Putting on White Coats: Professional Socialization of Medical Students Through Narrative Pedagogy in Standardized Patient Labs

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This dissertation titled
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ABSTRACT

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Putting on White Coats: Professional Socialization of Medical Students Through Narrative Pedagogy in Standardized Patient Labs

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Medical school is a formative time when future physicians learn what it means to care for patients and how to practice medicine in complex health systems. As students progress through school, they encounter significant challenges, risks, and expectations. Guided by a narrative perspective, I explore one experiential component of the professional education of medical students in the U.S.—standardized patient labs. Standardized patients are hired by medical schools to follow scripts and act as patients with various ailments and health problems. Medical students interact with standardized patients to practice diagnostic skills and prepare for clinical interactions beyond medical school. In this dissertation, I observe and analyze ways that standardized patient interactions prepare students for the narrative nature of clinical work. I also identify and interpret value sets that are maintained and disrupted through standardized patient interactions.

I outline a rationale for the project in Chapter One by exploring contemporary challenges facing the health care industry and medical educators. In Chapter Two, I illustrate the theoretical importance of the project by situating the project within scholarly literature on the narrative nature of medicine and the experience of uncertainty in medicine. I detail my inquiry practices in Chapter Three, a research design that crystallized data gathered through multiple methods including observations, in-depth
interviews, and the collection of documents. Chapters Four and Five offer complementary analytic representations of the SP lab at the Ohio University Heritage College of Osteopathic Medicine (OUHCOM). To begin, I take readers through a creative narrative vignette representing a typical and realistic medical student encounter in a SP lab. This story offers readers an ethnographic glimpse of the communication processes composing this pedagogy. Then, in Chapter Five, I present a traditional thematic representation developed through a constant comparative analysis of the data. Across both chapters, I position the SP labs as narrative-based pedagogies that prepare students for the narrative nature of clinical work in inescapably uncertain circumstances. Finally, in Chapter Six, I re-visit my initial research questions in light of the knowledge claims offered in Chapters Four and Five. I discuss theoretical and practical implications of my interpretations as well as recommendations for future directions.

Approved: ________________________________________________________________

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Beyond the classroom, after the last science exam is passed, in hospitals and clinics where they [doctors] are increasingly responsible for the care of sick people, there are fewer invariably right and generalizable answers (although there are certainly wrong ones). Instead of answers, clinical education provides a preparation for practical, ethical action: how to respond, what best to do, how to discover enough to warrant taking action, which choice to make on behalf of the patient. Montgomery, 2006, p. 134

Medical education historically has emphasized cutting-edge science and technical proficiency. Yet, the practice of medicine also involves interpersonal interactions and interpretive sensemaking. As argued by Montgomery (2006), a Professor of Medical Humanities and Bioethics and of Medicine at Northwestern University, a disjunction too often exists between the vision of medicine as a generalizable science and the practice of medicine as a narrative-based craft that is exercised in the midst of particular and ambiguous circumstances. In an effort to better prepare students for a diverse array of physician roles and responsibilities, medical schools have enlarged the dominant model of medical education to include experiential pedagogies such as standardized patient labs. As my dissertation illustrates, through standardized patient interactions, students learn to cope with substantial risks and assume responsibility for life and death decision-making, adapt to diverse (and sometimes divergent) expectations, and develop the capacity to exercise clinical judgment amidst inescapable uncertainty.

As with many professions, years of learning and experience are required to become a physician. Just as the practice of medicine is characterized by movement
between general principles and specific cases, so too is medical education. As argued by Cooke, Irby, and O’Brien (2010), one of the key challenges of medical schools is to negotiate “the essential tension between standardization of curriculum and individualization of instructional opportunities” (p. ix). Efforts at standardization must be tempered by opportunities for individual adaptation. The process is complex, spanning across classroom and experiential settings that define contemporary expectations and practices in medical education.

Formative experiences and accompanying standards for success begin early in a student’s career. For instance, to be a competitive candidate for medical school, undergraduate students must maintain high grade point averages and perform well on the Medical College Admission Test (MCAT). Although debates continue about what coursework should be required for entry to medical school (see Dienstag, 2008), most undergraduate students complete one year of biology and physics coupled with two years of general and organic chemistry. As they work diligently toward their careers, students shape stances and opinions regarding the types of doctors they want to become. Then, medical school provides students with classroom-based coursework generally organized around organ systems or topics (e.g., cardiovascular, renal, respiratory) alongside experiential learning opportunities to practice medicine. As they navigate medical school and move through clerkships and internships, students are confronted with meta-narratives informing them about their expected roles in the typical clinical settings (e.g., time is money; technology is progress). Students choose, consciously or unconsciously, whether to follow such scripts and if, when, and how to resist. However, when those scripts differ from their expectations, students must grapple to make meaning of their
experiences. Medical school is a particularly formative time for students as they envision their future roles in the midst of institutional logics that guide the medical profession and the economic and regulatory environments that shape how medicine is practiced.

In the past one hundred years, the practice of medicine has shifted dramatically as new technologies and drugs have altered diagnostic processes and treatment protocols. Ever-emergent delivery forms of care (e.g., ambulatory settings, long-term care facilities), the financing of care, specialized roles of care, and demands for patient-centered care will shape future physicians career paths and must be integrated in the processes of medical education. Preparing students to practice medicine in the midst of these, and other, environmental forces is a challenge in light of lingering critiques of medical education, summarized by Cooke et al. (2010) as “inflexible, excessively long, and not learner-centered” (p. 3). In their decade long assessment of medical education, they argued:

We observed poor connections between formal knowledge and experiential learning and inadequate attention to patient populations, health care delivery, and effectiveness. Students lack a holistic view of patients and often poorly understand nonclinical physician roles. (p. 3)

Communication scholars are equipped to describe, analyze, and enhance pedagogical efforts that promote patient-centered care in highly regulated and technologically-driven environments.

The unique socialization experience confronting medical students presents an opportunity for communication scholars to explore interconnections between the preparation of medical education and the practice of medicine. Institutional logics and
master narratives in medicine both shape and are perpetuated through communication. My dissertation examines these interconnections through an interpretive case study of the Standardized Patient (SP) labs at the Ohio University Heritage College of Osteopathic Medicine (OUHCOM). I position the SP labs as an experiential pedagogy that, in its finest moments, prepares students for the narrative nature of clinical work in professions characterized by technical complexity and moral responsibility.

**Challenges in Medical Education**

*Patients with the same diagnosis can differ unpredictably, and maladies even those firmly identified with bacteria or tumors or genetic mutations, are never quite things. Thus, although scientific and technological advances refine clinical problems and provide solutions, physicians still work in situations of inescapable uncertainty.* Montgomery, 2006, p. 3

The *practice* of medicine, which students experience in the *preparatory* space of medical school, is both exciting and uncertain. Through medical school socialization processes, students face identity challenges that I conceptualize as innately narrative. In this chapter, I justify my research project by problematizing some of the risks and pressures students face. Specifically, I argue that practicing medicine is risky because its cardinal value, health, is surrounded by uncertainty, and I highlight the risky nature of medical practice by discussing the prevalence of medical mistakes. In addition to these risks, I discuss the perceived climate of communication among healthcare practitioners and the pressure students face to assume the roles of effective communicators. Finally, this chapter concludes with a historical description of the context for my study.
(Un)certainty

At the heart of the quest for certainty is a longing for control. Or, to look at it the other way around, we disguise the need for control as a need for knowledge.

Montgomery, 2006, p. 22

Practicing medicine is risky business. Medicine is filled with uncertainty about its cardinal value, health. And, medical school is an important time for students to develop values, mentalities and habits that influence the ways they will interact with patients, family members, and colleagues throughout their careers. Hunter (1991) pointed out that the dominant paradigm for understanding medicine stems from academia and emphasizes science above all stating:

In the academic medical center, medicine takes its most nearly idealized and scientific form, and its culture influences the rest of medical practice. Absorbed and internalized by every physician as student, intern, and resident, academic medicine remains the “gold standard” of practice no matter how irrelevant it may be rendered by small-town, general practice, an inner-city clinic, or a suburban HMO. (p. xxi)

Though Hunter penned those words nearly two decades ago, little evidence suggests a change in direction (see also Brown, Bylund, Gueguen, Diamond, Eddington, & Kissane, 2010; Cooke et al., 2010; Kreps, Sparks, & Villigran, 2010).

Among the many perpetuated ideologies of academic medicine is an obsession with certainty. Physicians maintain high respect and status in our culture since many perceive that they have strong influence over life and death due to their certain knowledge of science (Harter & Kirby, 2004; Lupton, 1994; Morgan & Krone, 2001).
However, Babrow and Kline (2000) suggested that modern medicine, with all of its progress, does not always create certainty, but rather creates and reproduces uncertainty. This is demonstrated through people’s perceptions of modern medicine’s power to influence life and death. As Babrow and Mattson (2003) explained, “Contemporary medicine has replaced the certainty of death from a given illness at a given hour with the uncertainty of a vanishing line between life and death” (p. 42). In similar fashion, Hunter (1991) argued, “no matter how scientific it may be, medicine is not a science as science is commonly understood: an invariant and predictive account of the world” (p. xviii).

Reasonably, one could mistake the practice of medicine itself to be a science because the practice is surrounded by scientific elements. This common error is illuminated through expectations about how physicians should speak. Morgan and Krone (2001) suggested that scientific perspectives and jargon are esteemed as prerequisites for professionalism. Medical students often wear *certainty masks* to maintain credibility and professionalism (see Harter & Kirby, 2004). However, it should be noted that the process of wearing these masks can be stressful when *certainty roles* as health professionals and personal feelings contradict one another.

Dr. Atul Gawande (2002), a surgeon and professor at Harvard Medical School, wears no such certainty mask. In the introduction of his book entitled *Complications: A Surgeon’s Notes on an Imperfect Science* he acknowledged the uncertainty of medicine:

> Medicine is, as I have found, a strange and in many ways disturbing business. The stakes are high, the liberties taken tremendous. We drug people, put needles and tubes into them, manipulate their chemistry, biology, and physics, lay them unconscious and open their bodies up to the world. We do so out of an abiding
confidence in our know-how as a profession. What you find when you get in close, however - close enough to see the furrowed brows, the doubts and missteps, the failures as well as the successes - is how messy, uncertain, and also surprising medicine turns out to be.

The thing that still startles me is how fundamentally human an endeavor it is. Usually, when we think about medicine and its remarkable abilities, what comes to mind is the science and all it has given us to fight sickness and misery: the tests, the machines, the drugs, the procedures. And without question, these are at the center of virtually everything medicine achieves. But we rarely see how it all actually works. You have a cough that won’t go away - and then? It’s not science you call upon, but a doctor. (pp. 4-5)

Like Hunter, Gwande emphasized that medicine is a messy and uncertain science-using practice, but it is not science itself.

Though health can be measured, it cannot always be predicted. As students become expert caregivers, they must also accept that their expertise is risky because health is often unpredictable. Fox (1957, 1980) sparked a decades-spanning discussion when she wrote about medical school as *training for uncertainty*. In addition to learning “an enormous amount of established medical knowledge . . . they also learn much about the uncertainties of medicine and how to cope with them” (p. 207). As medical students progress through their education, they learn how to live with the uncertainty that accompanies their expertise.
Medical Mistakes

Not only is knowledge about health uncertain and incomplete, but medical students also must learn to live with the fact that they enter settings filled with costly mistakes—scenes in which expectations go awry. In 1999, the Institute of Medicine (IOM) released a report entitled *To err is human: Building a safer health system* (Kohn, Corrigen, & Donaldson, 1999). The report revealed a staggering estimate that between 44,000 and 98,000 people die annually from medical mistakes. These bold statistics have brought on a fair share of critical eyes; even the lower estimate is striking.

Many physicians seem to be aware that medical mistakes are common, but they are socialized to see them as part of the process of medicine. Even with his celebrated medical expertise and status, Dr. Gawande (2002) expressed uneasiness with the learning curve undergone by physicians in training. His books are filled with stories about medical mistakes. In one instance, he told of a time when he refused to let a resident operate on his own child. And, he later referred to a conversation he held with a fellow physician who admitted that he too was uncomfortable with the learning curve and did not allow a resident to deliver his baby (Gawande, 2002).

Given the common nature of medical mistakes, questions arise about physicians’ abilities and strategies to cope with the risk of making mistakes. How do they experience the pressure from the inevitability of making costly mistakes? Since many medical mistakes occur while physicians are in training (Gawande, 2002) particular attention to medical students’ perceptions of and processes toward the risks ought to be studied.
Communication Expectations

People in the U.S. expect physicians to be expert communicators yet remain generally dissatisfied with physician-patient interactions (Roter & Hall, 2010). In addition to learning impressive amounts of biomedical information, doctors also must learn social skills to interact effectively with patients. Over twenty years ago, Lansky (1998) pointed to a long standing lack of satisfaction with doctors’ communication skills. He also explained that for centuries, physicians and hospitals have struggled to understand their roles as communicating agents and whether their services provide satisfactory results for the patients. Yesterday’s legacy remains today’s challenge for medical school administrators and faculty (Cooke et al., 2010).

Demand for more humane and personalized medical care in America is high (Institute of Medicine, 2001). In both private and public domains, discourse is growing about how well, or poorly, physicians’ bedside manners are practiced. In fact, there seems to be a relationship between physicians’ communication skills and patients’ satisfaction with care. For example, Lenckus (2005) and others have pointed out that physicians’ bedside manners are closely correlated with their likelihood of being sued. Reasonably, one can assume that lack of attention to communication patterns, rather than mal-intent, cause much of the discord for patients and providers. For example, the State Medical Board of Ohio reported that each year it receives over 3,800 complaints that “turn out to be simple misunderstandings between the health care provider, the patient, or the patient’s family” (State Medical Board of Ohio, 2008). Perhaps the misunderstandings are “simple” because they could be avoided or resolved with better attention to communication patterns. Whether or not one sees the communication
challenges as simple, it is clear that solutions are challenging. Assessing communication competence and providing motivation for practicing physicians to improve their communication skills are complicated tasks (see Duffy, Gordon, Whelan, Cole-Kelly, & Frankel, 2004; Rosenthal & Frank, 2006).

The lack of satisfaction with doctors’ communication skills has peeked at a time when effective health communication is vital. Healthcare reform is in continuous flux as politicians and organizers comb solutions to provide care to the aging baby-boomer population. For years, researchers have expressed concerns about U.S. physician surpluses (Ginzberg, 1966; Grumbach & Lee, 1991). However analysts now fear that we are facing a massive shortage of doctors in America, with estimates that we need 200,000 more physicians by 2025 (see Cooper, 2004). Such a shortage will bring workload pressures and time demands, complicating the already challenging communication tasks that compose clinical interactions.

A growing body of literature notes that effective communication is not simply a nice touch to medical treatment, but a crucial component of quality care. For instance, the reduction of medical mistakes (Carmack, 2008) and relational distrust (Hillen, de Haes, & Smets, 2010; Travailine, Ruchinskas, & D’Alonzo, 2005) illustrate the value of effective communication.

In acknowledging the importance of teaching physicians to become effective communicators, accrediting organizations (e.g., the American Osteopathic Association) have begun requiring communication training as part of medical education curriculum. Specifically, in 1999, the Education Commission for Foreign Medical Graduates added a discrete communications component to the Clinical Skills Assessment Certification
As part of the Medical School Objectives Project, The Association of American Medical Colleges urged medical faculty to teach interpersonal communication skills as part of the curriculum (Anderson, et al., 1999). Now, the American Board of Medical Specialties and its member boards include communication skills in their certification and recertification processes (American Board of Medical Specialties, 1999). Additionally, competence in interpersonal and communication skills is part of the residency accreditation process by the Accreditation Council for Graduate Medical Education (Accreditation Council for Graduate Medical Education, 2007). And finally, the Institute of Medicine explained that healing relationships are essential for successful health care (Institute of Medicine, 2001).

The practice of medicine is filled with risks and expectations that are closely connected with communication patterns. As students encounter medical education, these risks and expectations blend together forming roles and scripts for them to embody and live out as doctors. In the following section, I introduce an interactive space and experientially-based pedagogy—SP labs—that allow students to rehearse the narrative nature of clinical interactions amidst competing values and inescapable uncertainty.

**Standardized Patients as Experientially-Based Pedagogy**

Part of the socialization and learning processes that help medical students develop the interpretive and scientific rationalities necessary for clinical reasoning involve formal communication education. Many medical schools use standardized patients—actors hired to simulate symptoms—to provide students with formulated opportunities to practice diagnoses and interaction with patients. In the past, other descriptors have been used to describe standardized patients including programmed patients, prepared patients, trained
patients, standard patients, actors, pseudo-patients, and patient instructors (Barrows, 1993). However, today the terms standardized patient and simulated patient are the most commonly used (Adamo, 2003).

Adamo (2003) distinguished between standardized patients and simulated patients indicating that standardized patients are used for consistent portrayals and simulated patient experiences vary from one portrayal to the next. Adamo explained, “A standardized patient encounter is a simulated patient encounter, but a simulated patient encounter is not necessarily standardized” (pp. 262-263). Some simulations call upon patients to perform their real conditions rather than following prescribed scripts. For example, the simulated patients could enact a range of experiences such as describing the loss of a loved one, or discussing their communicative challenges through their vocal limitations from Parkinson’s disease. In this case, since each simulated patient would tell a different story, the experience is not standardized across subjects.

The focus of my dissertation is on the SP lab at OUHCOM which strives to ensure consistency across patients and uses the term standardized for all the interactions. Thus, throughout this dissertation and as guided by scholarly literature, I use the term standardized patient (SP). In this project SPs are the people who follow preset patient scripts in interactive laboratories for the purpose of providing medical students with consistent interactive experiences. As an assessment tool, the SP labs at OUHCOM measure clinical competence.

Today, SP labs are commonly integrated in the curricula of osteopathic and allopathic medical schools throughout the U.S. (see Feeley, Anker, Soriano, & Friedman, 2010). However, SP interactions have not always been accepted among medical
educators as valuable educational tools. In 1963, Dr. Howard Barrows, a neurologist and professor and at University of Southern California School of Medicine, created the first SP interaction. His approach that involved bringing actors into medical exams received criticism from peers across the nation for being too “touchy-feely, too expensive, and too Hollywood” (Wallace, 1997, p. 6). The popular press also criticized the process with articles such as “Hollywood Invades USC Medical School” ("Hollywood invades USC medical school ", 1965) and another that read, “scantily clad models are making life a little more interesting for USC medical students” ("Models who imitate patients: Paradise for medical students," 1965). After teaming up with renowned medical educator Stephen Abrahamson and publishing the first scholarly article about standardized patients (see Barrows & Abrahamson, 1964) other medical educators adopted the technique in their own facilities and the criticism diminished (Wallace, 1997).

Barrows and Abrahamson initially used the term programmed patients in their work. The term standardized patient was later coined by psychometrician Geoffrey Norman to describe the pedagogical technique using trained actors to act out certain scenarios involving medical or psychological conditions as they interacted with medical students (Wallace, 1997). Norman chose to highlight the standardized aspect of the system, which simply means that every student could be presented with the same challenges. Such a system enabled assessment to emerge with the SP labs across medical schools.

Now SP interactions are requirements for successful completion of medical school. In 2005, the major accrediting body for medical schools, the Liaison Committee on Medical Education, required clinical skills training with SPs (Barzansky & Etzel,
2004). Additionally, communication researchers frequently use SPs as part of their experimental designs to evaluate training programs (e.g., Turan, et al., 2009; Yedidia, et al., 2003). The momentous wave of SP education has yielded professional organizations including Association of Standardized Patient Educators (Association of Standardized Patient Educators, 2011) and Society for Simulation in Healthcare (Society for Simulation in Healthcare, 2011).

Standardized Patient labs allow students to practice both social and clinical skills without the consequences of “real” scenarios. Through interviews with students about their experiences in SP labs, Harter and Kirby (2004) explained, “The environment was described as safe for becoming comfortable with patients because in SP interactions, both parties ‘know it's all pretend’” (p. 54). Some have questioned whether the pretend environment provides experience that is valuable beyond that setting (Wear & Varley, 2008) and others have defended SP education and its relevance to professional life beyond medical school (van Zanten, Boulet, & Mckinley, 2007).

Despite various perceptions of the nature of SP education, one can be assured that SPs have become a major part of medical education and the socialization of future physicians. The lab opportunities allow students to try out—that is, rehearse—being a doctor and practicing medicine. It is a place for students to practice their roles and grapple with their ideals for forming relationships with their patients. SP education has evolved into an institution with power that “integrates new models of rationality” (Islam & Zyphur, 2007, p. 770) contributing to the socialization process of medical students. As my dissertation demonstrates, narrative ways of sense-making are developed—if not explicitly acknowledged as such—through the SP labs of OUHCOM.
Setting: OUHCOM and CTAC

The OUHCOM has embraced medical education with standardized patients. As part of their first two years at OUHCOM (see Appendix A), medical students interact regularly with standardized patients in the Heritage Clinical Training and Assessment Center (CTAC). As noted on the CTAC Website:

CTAC plays a key role in the OU-COM mission ‘to educate competent, well-rounded osteopathic physicians by providing a clinically integrated, learning-centered, osteopathic medical education continuum for students’. (Ohio University College of Osteopathic Medicine, 2011a)

Various physician/professors create cases and oversee interactions in the CTAC. The interactions are audio and video recorded as they unfold. In a separate control room the instructors and evaluators can watch and listen through computers and headphones as the interactions unfold in real time. They can also access the interactions for performance reviews with the students at later dates (Ohio University College of Osteopathic Medicine, 2011b).

In April of 2011, OUHCOM held an open house for their new CTAC facilities made possible by a $2.3 million gift from Osteopathic Heritage Foundations (College of Osteopathic Medicine Office of Communication, 2011). The new facilities provide the same features as those they have previously used; however, more space is provided, equipment has been updated, and the system teaches students to use electronic medical records. One press release reported:
Richard Vincent, president and chief executive officer for the Osteopathic Heritage Foundations, said simulated clinical training has been integral in quality education provided to the medical students since the inception of the college. ‘The former center was tired and in need of an upgrade, with some cosmetic surgery. It appears that the operation was a success and the center’s prognosis for a long life is good’. (College of Osteopathic Medicine Office of Communication, 2011)

Through participant observations, in-depth interviews, and document analysis, I explored how the SP labs function as experientially-based pedagogies that (1) introduce students to the narrative nature of clinical practice, and (2) challenge students to confront and cope with the risky and uncertain nature of medicine.

This project lies at a nexus of narrative, risk, and communication education literature, and I contribute to each by investigating how students practice medicine in the CTAC facility at OUHCOM. In chapter two, I articulate the theoretical sensibilities that guided my fieldwork. Chapter three outlines my research design. I offer knowledge claims in the form of a creative narrative and thematic analysis in chapters four and five respectively, followed by a discussion of the theoretical and practical value of the findings in chapter six.
CHAPTER TWO: THEORETICAL STANDPOINT

Given the radical uncertainty of clinical medicine as a science-using practice that must diagnose and treat illnesses one by one, the complex reasoning physicians use requires a richer concept of rationality than a sparse, physics-based, positivist account of scientific knowledge. Montgomery, 2006, p. 37

In this chapter I articulate the theoretical literature that guided my engagement with and subsequent description and analysis of the SP labs at OUHCOM. Specifically, I discuss aspects of Problematic Integration (PI) theory as it relates to how humans communicatively cope with risk. Next, I articulate core assumptions that compose my standpoint as a narrative scholar. A narrative perspective offers a robust perspective for exploring (1) the experiential nature of SP pedagogies, and (2) how labs provide students with opportunities to construct and perform their professional identities, develop the interpretive reasoning needed for clinical judgment, and cope with risk and uncertainty in clinical care.

Risk and Problematic Integration Theory

As previously noted, the profession of medicine is inherently risky. Medical mistakes, increases in malpractice lawsuits, and uncertainty about the nature of health and healing are some of the contributing factors that saturate medicine with risk for physicians and patients alike (Gwande, 2003, 2008, 2010). As students are slowly introduced, through years of education, to their professions as physicians, they eventually come face to face with these risks. To provide a broader explanation of these issues, I review literature about risk and how individuals deal with risk taking.
The Social Construction of Risk

Risk arises out of human inventions (Beck, 2009). In other words, risk is a socially constructed phenomenon that does not exist independent of human interaction. The social production of risks has changed over time and now we are living in what Beck (1992) refers to as a risk society.

Beck’s (1992) articulation of the risk society is guided by the idea that modernity is a result of individual desire for autonomy and invention free from longstanding tradition. This occurred as people left traditional institutions for newer structures of modernity and industrialization that enabled them to exercise more individual exploration and autonomy. New institutions of early modernity gave rise to industrialization and the scientific paradigm. For example, modern medicine and medical technology is founded on these industrial and scientific paradigms.

Today we are in a period that Beck (1992) refers to as “reflexive modernization” (p.153). Reflexive modernity involves consideration of the new situations that arose while seeking different terrain through modernity and industrialization. As production, technology, and science have brought forth new fruit, so too have new risks affiliated with them been born. This process is continual and reaches into new realms of risk. Consider, for instance, Babrow and Kline’s (2000) study on breast self exams. Modern science, with its appetite for certainty and rationality, has led us to this supposedly efficient method for screening for breast cancer at potentially early stages in order to reduce risk. However, the process itself lends way to new challenges and risks for women. As Babrow and Kline reported, “Many women describe the procedure as a scary, guilt laden, and otherwise unpleasant experience” (p. 1808). Though the technique was
developed for risk reduction, it brought an entirely new set of risks and uncertainties.

This example is but one illustration that the risks we face now are functions and results of human action. Even though we live in a risk society where people are ever aware of risks from all angles, the rate of risk production still increases.

Values, Culture, and Risk

Physicians are duty bound to marshal all the certainty available to them. Over the course of their career, biomedical and clinical research will regularly move the boundary between what is certain and what is unknown. Montgomery, 2006, p. 136

Risks and values are strongly interconnected. As scholars and practitioners have started to define risk, disagreements about particularities have emerged (see Adams, 1995). Even so, definitions of risk tend to emphasize two characteristics (Adams, 1995). First, risk can be predicted and anticipated; and, second, risk is associated with negative values. For example, these two characteristics are evident in Britain’s Royal Society’s (1992) definition of risk. In a report, the Royal Society explained that it “views ‘risk’ as the probability that a particular adverse event occurs during a stated period of time, or results from a particular challenge” (p. 2). In this example the word “probability” implies predictability and “adverse” connotes a negative value. Both of these concepts (prediction and value) are fundamental for Babrow’s (1992) problematic integration (PI) theory which will be discussed in more detail below. However, defining risk as an entity that encompasses predictability and values is paramount to the perspective I take in this project.
As stated in chapter one, “academic medicine remains the gold standard for practice” (Hunter, 1991, p. xxi) in general. Modern western medicine values principles of science and reasoning. Consequently, many of today’s medical risks have evolved from those values. Expectations to be healed and risks and uncertainties of illness are intertwined with the scientific values of medicine.

Addressing the risky nature of science Douglas and Wildavsky explained, “For anyone disposed to worry about the unknown, science has actually expanded the universe about which we cannot speak with confidence” (p. 49). Medical school is generally centered on a culture for teaching students about certainties of science that reduce risk in health and control adverse outcomes. Obviously this practice has led to many amazing accomplishments. For example scientific achievements have permitted us to find ways to allow our bodies to live longer and more healthy than during previous centuries. However, the values of modern science also carry risks on their backs.

As cultural values ebb and flow, so too do the risks associated with those values. Understanding cultural values, though, can be a challenging process because our cultural orientations are fairly mirage-like. Adams (1995) supported this through his explanation that understanding culture is more than merely understanding “ways of life”. He wrote:

“Ways of life” implies a stability, consistency, and comprehensiveness of value systems that is difficult to find in a pluralistic world. Indeed, it has proved impossible to find pure examples of the cultural theory stereotypes. Breathes there a person outside the asylum who has never made common cause with others to achieve some objective, or who acknowledges no social constraints on his behavior, or in whom all traces of individuality have been extinguished by
subservience to authority, or who is not rendered fatalistic by the contemplation of his own mortality? A more flexible term is needed; cultural theory is better understood not as a set of categories of “ways of life”, but as a typology of bias.

(p. 67)

Adams’ orientation, to see culture as a set of biases, presents a workable frame for understanding risks in particular cultures. As I studied risks encountered by medical students through SP labs at OUHCOM, I paid particular attention to the preoccupations of the school, the broader institution of medicine, and society writ large.

**Individuals and Risk Taking**

In addition to understanding risk from a cultural-value perspective, individual decisions about risk remained vital for this project. In Beck’s (1992) *Risk Society*, he explained that the turn to modernity and industrialization was coupled with a strong desire for individualization suggesting that many people “associate ‘individualization’ with individuation” (p. 128). The ideas of individuation are centered on ideals such as personalization, uniqueness, and emancipation. However, Beck pointed out that individualization also has power to bring forth opposite outcomes. He explained that this opposing process has occurred while people left traditional conditions to meet individual opportunities in the marketplace. He stated, “The individual is indeed removed from traditional commitments and support relationships, but exchanges them for the constraints of existence in the labor market and as a consumer, with the standardizations and controls they contain” (p. 131).

Given this perspective, it seems reasonable that medical students could experience moments of confusion or frustration stemming from their desires for individualization
and professional-expert power, but also feel constrained by the institutional 
standardizations and controls of medical education. Or from another vein, it is possible 
that medical students are attracted to the profession for its stable and scientific 
characteristics, but could be surprised to discover the inherent uncertainty in medicine. 
Ultimately, individuals experience risk to varying degrees and toward various ends. 

Adams (1995) added to the conversation of individuals and risk taking through his 
theory of risk compensation. He described:

The theory postulates that we all come equipped with ‘risk thermostats’ and 
suggests that safety interventions that do not affect the setting of the thermostat 
are likely to be frustrated by behavioural responses that reassert the level of risk 
with which people were originally content. (p. ix)

The precise temperature at which each person’s risk thermostat is set will likely differ, 
but risk compensation maintains that all people behave in ways that help maintain a level 
of desirable risk. This concept is illustrated in the example that people who have 
insurance compensate by being less careful.

Faced with risks at all angles, medical students also find ways to compensate. 
Consider the pressure medical students face to meet expectations of various types. They 
are expected to perform well on exams, avoid clinical and diagnostic mistakes, and 
communicate in effective ways with patients, professors and classmates. Understanding 
how students compensate when confronted with these risks was one of the goals of my 
dissertation.

One should not assume that risk is something that people always seek to avoid. 
Some people become skilled risk takers as they gain intentional experience with risky
situations. Lyng (2008) referred to this in his work on voluntary risk taking and edgework. Noting a large increase in extreme sports, he suggests that some people are drawn to risky experiences because of the seductive nature of those experiences. But Lyng also explained that risk isn’t merely present in extreme environments stating, “Many individuals are adopting riskier lifestyles in their choices of occupational careers and leisure activities” (p. 106). As I seek to understand how medical students cope with the risky nature of medicine, it would be a mistake to overlook the concept of edgework.

**Problematic Integration**

The theory of problematic integration (PI) (Babrow, 1992) provides an insightful lens for understanding how people communicatively cope with values and risk. PI is centered on a few tenets. First, humans rely on probabilistic understandings of the world. Second, we also use evaluative understandings. And third, humans integrate these probabilistic and evaluative orientations.

PI theory claims that integration of probabilistic and evaluative orientations is both unavoidable and often problematic. As Babrow (1992) explained, “Integrating one’s probabilistic and evaluative orientations is a routine matter when probabilities are clear, evaluations are consistent, and when probabilities and evaluations converge” (p. 97). For example integration would not be difficult for a medical student who predicts high probability of a passing grade on an SP interaction (probabilistic) and who values high grades as positive (evaluative).

However, integration is not always easy. PI theory suggests that integration becomes difficult when “probability and evaluation diverge, probability becomes less clear, or ambivalence arises” (Babrow, 1992, p. 97). Integration of problematic and
evaluative orientations is unavoidable, so the process is part of everyday life. Thus, challenges of PI are not foreign or rare.

Four forms of PI have been identified in previous literature: diverging probability and evaluation, ambiguity, ambivalence, and impossibility. It is worthy to note that these forms of PI cross boundaries as values change. The first of the forms, diverging probability and evaluation, occurs as we recognize a “discrepancy between what we believe to be so and what we want to be so” (Babrow, 1992, p. 100). For example this might occur as a medical student hopes to receive positive feedback from a standardized patient, but based on the most recent interaction expects strong correction instead.

Ambiguity occurs when the probability of what one wants is unclear. For example, consider the patient who hopes to receive news that her illness will soon pass. However, upon reviewing test results, the physician informs her that she has a unique situation and further tests and expert opinions will need to be solicited before a definitive diagnosis can be attained. This example showcases the difficult nature of ambiguity for the patient and physician alike. Barondess (1986) stated, “Intellectual maturity in medicine is measured by the degree to which the [ambiguity] of clinical decision making is managed . . . Medical education itself has been characterized as training for [ambiguity]” (p. 526).

Two major forms of ambivalence include mutually exclusive alternatives or contradictory responses. The latter could occur as medical students find contradictions between feedback about their interpersonal communication during a medical interview from the instructor and the SP. Or it could occur as different sources suggest contradicting remedies for a particular health issue.
Impossibility is the fourth form of PI from Babrow’s (1992) theory. Impossibility is closely tied to certainty, because when something is impossible, it certainly cannot be. Though Babrow explained that there is a slight difference between very low probability and impossibility, he also suggested that they are considered the same in much of everyday communication and comprehension. Impossibility is particularly problematic when it is associated with highly positive values. People who expect all physicians’ communicative abilities to be outstanding cope with impossibility through PI. Physician’s can not control the elements of the universe, and they will make mistakes with their words as well as their decisions.

Throughout his foundational piece, Babrow (1992) explained that people use communication to cope with various forms of PI. Ultimately, information seeking is an inherently communicative process. In contrast, communication can also be the means to PI. I take the stance that all risky communication where predictions and values are at stake has PI potential. Therefore, PI theory offers a valuable lens for understanding how medical students cope with the risks and values of their profession.

**Narrative Theorizing**

Narrative medicine is a very practical undertaking. It arises from the day-in, day-out of events of the doctor’s or nurse’s office—right there off the crowded waiting room, the desk drawers filled with prescription blanks and rubber hammers, the gauze and the scalpels and the needles and the betadine. Or it arises in the anonymous hospital room, strangers overhearing, through the green cloth curtain, a doctor telling a patient bad news, sad news, news of defeat, and
Narrative theorizing is popular in many disciplines across the academy. In recent years, the epistemological potential of narrative has been realized in fields including communication, sociology, education, cultural studies, psychology, history, and medicine. This is not surprising given Hardy’s (1985) sentiments that “We dream in narrative, day-dream in narrative, remember, anticipate, hope, despair, believe, doubt, plan, revise, criticize, construct, gossip, learn, hate, and love by narrative” (p. 5).

In this section, I discuss key grammars of narrative theorizing along with functions served by storytelling in health care settings.

Through storytelling, we communicate, relate, and organize with others. One need not pause long to recollect a recent story she or he has told or heard. Even more striking is the fact that we think about stories, even when we are not talking to others. When was the last time you contemplated a story? Narrative episodes of life activity fill our minds as we think of past and present moments and anticipate future events. We craft stories around names, dates, and events, and in so doing pass meaning on from one generation to the next. To the extent that they allow us to size up circumstances and craft livable truths, narratives function, in the words of Burke (1954), as “equipment for living.”

Narratives are foundational communicative abilities. Fisher (1984) suggested that the term *homo narrans* be added to the list of scientific root metaphors that describe humans. This suggestion implies that the nature of our human existence is storied. Some believe that narrative is a natural ability unique to humans. Novak (1975) explained that narrative, “is an ancient and altogether human method. The human being alone among
the creatures on the earth is a storytelling animal; sees the present rising out of the past, heading into a future; perceives reality in narrative form” (p. 258). Presumably, humans’ ability to narrate is associated with the dawn of history.

In simple terms, narratives create meaning by organizing events in time and space, developing characters and their relationships, and ascertaining causality through the process of emplotment (Reissman, 2008). In health contexts, disciplined academic effort has explored the practice of storytelling in coping with life disruptions surrounding diagnoses (e.g., Frank, 1995), the role of stories in creating and maintaining organizational cultures (e.g., Morgan, 2005), and the role of narrative reasoning in clinical interactions (e.g., Charon, 2006). Scholars move between autobiographical stories, institutional scripts, and meta-narratives of a culture to explore, in the words of Holstein and Gubrium (2012), “the social organization and cultural conditioning of stories” (p. 3). In fact, Holstein and Gubrium advocate a “broad array of approaches that moves beyond, but does not exclude, the content of personal stories” (p. 4). Across approaches and levels of analysis, the sensemaking function of storytelling is emphasized by scholars and practitioners.

**Narrative and Sensemaking**

Life is filled with random moments that are symbolically organized to make sense of otherwise disconnected events. Narrative scholars have pointed out that sense making is a narrative process. For example, Garro and Mattingly (2000) explained:

Narrative is a fundamental human way of giving meaning to experience. In both telling and interpreting experiences, narrative mediates between an inner world of
thought-feeling and an outer world of observable actions and states of affairs. (p. 1).

Life’s experiences consist of events that occur across time and space. Without some form of organization, those experiences would be random and nebulous. However, the process of emplotment allows us to explain and justify human motives and behaviors. Through emplotment, humans engage in sensemaking by temporally organizing events (Mattingly, 1998).

Of course, chaos results when experiences occur “without sequence or discernible causality” (Frank, 1995, p. 97). On the contrary, however, order can be maintained or restored when experiences are narratively structured or re-structured. While addressing the topic of narrative and illness, Sharf and Vanderford (2003) stated that we use stories to, “cope with chaotic or confusing conditions often encountered in our everyday lives” (p. 16). In other words, we use stories to make sense of our worlds and to get by when that task seems most difficult. A case in point: we use narrative to cope with PI and risk (Russell & Babrow, 2011)

Due to its sensemaking capacity, the act of telling stories can be therapeutic. “Humans are by nature story tellers who use these stories to provide meaning and order for the circumstances and situations that occur throughout the life span” (Brown, 1986, p. 73). Talking aloud about one’s life events is a hallmark aspect of formal counseling experiences as well as informal moments of social support.
Stories are Told and Lived

*Narrative plays a central role in clinical work not only as a retrospective account of past events but as a form healers and patients actively seek to impose upon clinical time.* Mattingly, 1994, p. 811

In lay conversation it is unlikely that people think about *stories as lived episodes.* More likely, they think of them as something told, perhaps around a water-cooler, campfire, or dinner table. For example, in elementary school, we learn “proper” or “ideal” ways to tell or write a story. Narratives must have characters (protagonists and antagonists), setting, plot, etc. When we reflect on our experiences, such as those we had in elementary school, we use the same basic narrative features for telling or writing. Not surprisingly, some scholars reduce the value of narratives to be primarily descriptive in nature (see Megill, 1989; Somers, 1994). Mink (1970) expressed his opinion about storytelling as follows:

> Stories are not lived but told. Life has no beginnings, middles, or ends; there are meetings, but the start of an affair belongs to the story we tell ourselves later, and there are partings, but final partings only in the story. (p. 557)

This statement is not devoid of controversy. In contrast to Mink, MacIntyre (1984) explained, “we all live out narratives in our lives . . . we understand our own lives in terms of the narratives that we live out” (p. 212). In therapeutic interactions, Mattingly (1994) extended this argument to suggest that the emplotment process endows actions with meaning by situating them within larger therapeutic stories and improvising based on the specific contingencies and available resource. Or, in her words, “Narratives are lived before they are told” (p. 811).
It is my firm assumption that humans both live and tell stories. As Allison (1994) argued, “humans exist narratively and are better understood as story *livers* rather than storytellers” (p. 108). Life is a narrative experience and the chronology of living and telling is hard to decipher. In his book about making sense of the self through narrative, Kerby (1991) summed, “We are both experiencers and narrators (often pretty much at the same time), for the act of making intelligible is a more or less continuous one” (p. 45). As we move through the scenes of life continually making sense of narrative experiences, we are enabled to form senses of who we are in relation to our surroundings. In other words, our experiences are connected with our identities.

**Narrative Self and Identity**

Much research suggests that self and identity are at the heart of narrative experience (see Brockmeier & Carbaugh, 2001; Bruner, 1997; Cohler, 1991; Kerby, 1991; Linde, 1993; Somers, 1994). The storytelling process is one wherein identity is created and maintained (Crites, 1986). In life’s stories, we act as characters with identities and purposes. The sensemaking features of narrative allow us to evaluate our own positions as we change scenes throughout time. Somers (1994) argued that identity is constructed as people move between narrative scenes, “People make sense of what has happened and is happening to them by attempting to assemble or in some way to integrate these happenings within one or more narratives” (p. 614).

Becoming aware of our narrative identity is an ethical project (Phalen, 2004). While conscious decisions lead to particular places in life, narrative influence transcends consciousness. History influences where we stand today as well as who we perceive ourselves to be. Experiences from settings of the past converge to make meaning about
the present and inform the future. Our understanding of the past strongly influences our identities and storytelling aids with that discovery. Kerby (1991) summarized the importance of biography, “Loss of this ability to narrate one’s past is tantamount to a form of amnesia, with a resultant diminishing of one’s sense of self . . . our history constitutes a drama in which we are the leading character” (p. 7).

Importantly, our personal stories are conditioned by societal scripts commonly referred to as master narratives—what Gubrium and Holstein (2009) describe as “the social organization of the storying process” (p. 25). For example, Trethewey (2001) wrote about the master narrative of aging as decline in women’s midlife experiences at work. She explored how dominant scripts orient women to dread aging and disguise physical signs of decay and decline. The influence of master narratives is vast and powerful. Ricoeur (1982) wrote, “We belong to history before telling stories or writing history. The game of telling is included in the reality told” (p. 294). Even so, narratives remain contested terrain. Individuals are agents who can push against the gradients of habit. Throughout my fieldwork, I paid attention to discourses that clarified and reified dominant scripts about health care—and discourses that challenged and disrupted otherwise taken-for-granted ways of “how things are done.” Value-laden plots are particularly consequential when expectations go awry and individuals must decide how to proceed in light of unexpected blows of fate.

Peripeteia

For many students, the SP labs are unchartered territory, spaces to display their budding medical knowledge and develop their communicative and diagnostic skills. The SP lab is an environment ripe for peripeteia. From Aristotle’s Poetics, peripeteia is “a
sudden reversal in circumstances” or a “breach in the expected state of things” (Bruner, 2002, pp. 5,17). For Bruner, problems that invoke a change in plans, or trouble with a capital T as Burke (1954) put it, are central to narrative existence. Problematic disruption gives rise to the process of emplotment, sensemaking about cause and effect, right and wrong, across time and space.

Just like students who engage in any professional program, medical students are socialized to see themselves in particular ways (see Morgan & Krone, 2001). They come to medical school with histories and hopes for the future. Medical students embark on their journey hoping to exemplify certain doctor roles (i.e., good listeners, prestigious, well paid, cure finders, marginalized servers). Their selves, motives, and visions have been molded while interacting with like-minded students, while studying physical and biological sciences as pre-medical undergraduates, from fictionalized dramas and family conversations. Bakhtin (1990) wrote, “Freewill and self-activity are incompatible with rhythm” (p. 119). As medical students move toward doctor identities they should expect disruptions across time.

Even though standardized patients are actors, they are still people filled with emotions. Emotions are responses to narrative events (Kerby, 1991). Narrative medicine, a popular movement in medical education, centers on providing close attention to the plight of the patient (Charon, 2006). Relating to the plights of others is difficult. Yet, Bakhtin taught that we can “project” ourselves into others and try to experience what they experience before relying on pre-conceived judgments. This is a challenging process for students and patients alike.
Not only do students need to learn to listen to the stories of their patients, but they need to understand their own stories. Frank (1995) stated:

The moral imperative of narrative ethics is perpetual self-reflection on the sort of person that one’s story is shaping one into, entailing the requirement to change that self-story if the wrong self is being shaped. (p. 158)

Medical students should make effort to reflect about their stories and who they are becoming as they progress through medical school.

As students take inventory of their own life histories and defining moments, they should reflect on often taken-for-granted societal forces that give rise to one’s sense of self (see Garro & Mattingly, 2000; Lyotard, 1979). Although we are born into particular stories—they are not fixed or stagnant. As argued by Kerby (1991) “the script is not entirely pre-written, only certain backdrops are preset” (Kerby, 1991, p. 109). We might “belong to history,” but we are also the characters who make it and plan for it. Freeman (2010) stated:

Just as the future must be rewritten in order to break the stranglehold of narrative foreclosure, so too must the past. The first, very difficult step in doing so is demystification; that is, one must become more consciously aware of the scripts and storylines one has internalized. (p. 139)

Students’ awareness of dominant storylines represented another central point of this project. As I observed and listened, I paid attention to students’ awareness of expectations for role performances, espoused and/or silenced values, and how students coped with uncertainties and risks. In the next section, I summarize these and other concerns often engaged by narratives scholars—i.e., vital problematics.
Vital Problematics

Acknowledging the strength of narrative theory throughout the academy in general, and in health communication in particular, Harter, Japp, and Beck (2005) articulated common concerns engaged by narrative and health researchers. They articulated these concerns as vital problematics present in various forms (although not always clearly articulated or explicitly acknowledged). They are the problematics of: knowing and being, continuity and disruption, creativity and constraint, and partial and indeterminate. These problematics synthesize the grammars of narrative theory and functions of storytelling presented thus far—and shaped the stories I elicited from participants, the stories I watched unfold during fieldwork, and the stories I constructed and presented in Chapter Four and Five.

The problematic of knowing and being is a central struggle for medical students. Harter et al. (2005) stated, “The problematic of knowing and being foregrounds how we narratively construct and understand what we call our lives, creating ourselves in the process and shaping our existence in particular ways” (pp. 9-10). Since narratives are simultaneously instruments for self-discovery and self-creation (Bruner, 1990) an eye toward this problematic directed me to pay attention to how SP labs became spaces of identity construction. By performing roles in expected ways (or resisting expectations), I focused on the processes through which students (re)learned what it means to be a doctor.

Emplotment is central to the problematic of continuity and disruption. The SP labs by design force students to reckon with cause and effect as central to the diagnostic process. Narrative theory oriented me to paying attention to how patients presented disruptions and how medical students entered their emergent life stories in an effort to
connect them with biomedical/illness plots (see Charon, 2006). As patients—SPs—find themselves in the midst of disorder and uncertainty, they approach physicians with anticipation for an interpretation of what is going on and a series of “next steps.” I was keenly aware of how this narrative challenge presented itself as medical students interacted with patients in SP labs.

Creativity and constraint is the third problematic articulated by Harter et al. (2005). They explain that this problematic “foregrounds the human struggle to be individuated (i.e., assert creativity) and still identify with a group (i.e., respond to social and institutional constraints)” (p. 19). Humans construct institutions to organize themselves, but also find themselves constrained by those very structures (Giddens, 1979). Medical students enter medical school, a socially constructed institution, to further their individual careers. But the sheer weight of master narratives (e.g., hope is a cure), embedded with social rules and expectations, is strongly influential and consequential. Similarly, patients who seek out physicians’ expertise to address personal issues may find themselves reifying rules of the medical structure without questioning who benefits the most from such structures.

Finally, Harter et al. (2005) discussed the partial and indeterminate nature of narrative knowledge. This problematic acknowledges that narratives are lived, told, and understood from particular places and as such are inherently partial. As narrative elements shift, new sets of issues emerge. Medical research proceeds along the tracks of modernity, and post-modern realities medical students face come into focus. As highlighted in chapter one, medicine is wrought with uncertainty at many levels. Medical
students face the challenges of shifting narratives and shifting knowledge while they work to establish themselves as medical experts.

**Summary and Research Questions**

*How can we improve medical education? Can we produce competent and compassionate physicians more efficiently and effectively? How can we reorganize medical education to produce physicians who are able to achieve better health care outcomes for the American peoples?* Cooke et al., 2010, p. 2

SP lab pedagogies initially were designed to provide students with opportunities—early in their medical education—to practice compassionate and competent care. Medical students are learning a profession wherein they are expected to alleviate or heal others (patients) facing life disruptions—some significant in scope and consequence. With limited knowledge about human health and healing, medical students are forced into scenes where they have to communicate with patients (SPs) who anticipate their help. Clinical judgment relies on narrative reasoning (Charon, 2006). Providers must enter life stories of patients, ascertain symptoms of problems and potential causes, connect personal stories to biomedical illness scripts, and when necessary chart treatment paths.

Clinical interactions reveal the centrality of narrative reasoning to the provision of healthcare (B. Sharf, Harter, Yamasaki, & Haidet, 2011). As argued by Sharf et al.:

Providers and patients alike read physical symptoms narratively and contextually, urged by the impulse to emplot events befalling a character, search for causality, and develop actionable interventions. Individuals offer storied accounts of
symptoms, side-effects, and, if invited or supported, their experience of illness. (p. 43)

Mattingly (1998) used the term *therapeutic emplotment* to describe the story-like structures used by patients and providers alike during diagnostic and treatment processes. The SP labs of OUHCOM offered a rich context in which to witness how students demonstrate and develop narrative reasoning.

In health care contexts, narratives also take the form of cultural scripts that guide how individuals relate and organize (e.g., technology as progress; time is money). For example, norms characterizing the biomedical model (e.g., detached concern) function as institutionalized scripts that guide role performances. As I engaged in fieldwork, I remained focused on how value-laden societal scripts were reified (and in some cases resisted) as students interacted with patients in clinical settings.

Medical students must negotiate values and roles as they are socialized into their professions. In my exploration of the value-laden nature of SP encounters, I remained particularly interested in how students encountered and made sense of risk and uncertainty. Uncertainty about health, medical mistakes, and expectations to be expert communicators are some areas of risks that medical students encounter during their journeys. Even though their choices to become educated in medicine may be guided by values that enable individualization, their experiences in medical education can likely unveil unforeseen risks and constraining patterns. The realities of lived experience mess up the tidy ideals that gloss the surface of what some think life *should* look like. The risks that medical students face are real and very difficult to avoid. As students seek to make
sense of these realities, they are confronted with problematic integration and they cope in
diverse ways.

In this project, I explored how and to what extent medical students demonstrate
and develop narrative competency through SP labs. Furthermore, I investigated the value-
laden nature of SP labs and what they reveal about broader societal scripts that guide how
individuals relate and organize in health contexts. Accordingly, the following research
questions guided my data collection and analysis:

RQ1: How do SP interactions prepare students for the narrative nature of clinical
work?

RQ2: What value sets are maintained or disrupted through interactions with SPs?
CHAPTER THREE: INQUIRY PRACTICES

*Sometimes students and professional social scientists alike believe that an insightful qualitative study only results from the researcher’s extraordinary talents. They are wrong. Good qualitative research results from hard work and systematic approaches.* Charmaz, 2004, p. 496

In this study, I relied on my interpretive sensibilities and qualitative methods to gather, interpret, and represent data. My research questions remained at the forefront of this project, and I developed my research design around those questions. I did not select research questions based on a preferred methodology, but rather I began by honing questions that I deemed most intriguing and then crafted a research protocol best suited to answering those questions. I used qualitative methodologies because, per my estimation, they lent themselves best to answering my research questions.

In this chapter, I discuss the methodological details of my dissertation. Specifically, I offer details about the setting, data collection and data analysis, and how and why I chose to represent knowledge claims in both creative and traditional forms.

**Exploring the Setting**

Guided by narrative theory, I explored the SP labs as settings where medical students and SPs interacted in scenes simulated to reflect realistic clinical environments. Taking a holistic approach is important in qualitative research (Patton, 1990) and I recognize that the SP lab is but one setting in students’ broader educational experiences. After several months of pilot observations I narrowed my focus from broadly observing medical school, including orientation rituals, lectures, and extra curricular events to the interactions in the SP lab.
Sampson (2004) made a compelling argument for the value of pilot studies in qualitative research, and explained that, too often, they are overlooked and imagined as “only of relevance in more positivist methodological approaches to research” (p. 385). She added that “there are potential benefits to putting a toe or two into the research waters before diving in” (p. 399). After comparing two separate research experiences aboard cargo ships, one with and the other without a pilot study, she concluded:

It is in establishing [qualitative] projects that I now believe that pilot work is of greatest use. Not only in order to find ways of minimizing observer bias, not in simply determining the best course of action in establishing access or maintaining good fieldwork relations, although in all these endeavours a pilot can be helpful. Rather, as should perhaps be self-evident, it seems to me that pilots are invaluable as introductions to unknown worlds. p. 399, emphasis included in original

Looking back at the course of my project, I wholly agree that my pilot work helped me focus my interests, resources, and skills.

Before undertaking this project, I had not spent one hour inside a medical school. As I broadly examined the unfamiliar settings through my pilot work I peered into several dimensions of medical school experience. I attended lectures with medical students, explored their experiences on service trips abroad through interviews, joined leisure time conversations during daily breaks, and participated in extracurricular activities including basketball and golf. Through these experiences, I collected fieldnotes that are not included in the results of this dissertation. However, the effort was in no sense wasted because I became familiar with the terrain and formed relationships with individuals who, as it turned out, were the gatekeepers and key informants I needed to complete my
project. I decided that focusing on SP labs would yield the most value for understanding the issues that interested me. Ultimately, SP labs are nexuses for insight into how students confront the narrative dimensions of clinical practice and the uncertainties and risks that ensue.

**Setting and Participants**

I learned about ways medical students engage in narrative reasoning and construct roles to cope with values in medicine and medical education by observing interactions in the new SP labs at the Ohio University Heritage College of Osteopathic Medicine (OUHCOM). As highlighted in chapter one, the labs are newly constructed and video and audio recorders can monitor each exam room. Outside of the exam rooms, observers can tune into the interactions via the secure local network and control room. Beyond students, the SP labs involve several individuals including the SPs, instructional faculty, and a full time employee who oversees the logistics of the interactions.

SP interactions occur regularly during most months of the academic year. In a typical interaction, the patient, already educated about what will take place, waits inside the exam room for the student to knock and enter the room. OUHCOM has fifteen SP exam rooms so as many as fifteen interactions can simultaneously occur.

While my focus was primarily on the medical students, my peripheral gaze also included other individuals both in the middle and behind the scenes of SP interaction. Some of the primary stakeholders and gatekeepers worked away from the setting altogether. Gatekeepers are individuals who maintain power that can enable or constrain access to the settings (Lindlof & Taylor, 2002). I made concerted efforts to foster respectful and professional relationships with those who have power over access.
Lindlof and Taylor (2002) suggested, “The researcher’s first step in securing a research site must be to find out who the gatekeeper is” (p. 101). I identified two primary gatekeepers, Dr. Nicole Wadsworth, Interim Assistant Dean responsible for most of the interactions, and Pam Henderson, the lab coordinator who works daily as the literal gatekeeper deciding who can and cannot participate. Fortunately, I fostered workable relationships with them and I was also warmly received by Dr. Jack Brose, Dean of the OUHCOM. As an outsider to the medical school from the School of Communication Studies, I strived to foster healthy working relationships with everyone.

**Researcher’s Role and Reflexivity**

As an outside observer using qualitative methods, I conducted this project understanding that my interpretations are partial and biased. Even so, I also maintain a stance that biased positions can reveal quality information. From the beginning I maintained a strong concern for this context and I did not intend to make highly generalizable findings. Keyton (2006) said, “In the strictest sense, the qualitative research tradition rejects the objectivity and absolute truth that is sought in quantitative methods and accepts that multiple interpretations are possible” (p. 59). As an interpretive researcher, I recognize my biases while respecting interpretations of others.

Though interpretations vary, I represent reality as shaped by my own theoretical sensibilities and life experiences. Throughout the process, I sought to create a portrait with verisimilitude. Verisimilitude is concerned with representation and fidelity. Denzin (1994) explained, “In its most naïve form, verisimilitude describes a text’s relationship to reality. It asks, ‘Are the representations in a text consistent with the real? Is the text telling the truth?’” (p. 298). Although I do not believe it is possible for me to find The
truth, I do believe it is possible for me to co-construct—with participants—a truth that is plausible, defensible, and guided by my fieldwork.

One way to ensure that an interpretation is viable and defensible is through the use of member checks. Ellingson (2009) suggested, “I highly recommend that you invite some or all of your participants to respond to your findings” (p. 42). This process can occur through various forms (i.e., focus groups, informal conversations, or public forums). As I constantly interpreted the data I collected, I shared my interpretations with medical students and asked for additional insights and feedback. Through that process, my interpretations were confirmed as realistic, but I was occasionally redirected. Actors’ voices are important in portraying acts accurately. Using direct quotations from participants as well as seeking their feedback are helpful ways to ensure that my biases do not overshadow the truths uttered and lived by participants. My findings were organized to privilege participants’ voices (see Chapters 4 and 5).

Consent and Confidentiality

According to Keyton (2006), “confidentiality means that any information the participant provides is controlled in such a way that others do not have access to it” (p. 91). This definition emphasizes protection of information that participants share in confidence. This is clearly an important issue, but in addition to merely protecting information, I also believe confidentiality signifies respect, gratitude, and protects the dignity of participants.

Following standard guidelines, I obtained approval from Ohio University’s Institutional Review Board (IRB) to observe, interview, and analyze the people, setting, and artifacts for this project (see Appendix B). In written form, I received blanket
permission from Dr. Wadsworth (see Appendix C) to observe patients, faculty, and SPs. Meanwhile, I always ensured that participants knew of my presence and intention by presenting an informed consent form to them and discussing its details (see Appendix B and the IRB application for informed consent forms). In order to narrow the scope of my dissertation and remain focused on the key research questions, I did not hold formal interviews with SPs for this project. Even so, I acted prudently by including informed consent forms for them in my IRB application in case of the necessity. Finally, I felt that the IRB application asked for the minimum standard in consent and confidentiality. So, I followed the IRB guidelines and protocol in a manner highly consistent with my ideals of dignity and respect.

**Data Collection**

I used several qualitative methods for gathering data in this project. Ellingson (2009) referred to the use of multiple methods to collect and represent qualitative data as crystallization. In this section, I discuss my crystallization of several methods of data collection including observations, interviews, and artifacts. Rather than relying on one method for data collection, these three each offered insights that are unique, interrelated, and far-reaching. I then turn to how I interpreted data and represented findings in crystallized fashion.

**Observations**

One of the hallmarks of qualitative research is observing participants in their natural environments. Lincoln and Guba (1985) explained that naturalistic inquiry is a discovery-oriented approach wherein researchers minimalize manipulation of the setting (see also Denzin & Lincoln, 2011). One of the convenient factors of the SP labs is that I
was able to observe the interactions without being in the room with the participants. The
cameras and microphones allowed me to be as close to a fly on the wall as I could
without assuming a small insect-like morphology. However, some of my observations
outside of the exam rooms were not captured by audio and video recorders (i.e.,
observing students in the halls before and prior to the interactions). Nevertheless, I tried
to maintain a neutral and minimally-invasive presence in those moments.

During and after observations, I took field notes to capture my interpretations.
Frequently, those notes included seemingly random observations that appeared
disconnected, but which I deemed important. The following words from Schatzman and
Strauss (1973) resonate well for me:

Novices in research worry too soon about developing salient categories for final
analysis, about developing brilliant concepts, and about establishing ‘patterns of
interaction’; in short, they want quickly to prove to themselves and others that
they are social scientists. (p. 54).

As a neophyte researcher, I took care to recognize the value of watching patiently.

Using a narrative perspective as a guide, I made efforts to answer the following
questions highlighted by Lindlof and Taylor (2002) as I took field notes:

- Who are the actors?
- How is the scene set up?
- How do initial interactions occur?
- How do actors claim attention?
- Where and when do actors interact?
- Which events are significant?
In addition to field notes, I also took scratch notes during my observations and made more detailed field notes soon after the particular events passed. Writing a detailed description of observations is important because, “The more time that elapses after observing, the more likely that deteriorating memory will dilute the fidelity and detail of the account” (Lindlof & Taylor, 2002, p. 161). On the other hand, I also found that some of my delayed interpretations and reinterpretations of experiences were enhanced by perspective I gained since my initial observations.

Through my pilot work, I gained a sense of the culture in the SP labs and insight into some of the differences between various labs. For example, I identified the summer labs as unique and important. During the summer months, second year students’ completed their final labs before leaving for rotations and in preparation for their COMLEX2PE exam. The COMLEX2PE exam is the licensing exam that includes interaction with standardized patients (National Board of Osteopathic Medical Examiners [NBOME], 2011b). Also significant, during the fall months I observed first year medical students’ first SP labs that involved basic conversations of introductions and history taking with SPs. Guided by interactions I had made during my pilot work, I identified several individual students with whom I wanted to interview and observe during SP interactions. As time progressed, that group expanded.

Over the course of 32 months, I observed labs, debriefing sessions, orientation meetings, lectures, and informal and extracurricular gatherings. I was also enrolled in the Blackboard system, so I received the announcements, reading assignments, and email reminders for both classes of students. Throughout the process, I kept a research log that tracked my activities including participant observations (see Appendix D).
Interviews

Following observations, I held formal, recorded interviews with medical students and faculty. Those interviews were valuable for their unique angle on participants’ experiences and perspectives. Often times, this is where participants’ lived truths were disclosed. I recognized that participants words were rhetorical constructions of their experiences (Lindlof & Taylor, 2002).

I conducted both informal and formal interviews. Informal interviews occurred spontaneously as I made observations and held conversations with actors in their environments. The spontaneous nature of informal interviews made it difficult to record them in audio. Even so, in many cases, I was able to capture my recollections of conversations immediately afterward.

In addition to informal interviews, I also conducted formal face-to-face interviews with students. This type of formal interview is also referred to as the “long interview” (McCracken, 1988) or the “depth interview” (Berger, 1998). I held these interviews away from the SP labs at locations where I could audio record the conversation. Most often, those interviews were held at diners and restaurants. I followed an interview protocol; yet, the interviews were semi-structured so as to allow participants to share ideas and experiences they deemed relevant and important (see Appendix E for a copy of the interview protocol). I asked questions to encourage the participants to expound on their experiences with medical education, SPs, their feelings about affiliated risks, and other topics. As conversations opened up, I asked probing questions to dig more deeply and explore veins that emerged.
Artifact Collection

Throughout my observations at the SP labs, I collected artifacts affiliated with the educational experience. I use the term artifact broadly. For this project, an artifact is any tangible evidence of a symbolic, human act related to the context (Foss, 2009). I observed and collected artifacts including instructional materials such as SP scripts, narrative cases, videos, assigned readings designed to prepare students for the labs, rubrics and checklists. I also considered objects such as art on the walls and medical devices in the exam rooms as artifacts worthy of analysis.

Data Analysis

One of the principle strengths of qualitative research remains its blend of strategy and unexpected discovery. Lindlof & Taylor, 2002, p. 210

After I collected data, I used a systematic and creative process to analyze it and develop theoretically-informed arguments (see also Ellingson, 2009). Interpretive methods lend way to many forms of data analysis. However, in this project I followed tenets of artifact and constant comparative analyses.

Artifact Analysis

Many forms of analysis are used to understand artifacts in communication research. Content analysis, rhetorical criticism, textual analysis, and discourse analysis are some of the terms used to decipher between various analytic methodologies. Even though these analytic methodologies each have unique features, they also share similarities. They are all concerned with analyzing symbols that result from actors’ and cultures’ communicative constructions. Here, I use the term artifact analysis as an umbrella term for seeking meaning in the artifacts I collected during the observations.
Gee (2005) wrote about discourse analysis. His work is primarily concerned with “how language, both spoken and written, enacts social and cultural perspectives and identities” (p. i). Since many artifacts are documents of written words, Gee’s methodological suggestions are relevant for this project. Gee (2005) suggested that language is a tool designed to build things. Anytime people speak or write they simultaneously engage in the “seven building tasks” (p. 11). These tasks include: significance, activities, identities, relationships, politics, connections, and sign systems and knowledge. These tasks are connected to rhetorical artifacts. This list served as a good resource for maintaining a systematic way of looking beyond the surface and questioning the significance and meaning of artifacts. For example, while analyzing the the SP feedback form, I asked, “What identity or identities is this artifact being used to enact?” (identity), or “How does this artifact privilege or disprivilege specific sign systems or different ways of knowing and believing?” (sign systems and knowledge).

While Gee’s suggestions were helpful, I also recognized that the “building tasks” were intended to inform but not overly constrain the analytic process; thus, I did not construe the “building tasks” too literally as a mechanical “to do” list. In other words, Gee’s framework and my interpretive sensibilities informed the analysis.

**Constant Comparative Analysis**

Given the scope of data generated, I found it necessary to use computer software to manage the data during the coding process. Coding data allows the researcher to identify themes and horizons of significance that relate to the research questions and exploratory intentions. For this project, I relied on a constant comparative analytic process to code the data and develop themes. Constant comparative analysis is a legacy
of the grounded theory tradition originally articulated by Glaser & Straus (1967), and is used by contemporary qualitative researchers to code the data and organize significant themes (see Charmaz, 2006 for a historical discussion of the role of constant comparative analysis in grounded theory). I used Nvivo software for managing and organizing information during the constant comparative analysis process.

Researchers have different motives in adopting a constant comparative process for coding data. Charmaz (2004) explained, “Coding is the pivotal link between collecting data and developing an emergent theory to explain this data” (p. 506). Even though grounded theory in its fully articulated form is intended to generate new theory, most researchers informed by the constant comparative analytic process have used the coding steps to develop conceptual arguments about the social worlds of participants (see Charmaz, 2004, p. 517). I did not attempt to develop a new theory from my fieldwork. Instead, guided by narrative sensibilities, I used the coding methods established by grounded theory to systematically guide the construction of themes presented in the results chapter. It seems unreasonable to expect theory to simply inductively emerge from the data as implied by Glaser and Strauss (1967). In response to their work, Charmaz (2004) explained:

Perhaps in their enthusiasm to develop an inductive methodology that tightly linked emergent theory and data, Glaser and Strauss imply in their early works that the categories inhere in the data and may even leap out at him or her. I disagree. Rather, the categories reflect the interaction between the observer and observed. Certainly any observer's world view, disciplinary assumptions, theoretical proclivities, and research interests will influence his or her
observations and emerging categories.

In that spirit, and guided by narrative sensibilities, I maintained an openness to new ideas. I also continued to read literature during the process of fieldwork including both data collection and analysis.

From the time I entered the field, I made note of interesting ideas in the form of theoretical memos. From this perspective, and consistent with the constant comparative method, the analytic process begins when the researcher first begins to collect data. That said, once a significant portion of data are collected, the coding process begins. Two types of coding are emphasized in the constant comparative process: open coding and axial coding (also called in vivo coding). This two-step process generally allowed me to simultaneously code and analyze data in order to develop categories and “themes” representing recurring patterns of behavior and meaning. Through open and axial coding, I compared specific incidents in the data and refined my interpretation of them.

Open coding is the broadest and most unrestricted type of coding (Strauss, 1987, pp. 28-32). It is unrestricted because the categories are not yet established. During the open coding process, I read all transcripts, field notes and documents to develop a sense of the data as a whole. I then uploaded my data (field notes, transcripts, documents, and photos) into NVivo and began the process of identifying patterned regularities in the data. During axial coding, I continually compared specific incidents in the data and sorted them into categories. Initially, I came up with 19 categories. Rather than manually organizing categories, I used NVivo to sort and manage the data. As argued by Davidson and di Gregorio (Davidson & Gregorio, 2008), using computer-assisted software offers researchers a digital location in which to store and retrieve data. Through NVivo, I
created a root directly in order to keep track of actual products of coding, including information such as conceptual labels and thick descriptions of experience. Importantly, I believe the success of my analysis still rests with my theoretical sensitivity when constructing and using coding schemes. NVivo did not identify themes—it merely functioned as a tool helping me manage data as I categorized it.

Axial coding is the process of linking categories together in meaningful ways (Keyton, 2006, p. 295). This process reduces the number of categories established during the open coding process. During the axial coding process, I clarified my understanding of relationships between categories, collapsing some and in other cases developing sub-themes. Importantly, I coded the data with narrative sensibilities. I paid careful attention to narratives as texts – the topics, characters, content, style, functions served, contexts and telling of narratives as told by participants during interviews and in the course of their daily activities (see also Frank, 2012). I also approached narratives as performances (see also Cortazzi, 2001). Students performed scripts during SP labs (e.g., what it means to be an efficient doctor), and I sought to understand how those scripts were connected to broader meta-narratives of a culture (e.g., science and technology as progress). In this way, narrative theory provided a sense-making frame for patterned regularities that I discerned in the data. I stopped the analytic process when I was no longer surprised at what I was sensing, what some researchers refer to as reaching a point of theoretical saturation (Glaser & Strauss, 1967).
Representing Fieldwork in Writing

In the next two chapters, I present an account that privileges the voices of participants but also recognizes my position (and power) in selecting, organizing, representing, and interpreting participants’ experiences. I approached writing my results chapters as a multi-genre account composed of two chapters: (1) chapter four is a creative narrative based on my fieldwork, and (2) chapter five develops six themes that reflect patterned regularities emerging from my making sense of the data (constructed through participant observations, interviews, and textual artifacts). My juxtaposition of these two chapters is inspired by Ellingson’s (2009) vision of crystallization—i.e., there are multiple ways to frame findings and invite readers to experience the contexts composing a study. A crystallized text integrates multiple genres of representation into a coherent text.

First, chapter four is composed of a narrative portrayal of the SP lab experience. This creative vignette reflects a typical and realistic encounter in an SP lab—one that offers readers an ethnographic glimpse of communication processes composing this pedagogy. I constructed this narrative to make sense out of what I experienced in the field and as guided by the defining moments shared by participants. By framing this narrative as a typical day in the SP lab, I demonstrate a broad range of processes that typically happen in this assessment process. As articulated by Ellingson (2005), the process of constructing a composite narrative involves “the partial decontextualization of the interactions and recontextualization of them into different times and in differing juxtapositions” (p. 156). Following the lead of Ellingson, I openly acknowledge that this
story is not a real day in the SP lab—rather, the story offers a realistic portrayal of a realistic day in the SP lab.

Second, in chapter five, I articulate six key themes about communication processes in the SP lab. This part of the chapter reflects a more traditional, social-scientific approach to offering interpretive knowledge claims based on a constant comparative analysis of data. Across both parts, I intentionally move between autobiographical stories and dominant narrative scripts of medicine (e.g., time is money), the latter of which is both medium and outcome of autobiographical stories. In the final chapter of the dissertation, chapter six, I circle back and re-engage the research questions in light of both the creative narrative vignette and the six themes presented in results.
CHAPTER FOUR: A CREATIVE REPRESENTATION OF FINDINGS

Crystallized texts include more than one genre of writing or representation. Crystallization depends on segmenting, weaving, blending, or otherwise drawing upon two or more genres, media, or ways of experiencing findings. Ellingson, 2011, p. 605

A Typical Day in the SP Lab

During a warm spring day in the third quarter of her first year of medical school, Jane logged into her Blackboard account to check her class schedule. Upon opening her academic calendar through OU’s portal for students, she saw that situated alongside many lectures and meetings, she was scheduled for a clinical exam SP lab in two weeks. The announcement did not include many details about the lab. Among other calendar announcements, she read:

The following week there will be a standardized patient encounter with a SOAP note. Check your calendar and be sure you attend the correct session. An email with your assignment will NOT be sent out prior to this lab. This will take place in the NEW CTAC in Grosvenor Hall.

Jane did not feel nervous about the fact that her assignment was not available until the day of the lab - this is a common practice. Even so, she did feel pressure, the sort of anxiety that results in sweaty palms and an increased heart rate. Pressure is not all bad, though, she reminded herself. Those sweaty palms are a reminder to study hard and learn the lecture information. STUDY, STUDY, STUDY . . . that’s the best way to do well in the labs and on exams. With upcoming sections on respiratory and circulatory systems as well as a unit on diabetic hypertension and care, Jane had a good idea what to expect in
terms of clinical cases. So, along with approximately 120 classmates, she continued to diligently work through the curriculum that led up to the lab.

On lab day, Jane entered the building through the student entrance. Pam, the lab coordinator, always gives clear and firm instructions that students are to enter through one side of the building and the SPs another. She doesn’t want providers and patients to see each other or have any other contact prior to the clinical exams. Upon entering, Jane quickly walked into the waiting room, a classroom where she and about 30 of her colleagues awaited instructions regarding the lab and their group assignments. With about 120 students per class, simultaneously accommodating everyone in the SP lab would be nearly impossible. So, the students are generally divided into groups of 20-30 for each lab and then they take turns rotating in and out of the rooms. As one can imagine, the logistical challenge of arranging all the labs is no simple task for Pam.

In the waiting room some of the students sat quietly in their white coats and used the time to squeeze in some more studying for their upcoming exams. Others viewed the time as a break from the normal routine and sat in circles laughing and telling stories as their white coats sat on the desks in front of them. Several students nervously bounced around the room asking questions and seeking reassurance that they were prepared for the lab. Jane noticed that one of them was actually in tears from the anticipated stress of the lab combined with the plethora of other stressors accompanying medical school.

After greeting a few friends Jane sat down and Dr. Smalley, the lead professor, walked in with a few other physician-instructors. She greeted everyone, passed out some handouts, and explained the rotation schedule that included the logistical information of who had to be in which room and when. During the next two hours, Jane would see three
different patients, write *SOAP notes* (Subjective, Objective, Assessment, and Plan) after each visit, and receive individual feedback from each patient as well as her preceptor. She started to sweat as she slipped on her white coat. She felt a bit like an imposter, playing the part of doctor—a role she was not quite ready for but would someday assume along with responsibility for the health care of others.

“After your labs, you should come back here for a debriefing discussion,” Dr. Smalley stressed. “Any questions?”

Nobody replied.

She continued, “OK, then we will go back to the control room and make sure the cameras are working. The first group can come into the hallway and stand in front of your door. Do not knock until Pam gives you permission. Good luck!”

Jane and her classmates nervously and silently filed out to the hallway, each student wearing a white coat and draped with a stethoscope. As they entered the hallway, Pam quickly but quietly relayed a message to everyone, “Stand in front of the door, but don’t touch the chart on the wall until I tell you.”

Jane felt a lump in her throat. The situation reminded her of kneeling in the starting blocks before a 100 meter dash.

“Alright,” Pam said. “You can knock on the door in 3-2-1 go.”

Jane knocked on the door and entered the exam room—as physicians do. “Hi, I am Student Doctor Bingham.”

“I’m Larry.” Sitting on the exam table was a 52 year-old man hunched over a bit and holding his abdomen.
“Tell my why you are here today” Jane encouraged, as she pulled her clipboard and pen out.

Following the script of Gastritis (see figure 1 at the end of the chapter), Larry pointed to the top part of his abdomen and said, “I have a really sore pain in my stomach.”

“Hmmm, what does the pain feel like? Is this pain new? Have you taken over the counter pain medicine?” asked Jane, and then silently chided herself for asking too many questions at once without allowing the patient to answer.

“Well, I’ll start with your first question, it feels really sore, like its kinda burning.”

“Larry, have you experienced any other symptoms?”

“Well, I have been sick to my stomach.”

“Any vomiting?”

“Nope, just sick to my stomach. But my grandson, Ben, was there with a bag in case I did throw up!”

“That’s great. Okay, has there been a change in your appetite Larry? Any changes in your bowel movements?”

“No changes in my bathroom habits—my bowel movements. But my wife has noticed I’m not as hungry.”

“Okay, when did the pain start?”

“Oh, I’d say about 4 or five days ago.”

As the conversation continued, Jane moved into more specific questions about Larry’s past medical history. She learned he had a history of high blood pressure, for
which he takes daily medication, and arthritis that acts up when he engaged in heavy house and yard work.

“Can I listen to your heart,” asked Jane, as Larry concluded his family’s medical history.

He complied and she began moving the chest piece of her stethoscope around different parts of his upper body, on top of his shirt, as he breathed in and out. She could feel her own hands shake a bit even as she sensed his breathing patterns and heartbeat. Knowing that she was being evaluated on camera as well as by Larry, Jane took a deep breath and mentally reviewed the step-by-step checklist of procedures she had memorized from previous evaluation forms (see figure 2 on p. 7).

“Oh no!” Jane thought to herself. “I forgot to wash my hands. And I should be listening to his heart under his shirt against his skin.” So she excused herself, washed her hands, and re-started the physical exam. Larry just smiled a bit.

As she took a few more vitals, measuring his blood pressure and inducing pupil dilation with a small bright light, Jane mentally reviewed in her mind, “OLDCHARTS,” a popular mnemonic in medical education that she learned in a lecture for Onset, Location, Duration, Character, Alleviating or Aggravating, Radiation, Temporal, and Symptoms. As she proceeded through the differential diagnostic process, her questions became more specific as she prepared to make a diagnosis.

Jane was startled as she heard Pam’s voice echo over the PA system, “You have two minutes, two minutes.” She glanced quickly at the clock displayed prominently on the wall.
“I think you have irritable bowel syndrome,” Jane said in a frenzied tone. “And I want you to meet with a gastroenterologist.”

Larry looked at her like she just missed the million-dollar question on a game show. So she tried again, “Or, actually, I think you have gastritis.”

Larry smiled and they concluded their conversation.

Jane stepped out into the hall and used her full allotment of 10 minutes to write her SOAP note. After summarizing Larry’s chief complaint, the history of the present illness, its duration and symptoms, she articulated her diagnosis and treatment plan.

Jane re-entered the room for a second time. However, this entry was much different than the first, because she was there to receive feedback from the patient. So, she sat down as Larry pulled out his checklist and reviewed the details. He was kind, and joked about the fact that he helped her a bit at the end with the diagnosis.

Larry praised Jane for maintaining eye contact with him and other nonverbal gestures. “I really appreciate that you showed interest in me through your eye contact and body language. That is a sign of respect for me, the patient.”

Larry had a few recommendations. “Make sure you ask more open-ended questions. And most importantly, listen. Just listen to me talk about my symptoms.”

Listening is a recommendation Larry makes regularly when providing feedback to students.

Ultimately, when time expired Jane was happy to leave the room knowing that she made a correct diagnosis and the patient perceived her as respectful. One down, two more to go.
After following the same routine with two more patients Jane returned to the classroom for the debriefing session. The professors also came in and stood in the back of the room while Dr. Smalley led a question and answer session from the front. Most of the questions were technical scientific questions about immunology, gastroenterology and medical classifications. Jane sat quietly and took notes while her peers posed questions, some of which were already on her mind. "What is the differential diagnosis for acute onset gastritis?" and "What diagnostic tests would you have ordered?" were particularly insightful.

Dr. Smalley took a moment to tell a story about a time when she made a mistake in her private practice. She failed to palpate the lymph nodes of a young boy who was visiting for a wellness preventive checkup. Though he felt healthy, the little boy was walking around with a raging infection that manifest itself more strongly a few days later when he was admitted to the hospital.

“So be sure to always follow the entire protocol,” she concluded. “That is why we have all these mnemonics and checklists.”

At the end of that discussion, the other professors walked through the room and handed out completed evaluations for the students they observed from the control room. Jane was happy to learn that she passed. In fact, she received “satisfactory” marks all but one of the fifteen categories. Her preceptors even commended her on the quality of her SOAP notes. Typically, the SP labs are graded as pass or fail requirements rather than the traditional 100-percentage point system for grades. Had she not passed, she would have scheduled a date to redo the lab and make a time commitment that she really could not afford.
Behind the Scenes

During the two weeks that led up to Jane’s lab, a few fairly complex conditions came together for the lab to be successful. First, Jane was educated on the biomedical information relevant to the lab. Second, the SPs became familiar with the lab through their roles and scripts. And third, the professor at the head of the lab, Dr. Smalley, collaborated with Pam and other faculty to ensure that all the logistics, including patient feedback, forms, and schedules were in place. This is typical behind the scenes work for all SP labs at OUHCOM. Below, I draw on several examples to illustrate activities (including props) that set the scenes that unfold in SP labs.

Oft times the unit instructors for the labs also act as teachers in general lectures. This allows the instructors to provide information and handouts pertinent to the labs during the related lectures. For example, in preparation for an oncology lab where students told the SPs that they had terminal cancer, the lecturer, Dr. Marx, shared handouts relevant to the specific creative SP narrative that would be used in the lab. One handout included a creative scenario where the students were presented with a very specific role and task. Obviously SPs are hired and compensated to act out the roles; but this was an explicit example of when students were also trained to follow certain roles. Their script revealed that they were to act as primary care physicians who referred their patients, with very specific symptoms, to the oncologist (see example 3). The students also received specific instructions on how to communicate “bad news” to their patients (see example 4). Then the students were presented with a creatively constructed letter from the oncologist who had diagnosed the patient, but did not share the information (see example 5). That letter included jargon about the cancer type as well as the diagnostic
tests that were conducted for the diagnosis. So with all those elements coming together, one sees that Dr. Marx maximized the resources of the classroom, the time leading up to the lab, and the lab itself to provide an optimal SP interaction.

Lead instructors each conduct their lab differently. In the example with Jane, she did not know her task until she arrived at the scene – a striking contrast in comparison to Dr. Marx’s lab in which she informed the students weeks in advance. Of course, this realistically portrays how clinical practice unfolds for doctors in diverse practices. Sometimes they walk into the exam room with information from other sources; at other times, they walk in with no history.

Other examples of preparatory information shared with students include straightforward scripts that offer a lot of detail to the students. For example, during one lab, the instructor passed out instructions explaining that the patient suffers from migraine headaches and that the student’s job is to diagnose the headache and discuss lifestyle modifications with the patient (see figure 6). In another case, the students were not required to identify any malady, but “to demonstrate communication skills using empathy, support, active listening and appropriate nonverbal behaviors” (see figure 7).

In addition to preparing students, the SPs also receive necessary direction. The logistics of getting them to the right rooms with the right scripts on the right days is a big task for Pam. She holds regular orientation meetings with the SPs so they know where to park, where to enter, and even how to sit on the tables. Through these experiences, the SPs get to know each other and they form a sense of camaraderie. While observing an orientation session in the fall of 2010, I noticed a hierarchical relationship structure among the SPs. Later, when I asked Pam about the perceived hierarchy she explained that
some have more privileges than others stating that, “Those who have been around longer get to choose times first” (Fieldnotes). My emphasis on this project is not centered on SP behavior. However, it is worth noting that, during their down times, SPs educate one another as they talk about their experiences together.

As each lab approaches, the SPs are guided on their two roles—acting patients and evaluators. They do not take any drama or acting classes, and they receive their scripts and checklists via email 2-3 weeks before the labs begin. Sometimes the SPs come prepared to perform multiple roles. For example, one day during spring of 2011, I watched SPs move between scripts for allergic rhinitis and diabetes (see figures 8 and 9). The scripts do not include word-for-word directions. Instead, the scripts offer narrative details for the patient character they enact (e.g., "you feel worse when you are laying down outside", "you have only lived in this area of the country since last October").

SPs are also trained to evaluate the student’s performance. They do this via face-to-face feedback, as demonstrated in the previous example with Jane, and written feedback. The lead instructor for the lab takes charge of instructing the SPs how to provide the feedback. For written feedback, the SPs are given forms to fill out after they complete their interactions with medical students (see figure 2). Initially, I evaluated the form with a critical eye and noted that it had “a very mechanical style” (Fieldnotes), and later I noticed that the matrix questions were difficult to follow noting that one of them appeared to be a quadruple-barreled statement reading, "_____ acknowledged my emotions, showed courteous, respectful, and compassionate attitude towards me. However, the back of the page was blank for SPs to write open-ended comments, which they commonly did.
While students interact with the SPs, faculty members sit in a “control room” and watch the interactions unfold live (see figure 10). Since the student to faculty ratio is greater than one, each faculty member observes multiple interactions simultaneously. As they tune in and out of different interactions, they also complete evaluation forms by checking boxes that rate the students’ performances (see figure 11). There are 15 criteria such as "the student stated the chief complaint clearly", or "the student auscultated the heart". There are also three columns where evaluators can check the quality of the performance as satisfactory, marginal, or unsatisfactory. Due to the pace of the interactions and the increased stress from conducting simultaneous evaluations, the faculty members do not leave many written comments as they observe. However, all the interactions are recorded and stored for future review when necessary.

Finally, the SOAP note (see figure 12) mentioned in Jane’s Blackboard announcement represents a common practice in medicine. It is a method for documenting notes in patients' charts that doctors use in hospitals as well as in private settings. SOAP stands for Subjective, Objective, Assessment, and Plan. When I first heard the acronym, I asked Jenn, one of the preceptors, for clarification. She explained:

*Subjective* is any information you get from the patient. That includes their HPI (history of present illness) and anything they tell you about themselves. *Objective* is the stuff that you find from looking at the patient – like heart rate, rashes, blood pressure, etc. It is what you touch and observe. It could also be information from the lab. *Assessment* is the diagnosis that you make for the patient. And *plan* is what you are going to do to move forward – to treat them. (Fieldnotes, emphasis added)
Upon learning about the SOAP note I felt confused about the subjective portion asking myself, “Shouldn’t patient’s objective accounts of what they experience be called objective? Subjective should be how they feel about their health” (Fieldnotes). But it did not take long for me to conform. The SOAP note is an important part of the SP process. In fact, Travis, a first year student told me, “I feel like they grade our SOAP note and more people fail because of their SOAP notes than they do based on their experience or like their actual encounter” (Fieldnotes).

In sum, the SP lab is a space in which typical scenes of healthcare unfold. In the SP lab, students don their white coats and stethoscopes and interact with patients hired to simulate health problems (i.e., they act out scripts). Student doctors and patients engage in clinical interactions characterized by instrumental, narrative, and scientific rationalities—and vulnerability, fear, trepidation, and excitement. All the while, lab coordinators and faculty members vicariously experience the encounters from an evaluative standpoint.

The creative narrative and behind the scenes discussion in this chapter are an incomplete representation of the entire SP process. Yet, the representation here is intended to be a useful foundation as I move into the thematic analysis portion of this dissertation.
Case 3 – B  Gastritis

<table>
<thead>
<tr>
<th>History of present illness:</th>
<th>I have a pain in my stomach (motion to the top part in the middle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of the pain:</td>
<td>Top part of the abdomen in the middle</td>
</tr>
<tr>
<td>What does it feel like?</td>
<td>It feels deep, sore, kind of burning</td>
</tr>
<tr>
<td>Does it move anywhere?</td>
<td>No</td>
</tr>
<tr>
<td>How bad is it?</td>
<td>It's annoying more than anything –</td>
</tr>
<tr>
<td></td>
<td>On a scale of “1 to 10” : maybe a 3 or 4</td>
</tr>
<tr>
<td>When did it start?</td>
<td>4 – 5 days ago</td>
</tr>
<tr>
<td>Timing:</td>
<td>It's pretty steady, there most of the time. Maybe a little better after I eat.</td>
</tr>
<tr>
<td>What makes it worse?</td>
<td>Orange juice or anything with tomatoes in it (pizza, spaghetti sauce, etc.)</td>
</tr>
<tr>
<td>What makes it better?</td>
<td>Nothing except sometimes eating</td>
</tr>
<tr>
<td>Treatment attempts?</td>
<td>You tried some Pepto Bismol, but that didn't help</td>
</tr>
<tr>
<td></td>
<td>You tried some Tums – 2 after each meal, that helped a little</td>
</tr>
<tr>
<td>Any other symptoms?</td>
<td>You are nauseated, but you haven't vomited</td>
</tr>
<tr>
<td></td>
<td>Decreased appetite</td>
</tr>
<tr>
<td></td>
<td>No change in bowel habits</td>
</tr>
<tr>
<td></td>
<td>No change in color of your stool</td>
</tr>
<tr>
<td></td>
<td>No chest pain</td>
</tr>
<tr>
<td></td>
<td>No breathing trouble</td>
</tr>
<tr>
<td>Past Medical history:</td>
<td>High blood pressure</td>
</tr>
<tr>
<td></td>
<td>Arthritis – hips/hands act up after heavy house/yard work</td>
</tr>
<tr>
<td>No surgeries</td>
<td></td>
</tr>
<tr>
<td>Medications:</td>
<td>Ibuprofen 200mg 1 after each meal – you have been using it for a month due to a flare up of your arthritis with Spring cleaning/yard clean-up</td>
</tr>
<tr>
<td></td>
<td>1 baby aspirin a day</td>
</tr>
<tr>
<td></td>
<td>Metoprolol 25 mg 1 a day for blood pressure</td>
</tr>
<tr>
<td>Habits:</td>
<td>No tobacco</td>
</tr>
<tr>
<td></td>
<td>Rarely ever use alcohol</td>
</tr>
<tr>
<td>Family/Social history:</td>
<td>You may use your own, but keep it very simple and brief.</td>
</tr>
</tbody>
</table>

**Figure 1 - SP script for gastritis**
Figure 2 - Typical form SPs use to evaluate medical students
You are Dr. _____, who is seeing your patient, Mr/Mrs. Jones for follow-up visit after having completed an abdominal CT last week.

This is a 55-year old male/female who has been pointing to his abdominal area to complain of nausea, discomfort, gripping sensation, and on/off pain in RLQ for the past 3 months. Bowels have been sluggish and have had some abdominal bloating. He/she was treated with Prevacid and Nexium, but with no noted improvement to his/her condition. Liver function tests were elevated with AST 139 (nl 10-41), and ALT 225 (nl 11-60). Below is the CT scan written report.

Your job today is to go over the CT report and decide on the next course of action.

CT REPORT: INDICATION: abdominal distention & abdominal bloating/change in bowel habits/right lower quadrant. Pain today.
FULL RESULT: Contrast-enhanced images were obtained following 100 cc of optiray 320 contrast from the level of the diaphragms through the level of the kidneys. Visualized lung bases demonstrate bilateral pleural effusions, worse on the right than on the left. Associated basilar density is identified. There is ascites. There are multiple punctate masses within the liver & spleen consistent with metastatic disease. There is right porta hepatitis mass. It is irregular in appearance with mixed contrast enhancement. It measures approximately 4 x 3 cm. This is consistent with metastatic lymphadenopathy to this region. The pancreas is abnormal. There is a hypodense mass in the tail of the pancreas measuring up to 4.8 x 3.6 cm consistent with primary pancreatic neoplasm. There is minimal pancreatic ductal dilatation on this examination. There is no intrahepatic ductal dilatation. There is no pancreatic head mass. There is thickening of the stomach wall. This may represent contracted stomach. The adrenal glands are unremarkable bilaterally. A right superior pole renal cyst is noted measuring 3.3 x 2.6 cm. No other right kidney abnormality is identified. The left kidney is unremarkable. There is no hydronephrosis or nephrolithiasis. There is no retroperitoneal adenopathy. There is no bowel obstruction. Gallbladder is contracted. There are no gallstones or significant fluid collection.

CONCLUSION:
1. Bilateral pleural effusions, worse on the right than on the left with associated basilar consolidator.
2. Multiple variably sized liver masses consistent with metastatic disease.
3. Pancreatic tail mass consistent with a pancreatic neoplasm. Follow-up CT-guided pancreas biopsy would be helpful to identify the histology make up of this mass.
4. Ascites.
5. Right renal cyst.
6. No bowel obstruction.

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Preoperative Evaluation in Pancreatic Cancer- How much is enough?

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Pancreatic cancer is the fourth leading cause of cancer-related deaths in America for both men and women, and 20,500 new cases will occur annually. It represents 2% of all cancers, but 5% of all cancer deaths. In the last 70 years, the age-adjusted mortality rate has tripled in the USA, Japan and Europe, affecting all age groups and both sexes. Despite perceived advances in aggressive surgical and adjuvant therapies, the 5-year survival rate remains abysmal at 4% and has not changed in the past 2 decades. At the time of diagnosis, only 10-15% of tumors are resectable and aggressive pancreatectomy confers at most a 23% 5-year survival. The majority of patients are not eligible for surgical therapy due to advanced disease at the time of diagnosis and 5-year survival is rare. With median survivals limited to only months, patients and clinicians dealing with pancreatic cancer are justifiably desperate.

The clinical diagnosis of a symptomatic pancreatic cancer usually occurs too late. Although some fortunate few may present with limited disease obstructing their bile duct in the pancreatic head, over 85% of patients become symptomatic only after the tumor has become locally invasive or systemic. We as clinicians must streamline their clinical evaluation with two critical objectives in mind. First, since surgical resection remains our only potentially curative treatment, our evaluation must identify which patients are candidates. Second, and as importantly, our evaluation must identify non-candidates so that they may be spared the toll of a futile operation as they enter the final stage of their lives. To achieve these objectives, we invoke a comprehensive clinical exam, obtain serum tumor markers, and submit patients to a menu of today’s state-of-the-art imaging modalities. But does every patient need every study? No. A preoperative evaluation can and should be streamlined.

Comprehensive Clinical Assessment

Unfortunately, patients typically experience non-specific symptoms of an insidious disease. Their cancer has usually taken hold before the anorexia, malaise, fatigue, weight loss and pain prompts them to seek medical care. Physical findings reflect the incurable disease sometimes to the extent of malignant ascites and wasting. As noted, obstructive jaundice is our earliest warning sign, and should always be investigated urgently. New onset diabetes, exocrine insufficiency, depression and venous thrombosis also can occur. A careful history may reveal smoking, obesity, a sedentary lifestyle, long-standing chronic pancreatitis, and even a hereditary predisposition. The primary physician correctly checks baseline laboratory values, a Chest X-Ray, and in most cases, a relatively basic Abdominal CT Scan. The findings typically prompt a specific referral pattern. Obviously inoperable patients see a medical oncologist, potentially operable patients see a pancreatic surgeon, and jaundiced patients usually see an interventional endoscopist. At these entry points, today’s technology is put to work.

Tumor Markers. Carcinoembryonic antigen (CEA) and carbohydrate antigen 19-9 (CA 19-9) can be elevated in the blood of patients with pancreatic cancer. Neither is specific for the disease, and neither accurately screens for early stage disease. CA 19-9 is the more reliable, with some studies correlating elevated levels (>300 U/ml) with unresectability. Oncologists often track these tumor markers when evaluating disease progression or recurrence. For surgeons, these are inadequate determinants of resectability.
Imaging Studies. Stunning advances in pancreatic imaging over the past 20 years have increased our ability to evaluate pancreatic cancer. Today’s imaging power enables us to establish the diagnosis, identify candidates for resection, plan our surgical approaches, and identify inoperable patients. What are our options?

1. **Computed tomography**- CT is our mainstay given its capacity to detect and locally stage pancreatic cancer. It is highly reliable, especially for demonstrating unresectable disease. It still has limitations (small metastases, peritoneal implants, malignant lymph nodes) despite its new power from helical scanning and three-dimensional digital reformattting.

2. **Ultrasoundography**- Although non-invasive and inexpensive, transabdominal US is inadequate for this disease compared to CT.

3. **Magnetic Resonance Imaging**- The added cost and, for some patients, uncomfortable experience adds very little to what helical digital CT provides. MRI does have value, however, in non-invasive pancreatic and biliary duct imaging.

4. **Positron Emission Tomography**- Whether used alone, or combined with CT, FDG-PET studies have very limited utility in pancreatic cancer staging, and can be omitted.

Endoscopic Evaluations. As noted, many patients are initially triaged to interventional endoscopists, especially when jaundiced. At our center, the majority of patients undergo some type of endoscopic procedure, ranging from diagnostic to therapeutic to palliative. We abide by a multidisciplinary approach whenever possible.

1. **Endoscopic Retrograde Cholangiopancreatography**- Over 90% of patients with pancreatic cancer will have abnormal ERCP findings, although they are never entirely disease specific. With such diagnostic strengths come limitations. ERCP is invasive and highly operator-dependent. It carries a 5-10% risk of pancreatitis. In talented hands, ERCP is pivotal in expediting the diagnosis, relieving jaundice by stent placement, and establishing tissue diagnosis of cancer by brush cytology or forcep biopsy. Many disagree, however. Some claim that biliary stent placement preoperatively increases the risks of operation. All agree that false negative cytology is common. We have resected several early (and late) stage cancers based only on suspicious ERCP findings. Everything considered, I believe ERCP will remain a mainstay evaluation in pancreatic cancer because it’s diagnostic and therapeutic value, as well as its favorable location in patient triage and referral patterns.

2. **Endoscopic Ultrasound**- When performed by an expert with state-of-the-art equipment, EUS is highly sensitive for detecting and staging pancreatic cancer, with special power in detecting lesions under 3cm. It is useful, but not necessary, in determining resectability when non-invasive helical CT is available. As will be discussed, it has real value when tissue must be obtained for diagnosis.

3. **Endoscopic Palliation Techniques**- Obstructive jaundice, duodenal obstruction and even pain can be successfully managed endoscopically. Biliary endoprosthesis, luminal metal stents, and EUS-guided celiac plexus blocks are commonly used to help unresectable patients overcome these symptoms without a painful, futile operation.

Staging Laparoscopy. There are numerous studies available in hepatobiliary and pancreatic malignancies that prove SL is valuable and should be utilized. There are also studies to indicate that not every potentially resectable patient need undergo SL. Together with laparoscopic ultrasound, and for some, peritoneal cytology, SL accurately predicts tumor resectability, identifies occult metastases other studies (CT) cannot, and in the end, eliminates unnecessary laparotomy in up to 20% of patients thought to be resectable by conventional imaging techniques. Some favor limited techniques just prior to resection, others extended techniques under separate anesthetic.

**Practical Recommendations for Typical Clinical Scenarios**
Given this brief review of what we can do to evaluate pancreatic cancer patients, we can consider how and why to streamline our evaluations. No recommendation is perfect for every patient, and many high-volume centers may offer different and effective strategies. In my experience, the following evaluation strategies "are enough" for these typical clinical scenarios.

I. Initial Evaluation for possible pancreatic cancer.
   - Comprehensive History and Physical Examination
   - Chest X-Ray, Baseline Laboratory Survey
   - Dual-Contrast thin cut Abdominal CT Scan – This study may vary in quality across centers, but it is our best initial determinant of unresectability. Unfortunately, this is how most new patients will present.

II. Unresectable Pancreatic Cancer
   - Dual-Contrast thin cut Abdominal CT Scan- Because we will use this study to disqualify patients from any attempt at resection, it must be of the highest quality. As noted, today's highest resolution spiral scanners provide digital data, arterial and venous reformatting, and must be utilized. CT-Angiography criteria for tumor resectability include (a) Absence of non-contiguous, extrapancreatic disease, (b) patency of the superior mesenteric/splenic/portal vein confluence, and (c) no evidence of tumor extension/encasement to the superior mesenteric artery.
   - Tissue Diagnosis- There are many modalities to achieve this, and the choice should be for the least invasive. CT or US-guided percutaneous biopsy of an unresectable mass is least invasive. If necessary, EUS guided biopsy is reliable, and can be combined with endoscopic palliation.
   - ERCP and stenting- Unresectable lesions causing biliary obstruction warrant permanent metal stent placement. Late duodenal obstruction can also be suitably palliated with endoscopic stenting.
   - Avoid Surgery whenever possible.
   - Medical Oncology referral for palliative care.

III. Resectable Pancreatic Cancer
   1. Preoperative Neoadjuvant Chemoradiation Therapy- Today, many centers offer a preemptive systemic and locoregional treatment strategy before attempting resection in patients with resectable, and even marginally resectable tumors. This adds to a preoperative evaluation.
      - Dual-Contrast thin cut Abdominal CT Scan- determines resectability.
      - Tissue Diagnosis- This is required to begin neoadjuvant therapy. Typically, EUS-guided fine needle aspiration biopsy is simple, reliable and acceptably invasive. Percutaneous biopsy is not advisable.
      - ERCP and stenting- Necessary for jaundiced patients before commencing neoadjuvant therapy. May also provide tissue diagnosis, eliminating need for EUS-guided FNA.
      - Staging Laparoscopy- Because occult metastatic disease can be identified by SL in 10-20% of patients presumed resectable by CTA, we believe SL should be performed prior to commencing neoadjuvant therapy.
      - Re-staging CT-Angiogram- if still resectable, proceed to laparotomy.
   2. No Preoperative Therapy- Most centers move directly to laparotomy when potentially resectable pancreatic cancers are discovered. The preoperative workup should be limited and prompt.
      - Dual-Contrast thin cut Abdominal CT Scan- determines resectability. Digital reformatting CT-Angiography has eliminated any need for traditional angiography. The
images can indicate arterial and venous clearance from tumor, and help the surgeon in planning the operative approach, especially in the presence of anomalous arterial anatomy, or need for venous resection.

- **Tissue Diagnosis**- By any approach, either pre- or intraoperatively, there is no need or value of obtaining tissue diagnosis. This is not recommended.

- **ERCP and stenting**- Not necessary preoperatively in most, but often unavoidable given patient triage and referral patterns. We favor stenting in significantly jaundiced patients before operation since scheduling realities and general patient malaise warrant symptom relief.

- **Staging Laparoscopy**- We follow recommendations for subsets of pancreatic tumors when utilizing SL for presumed resectable disease. We routinely perform SL for larger tumors, especially in the body and tail of the pancreas, but omit SL for smaller peripancreatic lesions under 2cm or so. For some patients, unnecessary laparotomy will be avoided. This remains controversial despite compelling evidence of the value of selective SL.

### IV. Suspected, but Unproven, Pancreatic Cancer

Given both the magnitude of surgery required for cure, and the lethality of a missed diagnosis, this is a daunting and more common clinical scenario. Earlier studies have been recently validated and indicate that patients can be helped with an aggressive surgical strategy. This is probably the clinical scenario where no extent of preoperative evaluation "is enough". We are currently evaluating the impact of EUS in this scenario. Ultimately, once everything is considered, patients and surgeons will correctly select preemptive resection.
Figure 3 - Handout including the students' narrative script and educational background information about pancreatic cancer evaluation
Figure 4 - Handout with instructions for communicating bad news
YOUR FRIENDLY ONCOLOGY SERVICE

May 2010

Dr. Joe Student- DO
Irvine Hall
Athens, OH 45701

Dear Dr. Student,

Thank you for your referral of Mr./Mrs. Jones. As you know, Mr./Mrs. Jones has been having abdominal pain and nausea periodically for the past three months. Abdominal CT shows a pancreatic tail mass consistent with a pancreatic neoplasm. After examining Mr./Mrs. Jones and discussing these results, a CT guided biopsy was performed to obtain a tissue diagnosis. Based on the adenopathy and the liver involvement noted on the CT exam, we would stage this as T2 N1 M1 adenocarcinoma, commonly known as Stage IV pancreatic cancer. A phase III trial of gemcitabine as first-line therapy in patient with advanced adenocarcinoma has shown a significant improvement in survival among patients treated with gemcitabine (18% 1-year survival vs. 2% with a traditional 5-FU). I have offered Mr./Mrs. Jones a chemotherapy trial of gemcitabine with or without erlotinib which has shown modest improvements in survival. Based on phase III trial reports on the NCI website, one can expect an increase to 6.37 months with erlotinib vs. 5.91 months with placebo. Certainly aggressive symptomatic and supportive care would be appropriate. I would propose starting cycles of IV gemcitabine weekly x 7 followed by a week off. Common side effects include neutropenia, leukopenia, thrombocytopenia, severe nausea/vomiting, and elevation of liver function tests. Mr./Mrs. Jones would like to discuss these options with you as the primary care provider. Please let me know if I can be of further assistance. Thank you for your kind referral of this pleasant patient.

Sincerely,

Dr. Claude Smith
Oncology

Figure 5 - Realistic letter used to teach students about oncology referrals
Case: Migraine

Patient Mr./Mrs./Ms. Martin has come to the clinic today for follow-up regarding recent onset of headaches. She had a head CT and lab done since her last visit 2 weeks ago and is here to discuss results, diagnosis and treatment.

You DO NOT need to perform a history or physical examination unless you desire additional information from the patient.

You have 20 minutes to explain to the patient that, based on the normal lab and CT findings, you believe they are suffering from "Migraine headaches". Spend the remaining time discussing likely triggers, lifestyle modification, treatments.

After completing your visit, exit the exam room. The SP will summon you to return for a post-encounter review.

Following your SP feedback session proceed to the Clinical Skills Lab for a faculty debriefing.

Vital signs:
BP: 146/84
P: 76
R: 14
T: 97.6 F

ESR (erythrocyte sedimentation rate) = 15  normal (0 – 20)

CT head: normal study. No evidence of any acute pathology

Figure 6 - Migraine case narrative and instructions for students
MOVEMENT DISORDER PATIENT INTERVIEW
DR. JUDITH RHUE, PhD

GOALS: To better understand and appreciate the world of the movement disorder patient with regard to medical problems and needs, adjustment issues, family and social support, background, activities, financial burdens, and their view of physicians.

To demonstrate communication skills using empathy, support, active listening and appropriate nonverbal behaviors in a patient encounter.

INFORMATION TO GATHER:

1. Current Medical Status

2. Medical Needs / Problems

3. Family / Social Support

4. Background (work, education, etc.)

5. Activities

6. Income / Financial Support

7. Their expectation of physicians

Figure 7 - Movement disorder lab instructions for students
Case 2 – B  Allergic Rhinitis & Cough

Chief Complaint: “I’ve been coughing for two weeks. I think I need an antibiotic.”

What do you think is the matter? You think you have “bronchitis”.

History of present illness:
When did it start? 2 weeks ago
Timing: It is present all the time, but worse at night when you lay down.
Do you cough up anything? Yes: lots of mucous – all day long.
What does the sputum/mucous look like? It’s thick and yellow in the morning when you first wake up, but as the day goes on it gets clear and thinner (usually by noon)
What makes it worse? Laying down. Being outside, especially if it’s windy.
What makes it better? The steam from your hot shower in the morning seems to loosen things up, then it is easier to cough out the sputum (mucous) and it is thinner.

“My father’s/grandfather’s old-time remedy of ‘honey, whiskey and lemon’ has actually helped more than anything.

Treatment attempts:
Robitussin DM – 2 teaspoons every 4 hours – no help
Halls cough drops – temporary relief
You even resorted to Nyquil out of desperation: helped enough you could get a couple hours of uninterrupted sleep.
‘honey, whiskey and lemon’ – but you don’t take this if you took the Nyquil

How bad is it? BAD! You haven’t slept well in 2 weeks, so now you’re tired all the time.
Sometimes you cough so hard it gags you.

Any other symptoms with this?
Eyes are itchy/watery
Throat is scratchy, but not sore
Clear runny nose (after you cough out the yellow stuff in the morning)
Sneezing
No earache
NO fevers
Muscles/ribs are sore from coughing

Past Medical History:
No chronic diseases

No surgeries

Medications:
No prescription medications
Currently: Robitussin, Nyquil, cough drops
ibuprofen 200mg – 2 tablets 3-4 times a day for your sore muscles - helps

No one else in your household has these symptoms

Habits:
You smoke ½ pack per day, but are trying to quit.
Alcohol: rarely ever dry, until now.

Social & Family Histories (if asked)
You have only lived in this area of the country since last October. You relocated here either for work or school or to be closer to a child or an elderly family member – (you choose)
Use your own education, employment and family history but keep it very simple and brief.

Figure 8 - Allergic rhinitis script for SPs
Case 1 – B  Diabetes Follow-up

Reason for visit: “Dr. Jones wanted me to come in for a diabetes check up. I’ve been on that new medicine for three months, and I haven’t missed a single dose, so I hope you have good news for me!”

When the student tells you your lab results: hemoglobin A1C test (too high) and cholesterol test (too high) you act very disappointed.

How are you feeling: “pretty good”. No complaints

Any illnesses since your last visit? None

Eyes: vision seems a bit blurred at times, but it passes.

Last eye exam: at least 18 months ago

Ears/Nose/Throat: no complaints

Chest/Lungs: no pain, cough or shortness of breath

Feet: No burning sensation or numbness

If asked: you seem to be drinking more water than usual and you’re going to the bathroom more (urinating)

No pain with urination.

Past Medical History: Diabetes – type2 just diagnosed 6 months ago.

High blood pressure: 2 years

High cholesterol: 2 years

Surgery: none

Medications: okay to write them on an index card if you wish

  Lisinopril 5 mg daily
  Metformin 500mg daily
  Fish oil capsules 1200mg: 1 twice daily

Allergies: none to medicines

Family history: Both parents have/had high blood pressure

Father had heart attack at 58

Social: use your own, but keep it simple, don’t use too much of the student’s time

Habits: ½ pack cigarettes daily, but cutting down. 1-2 alcoholic beverages a week.

Diet: fast food 1-2 times a week, rarely use salt your food anymore. Trying to eat more fish & chicken.

  fresh fruit & veggies. Avoiding fried foods. Portion control and snacks have been your downfall

Exercise: Haven’t been walking much with the bad weather most of winter and spring. Not very motivated to go to a gym

Figure 9 - Diabetes script for SPs
Figure 10 - Photograph of the control room, September 2009
Clinical Skills 2 OSCE:  “Sinus Headache”

Faculty Feedback:

Student Name: ____________________________

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<th>S</th>
<th>M</th>
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<td>1.</td>
<td>The student stated the chief complaint clearly.</td>
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<td>2.</td>
<td>The student presented a well-organized, detailed HPI</td>
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<td>3.</td>
<td>The student reported the location of the patient’s pain.</td>
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<td>4.</td>
<td>The student reported the quality of the patient’s pain.</td>
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<td>5.</td>
<td>The student reported all associated symptoms.</td>
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<td>6.</td>
<td>The student reported treatment attempts.</td>
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<td>7.</td>
<td>The student reported current medication regimen.</td>
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<td>8.</td>
<td>The student presented the physical examination findings in a well-organized manner.</td>
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<td>9.</td>
<td>The student performed an ENT exam</td>
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<td>10.</td>
<td>The student percussed and/or palpated the sinuses.</td>
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<td>11.</td>
<td>The student auscultated the heart.</td>
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<td>The student auscultated the lungs.</td>
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<td>13.</td>
<td>The student grouped subjective data and objective data separately.</td>
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<td>14.</td>
<td>The student presented a plausible differential diagnosis: sinusitis; URI</td>
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<td>15.</td>
<td>The student presented an appropriate treatment plan.</td>
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Comments: ____________________________

S = Satisfactory  
M = Marginal  
U = Unsatisfactory

Faculty evaluator: ____________________________  Date ____________________________

Figure 11 - Evaluation form used by faculty during SP labs
Figure 12 - SOAP note form that students use in SP charts
CHAPTER FIVE: A THEMATIC REPRESENTATION OF FINDINGS

In this chapter, I move between interview excerpts, fieldnotes, OUHCOM documents, and inter-disciplinary scholarly literature to illustrate (1) how SP labs prepare students for the narrative nature of clinical work, and (2) value sets that are created, maintained, and sometimes resisted, in this pedagogical practice. Specifically, I offer six themes that collectively illustrate how individuals practice the differential diagnostic process, assimilate and perform (or resist) meta-narratives that guide medicine, and wrestle with uncertainty in spatially and temporally organized settings that simulate clinical realities.

First, I detail how the spaces of the labs are organized to structure clinical experiences. Second, I explore the temporal dimensions of the SP experience. Third, I outline how SPs—because of their spatial and temporal dimensions—represent experiential pedagogies that allow students to learn by doing. Fourth, I present a main value “It’s all about the patient” that guides SP interactions—and how that is sometimes undercut by other competing goals. Fifth and finally, I explore other factors that shape students’ identity development and performance in and beyond the SP lab.

Organizing Space for Localized Performances

With its concern for relationships between scenes, acts, agents, agency, and purpose (Burke, 1969), narrative theory provides a rich perspective for exploring how context matters. Narrative theory turns scholars’ attention toward the locatedness of action. Burke for example, argued, “terrains determine tactics” (p. 12), emphasizing where action unfolds. As noted in chapter one, OUHCOM recently spent substantial resources creating high fidelity (i.e., realistic) learning spaces for the SP experiences. The
exam rooms simulate typical settings composing professional clinics in traditional primary care contexts. In this section I explore the strategic creation and use of space in preparing future physicians. Students step into the setting of an SP lab, recreate the scene and the mood it represents, and presumably retain the experience. In this way, the architects of the SP program are creating what Croft (1999) and Fiske (1993) would describe as localized performances—temporary sites of action in which storytelling unfolds.

A quick tour of an SP lab reveals a familiar setting for anyone who has recently visited a clinic for wide-ranging ailments including sore throats, sprained ankles, or even septic shock. SP labs look like clinical exam rooms at most ambulatory care organizations (e.g., outpatient clinics, retail clinics, doctors’ offices). Upon entrance, one’s eye is immediately drawn to the brightly colored bags inside sanitary garbage cans marked “hazardous materials.” The wall is lined with paper boxes bulging with different sized exam gloves. Mounted between the garbage can and the glove boxes is a container for throwing away sharp objects. The spaces also include container-lined sinks, cabinets and drawers for storing medical equipment (see figure 13). Each room includes state-of-the-art software and computers for electronic medical records, and telephones—presumably for managing care among interdisciplinary care professionals, requesting lab results or other information, or even coordinating with third party payers (see figure 14).
Figure 13 - Supplies and storage cabinets in labs
Figure 14 - Computer and telephone in SP lab
Exam beds are prominently centered in the labs, surrounded by wheeled tables, chairs, and stools. Above the beds are storage mechanisms to hold and provide power to the otoscopes, medical devices allowing care providers to see both the outer and middle ear (see figure 15). The exam beds are always covered in long sheets of semi-translucent, white parchment paper and they feature fold out stirrups for gynecological exams. Those stirrups, quietly folded away under the tables, are objects made of synthetic plastic and metal. The space they consume is much larger than their mathematical dimensions. The stirrups function as artifacts of uncertainty, anxiety, and exploration for students and SPs alike (see figure 16).

In the middle of Winter quarter, 2011, the medical school equipped each exam room with an updated bed. Shortly afterwards, Pam, the lab coordinator, created a video with a demonstration of how to unfold the stirrups from underneath the beds. During my fieldwork, medical students reverently described Pam as “feisty,” “tough,” “incredible,” “funny,” “the most organized woman alive,” and, most importantly, “awesome” (Fieldnotes). After my first meeting with Pam, I wrote in my research journal, “Pam is definitely the gatekeeper and she is not afraid to speak her mind” (Fieldnotes). Now that I have spent more time with her and have a comfortable relationship with her, I join most of the medical students in describing Pam as incredible and awesome.
Figure 15 - Exam bed, instrument table, and powered otoscopes
Figure 16 - Folding stirrups under exam bed - used for genital exams
Pam’s demonstration video was posted to the class Blackboard Website to instruct students how to use the stirrups before they were faced with the challenge in front of the patients during an SP interaction. I noted her frustration during one of the labs as she told a colleague that “only eight students even watched the video, and only two asked for help” (Fieldnotes). Initially, it seemed strange to me that she wanted them to watch the video (i.e., a rehearsal of an act) before the SP act itself. Throughout my fieldwork, students generally agreed that the SP lab is a safe place to practice; Yet, Pam’s sincere frustration suggests that the SP experience is not merely practice; rather, it is a localized setting in which realistic performances unfold.

Adding to the realistic nature of the setting are contents less obvious than those discussed here. While looking around one of the rooms, I realized the drawers are filled with instruments and supplies that the students rarely use (e.g., vision charts, reflex hammers, and various instruments sealed in sterile plastic pouches). In fact, students bring many of their own instruments with them into the exam rooms. Even so, during a lab orientation, Pam opened the drawers to show the students their contents (see figure 17). Interestingly, I have never noticed a student using the contents of those drawers. But they know what is inside if they do need something. These objects—both seen and unseen, used and unused, pre-existing in the setting or brought to it by students—function as props that frame a setting in ways that shape expected performances (Goffman, 1959). Visual imagery, blood pressure cuffs, and glucometers define settings, providing material parameters for symbolic interactions. In other words, the material dimensions of the settings are inseparable from the improvisational nature of role performances. In many
ways, the use of props is similar to the practices associated with method acting (see Actor’s Studio, 2011). In method acting, characters draw on real, but sometimes unseen, aspects of a scene to experience genuine emotions.
Figure 17 - Rarely used contents of the drawers
Finally, perhaps the most influential object in the SP setting is the small black object looking down from its perch up high near the ceiling—the camera (see figure 18). As students interact with patients, every word and action is recorded for live and future viewing. As a researcher watching interactions unfold from a viewing room, the camera was a tool that allowed me to vicariously participate in the interactions. I literally was as close to a fly on the wall as I could have gotten. However, after talking about the camera with the students, it became apparent that for some students, it is much more obvious than a fly on the wall. Brandon, a first year student explained:

There’s like a little bit of anxiety because you know that there’s the camera on you. Especially when we first started, I remember them telling us, like, okay. We have the chair setup for you. You have to sit in this particular chair and you have to face such a direction so that wherever the camera is… The camera’s here, so you have to sit here and the patient has to be there, so you’re not blocking like the patient from the video, so they can make sure your interaction is okay. So, there was like some anxiety with that, but it is kind of nice knowing, especially learning… like when we learned how to do like the female pelvic exam, it was nice knowing that they were there watching. If you had a problem, you could just wave and they would come in. So, it is nice knowing if something is really going wrong, they’re there to help you.

The camera serves multiple functions. One of its major functions is that of a pedagogical tool. In the medical school setting, cameras are trace artifacts that allow to students to
revisit their interactions. At any time after the initial interactions, students and faculty review the footage for instructional and assessment purposes.
Figure 18 - Pivoting video camera (top left) in SP lab
As Brandon pointed out, the camera can be an anxiety-promoting device (i.e., “There’s like a little bit of anxiety because you know that there’s the camera on you.”). Of course, anxiety and its physical manifestations—sweaty palms, heart palpitations, and a shaky voice—are not necessarily negative aspects of the experience brought on by the camera. One day students will be in charge of others’ care—some would say they ought to feel just a bit anxious when they put on the white coat. Meanwhile, the camera can also serve as a source of security. As stressed by Brandon, “If you had a problem, you could just wave and they would come in.” In either case, the camera is always present and shapes the unfolding scenes in consequential ways.

Knowing that the video footage is preserved in its format beyond the moment of the interaction, some students expressed concern with their once-occurant faults being captured for future re-engagement. Hollie explained how she felt about this as she recounted the following:

My friend, during her pelvic exam, she was trying to adjust the stool. She had like a weird stool and somebody had messed with it. She was trying to adjust and actually ended up falling. Nobody said anything. I guess maybe no one caught it when they were watching the video, but so then to make it even worse, she didn’t just fall in front of her patient while doing a pelvic exam, but people have it on video tape now. Fell off her stool, onto the ground. She actually hurt herself a little bit. I mean, you think about the video. It’s weird. Capturing weaknesses and imperfections on video for people to review and re-watch at any time contributes to feelings of awkwardness for some students like Hollie. The camera captures the storytelling as it unfolds within the setting, inviting observers to
experience those moments in the present or in the future. Not surprisingly, the camera can be distracting for some students as they interact with SPs.

In addition to the observable aspects of the lab space, some students acknowledged that missing or inappropriate props are also influential. For example, the new SP labs had no art on the walls. Importantly, the material surrounds of the clinic can simulate but not entirely replicate the clinical experience. Meanwhile, though the SPs are real people that students interact with, there are times when the interactions just seem “fake” because of “scripts” that patients bring into the interaction with them. Consider the following story shared by Josh:

I try to make myself think of it as real as possible. But there are some patients that it just doesn’t feel like it’s real, because they’re not acting their part of they’re not prepared for their part. For example, I had a patient. It wasn’t their fault. It was the other person who canceled on them. But what happened was they got called in last second to act. So, they didn’t really know what they’re supposed to act out, so they had a little cheat sheet that they had to keep going back to every time I asked them a question. So, it just doesn’t really feel real at that point.

Recognizing what is not present or what is out of place (e.g., a patient holding a script to follow) can be observed as well as felt. In this case, Josh clearly identified something that was out of place and unrealistic about the interaction.

In summary, the space of the SP labs is organized to facilitate localized performances among medical students and patients. The artifacts strewn throughout the space are more than mere decorations or embellishments. Aesthetically, artifacts offer frameworks for action, structuring sensory experience and enlarging or constricting the
range of possible actions (see Harter et al., 2008). In the words of Pam, the lab coordinator, “Exam rooms are outfitted with medical equipment exactly like that found in the doctor’s office or clinic . . . [allowing students] opportunity to use their communication and practical skills to develop their confidence and increase their knowledge” (personal communication, March 15, 2012). Technology, sanitation, seating, and tools of the medical trade are some of the obvious artifacts that fill these interactive spaces. But the space is also filled with seemingly inconsequential and sometimes invisible objects and processes that shape how the interactions unfold.

“Time is money”

Across industries and occupations, temporal matters remain central concerns. The progressive intensification and commodification of the labor process has positioned time as inevitably scarce in commerce and finance, education, and social services (du Gay, 2009). As a commodity of the industrial process, the value of time rests with its centrality in organizational goals of accumulation and acceleration (Hassard, 1996). As the scarcity of time increases, so does its value.

Medical students learn about and confront the temporal demands of their future professions from countless sources—the family dinner table, the evening news, and even popular fictionalized dramas like Private Practice and House. In medical school, students reckon with time (and its scarcity) in gross anatomy labs, during lectures on life expectancy, in standardized exams, and in SP labs. In this section, I focus on how meanings of time are constructed and reinforced in interactions between medical students and SPs in the spaces of the lab. Specifically, I discuss (1) how SP labs provide students
with opportunities to develop clinical rhythm and pace, and (2) how students reframe
and/or resist dominant temporal expectations.

**Developing Clinical Rhythm and Pace**

To begin, a prominent feature of every clinical exam room in the SP lab is a clock
(see figure 19). The clock is the only decoration on any wall of the SP labs and I have
noticed its presence several times as its ticks echoed through the quiet rooms while
patients waited for the student doctors to knock on their doors. Patients and students alike
use the clock to manage the interactions. To students, the clock is an ever-present
reminder that, in the words of Gerad, and countless other students, “time is money.”
Figure 19 - Clock on the wall of SP lab
The prominent place of a clock in exam rooms is perhaps not surprising given that, in health settings, time is often highlighted (by patients, providers, and third-party payers) for its positive or negative effects on the process and outcomes of care. For example, I have vented my frustration to various acquaintances several times after sitting in many doctors’ waiting rooms for extended periods of time. Meanwhile, I have marveled at stories in which emergency medicine doctors have worked against the clock to preserve someone’s life – someone otherwise running out of time. For physicians, time is many things. Time is money, but it is also scarce resource that can only be used once. Managing time effectively and understanding the dimensions of time that surround healthcare scenes are important skills for physicians. As medical students interact with patients in SP labs, they experience the complexities of time and the ostensibly professional rules of the discipline concerning the realities of time management in the clinic.

Time ties together various aspects of medical care. As students stumble through the diagnostic process and physical exams in the simulated settings of a lab, they develop what numerous students described as “rhythm” and “pace.” During an interview at the end of her second year, Leanne explained, “I think that our physical exam encounters are good for us to just get practice and to try and develop our rhythm, our order of how we want to do a physical exam, and it kind of makes you realize what things you need to practice.” The repetitive experience of working with patients in simulated “real-time” provides students with opportunities to develop a temporal flow or a sense of pace. The
capacity to develop a rhythmic flow in clinical interactions is certainly one benefit of the SP process that students reap as they prepare to enter professional clinical care settings.

Relatedly, students must hone their abilities to budget time for various tasks. The COMLEX2PE has very specific requirements regarding the amount of time students are allotted for each SP interaction as well as the amount of time they have to write their post-encounter notes (which have a very particular format). The official orientation guide published by NBOME (2011a) outlines the time requirements:

During the 6-hour examination, candidates will rotate through a series of 12 standardized patient encounters. In each encounter, candidates will have 14 minutes to evaluate and treat the patient as they see fit given the time allowed, including the patient interview and history-taking, performing indicated physical examination maneuvers, communicating with and counseling the patient, and performing osteopathic manipulative treatment as indicated. Following each encounter candidates will have an additional 9 minutes to complete a written SOAP Note detailing their clinical findings and assessment of the case. p. 4

These time requirements function as basic parameters students must observe to pass the exam.

As part of the board preparation process, these guidelines are incorporated into SP settings during medical school. For example, all of the labs are timed and they start and stop with universal sounds and announcements through a PA system heard through all the halls and exam rooms. During the SP labs at OUHCOM students have more time to complete their labs than they do during the COMLEX2PE, but the pre and post-
interaction instructions as well as the continual chatter in the halls are filled with reminders to adhere to the time requirements.

Professional expectations about time management as reflected in the COMPLEX2PE are also reflected in the organization of SP labs. From my observations, the school made great effort to ensure that students spend a particular amount of time (1) with patients, and also a particular amount of time (2) between patients.

In terms of interacting with patients, the precise amounts of time for each case varied depending on the nature of the labs. The mini-objectively structured clinical examination (mini osce) labs, for example, are designed to simulate the COMLEX2PE more closely than any other lab. During the mini-osce, students see three consecutive patients, spending 15 minutes with each and 10 minutes between. Other labs, like the “breaking bad news” lab are less structured, offering three twenty minute sessions with an undesignated amount of time (up to 20 minutes) between encounters for preceptor feedback.

In short, one of a physician’s core clinical duties is conducting medical interviews. SP labs provide students with opportunities to develop the capacity to efficiently and quickly conduct histories, ascertain chief complaints, and outline next steps.

Just as labs have varying expectations for time allotments in working with patients, they also offer different experiences for students to manage time between different patient visits. For example, some of the labs allotted time for the students to enter electronic information in the form of electronic medical records into the computer. Unfortunately, that practice was scarce and I did not see enough of that experience to
make informed conclusions of my observations. As discussed earlier, there were also
times when the students received direct feedback from the SPs about their experiences.
But most commonly, students used the inter-patient time to receive feedback and
guidance from the preceptors who observed them from the control room.

**Reframing and/or Resisting Temporal Expectations**

During our interviews, several students referred to a comment one of their
professors made during a group debriefing session. In addition to running a practice as a
physician, this professor worked as a preceptor in SP labs as well as a lecturer in their
classroom. One student who preferred to remain nameless explained, “I think it was Dr.
Sammons, he came in and debriefed us after one of the labs and he told us straight up that
what we were doing, it was a joke, because it’s not what really happens in clinic.” After
exploring other unsolicited comments about that scene I learned that Dr. Sammons was
referring to the amount of feedback time they have between patients in the SP labs.
Specifically, he explained that “it’s not realistic to have 20 minutes between patients”
(Fieldnotes).

While the students tend to respect the instructors (who are often practicing
physicians as well) for their expertise and credibility, one student’s comments revealed to
me that she envisions options beyond the status quo. Carli said:

Dr. Sammons talked about in our debriefing to have 20 minutes to just talk to a
patient. At the same time, I think it depends completely on the patient, on the
physician whether or not you have 20 minutes for a patient to talk about those
bigger things or if you don’t. Like if you go into practice and you just want to run
through x amount of patients a day, then, yeah, you’re not going to have time. But
if you want to actually impact someone’s life, then you make time for this kind of thing.

I did not interpret Carlie’s comments as disrespectful or unappreciative. Rather, she revealed a strand of confidence about her anticipated role. Her experiences in SP labs have helped her understand at an informed and sophisticated level what would be required to practice medicine in a manner consistent with her values - despite the institutional and authoritative messages she received in school.

Carlie was not unique in sharing her desire to spend what she feels as sufficient time with her patients. During my observations, I noted that Carrie seemed particularly comfortable talking to her patient about his life. When time expires in the SP labs, an audible beep warns the participants that only a few minutes remain and then a second beep sounds to end the interaction. Commonly, students awkwardly wrap up their conversations soon after the first interruption and leave the room before the second call is sounded. But three times in a row, I watched Carrie continue her conversations as if she had not heard the time indications. In my fieldnotes, I wrote that her style reminded “me of the way I talk to Brother A” (Fieldnotes) – an elderly man, like a grandfather to me, who is the closest friend my family has ever had.

In a follow up interview with Carrie, I asked, “Do you feel like that experience with sitting down with patients and talking to them is something that you’ll get to do when you are practicing medicine? Or is it kind of unrealistic?” She responded:

It depends on what type of doctor you want to be. I want to be small town, so I plan on talking to my patients a lot. I don’t care to be poor for the rest of my life either, but some people do. I don’t know.
After her response, one of her classmates, Gerad was sitting close by and added his response too. He stated:

Yeah, I guess it depends on what you went into it for and I guess we live in such a fast-paced world that time is money and time is everything. I think it’s a good thing to, even if you have to - you know, you see them for 15 minutes, but you need to - if you need to schedule an appointment just for a conversational appointment, not even really a medical just to talk about different issues and stuff. I guess you could go about it that way maybe. I don’t know.

Stemming from experiences these students had in SP labs, their comments indicate they have developed an awareness of the consequences of time.

These conversations are evidence of a popular paradigm. They work against the underlying assumption that time is money. As the researcher, I did not bring money into the conversation, but rather it was just assumed by everyone that time spent talking to patients is money lost.

In summary, cost and access to healthcare in the U.S. continue to be social priorities. The U.S. currently has the most expensive health system in the world, and its expenditures continue to escalate (Organisation for Economic Co-operation and Development [OECD], 2011). Started in 1960, the OECD has grown to 34 members including the world’s most advanced countries as well as emerging countries like Mexico, Chili, and Turkey. According to the updated report, the U.S. “spent 7,960 USD on health per capita in 2009, two-and-a-half times more than the OECD average of 3,223 USD (adjusted for purchasing power parity). Following the United States were Norway and Switzerland which spent over 5,000 USD per capita” (p. 1). Meanwhile, there is an
increased burden on safety nets of care for uninsured persons and/or those without adequate access (e.g., public hospitals). A recent press release from the U.S. Census Bureau (2011) reports that nearly 50 million Americans (16.3%) had no health insurance in 2010. And that number increased by almost one million from the previous year. Similarly, Himmelstein, Thorne, Warren, and Woodhandler (2009) concluded that during 2007, 62% of all U.S. bankruptcies were due to medical expenses.

Health care organizations and professionals face a time-bind as they try to absorb an elevated public demand for care coupled with the need to control expenditures. Students encounter first-hand the value of time as a limited good in SP labs. At the same time, labs allow students to clarify their own professional commitments and expectations. Students recognize varying temporal expectations that accompany different settings of care and different areas of specialty.

Similarly, time expectations provide students immediate rhythms with enabling potential. Just as checklists are important, so too is personal rhythm with professional development. Thus, while the temporal demands of the institution can be constraining, students are also immediately enabled as they learn and become familiar with the rhythm of the labs.

**Learning by Doing – “It’s Kind of Like…Learning How to Drive”**

The staff of OUHCOM has spent significant resources to create realistic settings in which typical scenes of healthcare can unfold. The creation—and subsequent use of—SP labs embodies what John Dewey (1966) described as learning by doing, or learning through experience. In his critique of formal education, Dewey argued that pedagogical practices to often hamper rather than foster students’ capacity for continual growth,
instead creating chasms between living and learning. In their finest moments, SP interactions offer students foundation experiences that prepare them to learn through interaction during the course of their careers. I draw on Dewey’s understanding of experience to advance this argument:

We employ the word “experience” in the same pregnant sense. And to it, as well as to life in the bare physiological sense, the principle of continuity through renewal applies…The continuity of any experience, through renewing of the social group is a literal fact. Education, in its broadest sense, is the means of this social continuity of life. (emphasis in original, p. 2).

From Dewey’s perspective, education ought to foster students’ capacity for further education, renewal, and growth through experience.

In this section, I move between students’ voices, the work of Dewey and others, and my own experiences to develop conceptual arguments about how SP labs promote learning by doing. I focus on how students experientially (1) learn to conduct physical exams, and (2) learn to communicate with patients.

**Learning to Conduct Physical Exams**

The goal of the SP lab is distinct from other medical school pedagogies because it is not centered solely on what students know, but also what they do. In the SP lab settings, the acts of the characters (students as well as patients) take on significance. Rather than meta-communication pedagogies, students actually practice touching, examining, and talking to the SPs. Instead of talking about how to use the equipment, students hold the instruments in their hands and directly touch the patients. Ultimately, SP labs represent experientially-based pedagogies. This type of learning historically has
been found more commonly in technical colleges than in doctoral granting institutions or medical schools.

I asked Nathan, a second year student, “What is the most valuable aspect of the [SP] lab?” He replied:

Being able to do the actual examinations, I think, has been the biggest thing. Like when we had to do like the pelvic and rectal examinations, it’s a situation where the people are there. They’re volunteering, so they’re comfortable with, you know, teaching us and helping us learn . . . so when we’re in that real setting, we’re not making mistakes. I think in that aspect, you know, it’s really helpful, because it does prevent, you know, any issues later on, because we’ve practiced.

Other students also emphasized the value of learning by doing. For example, during his second year Tyler, shared:

I think the hands on approach is the biggest thing . . . because we are in the situation where we are actually doing these things that we’ve learned about in lecture or learned about in clinical skill lab. So we’re actually able to do these things and practice our exam skills, take blood pressure, and listening to hearts, and looking in ears and things like that. In that respect, I appreciate being able to practice those things.

Similarly, Maria explained that the lab experience provides space for dialogue as well stating, “I mean, we’ve had some lectures on communicating, but I just wonder how well I’m actually learning to communicate with someone telling me how to communicate. I think it is something you absolutely have to do by practicing.”
As mentioned in chapter one, Gawande (2002) highlighted the steep learning curve for medical residents as they perform risky tasks. The students at OUHCOM seem to recognize the unnerving nature of those situations and value their ability to practice in a “safe environment.” SP labs supply the environmental conditions for students to widen their learning beyond textbooks and lecture halls and carry out the activities of their future professions.

While students move through the first two years of medical school, they also keep an eye toward the clinical experiences they will gain in professional settings after those formative years. Brendan (BK) described his perception in the following conversation:

BK: It is a game essentially.

SP: You know you’re there to figure out something.

BK: It’s cool, though. They have a standard of what’s wanted, but you’re supposed to figure out what it is you should do. It’s supposed to be pretty free, but it’s actually pretty constructive. You have to make sure you still… I mean, there’s some things I would never think that were necessary to check off and then at other times, it’s good to have it and that sort of thing. So, it’s just like anything else. You practice. It’s just like having a coach.

SP: When you’re in there, though, it’s like you’re trying to hit the right questions, right? There’s a checklist of things you need to ask.

BK: Right. I don’t know how else they would… they’ve got to make it standard somehow, you know, to compare everybody to each other and make sure they’re maintaining the level of medicine that’s necessary. But,
you know, it’s kind of like when you first were learning how to drive. Did you take state tests and stuff like that?

SP: Yeah.

BK: Well, you know, they say you always have to make sure you come to a stop. Well, how many people stop at a stop? Sometimes they slow down a bit. I guess it’s kind of like that eventually.

SP: That’s a great metaphor.

BK: I think if anything it’s a good decent metaphor. But sometimes, what’s really wanted is kind of hard to mesh with what actually happens, you know, what we see in the clinics, I guess.

Even though there are discrepancies between the arranged nature of the SP experiences and those they will have in professional environments, students generally recognized the opportunities to learn by doing in the SP labs.

Brendan’s testimony refers to the diagnostic process of asking questions, appropriately using the clinical objects in the exam room, and conducting the physical symptoms are read narratively, contextually, and interpreted in cultural systems. A physician’s diagnosis is a plot summary of a socially constructed exam to exercise clinical judgment. In unpacking the reasoning skills involved in the clinical exam process, Montgomery (2006) emphasized that students draw on scientific logics and their respective technologies as well as narrative reasoning to explore the “pathophysiological sequence of events” (p. 14). When student physicians enter the SP labs, they enter into the stories of patients’ lives as narrated in those moments. Patients’ bodies also tell stories that students need to bear witness to (Charon, 2006). Students’ classification of
patients’ maladies is guided by the story of symptoms as told by patients—and organized by checklists. Importantly, students do not describe what they are learning as narrative-based reasoning, nor did I hear any instructors or mentors position SP labs as narrative pedagogies. Nonetheless, the experience embodies the narrative nature of clinical work that physicians will practice through the course of their careers. In the discussion chapter, I talk in detail about ways the narrative nature of SP pedagogies could be explicitly acknowledged and developed.

One afternoon, in my post-observation field notes, I wrote, “It seemed like the students were playing a guessing game as they tried to get the patients to say what the [preceptors] wanted them to say” (Fieldnotes). I also overheard a prominent visitor, after observing, tell the faculty that it seemed like “these students were more like body mechanics than doctors” (Fieldnotes). Initially, I felt frustrated as I thought about the students standing with their checklists focusing on the best route of interrogation to get the right disease quickly—i.e., to quickly connect the patient’s story to the biomedical illness script. My own biases set in as I hoped to see them focus less on the requirements of the checklist and interact more with the patients as people.

Gawande (2009) explained that checklists are necessary to protect us from ourselves as a whole. He argued, “Medicine has become the art of managing extreme complexity – and a test of whether such complexity can, in fact, be humanly mastered (p. 19). He pointed out that the complexity becomes exponentially compounded as numerous decisions and people work independently to join together and try to govern outcomes for the human body. Gawande is a physician and his examples are dramatic. However, considering the many available courses of possibility medical students can explore during
a medical interview, one realizes that even these elementary situations are very complex. Without checklists, students could forget to probe critical details such as current prescriptions, previous diagnoses, or even current physical malformations.

When I asked Carlie about her feelings on checklists she explained that learning to use checklists in SP settings will be beneficial for her as she enters professional settings beyond medical school. She explained, “From my experience in hospitals, there’s pretty much always a standardized form that you take into a room with a patient with all the questions you should ask and the physical exams that you should do.” So, contrary to my initial biases as an interloper, sufficient testimony exists to indicate that the act of practicing with checklists has significant merit.

Learning to Talk in Clinical Settings

Over the past year, I have watched medical students learn by doing in SP labs. Beyond learning how to use instruments, conducting physical exams, and using checklists, I observed them learning how to talk in clinical settings. They had to learn how to talk in different ways. They were confronted with diverse challenges including translating medical terminology and relating, through talking, with their patients.

During one lab called the “mini-osce’s” the students were required to meet with their preceptors during the brief breaks between three SP sessions. While watching a male medical student I noted in my field notes that “Jenn (the preceptor) is being pretty tough on him for not knowing the medical terminology” (Fieldnotes). At that point, I realized that the students were really pressured to gain expertise in language switching. I had often thought of the challenge doctors face to translate medical terminology into lay language for their patients, and the fact that most doctors fail at it (see Koch-Weser,
DeJong, & Rudd, 2009). But in this case I realized that before they developed that depth of expertise, doctors also had to learn how to move between lay terminology (the stories patients tell) and the language of medicine. As I articulated with two colleagues in an article in Management Communication Quarterly, “the singular nature of experience must be juxtaposed with the generalities of a science-using practice” (Harter, Patterson, Gerbensky-Kerber, 2010, p. 466). I deepen this argument by suggesting that this is a process that ultimately requires providers to learn to talk in different language, a process fraught with difficulty. Second year student Carlie told me, “Sometimes I don’t know where to draw the line of giving an exact quote of what the patient told me or translating it to what the medical term they told me it would be” (Fieldnotes). SP labs represent a unique experiential opportunity for students to become multilingual.

In addition to mastering medical terminology, SP experiences provide students with opportunities to hone their speech. While discussing the formal communication training she received in classroom environments, Hollie (HZ) explained:

HZ: Yeah. And you’re expected to know those. That’s part of your job. If you’re doing a pelvic exam, you have to feel an ovary. Does it feel large? Do you feel any cysts? That kind of thing. I don’t know what it feels like. I can’t tell you if I’m on it and I can’t tell you if it has anything abnormal on it. And those . . . the pelvic exams, I know they’re so nerve wracking, but they really are beneficial, especially to like, I know some people that got in trouble for this. To know the right things to say during a pelvic exam, it is uncomfortable for the patient. It is very uncomfortable for the patient. It’s not appropriate for you to say, “everything looks good down here”. No.
You may be thinking you look healthy and you’re good to go. No. You’re looking at my… and you just said everything looks good. Oh my Gosh.

That was something I prepped myself ahead of time, because I don’t want to be the idiot that goes in there and says that. So, I prep with myself saying healthy, healthy. Everything looks healthy. That was my go-to. Oh, they always have horror stories like someone pointing to the cervix and saying “bingo”. Are you kidding me? Somebody saying, yeah, everything looks good or great or fantastic. Things I think are okay, but can really be taken wrong. Like I said, those things are the most nerve wracking.

**SP:** Wow.

**HZ:** I know there was a student not too long ago who was getting reamed for that. He made his patient feel uncomfortable, because he must have used inappropriate language when he was doing that exam.

**SP:** So, it’s maybe kind of a safer place to practice.

**HZ:** Absolutely.

**SP:** And do you have lectures on what to say and what not to say?

**HZ:** No. We have lectures… in the beginning, we have lectures on doing the interview and using open ended questions. They’re crazy about open ended questions instead of asking the yes or no answer. Tell me about this and then they can talk. And then we have lots of lectures or discussions about the research about how long a physician shuts up and lets a patient talk. There’s this stat about 20 seconds or something that that’s all a patient gets to talk or something like that.
SP: Or if they ask a question, they give them four seconds to answer. That’s another one that I read.

HZ: And like I said, the body language. But you don’t get anything about how you should speak with them when you’re doing the exam. Which would be helpful. My go to word is healthy. You can’t say anything wrong if you say healthy.

Through this conversation, Hollie revealed that she learned the word “healthy” through practicing communication in the SP lab.

During medical school, some of the communication training is formal, but hardly significant compared to the broader curriculum. There are specialty labs where students learn to hold simple five minute conversations with patients and ask questions about their medical and family history without seeking a diagnosis. Additionally, students experience staged intercultural scenes as well as interactions with people who have physical disabilities that impede the pace of speech and motion. One lab is even designed to give students experiences communicating a most difficult topic – death.

In my estimation all of these labs are worthwhile and provide students with valuable new experiences. They should continue to focus explicitly on these issues. However, in addition to the purposefully designed labs, students learned important clinical and communicative lessons that were not intentionally intended – but were extremely valuable. Dewey referred to this as collateral learning. Simpson (2006) expounded on Dewey’s concept of “collateral learning” and clarified, “the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is
studying at the time” (p. 58). In sum, the narrative nature of doing experience offers valuable space to formally and informally learn important lessons.

**Learning from Patients and Family Members - “A 3D Aspect to This Situation”**

Hollie: My first one. I remember the first time I had to do a pelvic exam. I was so nervous. And the sim patients were awesome in that regard, because I think I was sweating and shaking even. It was ridiculous. First, we had to see it done in a group to one lady, like the pelvic exam. And you know how we have these little electronic trashcans, so when you wave your hand, it will open so you don’t have to touch it?

Spencer: Oh, cool. I didn’t know that.

Hollie: Yeah, so sometimes they don’t have them plugged in or the battery working, so they don’t work. I wasn’t paying attention to the trashcan. I was focusing on the pelvic exam and I couldn’t see, because there was a whole bunch of people and I walked around the group. And I walked by the trashcan and I was shaking. The trashcan opened and it made the squeaky sound and I screamed and jumped in the middle of this lady’s pelvic exam. Everybody looked at me and I was like, oh my Gosh. I was mortified and I apologized. And, yeah. I mean, I don’t remember my very, very first exam ever, but you’re nervous. Doing these definitely gets you more comfortable talking to patients. I will say that.

In American culture, doctors are revered as experts. This role has deep roots in American history dating back before modern hospitals and health systems to a time when local doctors made house visits, offering hope and expertise to people with nowhere else to turn (Rosenberg, 1995). While I have more options today, my anecdotal experience
parallels this same tradition. Oft times, I look to the physician as the one with confidence and expertise to teach me about my body. Generally society finds it acceptable for the patient to experience nervousness and anxiety, but rarely imagines the physician to tremble and “shake” with intimidation in clinical settings. Hollie’s narrative is a poignant reminder that physicians also experience trepidation as they learn to assume the role of expert caregiver. In this section, I explore how SP labs offer students opportunities to (1) learn about human bodies, and (2) learn about caregiving from patients and family members. The practice of medicine is composed of processes fraught with uncertainty and anxiety. As they perform their roles in SP labs and in the feedback they provide, patients and family members expose medical students to the vulnerability and responsibility that accompanies “the white coat”—and its symbolic and material power.

**Learning about Human Bodies**

Medical school is the beginning of a lifetime of learning about the human body and the multiplicity of conditions that can cause it damage. Viewed as society’s medical experts, expectations remain high for doctors to offer explanations about the body’s conditions. As highlighted in another section, friends and family even expect the students to have diagnostic expertise during the first years of school. In reality, medicine includes unmapped terrains and even seasoned physicians do not have answers to many medical questions. Ultimately, medical students must negotiate their vulnerability (and that of patients and family members) and come to grips with the realities of their limited knowledge and experiences. This challenging process is a fine example of problematic integration (Babrow, 1992) as highlighted in chapter one which highlights the space between probabilistic and evaluative orientations.
Through SP interactions as well as traditional exams, students become well acquainted with their knowledge limitations. As Babrow (1992) pointed out, one form of problematic integration comes as we encounter a “discrepancy between what we believe to be so and what we want to be so” (p. 100). For students who hold strong desires to become doctors with answers for everything, problematic integration is particularly intense. Fortunately, the vast majority of students I came to know acknowledged that medicine contains inescapably uncertain moments and that they were not required to be omniscient experts.

Throughout our interviews, students repeatedly expressed gratitude for the SP’s willingness to share their bodies – and their expertise. This gratitude was commonly linked with discussions about what some call the “intimate exams”. In addition to listening to hearts and lungs, assessing flexibility, and ordering blood tests, medical students learn how to perform some of the exams we do not normally discuss at the dinner table. Students must learn to be experts of the whole body. Penises, vaginas, rectums, and cervixes all must become familiar territory. While discussing this topic in an interview, Carrie a medical student, described her feelings about learning about intimate exams in SP labs:

Usually, they’re [SPs] really nice. They’re really kind. They want to be there. They want to help you to be better. And they’ll say that to you afterwards, which is really sweet. I think knowing that someone is there that’s not going to like bite your head off or tell you you’re an idiot right to your face is very comforting, especially when you first start out and you’re so nervous. Like I’ve had a couple of ladies that were just like, oh honey, you’re doing so well. It’s okay. Calm
down. And it’s just like, oh God. And that helps. Especially, like I said, in the beginning when you’re just about to sweat into an oblivion.

Practicing intimate exams for a novice, expert-in-training, is accomplished as the patient, in many cases, provides social support for the medical students. In SP labs, patients become teachers and mentors.

In addition to providing social support, students reported that many of the SPs are also capable of sharing biological expertise. During a conversation I held with the lab coordinator, Pam, I learned that several of the SPs had been part of this process for years. In fact, my field notes indicate “there is a hierarchy among the SPs. It seems like common knowledge that the senior SPs get to choose dates [that fit their schedules] first” (Fieldnotes). Hollie, a second year medical student described:

They like help you out or they’ll say, “I can tell you’re not on the right one” when you’re trying to find the ovaries or things like that or the uterus. They’re like, “No, I can tell. Go a little bit”. They’re there for educational purposes. When you’re scared out of your mind, you don’t know what you’re doing, you’ve never done it before, it’s nice to have a little bit of guidance live.

These are words of gratitude and confidence from a expert-in-training regarding her patient. They demonstrate that at a very early stage these providers are to some degree reliant on the patient for their education.

Other students raved about the feedback they received from SPs. For example, Kushall, a first year student said, “I love patient feedback. I think that’s one of the most important things I get”. Patient feedback comes in three main forms – informal in-the-moment, oral debriefing, and written feedback. Kushall’s comment was broad and
applicable to all forms of patient feedback.

In-the-moment feedback comes regularly as students and patients interact. Sometimes the feedback comes as students are touching the patients and completing exams. But I observed it most commonly at the end of interactions when students had completed the requirements on their checklists, but the time announcement had not yet sounded. In those moments, it was common for students to ask the patients questions like “Do you have any feedback?” or “What do you think I could have done better?” (Fieldnotes). Sometimes, I observed the same SP through different sessions as students rotated in and out (as opposed to following a student through different SPs). I noted that many of the SPs have common issues that they share with all the medical students. For example, at the end of three different, consecutive sessions, I observed one SP tell the each student a story about how his doctor did not listen to him and reminded the medical students of the importance of listening.

Some of the SP labs were organized to allow the SPs to offer oral feedback immediately after the interactions were completed. In these scenarios, the SPs generally referred to checklists and forms provided by the professors as they discussed areas for improvement. Interestingly, I observed that SPs commonly offered feedback on the same issues as they did in the informal sessions.

The last type of SP feedback came in written or typed form. Typically, time was allotted between sessions for the SP to complete the evaluations for the previous interactions. In some cases, the SPs sat down at the computers in the SP labs and typed their feedback. I was never permitted to see those records. In other cases, the SPs filled out forms by checking boxes to matrix questions and free writing in the “comments”
section (see example in chapter four).

Importantly, students also expressed concerns about some patient feedback. Stephanie explained that she is not always confident the SPs really know the terrain:

It’s really nice because instead of just kind of like fumbling through it and not really finding, they can like help find what you’re supposed to find. Or they know if you’re feeling in the right place or not. But I mean, some comments can go the other way, too. It’s like, well, it doesn’t really seem like he would know what we’re doing or not, so I don’t know. I think a lot of that depends on the particular simulated patient that you have on what their feedback means.

As students gain familiarity and confidence with their tasks and with various SPs, they are better able to assess the value of the feedback they receive. And, of course, patient feedback is coupled with faculty feedback.

It is important to acknowledge that students’ gratitude for the patients’ help is not necessarily representative of physicians’ experiences in the professional world. As previously mentioned, in American society, the role of the physician is an expert role, and the patient’s role is to be compliant. Through observations as well as interviews, I surmise that many students understand this meta-narrative of medicine and envision their roles as experts and teachers.

After observing Maria receive immediate oral feedback from the SP, I noted that she seemed less than enthusiastic. She explained her apprehension in the following conversation:

SP: How do you feel about them giving you feedback?

MB: I think that can be pretty awkward sometimes. I think… Well, when they
give it one on one, it’s pretty awkward. I was just in there with them and I don’t know. I feel like they feel like they can’t say as much as they might actually think.

SP: Oh, really?

MB: Yeah, all of a sudden they switch roles. I was the doctor and now they’re evaluating me.

For some students, accepting the patient-as-teacher role can be challenging. And it appears that the face-to-face feedback in SP labs increases the intensity of the situations. A few other students explained to me that they love to get SP feedback, but they prefer to receive it in written form.

Throughout the conversations I held with students, memories of helpful SPs in intimate exam settings were expressed most frequently. However, intimate exam labs are not the only spaces where students have opportunities to learn from their patients. I observed patients educating students regularly as they interacted in various clinical scenarios, including involving family members or lay caregivers.

**Learning About Caregiving From Patients and Family Members**

During the Fall quarter of 2011, students participated in an unusual SP lab. In this lab, the SP’s roles were not patients, but caregivers of patients with movement disorders. For example, the scripts included elderly women who cared for aged spouses with Parkinson’s disease, or young parents caring for children with physical disabilities. The students had opportunities to investigate the daily struggles and financial burdens associated with movement disorders. In my fieldnotes, I noted a range of conversations that focused on topics significantly different than the status quo. In one scene, I listened
to an SP talk about how difficult it has been for her to take care of her cats and work with her insurance to pay for a motorized “rascal” (scooter) for her immobile husband. In another lab, I watched students talk to a mother who cares for a 30-year-old child with physical and mental disabilities. As students asked her about the medical condition of her daughter, that mother kept bringing the conversation back to the ups and downs she and her family have experienced through their caregiving adventures. Specifically, she mentioned that her other children have gained physical strength from carrying their adult sister to help her with various tasks. She also mentioned that she and her husband went years without going on a date because one or both had to stay home to be with their daughter. Interestingly, most of the SPs were actually lay caregivers outside of work and their acting performances seemed motivated by the insights and emotions from those real experiences.

Near the end of this caregiver lab, I listened as one student, Janaid, received informal feedback from the SP. During that conversation, Janaid said, “Meeting with you puts a 3D aspect to this situation. That is why I want to talk to you because I came into this profession to learn how to care for people” (Fieldnotes). Learning to care for people implies much more than attaining medical expertise. Janaid was literally asking a lay caregiver how to care for patients. Seeking to care for patients is something as sophisticated as one’s definition of care will allow. Emergent trends and organizational structures for caring (i.e., narrative medicine, patient centered medical homes) extend common definitions of caring into realms beyond medical conditions to spaces such as family relationships, careers, and finances.

The caregiver SP lab highlighted new dimensions that patients experience as
ruptures in health reveal themselves. It also provided opportunities for medical students to have close encounters with those ruptures. Harter, Patterson, and Gerbensky-Kerber (2010) wrote about “new normals” in health care as they showcased examples of creative ways providers can honor broader illness scripts of their patients through care beyond the human body. Some of those methods include inexpensive strategies like conducting dictations in front of the patients and incorporating personal interests in their medical plans – including, for example, a young man’s pet pig (see Harter and Hayward, 2010).

Institutionalized scripts for the biomedical model are broadly adopted and reinforce perceptions of how care should be performed (see Morgan & Krone, 2001). The caregiver lab demonstrates that SP labs can be strategically utilized to train students to apply qualitative sensibilities and improve care beyond the traditional biomedical model. In the case of the caregiver SP lab, students were compelled to move beyond the scientific traditions and gain insight into the broader lifeworlds of patients and families.

Most of the labs I observed centered on health issues of the human body. Even so, most of the SP labs provided space to discuss care beyond the body. This occurred during the debriefing sessions when all the students who participated in the day’s SP interactions convened in a room with their professors. This process occurred with every lab I observed. Sometimes I went into the room with the students and other times I observed from the control room. The debriefing sessions lasted about 15 minutes and generally focused on macro issues for the group as a whole rather than micro-details from individual labs. Commonly, the professors would tell stories from their professional practices outside of academia that connected with the day’s SP experiences.

On one occasion, the instructor invited the SPs to join the debriefing session and
talk about their real life experiences, allowing the students to respond with questions. A student sitting in the middle of the room asked the SP’s, “What is the best thing a caregiver can do?” Various SPs blurted out different answers like “eye to eye contact”, “drawing diagrams”, and “just listen to us” (Fieldnotes). Then an elderly SP named Ray exclaimed:

Yes, listen to us – we are the ones who know our bodies best. Post-polio syndrome wasn’t a problem until about 20 years ago and before that they thought it wasn’t really a problem. But I had it for many years . . . You can also help by keeping us informed. When I was 12 they told me that I would have a cast after my surgery. I expected a cast on my leg, but when I woke up I was in a full body cast. I was scared, I was miserable. (Fieldnotes)

The room was quiet for a few moments and then the instructor broke the silence by dismissing everyone. No follow-up discussion was held. However, the tone of that man’s voice was harrowing and penetrating. Students must learn to listen and they should use caution in their communication. By creating appropriate time and space, and showing a hunger to learn, students and instructors alike were taught by the patients and lay caregivers participating in SP labs.

Throughout my observations and field interviews, students consistently displayed nervousness and trepidation in many SP interactions. As demonstrated on previous pages, the students seem to be particularly frenzied in new situations where they learned to touch the private parts of others. Learning from the patient can be a really intense experience for many medical students. But testimonies of seasoned physicians bring hope to the students who see the tasks to be too great. Verghese (2009) described his feelings
related to the experiences of touching and learning with his patients as follows:

The physical exam is really about one individual granting permission to another individual to touch his or her unclothed body, to probe the most ticklish and private places. The exam then is about trust, about a sacred privilege. I can recall occasions when my visit with a difficult or aggrieved patient, or with garrulous and hypochondriac patient, changed course as I performed detailed examination. On those occasions, I had a sense that the exam had flowed, it had become almost a dance, one in which the patient was an active participant, and that it had quieted and reassured my patient, the exam itself bringing about this change. Indeed, in those moments, I became aware that I’d changed, too, as though both of us – doctor and patient – had entered some sacred space by virtue of this ritual and had been transformed. p. 1180

These words demonstrate that the purposes of the SP labs are justified by practice outside medical school. They fulfill preparatory purposes. Learning to touch and “dance” with the patient is even considered by Verghese as “sacred.”

Although some physicians choose terms like dance and sacred to describe their relationships with their patients, contrary and negative experiences also abound. These negative experiences are discussed formally and informally in medical school and lend reason for students to be prudent as they enter the risky scenes of standardized patient labs. During our conversations multiple students told me, from memory, that gynecology has the highest rate of malpractice incidents among medical specialties. Mirivel (2008), a scholar of health communication, wrote about some potentially harmful communication tactics plastic surgeons use as they touch patients seeking breast augmentation and
perpetuate ideas that any excess fat is a real problem. For example, he noted “the manual-tactile-kinetic process of lifting and releasing the breast is an action that activates ‘sagginess’ or ‘drooping.’ As the breast reacts to his action toward it, its elasticity and drooping comes to life. These surgeon-initiated activities are consequential: they validate the patients’ reported bodily flaws” (p. 158).

In summary, the previous examples of dancing with patients through touch and revealing their flaws through touch are evidence that physicians typically move beyond the fear they experienced as medical students in first-time encounters. Understanding turning points at which students become comfortable touching unclothed patients is beyond the scope of this project. But my observations and interviews demonstrate that (1) learning about human bodies and (2) learning from the patients and family members about caregiving during student’s formative years are daunting tasks that medical students experience as they enter spaces of the SP labs.

“It’s About the Patient”….and the COMLEX2PE

From the first day of medical school, figures of authority at OUHCOM reinforce one message verbally and visually as students learn to communicate with patients during their formative years – it’s about the patient. The words are clear and the message is filled with good purpose and aligned with broader societal values. Creative efforts to put patients front and center of healthcare are driving an explosion of innovation and thought, commonly referred to as medicine 2.0 (see Eysenbach, 2008). In this section, I first explore (1) how the message “It’s all about the patient” is reinforced through SP labs, and then (2) interrogate forces that shift the focus to the COMLEX2PE—a SP board required for licensure.
It’s About the Patient

On the first day of orientation, the students are given lapel pins with the letters IATP (see figure 20) to remind them, even when they become hurried or confused, it’s about the patient. The lapel pins are worn on their white clinic coats as reminders to keep priorities in check. And they function as a common symbol for faculty and students alike.

Before every SP lab, students congregate in a waiting room to talk with their instructors—like a pregame talk with the coach in the locker room. After a couple observations in the waiting room, I learned that the phrase, it’s about the patient, is very popular in OUHCOM. The phrase is used as an ethical reminder that medicine is about people first.
Figure 20 - It's about the patient (IATP) lapel pin for medical students
As I discussed the phrase with medical students, it seemed that each had adopted a unique interpretation for the phrase. For example, at the end of her first year, Carly brought up the phrase during an unrelated conversation. After considering her attentiveness to the words, I asked her how she interprets IATP. She explained:

For me it's a reminder that everything we're doing now, is all for the patients we will see in the future. Whenever we're studying in a group and someone doesn't want to learn something we remind each other that our patients in the future will want us to know this stuff. Everything we do is so that we can help our patients to the best of our abilities in the future.

Carly’s interpretation focused on the future. She used the symbol as a tool to motivate and stay motivated by envisioning interactions that have not yet occurred with future patients. Similarly, Tyler, a second year student explained, “To me, it’s about the patient means that you’ve got to remember to respect the patient first. You know, they have their own lives that you have to honor.”

IATP is a message that has resonated throughout OUHCOM and is reinforced linguistically and in other practices and patterns. The lapel pin campaign is a success insofar that the message appears to have entered into conversations among students and instructors. The power of the message is also manifest by the depth of meaning and passion for it that individuals have exhibited.

**It’s About the COMLEX2PE**

Importantly, the meaning of the message “it’s all about the patient” is not always easily discerned. After interpreting many hours of interviews and observations of the mini-osce labs I am compelled to modify the phrase to, *it’s about the patient and the*
The Comprehensive Osteopathic Medical Licensing Examination of the United States (commonly known as COMLEX-USA) is a licensing examination series for osteopathic physicians (NBOME, 2012d). The exam has three levels that are completed independently and all are required for licensure. Level 2 is called the Performance Evaluation (PE) and focuses on clinical encounters with SPs. Among medical students, this portion of the exam is commonly known as the COMLEX2PE.

The COMLEX2PE is not a written exam, but an examination of physical performance. After students leave OUHCOM and enter into a year of rotations, they take a trip to the National Center for Clinical Skills Testing to take the COMLEX2PE in Conshohocken, Pennsylvania. In their Statement of Purpose, the National Board of Osteopathic Medical Examination explained:

[COMLEX2PE] is the clinical skills component of the COMLEX-USA. Consistent with NBOME’s mission to protect the public, [COMLEX2PE] fulfills the public and licensing authority mandate for enhanced patient safety through the documentation of the clinical skills proficiency of graduates from osteopathic medical schools. The Performance Evaluation augments [the other COMLEX exams] by providing an assessment of fundamental clinical skills. (NBOME, 2011a, p. 2)

The COMLEX2PE Fact Sheet published by the NBOME details the skill sets that the exam explores stating:
The examination measures doctor-patient communication, interpersonal skills, professionalism, medical history-taking, physical examination skills including osteopathic palpatory skills, osteopathic manipulative treatment and osteopathic principles, written communication skills in the form of a “SOAP” note, and some aspects of clinical problem-solving, integrated differential diagnosis, and formulation of a therapeutic plan. (NBOME, 2011c, p. 1)

The Fact Sheet also explains that the skills are assessed in two examination domains, biomedical/biomechanical and humanistic domain. While both domains are laden with elements of communication, the humanistic domain is solely communicative, focusing on “doctor-patient communication, interpersonal skills, and professionalism” (p. 2).

Ultimately, as students engage in SP interactions, they also plainly engage in COMLEX2PE preparation.

Evaluation of the COMLEX2PE is highly subjective. NBOME explains that, “highly trained standardized patients” and “osteopathic physician examiners” evaluate the students on dimensions including ability to “elicit information, listening skills, giving information, respectfulness, empathy, and professionalism” (NBOME, 2011c, p. 2).

However, NBOME does not provide any clear operationalization of what the most effective behaviors look like. To those who are concerned about fairness, objectivity, and reliability of assessment, NBOME responded, “The standardized patients as well as osteopathic physician examiners are highly trained, and rigorous, industry-standard quality control measures are employed. Representatives from every college of osteopathic medicine have been involved in examination development and in setting the standards” (NBOME, 2011c, p.1). However, the organization also reported that for those
who want to improve their performance or remediate, “Case-specific feedback (e.g., ‘What questions should I have asked,’ or ‘What communication skills did I not demonstrate in the exam’) cannot be provided” (see FAQ section, NBOME, 2011d, p. 2).

Though the NBOME does not offer specific evaluation details, they do provide general guidelines for medical schools to follow, and OUHCOM is very attentive to them. For example, the exam follows a very rigid time schedule. The NBOME Website explains that the exam “is a one-day examination of clinical skills where each candidate will encounter twelve standardized patients over the course of a seven-hour examination day” (NBOME, 2011b). OUHCOM has been represented on the committee by a few different faculty members over past years, and there seems to be an informal network for sharing details about the exam to Pam, the local lab coordinator. Those details take on new life in the SP labs at OUHCOM. For example, I listened as Pam told the students they would be docked points at COMLEX2PE if they touched the SPs’ charts before the starting time (Fieldnotes). Similarly, I joined in a conversation where Pam and another instructor discussed the rigid details of time allotment between SP encounters at the COMLEX2PE and deliberated whether they should be more unbending at OUHCOM to help the students prepare – a decision that was ultimately implemented.

As previously mentioned, students who fail the COMLEX2PE do not receive specific feedback regarding their errors. Instead, they are encouraged to “consult with their dean or school representative to obtain reference materials and to formulate a remediation plan” (NBOME, 2011c, p. 2). So, the remediation process can be difficult and expensive (costing time and money), and OUHCOM provides valuable opportunities for students to prepare to succeed. These opportunities are illuminated in the mini-osce
SP labs. OSCE stands for objectively structured clinical examination and follows the same format as the COMLEX2PE where students are presented with various SP cases and expected to complete accurate diagnoses and sufficient recommendations for future care.

Ultimately, the mini-osce labs function to prepare students for the COMLEX2PE and the standards and habits associated with them are formative. They are mini because the time is condensed and students do not see as many patients as a professional would typically see, or as they will see in the COMLEX2PE. But otherwise, the mini-OSCE’s mirror the experiences students will have at the COMLEX2PE including SP and faculty evaluation of their communication skills and SOAP notes. Through all my observations of SP labs and interviews surrounding those experiences, I learned that certain skills are highlighted and others take a background position. The standard evaluation form (example 4) referenced and discussed in chapter four is influential because students cater their preparation to meet the requirements on its pages. Washing hands, using open-ended questions, dressing appropriately (including not wearing too much cologne or perfume), maintaining good posture, explaining steps, and avoiding chewing gum are examples some of the items upon which students focus. This came to light when one student told me about a colleague who was “horrified” because chewing gum fell out of her mouth while she was evaluated on camera.

Much of the preparation students receive in SP labs during the first years of medical school is geared toward helping them pass the exam – making it about the COMLEX2PE first and putting it’s about the patient in a secondary role. Certainly, the two categories are not mutually exclusive. In fact, the COMLEX2PE preparation is a
preliminary step toward making it about the patient, but too much emphasis on the mechanical communicative requirements can diverge student’s desires and skills to deeply acknowledge the narrative plights of their patients. I first witnessed that tendency in a lab during the fall quarter of 2009, just after I began exploring the SP setting. During that lab students were instructed to show empathy to the SPs. While sitting in the control room, I learned that the instructors were evaluating the students in a manner very different than I anticipated. They were counting the students' empathic statements. That moment spurred what I described in my reflective field notes:

During the past week I went on an empathy hunt. Seeking to learn about empathy and uncertainty in medicine I scanned dozens of articles and closely read five. The articles were primarily focused on the conversation about teaching empathy to medical students and physicians rather than empathy as a general topic or a topic in a different field.

Every article I encountered mentions benefits of empathy. Among the long list of benefits from empathy from doctors to patients are: trust, adherence, participatory decision making, and high satisfaction with the healthcare experience (see Martin, Williams, Haskard, DiMatteo, 2005). Several quantitative studies have confirmed an interesting finding that I recently discovered. Medical students become less empathetic as years pass. From my observations, Helfer (1970) did a foundational study on the topic which compared interviewing skills of freshmen and senior medical students. He concluded that first year students showed understanding of patients’ emotional experiences, but lacked knowledge about biological illnesses and vice versa for fourth year students.
It seems that empathy is a buzzword in health communication literature intended for health practitioners. As I spoke with one medical school professor of communication (Dr. Rhue) it seemed that empathy is the most important characteristic to teach doctors to be. However, when I observed her lab, she evaluated students by counting empathic statements. I made an appointment and went to her office to talk to her about it. When I asked her if that was an effective approach to understanding empathy she told me that psychologists have been counting empathic statements for years. To me, that seems like a really stupid way for understanding students’ empathy skills.

Perhaps the language I chose in my private fieldnotes is too elementary. But reflecting back now, I interpret that case as one in which the necessity to provide structured feedback interfered with the broader goal of making it about the patient.

Students enter medical school with visions and dreams about the types of doctors they want to become. Reasonably, sometimes students face situations where purposive decisions must be made between whether to communicate with patients in ways they feel inclined and communicating in the manner they are taught according to the traditions of COMLEX2PE preparation. To illustrate with an example, I discuss an interaction I observed.

During fall semester of 2011, Tyler, a medical student, was talking to a SP about a real life struggle she had been facing with her health. The woman had a movement disorder and Tyler’s task was to talk to her about the ways it impacted her life. After she explained that several family members, who provided her support, had passed away she added that she also went through a difficult divorce with an abusive husband. Rather than
changing the topic, Tyler reciprocated by talking about some struggles he faced. In my scratch notes I wrote, “After she explained that a bunch of her family members died and she was married and divorced in one year, he talked about a tough time when a bunch of people in his family had deaths or major surgeries at the same time. His self disclosure was unusually high” (Fieldnotes). Noticing that his response was unique, I followed up with Tyler (TF) in the following formal interview:

SP: I heard you telling one of the standardized patients about… I can’t remember. I should pull up my notes. The patient was talking about a bunch of stuff going wrong and different people dying and you were able to kind of relate and say, “Yeah, I kind of…”

TF: Yeah.

SP: And you experienced that, too.

TF: Yeah, I was just talking about being diagnosed with MS and having, just having my dad die around this similar time.

SP: Yeah, I think that was… you’re right.

TF: I’ve been there. I just told her about my freshman year of college. Finals week was just horrible for me, because I had an uncle die in a car crash and he left behind two kids. The same week, my mom was in a pretty severe crash involving a cow out near Delta. And so, she had to come up… or, she had to go up to Orem/Provo area for surgery. I didn’t find out until the day after.

SP: Oh, man.
And at the same time, my grandpa, my mom’s dad, had a pretty severe heart attack.

This is all at once?

Yeah. So my grandpa didn’t even know that his son was dead until a few days later actually.

Oh, it was his dad?

Yeah. And so, that was all during finals week. I was trying… because my grandpa was in the hospital and make sure everything was okay with my mom, and help with what I could.

And cope with your uncle’s thing.

Well, and he left behind two kids that… and his wife had left like a year before. And he was struggling. He had some alcohol issues, drug issues. I was doing a little babysitting for him while I was in college during that freshman year. I was just trying to take care of his kids, help him take care of his kids.

So, you like had some responsibilities there, too.

Yeah. I wish I could have done a little more.

Well, I thought that was pretty cool that you told the patient that, the SP that. Not every medical student relates personal information like that. Do you see yourself when you’re beyond medical school talking to your patients that intimately, that personally?

I think so, just because, you know, when I talk to a patient I want to feel more like I’m talking to a friend, somebody that I really care about and I
want them to have the best health possible. I want them to be able to relate
to me and understand that I’m not some guy that’s just going to cut them
open or throw some medicine at them or something like that. I want them
to be able to see that, okay, I understand. I might not be in the same
situation, but I can relate to what’s going on in their lives.

SP: Are you ever concerned that talking like that will hurt you in your
evaluations?

TF: I don’t think it will hurt at all, because it sets up that relationship of trust.
It shows that the doctor understands and is willing to listen and that’s a big
thing.

SP: You feel they leave space for you to do that?

TF: Yes, as long as the patient is happy. I feel when I’m in that setting . . . I
feel bad for the patient, but I feel comfortable in that setting helping them
feel like I care.

SP: Are you bothered by the preceptors? Worried you’ll get it wrong?

TF: The preceptors don’t bother me. I don’t even pay attention to the fact that
they listen or watch, or will watch later. It doesn’t cross my mind. But it is
nice to know they are there.

As already stated, Tyler’s approach was unique. From my observations, it is unusual for a
medical student to respond to a patient with such personal information. And certainly, the
guiding patterns for the COMLEX2PE do not encourage it. Perhaps Tyler is always a
high self-discloser. But, his bold approach illustrates how some students follow their
preferred roles irrespective of costs that may ensue. Tyler’s deviation swayed far from the
evaluative expectations. However, he also demonstrated that there is space for students to hold to their individual values while also learning the values of the system.

As the research instrument, I did not interpret many individual values to be highly different from those established by the professors’ requirements in various SP labs. Comment’s like Maria’s “I want to tell people that I’m there for them and explain it to them”, or Nathan’s “I just want to be the kind of doctor that patients know I care about them as people” are indicative of the values some students maintain. Ultimately, these students offered glimpses of the identities and values they hope to maintain in future years – after they pass the COMLEX2PE.

“*My Dad Just Works in a Factory*” - The Role of Family in Identity Construction Among Future Physicians

Throughout our interviews, students frequently talked about their familial roots in relation to their evolving professional identities. Although only tangentially related to my research questions, the role of family expectations and perceptions of student doctors was a prevalent point of conversation. As this chapter closes, I acknowledge students’ testimonies that revolve around moving between their evolving professional roles and their family roots and expectations.

One student, Pradeep, moved to America when he was 12 years old. He spoke with enthusiasm as he described his family’s move so he could get a solid education. His rate and pitch illustrated a sense of pride in his identification with the medical community. He explained that his mother got a microbiology degree and then became trained to do ultrasounds after they moved to the United States. He also mentioned that his sister is applying to OUHCOM to become a physician. Then, to taper off the
conversation, he said, “and my dad just works in a factory” (Fieldnotes). I did not interpret the statement as demeaning toward his father. In fact, through our conversation, I interpreted it to be the opposite—he was honoring his dad, acknowledging that he took a blue collar job so his family could prosper in new places – like medicine. It became abundantly clear that for Pradeep becoming a physician is a noble job.

Several international students I spoke with told stories connected to their family’s immigration and/or acculturation – and how those familial experiences shape their evolving professional identity. For example, while observing SP interactions, I noted that one student spent an inordinate amount of her conversations talking to patients about their interests and hobbies. So I made it a point to bring the topic up in a follow up interview. During our conversation, Roseanna (RE) explained to me (SP) how working with her parents, immigrant farmers from Cambodia, has helped her pay attention to her patients’ stories:

SP: Yesterday I was running up on the trails in Sells Park and I just totally rolled my ankle. I had to crawl on the trail for about 200 yards before I mustered enough courage to walk on it. But if I was your patient and telling you this, would you be okay with me talking about my hobbies and trail running?

RE: Oh, of course.

SP: How would you explore some of that area?

RE: Of course. I mean, if you don’t ask your patients these things, how would you know what type of illnesses they would have or how their lifestyle is?
SP: So, that matters. Not everybody has that perspective. Where did you learn that?

RE: I don’t know. Maybe I grew up with parents who are immigrants and every time I would have to like translate or interpret something or a medical term with them, I would have to explain it fully and then ask them questions. More in depth questions.

Of all the things Roseanna could have said, she drew on her background as a family interpreter to explain her honed ability to probe into the lifestyles of her patients.

Though these examples illustrate positive identification with family experiences and the practice of medicine, other students expressed forms of frustration with their family members’ inability to understand the experience of medical school. In a recorded interview Hollie (HZ) explained the following:

HZ: It’s hard to swallow when somebody tells you that you don’t know what the hell you’re talking about when you’ve done all of this effort. You know, people don’t realize at all. I mean, I talk to my own family about this. They don’t even realize at all how much training you do, how many hours you do in residency. They have no idea. And they always do that whole adage, “oh, you’re going to make hundreds of thousands when you get out. Shut up. Suck it up. You have the greatest life.” But it’s like, not if I’m going into it with half a million dollars in debt, which is the reality of it between my husband and I. We’re literally going to be going into about a half million dollars in debt.

SP: I know of some that are even more than that.
Yeah. And then with residency, we get what? About $40,000 each and we’re working 80 hours a week. That wouldn’t be acceptable to anybody not going into medicine, but they don’t get that.

Yeah. I totally see that.

They just think that we’re spoiled.

Really? That’s the perception you get?

I mean, I hear it from my family all the time. My little niece for instance… you know kids. They’ll say anything they hear their parents say and they don’t know if they’re saying something bad. Like a couple of months ago, my niece, she’s about to turn six. A couple of months ago, I was shopping on a discount store online and I was like, “Oh, that looks really cute. What do you think?” And she goes, “Well, how could you buy that? You don’t even work.” I’m like, hmm. I wonder where you heard that from.

Like the majority of the students I interviewed, Hollie is the first person in her family to go to medical school. With no experience supporting a medical student how could family members understand the process?

Stephanie, a second year student indicated similar concerns suggesting that her husband is the only family member who really understands:

Yeah, so . . . I think he’s the only one, besides like other students, that has an idea of what I’m doing or what I’m going through or what kind of time it is. But your extended family have like no ides, you know? My parents – here and there or they’ll call me and they’ll be like, “you’re still studying?” Yeah, I’m still studying.
These descriptions and frustrations both reveal the struggles students face as the expectations of supporting family members collide with those of the school organization.

Other students explained that family members expect them to do things they aren’t yet capable of doing as soon as they enter medical school. At the end of his second year, Kushal explained:

Everyone calls about every minor thing that goes wrong with them and the worst thing that goes wrong with them. I mean, I’m just a student and my uncle, who’s got type 2 diabetes and heart problems, and he’ll call him with his medication dosages and stuff. I do not know that yet, so yeah. It’s interesting. (Interview Transcripts)

This comment is representative of several others where students expressed a noticeable increase in requests from friends and family to help them overcome health issues. Josh explained, “I think they expect more from you, when I go home, my dad’s like, ‘check my blood pressure’ or ‘check my sugars’ or ‘what’s wrong with me, I’m dizzy?’” (Interview Transcripts). These requests demonstrate that people generally place great trust and hope in their doctors. Assuming that second year medical students have certain knowledge about diagnosing ailments and providing expertise on pharmacological details is unreasonable. Woven throughout other sections I discuss ways students respond differently to expectations for certainty.

As stated in chapter one, members of society maintain high expectations about doctors’ roles, grant them status and authority, and generally assume they hold true and absolute and verifiable knowledge about health. As students enter medical school and wear the label of doctor, they face familial and societal expectations of those who wear
white coats. Hollie, the same student who expressed frustration with her family’s ignorance of medical student life (as highlighted in their comment about making “hundreds of thousands of dollars”) also indicated the problem is not just her parents’ but a larger systemic issue.

When Hollie and her husband entered medical school together, she explained that the system expects medical students to have a lot of money or come from a place with significant financial support. I was unable to explore this issue with much depth. But through observations and informal interviews, I have noted several times that students were required to buy laptops for $1800 which they rarely used and felt was an unfair requirement and expense - an expense not customarily placed on other college students.

When I asked Lillie, a second year student if the computers have required texts or protected intellectual property she responded, “No, no. It doesn’t have any books in it really. They just made us buy it” (Fieldnotes). Building off of this conversation in a formal interview, Lillie (LF) explained some of her financial challenges:

LF: Yeah. I mean, like my husband and I, neither of us come from rich families. No one in our families have ever been a doctor or a dentist or a PhD. Nothing like that. Middle, middle, middle class, yeah.

SP: You’re the first generation to do it?

LF: Yeah.

SP: That’s good.

LF: So, for us, even like the very first day to get here last year, we had to start summer quarter. Well, your financial aid doesn’t come in on the very first day you need it. It doesn’t come in for at least a week until after school
starts. So, to even move down here, to buy the books, to buy the lab kits.
You need gloves and all that stuff just to get started. We had to take out a
personal loan from the bank, and of course, with our age, had to have a co-
signer, which was my dad, just to get a loan to come down here and get
everything set up. I’m not kidding.

SP: Wow. And then you take out loans later?

LF: Yes, and now because of the economic situation, they don’t have any
personal student loans anymore, so you can only get what the school
deems you need to live and for tuition, which also is kind of a catch-22,
because had I known that in the beginning, I would have bought a car that
was really reliable beforehand when I had an income. But now that you
don’t have an income technically, according to everybody, you can’t get
even a car loan to buy a car.

Members of society perceive many physicians as wealthy since “their wages are among
the highest of all occupations” in Americans (Bureau of Labor Statistics, 2012).
However, assumptions that medical students, through affiliation with medicine, are also
financially secure can be misleading. Such assumptions create challenges of maintaining
or negotiating this identity for students and may tacitly contribute to their communication
approaches.

Students must learn to cope with challenges to and from familial resources. As
students learn to think like doctors and live doctors’ roles, these challenges are part of the
process. In some cases, beloved family members and friends take on unintentional
antagonist roles that students drag around wherever they go, including SP labs. In some
cases, the students have to learn to adopt a new lifestyle while holding their loved ones close, and at other times student’s cherished familial values and customs are challenged. Consider the following SP observation from fall 2009 that I recorded in my reflective fieldnotes:

The students were interacting with elderly people who had Parkinson’s Disease (PD), or who cared for a spouse with PD. The specific conversation I heard was between a female student and an elderly man. His speech was slow, broken, and raspy. It reminded me of Emily’s grandma Warr who passed away from PD a few years ago. The student was in her second year. Her complexion, facial features, and accent lead me to believe she was from India. Near the end of their interaction, an interesting conversation unfolded.

The student asked, “What can we do to become better doctors?”

His reply, “Just be good Christians.”

Knowing that he was listening to the same conversation, I heard Dr. Fredrick chuckle at the same moment I thought, “WOW!” The student looked uneasy and quickly changed topics and half-heartedly finished the conversation until she escaped the room.

Watching the incident sparked a few questions for me. Why was the student uncomfortable talking about religion? Perhaps she was not Christian and did not know how to respond. But, wouldn’t it have been beneficial say something like, “I am not Christian, so I don’t know what you mean. Can you describe it in another way?”
Perhaps that student was facing a boundary between her family values and other values for the first time in a clinical setting.

These cases help shed light on the fact that students—learning to become and practicing being a doctor—carry invisible challenges and expectations stemming from people in their closest relational circles to the SP labs. The burdens are not part of their formalized scripts, but they are present and shape how students interact with SPs. As I spoke with students about their SP experiences, frequently the conversations moved from patient expectations to family expectations. Students negotiate perceptions of their own identities as physicians-to-be outside and inside these interactive scenes. Messages from family, friends, and even school itself work as catalysts, propelling them toward various identity paths that are honed and cultivated through SP interaction.
CHAPTER SIX: FINAL REFLECTIONS AND FUTURE DIRECTIONS

*I hear and I forget. I see and I remember. I do and I understand.* Confucius, n.d.

As argued in Chapters One and Two and illustrated in Chapters Four and Five, medical school is a formative time when future physicians learn what it means to care for patients and how to practice medicine amidst inescapable uncertainty and risk. As students progress through school, they engage in simulated and real clinical interactions characterized by narrative sensemaking and practices. In this dissertation, I explored SP labs--one experiential component of the professional socialization of medical students at OUHCOM. Guided by a narrative perspective, I first observed and analyzed ways that SP interactions prepare students for the narrative nature of clinical work. In SP labs, students must elicit opening stories about maladies from patients, probe and expand the initial accounts in light of temporality and causation, order and recast the patients' accounts in familiar biomedical taxonomies of similar cases, recount the stories to other colleagues, and therapeutically respond to the plights of patients. Second, I explored and interpreted value sets that are maintained and disrupted through standardized patient interactions. Ideologies are constructed and reinforced as medical students interact with SPs, often times solidifying deeply engrained role expectations (e.g., physicians as omnipotent figures). In this chapter, I discuss the theoretical and practical implications of my arguments and articulate future directions.

A discussion or summary of this type is reductive in nature and a simplification of ideas charted in previous chapters. In any such summary, ideas are lost--some of which ought not be forgotten. Up to this point, I have sought to offer enough context, enough discourse, and enough detail to enable the reader to form his or her own sense of the SP
labs. I do not summarize and offer my arguments as the Truth. Rather, I hope I have told a complete enough story to enable the reader to find the arguments plausible, defensible, compelling and interesting.

**Theoretical Implications**

In order to explain the significance of my interpretations, I proceed by discussing the knowledge claims presented in chapters four and five in relation to my research questions.

**Research Question One**

The first research question asked: *How do SP interactions prepare students for the narrative nature of clinical work?* I was guided by narrative sensibilities throughout this project and I focused on narrative elements in the SP labs while observing, interviewing, interpreting and even representing the data. I developed the creative vignette presented in chapter four to embody the narrative features of clinical interactions rehearsed in SP interactions—temporality, the ordering impulses of emplotment, cause and effect, singularity (see Charon, 2006). Meanwhile, the themes I presented in chapter five spotlight noteworthy narrative issues. However, on the surface, some themes appear to have the most variance directed to the narrative nature of clinical work (e.g., organizing space for localized performances, “time is money”, learning by doing).

From my perspective, SP labs function to prepare students for the narrative nature of clinical work. Most students and instructors do not intentionally use narrative language in framing the purpose or outcomes of SP experiences. Even so, all that unfolds in the settings of SP labs simulate the narrative sensemaking and practices students will engage and experience during professional clinical work. This is done through a complex
interplay of institutional strategies (e.g., evaluations, timed interactions, specified ends) and environmental elements (e.g., health subjects, physician teachers, medical instruments). Evaluation forms and processes, timed and enforced interactions, and specific biomedical goals are some of the institutional strategies that contribute to the narrative experiences in SP labs. The very nature of disciplinary subjects (e.g., immunology, biology, histology), medical instruments and equipment (e.g., odoscopes, sphygmomanometers, stirrups), and physician-instructors are naturally fitting environmental elements that also contribute to the narrative experiences in SP labs.

Just as clinical professionals work amidst narrative elements of space, time, acts, characters, and plots, SP experiences, too, are characterized by those same narrative elements. The narrative practices that occur naturally in lived clinical interactions are intentionally planned in SP labs, though they are not typically identified as narrative. For example, OUHCOM created representative clinical spaces for students to practice diagnostic reasoning and exercise clinical judgment, both of which rely on narrative sensemaking and practices. Organizing the clinical spaces with patient chart holders on the outside walls beside the doors entering into the exam rooms is but one example. Inside the exam rooms, the realistic, sterile environment highlighted with latex gloves and red biohazardous bins also indicate that the space was intentionally prepared to simulate professional spaces. Students interact in those spaces performing roles of doctors.

Similarly, the clock on wall and the regimented timing of the labs are reminders and reflectors of the realities of time and rhythm that occur in professional clinics. Certainly, students can and will learn much more about their own rhythms and paces as
they enter those professional scenes. But the narrative experiences in SP labs also allow them to reflect on how those temporal expectations are aligned with their goals and values. For example, they learn what it feels like to hold conversations for five, 10, 15, or any other specified number of minutes about a variety of topics. In other words, the students get head starts before they step into the swift currents of professional life.

One may also look to the plots in SP scenes to understand how those labs prepare students for the narrative nature of clinical work. The roles that patients enact and their accompanying health conditions are designed to represent typical characters and conditions that students will encounter when they work in professional clinical settings. The scripts are crafted to represent realistic conditions that are common in clinics. They also include realistic challenges and force the students to grapple with uncertainty as they strive to connect with patients and make accurate diagnoses. The clinical processes of questioning and interviewing through uncertainty and moving toward diagnoses rely on narrative sensemaking (Charon, 2006; Montgomery, 2006). Students learn how to gather pieces of information from medical records, physiological measurements, and patients’ words and then compile them into coherent stories that fit with various diagnoses. However, they also have to learn how to respond when the pieces do not make sense. During a recent email conversation about uncertainty in the clinic with a practicing oncologist, Dr. Benson, he recounted the following story:

In my experience, it’s the docs that often err towards respecting that quiet voice of concern and make decisions that (on face value) appear to be too conservative or even contrary to the “obvious” solutions . . . Like other professionals, we often process information with potentially severe consequences – seeking only
confirmatory clinical data for our initial hypotheses, mis-prioritizing signs and symptoms (when you’re a hammer, the world’s a nail), and forgetting that rare things do, in fact, occasionally occur (typically on a weekend or holiday or when you least expect them).

I had a very illustrative experience this past Sunday night – was here in the hospital all night with a patient with a bizarre acid/base disturbance. Her pH was profoundly alkalotic, she was breathing very rapidly – actively trying to “blow off” excess CO2. That “fits” – it makes sense physiologically. Yet, her blood work showed, in fact, that her blood was acidic! So, I was stuck trying to explain why someone with such acidic blood was – in effect – making things worse with her respiratory rate??? The compensatory mechanism ought to be for her kidneys to hold on to CO2 (which they were not) or for her to breathe more slowly. It was a complete paradox. It wasn’t until early Monday morning when we did an MRI of her head and found – tragically – that her lymphoma had spread to her brain. This completely unexpected event explained her acid/base status perfectly but was literally the last thing I was thinking of at the time (maybe deep down somewhere, I didn’t want to know this and resisted ordering the test until we ruled everything else out?) Still, we bird-dogged the case and chased down every possible explanation, instead of following the published algorithms and “evidence-based medicine” and hoping something would work. It’s interesting that treating her with a base (even though her pH was very basic despite her acidic blood!) corrected her problem. (Personal Communication, April, 2012)
As illustrated by this experience, doctors must learn to listen to their “quiet voices of concern” when things have gone awry and do not make sense. Through SP labs, students gain valuable experience grappling with complex plots - uncertainties that lie on the outskirts of coherency and logic. Thus, the narrative nature of clinical work that cannot be learned through traditional exams alone is learned by experience.

**Research Question Two**

The second research question asked: What value sets are maintained or disrupted through SP interactions? The narrative experiences in SP labs are embedded with values. These values can be categorized in many ways, but I conceptualize them in two interrelated categories: 1) personal values and 2) institutional values perpetuated in the profession. Both the creative vignette in chapter four and all of the themes in chapter five include examples of these values. In terms of maintaining and disrupting values, it seems that oft times the dominant institutional values are maintained at the expense of personal values. However, that interaction is not the focus of this dissertation nor this research question in particular.

As noted in chapter one, students come to medical school with values and visions regarding the types of doctors they want to become. Many of the comments highlighted in chapter five reveal these values. Some students mentioned that they want to be great listeners and subject matter experts with helpful answers. Others indicated that they are willing to spend significant time with patients even if that means receiving smaller paychecks. Several other students indicated that they do not want their patients to "feel like a number". It is reasonable to assume that all the students enter school with desires to be proficient and gain expertise in medicine so they can fulfill successful careers. These
are foundational values that go unrestrained until they meet the demands of school and the SP lab specifically where immediate demands give way to strong institutional values and traditions.

Guided by the idea that academic medicine is the gold standard for medical practice in the U.S. (Hunter, 1991), one may not be surprised to find that some dominant pedagogical and research practices that originated in academic medicine have reached into clinical care. I observed that SP labs are organized and geared toward these academic ends. For example, as noted in previous chapters, many SP labs (particularly the mini-OSCES's) are focused on helping students pass the COMLEX2PE. So, checklists, rigid time constraints, and mechanical communication are emphasized to meet their corresponding requirements.

Enacting the role of doctor is a complex task for students. They need to demonstrate competency in biomedical standards (e.g., identify diseases accurately) as well as social awareness and competence (e.g., intercultural sensitivity). Students are instructed to present themselves as student doctors. The word student is interesting in this context. The instructors encourage the students to act as if they were practicing physicians, and make decisions that professional doctors would make; yet those instructors do not want the students to use the title of doctor alone. This is an example of the disciplining institutional power of OUHCOM. Disciplining students to enact particular doctor roles is enforced through a panoptic (Foucault, 1977) process in medical school. "Panopticism" (p. 195) is Foucault's term describing the nature of prisons where prisoners are continually surveiled and corrected. Foucault explained, "The panopticon,
on the other hand, must be understood as a generalizable model of functioning, a way of defining power relations in terms of the everyday life of men" (p. 205).

Medical students are closely monitored to ensure that they learn to follow legal and professional rules. SP labs are scenes where the monitoring and correcting is explicit. Under continual video and audio observation, the students follow prescribed processes to learn the values and rules of their profession. Power is enacted in multiple forms to teach values. Physician-instructors, like any other college instructors, hold power to teach and evaluate correct and incorrect knowledge and rules. Importantly, I should note that Foucault did not suggest that power is necessarily repressive. He explained, "We must cease once and for all to describe the effects of power in negative terms . . . in fact power produces; it produces reality; it produces domains of objects and rituals of truth" (p. 194).

The close monitoring and correction students receive around SP labs have valid purposes. For example, checklists ensure accuracy (Gawande, 2009) and conversation guidelines promote confidentiality.

Certain values repeatedly discussed throughout the previous pages are prominent in SP labs. Most notably are the instrumental values surrounding checklists, the COMLEX2PE, as well as the assumption that time is money. But the expectation for certainty, as highlighted early in this dissertation, seems very prevalent in SP labs. Not only do patients expect certainty, but the students also expect to have answers. In SP labs biomedical information and people are integrated. Medical students showcase their disciplinary knowledge by applying it to the SPs. Generally, members of society expect doctors to have answers to their medical questions, and explain how healing processes advance. Following these traditions, it seems that many students see their roles as experts
who impart knowledge. However, in talking about healthcare reform, many physicians (i.e., Charon, 2006) would argue that too often the expert role of doctor minimizes the real importance of knowledge that patients bring to the interaction—knowledge of their bodies, symptoms, what they are and are not physically able to do. Patients will always be integral to diagnostic and treatment processes even if unacknowledged as such. Perhaps we should question the limits of dominant scripts that position the doctors as the only experts.

Sometimes personal values clash with the values that are perpetuated in academic medicine broadly and SP labs specifically. For example, some students want to learn to hold meaningful conversations with patients, but the rigidly enforced rhythm of the SP labs does not permit enough time. As Babrow (1992) explained, integrating orientations is not always problematic. However, when one's probabilistic orientations diverge from one's evaluative orientations, integration of the two is difficult. This is a common situation for medical students in SP labs. The students face these challenges as they maintain strong desires to provide answers and perform like physicians, but recognize their limitations and abilities to do so.

**Practical Implications**

Along with the theoretical implications that build upon communication theory and are essential to this dissertation, I also offer practical implications. Here, I write about these implications and their relevance for policy makers and organizers at OUHCOM. However, I must interject that OUHCOM is merely one medical school and larger, influential bodies such as the NBOME should address these implications for broad and
universal alleviation. Specifically, I describe two areas in which OUHCOM can revise their SP lab process.

First, I suggest that OUHCOM incorporates a method for collaboration among instructors who lead various SP labs. Second, I recommend that OUHCOM adopt a narrative frame for the SP labs. Generally speaking, the SP labs at OUHCOM are very well executed. No student complained in any form about the logistical process of the labs. Members of the staff work diligently to create ideal logistics that permit SPs and students to interact effectively. However, I do suggest that OUHCOM incorporates a structure that allows instructional faculty to collaborate. Students did suggest that it is hard to please all the faculty members because each lab has different processes. Sometimes the students are confused about the goal of the labs since they are evaluated differently depending on the professor. Likewise, some students expressed frustration about the lack of authenticity in some labs. For example, one second year student explained that he saw the same SP three times in a row with a different disease each time. He began to conflate different stories of medical history and it was difficult to personalize his interactions with that patient.

Similarly, students told of times when faculty members contradicted each other between lectures and SP experiences. Without prompts, multiple students told me about an experience where one lab instructor emphasized the importance of using all their available time to probe deeply by asking open ended questions. Then after the next lab, a different instructor told them that their allotted amount of time was unrealistic and that they needed to learn to wrap up their conversations more quickly. On another occasion, the students were taught in lecture that empathy is a subjective art that is impossible to
quantify, but easy to identify. Then in a follow-up lab they were graded based on the number of empathic statements they made.

I recommend a series of planning meetings where SP faculty members inform each other of their goals and procedures to reduce contradictions and confusion. Many of the faculty members are extremely busy as they also manage practices outside of medical school in hospitals and other settings, but the proposed meetings could serve as space for faculty to share ideas and materials, reducing their own preparation time.

My second and most fervent recommendation is that OUHCOM adopts a narrative frame to talk about and teach interactions in SP labs. Adopting a narrative vocabulary could create consistency across OUHCOM and help with the problems associated with my first practical recommendation. Sharing a vocabulary and mental model can help teams operate effectively in unfamiliar circumstances (Patterson, 2008). In sum, over the past decade numerous practicing physicians and medical school faculty have acknowledged the narrative nature of clinical work (e.g., Charon, 2006; Hunter, 2006). The experiential nature of SP labs implicitly introduce students to narrative sensemaking and practice--yet, they don't acknowledge it as such. Faculty members are missing opportunities to foster reflexivity among students and themselves about the interpretive nature of the science-using practice of medicine.

In addition to improving the landscape for communication and potentially reducing the likelihood of contradictions and misinformation, a narrative frame can help students practice better medicine. As discussed in chapter one, Dr. Rita Charon and her colleagues at Columbia University created a Master's program in narrative medicine. Charon teaches medical students and practicing physicians alike to pay close attention to
the stories of their patients through careful listening, journaling, and other techniques. She explained:

A medicine practiced with narrative competence will more ably recognize patients and diseases, convey knowledge and regard, join humbly with colleagues, and accompany patients and their families through the ordeals of illness. These capacities will lead to more humane, more ethical, and perhaps more effective care.

Integrating a narrative focus to the SP process at OUHCOM would be new and challenging, but very possible. There already exists a template for success at Columbia University. The most ideal recommendation I can offer is to create a shared narrative vision of SP experiences at OUHCOM.

**Limitations**

In general, I am very pleased with the work I have done during the process of this dissertation. The process began as a casual investigation of my interest in medical education and then developed into the most substantial work I have undertaken. I am happy to have begun with a pilot investigation to familiarize myself with the setting and its characters, but there are also many limitations to what I was able to accomplish and the methods I used throughout the process. I address some of those limitations here.

First, I recognize that as the research instrument, my observations and interpretations are partial and indeterminate. Certainly, there are important experiences and lessons that I missed which another scholar may have recognized. I entered into interviews with an open mind, but I also recognize that I did not enter with an empty
mind. I offer my interpretations as viable but also partial and open to revision by other individuals who adopt difference theoretical frames.

Second, student perspectives are disproportionately advantaged throughout this project. Clearly students' perspectives are valuable, but SPs and faculty have valuable perspectives too. Early in the process, I recognized that an entire dissertation could be written about experiences from SP perspectives; yet, it was not viable for me to include all stakeholders in the research design. Thus, I chose not to interview the SPs. While I conducted interviews with a few faculty members, I had limited access and feel like some of their key voices have been underrepresented.

Last, though I was able to interview many students, there were times when I was unable to conduct follow-up interviews immediately following specific observations that I made during the SP lab. I saw students do and say things that would have been worthy of follow-up interviews that I could not conduct due to the timing of events and logistics of conducting interviews amidst students' calendars and in light of the hundreds of SP interactions that take place in any given year.

**Future Directions**

I conclude this dissertation with as many questions as answers. I believe that this is not a sign of weakness, but evidence that my efforts have been worthwhile. I present a few suggestions for building off this project.

The SP setting is created to reflect common working conditions in professional clinics. However, technology and community-based medicine provide new terrains and media for physicians to practice medicine. It seems worthwhile to study students’ exposure to non-traditional spaces in which care unfolds. How are physicians prepared to
practice medicine in settings like mobile clinics and curbside care? Many physicians participate in medical care for persons in developing worlds. What experiences do medical students undergo to prepare them to contribute to international efforts? And finally, how can narrative medicine be enacted in these non-traditional settings?

This project centered on the formative experiences medical students undergo in SP labs. Next important steps would be to study students as they work through rotations, residencies, medical practice, and even retirement. I have permission and intend to stay in touch with several of my participants as they move through these phases. A longitudinal perspective that accounts for how students' formative experiences with SP labs shaped their emergent careers could add value to the insights presented in this project.

In general, SP interactions are compelling experiential pedagogies that should be of interest to communication scholars generally and health and communication education scholars specifically. Yet, as a whole, health communication scholars have paid little attention to this setting. Just as buds emerge from fertile soil in starter pots, SP labs are formative spaces where health communication and communication education scholars can study any range of topics to learn about interesting and socially relevant issues.

As scholars continue to explore the narrative spaces of SP labs, I hope to encourage them to expand representation as with the creative narrative of chapter four. There are great benefits from understanding scenes through various perspectives. Composite narratives derived from fieldwork are reasonable structures to express various perspectives. Representations from multiple characters in identical scenes could yield unique forms of narrative richness.
Final Reflections

I am filled with gratitude for the time I spent with medical students, staff, and faculty members. What I can offer in return pales in comparison to what I gained from this project. I am particularly grateful to those who accepted me as an outsider and brought me under their wings and introduced me to others with respect and humility.

Some of the most vivid and personally valuable moments came immediately after observations, interviews, or conversations as I walked or biked to various destinations. Oft times, my spirit was lifted while thinking about the tenacity, humility, humanity, and talents of those who participated in this project. I have developed a great respect for medical students and physicians. As a whole I see them as ambitious people with strong desires to help humanity. Many of our conversations were therapeutic for me. As I spoke with students about their trials and triumphs, I reflected on my own place as a graduate student struggling to learn and grow. I feel like this reflexivity helped me empathize with the students as they spoke broadly about their challenges in a fast-paced environment.

Ultimately, I see medical school as a whole, and SP labs specifically, as contexts for doing care. By doing care I mean responding to the plight of another in humane ways that uplift, inspire, and alleviate trouble, pain, and suffering. SP interactions are rich settings where students work through vulnerability, timidity, and uncertainty to improve their capacity to care. I am grateful for those who have allowed me to watch this unfold.
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### SP Labs and Curricula at OUHCOM

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<th>Spring 1</th>
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<td>OB GYN</td>
<td>Addiction, Pain and Palliative</td>
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APPENDIX B: IRB Approval and Consent Form

The following research study has been approved by the Institutional Review Board at Ohio University for the period listed below. This review was conducted through an expedited review procedure as defined in the federal regulations as Category(ies): 7

Project Title: Observing Medical Students’ Communication Skills with Standardized Patients

Primary Investigator: Spencer Patterson
Co-Investigator(s):

Faculty Advisor: Scott Titsworth

Department: Communication Studies

Rebecca Cale, AAB, CIP
Office of Research Compliance

Approval Date 05/03/11
Expiration Date 05/02/12

This approval is valid until expiration date listed above. If you wish to continue beyond expiration date, you must submit a periodic review application and obtain approval prior to continuation.

Adverse events must be reported to the IRB promptly, within 5 working days of the occurrence.

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.
Ohio University Consent Form (Medical Students)

Title of Research: Communicating with Standardized Patients

Researchers: Spencer Patterson

You are being asked to participate in research. For you to be able to decide whether you want to participate in this project, you should understand what the project is about, as well as the possible risks and benefits in order to make an informed decision. This process is known as informed consent. This form describes the purpose, procedures, possible benefits, and risks. It also explains how your personal information will be used and protected. Once you have read this form and your questions about the study are answered, you will be asked to sign it. This will allow your participation in this study. You should receive a copy of this document to take with you.

Explanation of Study

This study is being done to better understand some of the communication challenges medical students face in the standardized patient labs. If you agree to participate, you will be observed (from the control room) during your interactions with the standardized patients and
then asked several questions about those experiences as they relate to your education. The interview will last about a half-hour.

Risks and Discomforts

There are no anticipated risks or discomforts.

Benefits

This study is important to society because effective doctor/patient communication is in high demand. Research suggests that doctors and patients both benefit from effective communication. The findings from this study will be used to advance further research about effective strategies for teaching medical students communication skills. You might personally benefit from participating in this study by having the opportunity to share your experiences as a communicator/medical student.

Confidentiality and Records

Your study information will be kept confidential by the researcher, Spencer Patterson. All typed documents will be stored on a private, password protected computer. And your name will not be recorded.
Additionally, while every effort will be made to keep your study-related information confidential, there may be circumstances where this information must be shared with:

* Federal agencies, for example the Office of Human Research Protections, whose responsibility is to protect human subjects in research;

* Representatives of Ohio University (OU), including the Institutional Review Board, a committee that oversees the research at OU;

Contact Information

If you have any questions regarding this study, please contact Spencer Patterson (sp285408@ohio.edu, 208.308.9880) or Scott Titsworth (titsworth@ohio.edu, 740.593.9160).

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.

By signing below, you are agreeing that:

- you have read this consent form (or it has been read to you) and have been given the opportunity to ask questions and have them answered
- you have been informed of potential risks and they have been
explained to your satisfaction.

• you understand Ohio University has no funds set aside for any injuries you might receive as a result of participating in this study

• you are 18 years of age or older

• your participation in this research is completely voluntary

• you may leave the study at any time. If you decide to stop participating in the study, there will be no penalty to you and you will not lose any benefits to which you are otherwise entitled.

Signature________________________________________ Date________


Printed Name________________________________________

Version Date: 04/29/11
Appendix F
Letter of Access

March 22, 2011

Ohio University
Institutional Review Board

Committee Members:

Please accept this letter as confirmation that I have granted Spencer Patterson, a doctoral student, access to conduct observations of the medical students interacting with standardized patients, as well as in-depth interviews with those who choose to participate. If I can provide any other information, please feel free to contact me at (740) 593-2477 or wadsworth@exchange.oucom.ohiou.edu.

Nicole Wadsworth, D. O.
Assistant Dean for Pre-Clinical Education
OUCOM
## APPENDIX D: Research Log

Spencer Patterson's Research Log

<table>
<thead>
<tr>
<th>Date</th>
<th>Times</th>
<th>Activities</th>
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<th>Field Notes</th>
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APPENDIX E: Interview Protocol

Interview Protocol

Interviewee: __________________________  Time: ________________

Place: ______________________________  Date: ______________

Gender: ____________________________  Class: ______________

Introduction: (briefly highlight the goals of the project and review informed consent)

General Questions:

• Tell me about your journey to medical school.
• Have you always wanted to become a doctor?
• What did you study as an undergraduate? How did that prepare you for medical school (if at all)?
• So far, what have been the strongest challenges of medical school?

Narrative

• Has medical school been what you expected it to be?
• Now that you are a medical student, do you think your friends or family see you differently? Explain.
• Do you enjoy talking with patients in the SP labs? What have been the most difficult conversations?
• What do you see yourself doing when you graduate from medical school?

Risk/Values:

• Do you see medicine as a risky profession? How so?
• What risks stand out the most to you?
• Have you had the opportunity to face any of those challenges in the SP lab?
• How does the simulated environment affect you in SP labs?
• How do the academic requirements impact your experiences with SPs?
Standardized Patient Labs

- Tell me about your first experience in the SP lab.
- What are some of the biggest challenges for you in SP labs?
- Do you feel that the SP labs are beneficial? How so?
- Tell me about a particularly memorable experience you have had in the SP lab?
- How does the SP experience compare to other educational experiences of medical school?