonna say ‘yeah, I saw her nebulize insulin.’ Because we weren’t there when she drew it up or when she did it. But she admitted to it,” so he was relieved (Adrian). His account reveals fear of managerial scrutiny, as he did not want to the administration to know he had any awareness of the error.

Another provider elaborated that the nebulized insulin event led to an investigation that uncovered a pattern of inexcusable errors made by the allied health provider who nebulized the insulin. The result was that person’s termination. Knowledge of the incident is apparently widespread; one of providers who told me of the event said he was sure I had heard the story plenty of times, and another referenced the surprised reactions of departmental colleagues upon hearing that someone had nebulized I.V. insulin.

Word of major incidents spreads far and wide in a very short amount of time. With each variation of the story, the significance is altered. For the first storyteller, the story is serves as a reminder to confirm all medications and is significant due to the firing of the staff member. Another story teller emphasized how important it is for patients or the families of patients to be familiar with their care. After all, it was the patient who caught the error in this situation, and he was unharmed because he knew what he was supposed to receive.
ORGANIZATIONAL SECRECY, SAVING FACE, AND TRANSIENT TIES

While stories like this spread very quickly, it can take a long time (over a month was a common time frame mentioned) for administration to respond to the events. Depending on the scale of the incident (major events and responses would be carefully publicized), the organization tends to be reticent. According to one supervisor, feedback to uninvolved staff after error events is purposefully limited because “rumors spread and things start happening negatively when you just make broad spectrum accusations” (Bill). There are lines drawn between organizational openness and protecting the confidentiality of staff members. Thus, organizational response to error involves attempts to limit what is made public knowledge.

Similarly, a nurse from Unit C used the phrase “big brother” to describe her perception of the organization’s handling of a recent situation. In this situation, a colleague was reprimanded for something that many department staff doubt occurred. Commenting on the negative rumors that had spread since the event, she criticized the organization’s level of secrecy:

I know that there’s a timeline in protection of their privacy but I think if they keep it so hush hush that then we start hearing this. People talking and so we really don’t know what the whole situation was. And sometimes I wish that they could explain to us situations that things that happened to avoid it. (Emily)

Partial and at times contradictory accounts will still be spread, try as the management may to limit the spread of information. Organizational secrecy in can create a sense of mistrust and suspicion between staff and management. Rumors do not only affect the political relationship between clinical staff and management. They also play an important role in staff relations with one another.

One young nurse from Unit C mentioned a particular concern that some nurses are quick to judge an erring nurse as incompetent. A nurse from Unit B similarly explained the challenges of floating (working in another unit that is short-staffed) to other units. Linking floating to the stigma associated with erring before the introduction of Just Culture in her unit, she said “if you floated to another unit and you messed up- then you are fresh meat” (Amanda). Floating can be a vulnerable situation for nurses, and erring can lead to severe ridicule from staff who are only distant colleagues. Error carries stigma, and staff from other units may be less forgiving than regular colleagues. Floating is also an important transient tie
created between units and through which rumors and partial accounts can spread beyond a single unit.

Many nurses have no idea whatsoever of the goings on beyond their units, with the exceptions of charge nurse meetings and occasional floating. When I asked a nurse from Unit B whether the organization could do anything to increase the frequency of error reporting, she mentioned a need to focus more on publicizing improvement and not to point out “weaknesses and faults” (Sherry). When I asked her to elaborate, she explained: “I don’t know if it’s rumors or if it’s true, it’s just we hear when people float here or when we float other places,” (Sherry) or staff will hear stories from friends who work in other units. As far as frontline staff are concerned, floating may be the only actual connection, however temporary, between direct patient care units of the hospital organization. When I asked a nurse from Unit B about the best way to respond to errors, he began his response by downplaying his awareness of the hospital beyond his department: “I’ve never worked on the other units I’ve just heard stories but who knows, could be just stories made up, I don’t know, just the management’s worse” (Dave). The stories that spread throughout the hospital can and do shape how staff think and feel about the rest of the hospital. They may also contribute to the compartmentalization of units within the organization.

**Physicians Are Transients**

Although I can only provide brief discussion, an important point for further inquiry is that doctors spend very little time in the physical space of the clinical unit. During one of my shadowing sessions in Unit B, I took note of a posting at a workstation behind the secondary desk positioned in the front entry area of the unit. The posting was an appeal to physicians to come to the unit in the mornings and brief the nurses on each patient, promising that doing morning rounds would reduce the number of pages they would receive. In an interview I conducted shortly afterwards, a nurse was explaining that with the introduction of EPIC (a popular integrated electronic record keeping system) responsibility over the medication reconciliation process had shifted away from nurses toward doctors. The unit had recently been moved to a new floor in a new building, and due to the change in physical work environment, the “face to face communication’s gone. So you have to like actively seek it out, so we’ve tried to get our docs to come round with us. We’ll try to have that conversation
with them cause a lot of times the family knows more than the nurses do now. Because the
docs come in, they see the patients, they write the orders and then leave,” assuming the nurse
will see (Kelly). While electronic systems like EPIC help integrate the hospital by making
record keeping more efficient, they also contribute to the fragmentation of the hospital by
changing the dynamics of clinician interaction.

**DISCUSSION**

Patient safety literature pushes strongly for openness and transparency about errors. Try as they may to control what information is publicized, hospital administration cannot stop staff from sharing what they know with one another. Indeed, clinicians are aware of more than the organization desires. In some situations, however, staff can be frustrated by organizational silence concerning situations involving their colleagues. This frustration can create a sense of mistrust between frontline staff and the organization. In the absence of an official statement on an incident, staff will fill in the blanks. In many cases, the ‘factuality’ of the stories that spread between staff is irrelevant, especially when there is no other evidence to consider. Likewise, the significance of any event will vary between different care providers, depending on many factors including how they learned of the incident and personal background.

The departments at Mesa Hospital are quite fragmented, with staff from different units often having little or nothing to do with one another. Floating staff and error reports (discussed in the previous chapter) become major temporary ties that link hospital activities. The relationships between individual staff members as well as between clinical departments are fragile and inconstant. Beyond their own unit, most clinician’s views and understandings of other departments and hospital administration appear to be significantly shaped by rumors.
CHAPTER 9

WHAT IS JUST CULTURE AT MESA HOSPITAL:
DISCUSSION OF INTERVIEW RESPONSES

As a component of the project, I intentionally included three interview questions that asked participating staff to evaluate their hospital’s Just Culture initiative. This would contribute to my own effort to add value to this thesis by providing an evaluatory report to the hospital upon its completion (see Appendix C). Responses varied, particularly because a large number of participants (especially those working night shift) claimed to be unfamiliar with the Just Culture or familiar in name only. The nurses from Unit B that participated nearly all reported that they had noticed no change in error management because their unit had always been nonpunitive about error:

I think if [name]- if it’s going by what the rules of like almost what we’re goin’ by in our unit I feel like it would make help the whole hospital, basically. So it probably would reduce the errors, because you feel more likely- if I make a med error, let’s if somebody were to make a med error, it’s almost a honor system, like do I write myself up or do I not. I feel like if you’re makin’ it seem like more open and less punitive I feel like more people would write themselves up. And I feel like that’s what this is tryin’ to accomplish. (Dave)

One night shift nurse I interviewed from Unit C claimed that she did not believe the Just Culture had made any impact at all on error response. When I pressed the subject, she elaborated “I guess to say none is a little drastic, I do think that we’ve taken opportunities to discuss situations, but I think that people do get penalized when situations do occur.”

Because only one day shift nurse from Unit C participated, it is difficult to clearly say how well the staff are aware of the initiative. To be sure, nurses have a lot to do on the floor and remembering all of the hospital’s current programs would certainly be low on their priority list when fronted with more pressing matters of patients requiring care.
THE MEANING OF “JUST CULTURE” TO ALLIED HEALTH STAFF

For the allied health staff that participated (who again were predominately night shift staff), the term “Just Culture” only has positive meaning to supervisors, who are responsible for handling reports involving their staff. For the two that participated, the Just Culture is simply a very useful instrument: one stated “I feel like the Just Culture and all that is a really good tool to use in working” (Bill). The other likewise responded that:

it just guides you and gives you a tool to actually respond to it because before Just Culture there was no continuity on how we would respond to something. Some leaders wouldn’t respond at all or some would overly respond and now there’s kind of a guideline how to respond to it. And people can use that guideline to respond to it. (Gabriel)

For the latter respondent, the Just Culture is an effective instrument for standardizing organizational error response. Because many rank and file allied health provider’s claim unawareness of the “Just Culture”, it is difficult to say that the policy has any effect at all on their practice. However, one of the participating supervisors claimed that there is no reason for frontline staff to know about “Just Culture” as long as they hold themselves accountable, as the only way they would learn about the algorithm would be during an error investigation. One who said he was aware of the Just Culture claimed he did not believe it, and felt too new and inexperienced to feel safe reporting anything to administration for fear of termination. However, he also explicitly stated he has no problem asking fellow allied health providers for help if he has any doubts concerning his care delivery. Another allied health staff member wasn’t aware of the initiative but conversely stated said that he did not believe “they’ll come down at you yelling at you because what’s it called- that’s not their character. They’re really easy going, they’re very easy to talk to” (Adrian). Although unfamiliar with the Just Culture on paper, he was not afraid that his direct supervisors would be unnecessarily punitive if someone came to them reporting an error. He based this knowledge his personal history with them as a colleague rather than awareness of policy.

NURSE SAFETY PRACTICES

For the nurses of Unit B, it is evident that they not only practice the Just Culture, but creatively instill anew its principles by encourage practices like self-reporting in new staff. In this sense, safety culture is constant rather than enacted at static points in time via policy
enforcement. The nurses from this unit, both day and night shift, were also seemingly far more enthusiastic about participating in my project and sharing their views, and it seemed much easier to arrange appointments to speak with them than nurses from Unit C.

One of my interview questions asked what staff would do to change the way their organization attempts to control error. The most frequent suggestion from staff was decreased turnaround time on error follow-up (many claimed to have been questioned about incidents that occurred over a month before). Three of the five nursing staff participants from Unit C used my interview to complain about the hospital’s slow pace at acquiring better equipment, particularly wireless barcode scanners. A nurse from Unit B echoed the sentiment in claiming the organization continues to ask nurses to do “more with less” support. Another Unit B nurse cogently argued for desegmentation of hospital work:

I think if they can improve the buy in from the nurses. And whether that means- I don’t know the perfect solution for that but, somehow getting more nurses, Respiratory therapists, anyone who’s involved anywhere along in the process and helping break down those barriers so we understand how pharmacy works better, makes us not misunderstand. I feel like it helps with the communication, and I think you had asked about handoffs and stuffs and transitions in care, I think the more you understand someone else’s job, the more that it facilitates those kind of handoffs and the less likelihood there is for miscommunication or error to happen. I don’t know if that would be- but getting helping those- the people that are actually involved in the process better connected and better involved. (Jill)

One nurse further suggested adding what she termed ‘social acuity’ to the calculation used for determining nurse staffing ratios. At the time of our interview, the hospital did not include any sort of social issues (such as family members exhibiting bizarre behavior) in the algorithm that determined each nurse’s daily or nightly patient assignment. Such issues of course can take time and energy away from nurses who would be expected to be spending allocated care time with a different patient. An additional night shift nurse from Unit C claimed that his department management was not effective at communicating in general, and does not respond to staff suggestions for improvement: “it just seems like it just fades away.”

**STAFF SUGGESTIONS FOR INCREASED REPORTING**

I also asked staff what could be done to encourage further error reporting. Multiple staff complained that the amount of time it takes to fill out an error report on top of other end
of shift duties (most are filled out after all other administrative paperwork) is a major obstacle. As a Unit B nurse responded:

    I think a lot of it doesn’t get reported because people don’t have time and they stay late to chart, and it’s one more thing you have to fill out. And I think it’s just, people don’t care because it’s the last thing they wanna do when they’re exhausted at the end of a shift and they’ve already stayed over. (Jill)

Most allied health staff did not believe error reporting could be increased, with only one suggesting the possibility of capturing near more near miss data. One supervisor and another staff member respectively suggested removing the repercussions altogether, however, the supervisor tracked back saying he did not believe this should actually be done. The other supervisor responded with some surprise that he receives many, with a steadily increasing number since the introduction of Just Culture. He also added that the number of patients his staff see, which varies seasonally, strongly affects how many reports are filed. It should also be noted that most of the reports seen and reviewed by the allied health supervisors are submitted by other departments and not immediate colleagues. Interestingly, none of the supervisors who participated said they would change anything about how the organization attempts to control errors when directly asked. When I asked a Unit B nursing supervisor about the process for error follow up, however, she explained that she wished she could meet with staff within a month to process errors so the event would be fresh in the minds of those involved, but usually cannot.

A small number of nurses from both Unit B and Unit C felt that all errors were reported sufficiently, with a few from Unit B suggesting that near misses were the only possible means of increase. Multiple nurses suggested continued emphasis on how error reporting is about systems improvement and not outing the faults of individuals. Maintaining an attitude of nonpunitiveness was also highlighted as necessary by several Unit B nurses: One from Unit C and two from Unit B said more time to complete the reports would help. Suggestions for creating the time necessary to complete more reports included simplifying the form, decreasing the acuity of the patients, and increased staffing. Three nurses from Unit C felt that nothing at all could be done either because all observed errors were reported as they were supposed to or nurses simply “will or won’t” report (Veronica). Although the nurses of Unit B are trained to value self-reporting, it is still a low priority when faced with the demands of patient care. Attitudes toward error reporting are less organized for Unit C,
possible because they do not appear to have anything resembling Unit B’s ritualized practice aimed at inculcating a feeling of personal obligation for self-reporting.

**THE MEANING OF “NONPUNITIVE ENVIRONMENT” TO MESA HOSPITAL STAFF**

My final evaluative question asked staff what a “nonpunitive environment” meant to them. Several nurses from Unit C felt that they could not answer the question because it felt loaded. Two either hinted or directly stated that they felt they worked in an environment that was overly disciplinary, with one using the phrase “big brother” and another expressing extreme dismay at the circumstances of the dismissal of a long time unit secretary. While admitting that where errors are concerned the hospital is nonpunitive, he said: “There’s a fine line of what punitive and nonpunitive here is. It’s more situational than set guidelines. There’s no set guidelines in this hospital” (Randall). Interestingly, this was the same nurse who above felt that the ideas for improvement that the Professional Practice Committee he was formerly on gave to administration fell upon deaf ears. Another nurse participant from Unit B was similarly a former representative for the hospital’s union. While she claimed her Unit was entirely nonpunitive, she too expressed great dissatisfaction with the overall hospital administration’s policies and attitudes toward workplace discipline. She accused the hospital of paying “lip service” to Just Culture:

> I don’t feel that the hospital believes and supports the Just Culture initiative. They say it. They print it. They preach it to us. But when I sit in those meetings and we’re going over the algorithm, they just want it to be on the other side. They don’t want it to be a Just Culture thing where things need to change. (Jessica)

The attitudes expressed by these two nurses may be related to the fact that they were both in positions that posed challenges to the authority of the administration. The nurse from Unit B continued:

> They don’t want it to be in the Just Culture side. They don’t want it to be something that needs to be changed, or- I don’t know what I’m trying to say- They don’t- They’re resistant for it to be the way things are. They want it to be more punitive, somebody made a mistake and somebody needs to get in trouble. (Jessica)
Thus, to this nurse the hospital creates fictional problems within staff members it views as expendable rather than attempting to find actual systemic problems in processes. She contrasted this attitude with that of her Unit managers:

I have sat in where nurses on this unit have been- one in particular she was actually let go- well she resigned because she was going to be let go- because she just could not pay attention to the orders. Like this was when they were all written, and she- every night as night nurses we are required to go over those charts and make sure all of the orders were on the MAR. Like that was part-before EPIC. She just would miss whole pages, or miss orders and multiple times [manager] is like “what can we do? How can we help you? We need to slow it down.” So we’d give her the easier patients. We’d give her- the appys [appendectomies] and the elbows, and she just could not pay attention to the detail. But [manager] wanted it to be- us. Like we’re doing something wrong if she keeps making the same mistake. Like what can we change, what can we make better or easier for her, so that she’s not missing orders. She really tried. We sat in three different meetings before we let her go. (Jessica)

While the hospital (specifically Human Resources), attempts to eliminate problems in the form of individual staff members, the Unit B manager makes every effort to find a systemic problem rather than blame an individual. The staff member’s patient load was reduced to a minimum, and the colleagues were actively involved in trying to find a way to prevent that nurse from being terminated.

Most nurses were not nearly as dissatisfied as the two above. Many emphasized the importance of feeling safe openly talking to colleagues or supervisors. During some interviews, I asked participants if they felt their work environment should be entirely nonpunitive or accountable. Nearly all who were asked reported they preferred an accountable environment rather than an entirely nonpunitive one, and the few who pondered the possibility of no blame quickly backtracked. Several even suggested the possibility that without blame there is a chance of someone taking advantage of the lack of repercussions.

As one allied health provider suggested:

I think a good healthy fear of repercussions is good to keep people in line. That’s what we have cops for. That’s what we have red light cameras for. That’s what we have rules and regulations for. There are no rules and regulations people would just be running wild. (Wilson)

While talking with a Unit B nurse about a debate in safety literature between accountable and no blame systems, she responded that as much as the organization may want to remove fear: “unfortunately those are- from past issues and past situations that we’ve heard of or seen and
it takes a while for that trust to get built back up” (Amanda). And it is clear that Mesa Hospital has a lot of work to do to remove fear.

Above, I mentioned a nurse’s suggestion for improved communication and understanding between different organizational units. I similarly discussed how intradepartmental error reports can serve as a means of separating the hospital’s departments. As I was wrapping up interviews with Unit B, several nurses mentioned with some uncertainty that the hospital was soon to restructure, and they were to be merged with another Unit with a very different style than theirs. All of those I asked with about the upcoming merger were either displeased or uncertain about the coming change.

**CONCLUSION**

The goal of this research was to begin to answer the following questions:

1. Given exposure to a *Just Culture* initiative, what are frontline practitioner perspectives on and experiences of medication administration error or patient identification error and how do they differ or not from those that would be predicted by the patient safety literature?

2. How (if at all) do practitioners say that on-site organizational efforts at culture change (e.g. via the introduction of the *Just Culture* Algorithm and philosophy) have affected their perceptions and experiences of error (e.g. from indexing a personal failure to representing an opportunity for organizational improvement)?

3. How can the implementation of *Just Culture* be improved or altered so as to accomplish its goal of changing provider perceptions of error to match those intended?

Frontline practitioner perspectives on error were strongly related to how departmental colleagues and leadership oriented to errors and error response, and to everyday workflow. For providers at Mesa Hospital, just as with the providers studied by Dixon-Woods et al. (2009), “practices and reasoning in relation to risk emerged through their practical engagement in the everyday work” (364). For Mesa Hospital staff, whether nursing or allied health, the ultimate perceived risk from any error is patient harm. And in daily practice, errors and error prevention are not topics that enter the minds of most providers, though avoiding patient harm is always a priority. Preventing patient harm is not only a priority in the self-management of providers, but also an expectation they hold of their peers, as the practice of peer intervention shows.
In Chapter 5, I discussed how providers pointed to systems issues as factors contributing to an error, but overwhelmingly stated that they believed errors are someone’s fault. That is, systems issues were never a focus for frontline staff. Rather, their concern was accountability. Because harm is central to frontline orientation to risk and error, it is easy to infer that for frontline staff, an erring provider is a provider who failed to prevent the patient from being harmed. Thus, frontline providers described error in the same way Wachter (2012) does: “errors are acts of commission (doing something wrong) or omission (failing to do the right thing) leading to an undesirable outcome or significant potential for such an outcome” (16). For frontline clinicians at Mesa Hospital, harm is central (“undesirable outcome”). Thus, his textbook definition of error matches frontline views of error as an individual responsibility.

The Just Culture model, however, differentiates between human error (unintentional) and at-risk behavior (conscious decisions). It explicitly states that the effects of what occurred should not be considered (Marx 2001 as cited in Wachter 2012; Marx 2009; Wachter 2012:349).

I believe the gap between Just Culture’s definitions and those of every-day providers has to do with the rootedness of medicine’s ‘culture of blame’ and the centrality of harm in frontline outlook. When frontline providers expand beyond their own self-management to avoid harming patients, it is through direct intervention with peers only. Fixing faulty institutional systems and processes is not normally a factor in provider self-management.

The field of patient safety emerged in order to reduce a leading cause of harm to patients, error. The approach of its practitioners is notably Cartesian: objects can be “known and mastered” (Krakauer 2007:386-388). Error is one of patient safety’s knowable, masterable objects. Safety culture too is another of those knowable objects. And although patient safety experts note that culture includes “values, attitudes, norms, beliefs, practices, policies, and behaviors of personnel,” the survey tools used by organizations are limited means of learning this (Provonost and Sexton 2005:231). Surveys are generally multiple choice to enable quantification, but do not encourage providers to input their own views and suggestions. By quantifying values, beliefs etc., safety culture is fashioned (by and for administrators and safety experts).
Another goal of patient safety is to reduce the emotional impact of guilt and related emotions that ‘blame’ cultures encourage. According to British safety expert Charles Vincent (2010), there is limited data on nursing and allied health emotional reactions to error. However, he asserts that their feelings are likely similar to those of physicians: “fear, guilt, anger, embarrassment and humiliation” (196-197). Although I intended to examine the emotional fallout of errors, I was only able to elicit limited data on the topic. This may have been because of the sensitivity of revealing personal emotions to a researcher. Nevertheless, the responses I did get suggested that fear of harm is a major factor. The emotions listed by Vincent and recapped just above do seem to match with feeling responsibility for causing harm that participants did report.

The centrality of harm in frontline provider views and practices in relation to safety may cause many errors and near misses to go unnoticed or ignored as insignificant. When errors (or near misses) are noted, nurses and allied health alike value learning in order to prevent harm: “It’s better to show the person than having… that person be written up and… even it might help out the patient later. It might help out the person later” (Adrian).

However, at Mesa Hospital, nurses and allied health staff alike reported mistrust of hospital administration, with nursing responses being somewhat more mixed. This mistrust limits the organization from knowing of incidents and thus subverts administration from directing what staff should learn. Again due to this mistrust, and because they view reporting as informing administration of transgressions, allied health providers in particular avoid incident reporting. Moreover, because allied health supervisors use Just Culture as a disciplinary tool (which it certainly is) and nothing more (unlike nurses), allied health providers do not see the preventive utility of official error reports. They also see them as stigmatizing, at least when their departmental peers are involved. In highlighting this, I do not intend to imply that the allied health leadership or staff are doing anything wrong, but to show the profound differences in the ways staff orient to safety practices and ideas. Just as with nurses, their ultimate goal is to prevent patient harm, but they prefer to avoid official reporting mechanisms whenever possible while nurses find ways of making official reporting mechanisms personally useful.

Official reports aside, for all providers, error narratives can become tools to utilize to prevent causing the same or worse harm that they or someone else once caused. For nurses,
filing official incident reports performs a similar function, while simultaneously protecting one’s reputation (and employment). Individual providers actively hold themselves accountable for avoiding harm, and develop personal tools and practices for risk management in order to prevent their patients from being harmed. These tools and practices are socially shared, and some are learned from prior experience (see also Leach and Fairhead 2007:26). Professional reputation is also in mind when providers engage in risk management activities, as Dixon-Woods et al. (2009) have observed (368). Providers will use their narratives to present to others the high standards they hold themselves to.

I suspect that an additional reason the nurses of Unit B allow their colleagues the opportunity to report themselves may be to avoid “ratting out” peers (Wachter and Provonost 2010). Indeed, staff at Mesa Hospital are insular in many respects. As one of my nurse respondents mentioned, providers hold themselves accountable foremost (after patients) to their departmental peers. Most spoke unfavorably of floating to other units, and of error reports coming from different departments. Barring occasional personal friendships with providers external to their unit, providers generally indicated distance and mistrust. For the domain of safety, error reports coming from other units are generally taken as personal criticism to nurses and allied health alike, even if the intended purpose is to document a need for retraining. Allied health avoidance of reporting is also understandable, since they are not wrong in viewing incident reporting as documenting transgression. Many nurses are also aware of this aspect of reporting, but are more aware of the preventive aspects and administrative justifications for the information contained in the reports, in addition to its personal benefit as a memory tool.

At Mesa Hospital, frontline practitioners indicate more confidence in the recommendations and judgments of their peers on their conduct and practice than they do in those from administration or other sources. In some ways, the administration is viewed as an opponent in their efforts to provide safe and effective care. However, staff members do actively hold one another accountable, and indicated they would not hesitate to report a colleague who harmed a patient. Wachter and Provonost (2010) have called for stronger surveillance and policing to ensure “accountable” approaches are effective because staff will protect each other (275-276). In doing so, they contribute to the antagonistic aspects of the relationship between staff and administration.
EFFECTS AND POSSIBILITIES OF JUST CULTURE

In summary, the effects of the Just Culture initiative at Mesa Hospital have not been as intended. Though allied health supervisors appreciate having a new tool to use when responding to errors, frontline staff are largely unaware of its existence and their practice is unchanged. For nurses, who are much more likely to be aware of the initiative, daily practice is likewise unchanged due to the new policy. While Unit B can be said to have a strong safety culture because of its openness about error, the practices of role modeling and self-reporting were long established before the Just Culture policy was introduced. Staff in this unit attribute their openness to their trust in their immediate departmental leadership, who several participants praised for their nonpunitive attitudes during my interviews. While staff in this unit are readily willing to discuss error, they still attribute responsibility for errors to individuals and express feelings of shame and guilt for causing harm, as providers in other units do. In this light, we can see the Just Culture as implemented by administration has not made an impact on the beliefs or practices of staff, and thus has not altered or created a safety culture. What it has done, in keeping with Rabinow’s anthropology of the contemporary, is in small ways altered how some providers practice. For example, nurses now have a few extra boxes on an otherwise unchanged (administration required) computerized incident reporting form, and allied health supervisors have a more standardized means of responding to incident reports under their purview.

Statements made by experts “carry authority” not only within their immediate field but also with bureaucrats who create policies and other groups if directed towards them (Rabinow 2008:39). When Wachter and Provonost (2010) (who are two of the most prominent experts in the field of patient safety) call for hospitals to enhance their surveillance of staff, it is quite likely that administrators charged with quality or risk management will strongly consider doing so, regardless of the fact that the statements were made in a response to a letter and not in a research article.

In my evaluation report (Appendix C), I provide recommendations to Mesa Hospital’s Department of Quality Management. Some of the greatest barriers to the success of the Just Culture initiative, namely mistrust of the organization and departmental insularity, are not limited to hindering patient safety efforts alone. Additionally, administration may benefit from reframing the focus of the Just Culture and other safety efforts (e.g. in presentations and
internal email correspondence) from reducing error to reducing harm. Simply because error is secondary to harm for frontline providers does not mean they are uninterested in ensuring patient safety. Staff are passionate about protecting patients from harm, as well as learning from opportunities that can help them do so. The justification for adopting the Just Culture was that Mesa Hospital staff view the organization as overly punitive. AHRQ survey results for “nonpunitive response to error” suggest that staff still view this as a problem. My project provides a starting point for understanding why staff perceptions of punitiveness have not improved.
REFERENCES

Agency for Healthcare Research and Quality

American Diabetes Association

Bates, David, David J. Cullen, Nan Laird, Laura A. Petersen, Stephen D. Small, Deborah Servi, Glenn Laffel, Bobbie J Sweitzer, Brian F. Shea, Robert Hallisey, Martha Vander Vliet, Roberta Nemeskal, and Lucian L. Leape

Berwick, Donald

Biehl, João, Byron Good, and Arthur Kleinman, eds.

Bohand, Xavier, Laurent Simon, Eric Perrier, Helene Mullot, Leslie Lefeuivre, and Christian Plotton
2008 Frequency, Types, and Potential Clinical Significance of Medication-Dispensing Errors. Clinics (Sao Paulo) 64(1):11-16.

Borgatti, Steve

Committee on Identifying and Preventing Medication Errors

Deitrick, Lynn M., Terry Capuano, and Debbie Salas-Lopez

Dixon-Woods, Mary, Sarah McNicol, and Graham Martin
Dixon-Woods, Mary, Anu Suokas, Emma Pitchforth, and Carolyn Tarant

Donabedian, Avedis
2005 Evaluating the Quality of Medical Care. The Milibank Quarterly 83(4):691-729.

Douglas, Mary, and Aaron Wildavsky

Emerson, Robert M., Rachel I. Fretz, and Linda L. Shaw

Ervin, Alexander M.

Finkler, Kaja, Cynthia Hunter, and Rick Iedema

Goodman, Charity, Brad Trainor, and Stan Divorski

Gravlee, Clarence

Hoyert, Donna L., and Jiaquan Xu

Hudelson, Patricia M.

Hunter, Cynthia L., Kaye Spence, and Adam Scheinberg

Institute of Medicine (IOM)
Jordan, Ann T.

Kaufman, Sharon R.

Kleinman, Arthur, and Erin Fitz-Henry

Krakauer, Eric L.

Leach, Melissa, and James Fairhead

Leape, Lucian


2004 Errors are not Diseases; They are Symptoms of Diseases. The Laryngoscope 114:1320-1321.

Leape, Lucian, Troyan A. Brennan, Nan Laird, Ann G. Lawthers, A. Russell Localio, Benjamin A. Barnes, Liesi Herbert, Joseph P. Newhouse, Paul C. Weiler, and Howard Hiatt

Luhmann, Niklas

Marx, David

National Institute of General Medical Sciences
Nieva, V. F., and J. Sorra

Outcome Engenuity

Peled, Harry

Pizzi, Laura T., Neil I. Goldfarb, and David B. Nash

Plumb, Jennifer, Joanne Travaglia, Peter Nugus, and Jeffrey Braithwaite

President’s Advisory Commission on Consumer Protection and Quality in Healthcare

Provonost, P., Marlene Miller, and Robert Wachter

Provonost, P., and James Sexton

Rabinow, Paul

Reason, James

Ryan, Gery W., and H. Russell Bernard

Shi, Leiyu, and Douglas A. Singh

Singer, Merrill
Sobo, Elisa
2009 Culture and Meaning in Health Services Research: A Practical Field Guide. Walnut Creek: Left Coast Press.

Sorra, J. S., and V. F. Nieva

Spiller, Henry A.

Strauss, Anselm, and Juliet M. Corbin

Sunderland, Patricia L., and Rita M. Denny
2007 Doing Anthropology in Consumer Research. Walnut Creek: West Coast Press.

Trotter, Robert T.

U.S. Department of Health & Human Services

U.S. GAO

Vincent, Charles

Wachter, Robert
2004 The End of the Beginning: Five Years After ‘To Err is Human’. Bethesda: Project HOPE: The People-to-People Health Foundation.


Wachter, Robert, and Peter Provonost

Whiteford, Linda M., and Linda A. Bennett
Wind, Gitte

2008  Negotiated Interactive Observation: Doing Fieldwork in Hospital Settings.

World Health Organization.

APPENDIX A

INVITATION LETTER
Dear [Hospital] RN or RT,

My name is Samuel Katzman, a graduate student in the Anthropology Department at San Diego State University. I invite you to participate in my master’s thesis research, which concerns front line healthcare provider perspectives on error and hospital responses to error.

I request up to an hour and a half of your unpaid time to interview you to gain a sense of your thoughts on either medication administration error or patient identification error, as well as your view of [your hospital’s] “Just Culture” initiative.

In order to obtain background information for the interviews, which are the main focus of my study, I also request permission to observe you for up to two hours and take notes as you work. Observations of your care practices will not be focused on error, but rather, systems and processes from which error may emerge. To protect patients, these observations will be as unobtrusive as possible. No specific patient information or interactions will be recorded. I will be recording notes on the general work environment (physical layout of the department, staff ratios) and on procedures such as for medication administration or patient identification. In the event of an emergency, I will immediately remove myself from the area. Additionally, as I am aware that reporting structures are already in place at [your hospital], I will not need to report any incidents that I observe during the course of my research.

Please feel free to contact me if you have any question. I have attached additional information about the study. If you decide to participate, please contact me.

Sam Katzman
Skatzman923@gmail.com
(858)-220-3105
APPENDIX B

INTERVIEW TOPIC GUIDE
Thank you for agreeing to discuss your thoughts on error and error management with me today. The information I gather from you and your colleagues will help me understand patient safety from the perspective of front line staff. I will share my final results in my Master’s thesis, with the San Diego State University Department of Anthropology, and the Mesa Hospital Department of Quality Management, which may decide to alter current strategies for responding to error.

This interview should last no longer than an hour and a half. I request your permission to record this interview, which will be transcribed and analyzed. All electronic data gathered from interviews will be maintained encrypted on my password protected computer, and written notes will be safely stored in a locked desk drawer. Your responses are confidential, and I am the only person who will be able to access this research data. Only your unit and the type of healthcare certification you possess will be documented in order further protect your confidentiality. Your name will not be included on the recording. At the end of the project, audio recordings will be deleted and written notes either shredded or securely stored.

I remind you that participation is completely voluntary, and you are welcome to withdraw at any time. May I continue?

Italics indicate probes.

Agree 1/2/3 A/ B #____

Do not agree

1. Can you tell me about any examples of (patient identification/medication administration) error that you are aware of (such as from literature), and how it impacted you? (Does not need to be a personal experience, and please avoid names using names)

2. How serious a problem is (patient identification/medication administration) error in your view? 1(Not very serious) 2 3 4 5(Very Serious)

3. What do you think are the most common causes of this type of error?

4. What do you think is the best way to respond to this type of error? (Reducing frequency or level of harm to patient)? 2010 AHRQ Culture of Safety Categories Handoffs + Transitions, Feedback

5. Are you familiar with the organization’s “Just Culture” initiative? What kind of an impact, if any, do you think it has made on error response? How were errors responded to before the introduction of “Just Culture”? 1(Not very serious) 2 3 4 5(Very Serious)
6. What would you change about the way the organization attempts to control error?

7. What can be done to increase the frequency of error reporting?

8. What is a non-punitive environment to you?
APPENDIX C

EVALUATION OF JUST CULTURE IN A LOCAL HOSPITAL
Main Findings

1. Awareness of the Just Culture initiative needs raising among allied health care workers and those on the night shift.
2. A focus on reducing error should be replaced by a focus on reducing patient harm.
3. Reports should be responded to sooner for higher impact.
4. Departmental insularity is contributing to defensiveness that needs to be eased.

Background

The Just Culture was officially introduced at Mesa Hospital (a pseudonym) 9/1/2011, with the purpose of encouraging staff to report errors and near miss events. The Just Culture is a guideline to standardize a fair method of error response which promotes staff disclosure. It provides an algorithm to supervisors and managers to use when investigating error reports. It requires that staff involved in an event meet directly with the investigating manager and are shown what the response will be (support/education, coaching/education, or corrective action) and how the response was determined. The objectives of the Just Culture program are:

- Increased event reporting by 5%, specifically targeting near miss incidents.
- A 2% score improvement in the Agency for Healthcare Research and Quality’s Culture of Safety Hospital Survey on Patient Safety Culture “non-punitive response to error” category.

However, while the total number of incident reports has increased, positive survey scores in the category of “nonpunitive response to error” have not improved within statistical significance. To help understand this, hospital staff were interviewed in the context of an IRB-approved thesis research project between 7/2013 and 11/2013, and responses were compared to internal AHRQ Hospital Survey on Patient Safety Culture results. The following open-ended prompts were given to providers:

- Are you familiar with the organization’s “Just Culture” initiative? What kind of an impact, if any, do you think it has made on error response? How were errors responded to before the introduction of “Just Culture”?
- What would you change about the way the organization attempts to control error?
- What can be done to increase the frequency of error reporting?
- What is a non-punitive environment to you?

Conclusions and recommendations:

- Awareness and Focus
  - Expand awareness of the program to allied health staff, especially those working night shift: Only one interviewed allied health staff member was even aware of the program. He expressed that he felt he would be terminated for making any error. Because allied health staff view incident reporting
purely as a means of informing administration of transgressions, buy-in will be challenging, however.

- **Reframe the focus of Just Culture from error to harm reduction and prevention when presenting to staff:** for frontline clinical staff, error is secondary to preventing harm.

- **Work to convince staff that reporting near miss events can help reduce patient harm:** Hospital staff currently do not view near misses as reportable because harm does not occur, even when the potential for harm is recognized.

- **Timeline**
  - **Help supervisors and managers respond to error reports more quickly:** many staff reported that they are not contacted about incidents until over a month after they are reported, meaning they cannot remember effectively.
  - **Explore ways of decreasing the amount of time it takes to complete an incident report:** nurses write error reports at the end of their shift, after their care duties have been completed. Incident reports are completely secondary to patient care, and usually secondary to all other administrative duties as well. Staff suggestions include simplifying the form, decreased patient acuity loads, and increased staffing. In addition to health acuity, one nurse also suggested adding ‘social acuity,’ to the acuity calculations. That is, possibly demands from social and familial issues that may increase the nurse’s allocated time with that patient.

- **Defensiveness**
  - **Explore ways of improving staff perceptions of the Department of Quality Management:** In general, staff do not trust “the organization.” That is, many staff have negative impressions of hospital administration, within which the Department of Quality Management is included.
  - **Examine ways of decreasing hospital compartmentalization:** With the exception of personal friendships, most staff are wary of external departments to their own. Most dislike floating to other units, and error reports originating from outside are generally taken more as personal criticism than those from peers. One reported issue was that pharmacy is not updated of patient room changes, so the hospital should seek a way of ensuring patient location is automatically updated when patients are moved.