The paradox of professionalism education: the context of one U.S. medical school's curricular reform

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THE PARADOX OF PROFESSIONALISM EDUCATION:
THE CONTEXT OF ONE U.S. MEDICAL SCHOOL’S
CURRICULAR REFORM

by

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DEDICATION

To my parents, Charles (Chunk) and Lucille Maderer
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One name may appear on the title page, but this has been far from a solo effort. Many thanks go to Charles Glenn for his generous and genteel guidance, to Maria Blanco for her mentorship and for keeping me going (and going), and to Angela Healy for her expertise and perceptive feedback. Much appreciation, as well, to Tufts University School of Medicine and Tufts University Archives, and to my co-workers, especially Donna Merrick, Nicole Love, and Lauren Fielding for their remarkable endurance. Finally, thanks very much to the ever-patient Maggie, Mick, Cate Horan, and, most of all to their dad, Michael Horan, who always made me laugh, even (and especially) on the darker days of dissertating.
THE PARADOX OF PROFESSIONALISM EDUCATION:
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ABSTRACT

In the past fifty years the medical profession in the United States has been transformed by federal and commercial forces. At teaching hospitals, clinical faculty were pressured to cut costs, treat more patients, and spend less time training students. Evidence emerged that medical students became increasingly cynical and detached throughout their training, and medical educators grew concerned that the for-profit priorities of clinical environments were damaging to the professional identities and values of trainees.

Consequently, American medical schools reformd their curricula, adding coursework in bioethics and doctor-patient communication. These measures would not, however, counteract the stubborn effects of the so-called hidden curriculum in medical school. Associated with the unintended and implicit lessons that undermine espoused institutional principles, this “curriculum” was thought to be exacerbated by the
challenges of contemporary clinical settings.

In the late 1990s the “professionalism movement” arose to further the cause of medical ethics education and to promote more accountability in practice; by 2003 the accrediting body of North American medical schools mandated the explicit teaching of professionalism. Professionalism curricula differed from ethics in that it emphasized observable virtuous attitudes and behaviors rather than cognitive reasoning.

The reforms at Tufts University School of Medicine (TUSM) in Boston illustrate one approach to the teaching and assessment of professionalism. Archival materials show that TUSM responded to the accreditation mandates by implementing coursework, special programs, performance-based assessment, and the medical school induction rite, the White Coat Ceremony.

Professionalism education was complicated for medical schools like TUSM by a lack of clear curricular and institutional goals. Furthermore, the practice of medicine did not necessarily coincide with the ideals of the profession, and senior physicians were inconsistent role models of such ideals – contradictions not lost on students. In 2013 the medical school accreditation agency revised its standards regarding professionalism, shifting its focus to the context for developing professionalism, the learning environment.
Recommendations to medical schools for advancing professionalism education include faculty development programming and preparing students to face the ideological conflicts inherent in the current healthcare system.
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CHAPTER ONE: The “Professionalism Movement”

in American Medical Education

Throughout the history of American medical education, fostering the values of the healthcare profession has been a self-evident goal. Medical students, after many years of coursework and clinical training, are expected to embody the appropriate and desirable qualities of a physician – qualities like altruism, honesty, and responsibility. However, by the turn of the twenty-first century, medical schools no longer assumed that students would automatically develop such traits; over time strategies were developed to teach “professionalism” explicitly (Ludmerer, 1999). What brought about this curricular reform?

Teaching & Learning Professionalism

The growing commercialization of medicine since the 1960s and increasing tensions in clinical settings have worried medical educators, who suspect that a decline in trainee professional values is an inevitable result (Cohen, 2006; Hafferty, 2006b; Relman, 1998). In the early 1990s urgent editorials in medical journals warned of a growing “crisis” in both physician and medical student “professionalism,” a word that was relatively new to the literature and suggested a predicament beyond ethical reasoning and theorizing.

Representatives from American Association of Medical Colleges and medical schools proposed a solution at various conferences and
meetings—promoting student professionalism by explicitly teaching it.

In 2002, physician organizations and medical educators partnered formally on several projects to define professionalism and to form a concrete plan for a new curriculum. The Medical Professionalism Project—a collaborative initiative of the American Board of Internal Medicine Foundation, the American College of Physicians, and the European Federation of Internal Medicine—culminated in the publication of the Physician Charter, which has served as a foundational document for what became referred to as “the professionalism movement” in medical education. The Physician Charter affirmed “medicine’s twenty-first century obligations under the social contract—preserving medicine’s traditional values but adapting them to contemporary reality” (Humphrey, 2008, p. 491).¹ By 2003, professionalism became a required component of medical school curriculum, as mandated by the Liaison Committee of Medicine Education (LCME), the accrediting agency of American and Canadian medical schools (LCME, 2007).²

Seen as an antidote to the crisis, medical school professionalism curricula would both nurture traditional professional values and forestall their degradation. Although the concept of professionalism has been

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¹ “Contemporary reality” is a reference to corporate influences on hospital-based health care systems (Cohen, 2006).
² The LCME accreditation standard of 2007 states that medical students should “learn the importance of demonstrating the attributes (attitudes, behavior, professional identity) of a professional and understand the balance of privileges and obligations that the public and the profession expect of a medical doctor” (LCME, 2007, p. 24).
actively debated since the movement began, a general consensus in the field pertaining to its essential elements emerged (detailed in Appendix I). Defined broadly, professionalism typically included responsible relations with patients, sensitivity to cultural differences, service to society, accountability to colleagues, and upholding the essential values of the profession (Baldwin, 2006).

Throughout the 2000s, medical schools developed and expanded professionalism teaching and assessment. The Carnegie Foundation for the Advancement of Teaching (CFAT) commissioned a report to assess the state of medical education and to propose reform measures. Published at the centennial of the Flexner Report of 1910, Educating Physicians: A Call for Reform of Medical School and Residency made four recommendations, one of which was to explicitly cultivate the formation of professional identity (Cooke, Irby & O’Brien, 2010).³ This recommendation reaffirmed the efforts of medical schools and educators.

The Hidden Curriculum

First discussed in the literature in the context of ethics curricula (Hafferty & Franks, 1994), the hidden curriculum in medical education has been defined as “a set of influences that operate systemically at the level of the institution and communicate the institution’s values”

³ The other proposals were: 1) standardize learning outcomes while individualizing the learning process; 2) integrate formal knowledge with clinical experience, and 3) imbue habits of inquire and improvement to achieve lifelong learning and excellence (Irby, 2011, p. 547).
(Coulehan, 2005; Mann, 2011, p. 65). In the case of clinical practice, the espoused values of professionalism were juxtaposed against the values on display in routine hospital work—such as physicians avoiding difficult patients, fudging patient notes, passing off tasks to nurses, and ignoring errors. In the year that the LCME made professionalism a required component of the medical school curriculum, the American Association of Medical Colleges (AAMC) published a report called *A Flag in the Wind: Educating for Professionalism in Medicine*. In it the author writes:

> What the literature and rhetoric of medicine lacks is a clear recognition of the gap between these widely recognized manifestations of virtue in action and *what we actually do* in the circumstances in which we live our lives [as physicians]. We may be unconscious of some of this gap, but even when conscious we are silent or inarticulate about the dissonance and, in our silence, do not assist our students to understand our challenges when attempting to live up to our profession’s ideals (Inui, 2003, p. 4).

The “dissonance” identified by Inui had the effect of undermining the tenets of professionalism (Cruess & Cruess, 2008; Mann, 2011).

The sentiments Inui expressed in his report reverberated throughout the field. Articles published between 2002–2008 on the topic of medical professionalism tended to also address the hidden curriculum, suggesting that a professionalism curriculum could mitigate the unfortunate side effects of clinical training (Humphrey, 2008).

Hafferty defines three ways in which students learn in medical school – via the *formal curriculum*, the *informal curriculum*, and the *hidden*
*curriculum* (Hafferty & Castellini, 2009). The formal curriculum is the stated, intended curriculum—the handouts, syllabi, lecture PowerPoints, and textbooks. The informal curriculum is the unscripted, interpersonal lessons taught by faculty after class, after clinical rounds, and in hallways; it is the ad hoc teaching that happens by chance and often occurs today in email communications between faculty and students. Finally, the hidden curriculum offers implicit lessons that may be *contrary* to the formal curriculum (Hafferty, 1998, p. 404). For example, students in clinical settings may learn that senior faculty do not necessarily show empathy with their patients; in fact, they may see their supervisors behaving in ways that would, if they were evaluated by the same standards, score them low marks on measures of professionalism.

On a theoretical level, the hidden curriculum has been associated with the work of Erving Goffman (1959), who uses the metaphor of the theater to describe the “on stage” and “off stage” experiences of different “social actors” (Hafferty & Castellani, 2009; p. 23; Lewin & Reeves, 2011). From this view, medical students become aware when they are performing, or creating an impression, and adjust their actions strategically to appease faculty mentors and others in positions of power. Like Hafferty’s conception of the “informal curriculum”, some actions take place “behind the scenes” – in hallways and in staff break room in the hospitals – and are thought to be equally influential in the student’s
development. “Off stage” they may take off their white coat costume, discuss how to cope with senior physicians, joke about patients, and share information not found in any clerkship manual. Students learn, perhaps unconsciously, how to modulate behavior and jargon and discern what is appropriate (and inappropriate) in different contexts. For example, a student may learn that it is acceptable for physicians to suddenly interrupt a conversation and walk away in order to attend to their beeper (or cell phone), returning either minutes or hours later. Observing supervisors, students may learn a range of social interactions acceptable in the clinical workplace.

So, while there may be an institutional mission to promote professional values, students see their teachers and mentors behaving in ways that were an affront to this mission. When there is a contradiction between the official, institutional teachings and the lessons of the hidden curriculum, students become cynical about institutionally-espoused values and about the professional “act” (Levinson, Ginsburg, Hafferty, Lucey, 2014; p. 245). However, in order to successfully acclimate to medical culture, students must learn what it takes to be accepted – performing, outwardly, in accordance to the stated ethical standards. Some educators today have observed that this encourages students to put on a “false front” – which could disguise professionalism that is underdeveloped (Coulehan, 2005).
Emerging Evidence of Unprofessionalism in Medical Students

In the early 2000s, the results of studies were mounting and seemed to validate what many educators had suspected—medical students and residents routinely displayed attitudinal and behavioral problems that could be characterized as unprofessional—and these problems intensified with each year of training (Dupras, Edson, Halvorsen, Hopkins, & McDonald, 2012; Frellsen, Baker, Papp, & Durning, 2008; Guerrasio, Garrity, & Aaraard, 2014). There was also evidence that empathy and moral judgment among medical students diminished throughout training (Patenaude, Niyonsenga, & Fafard, 2003), while the incidence and acceptance of unprofessional behavior increased (Reddy, Farnan, Yoon, Leo, Upadhyay, Humphrey, & Arora, 2007). Additionally, repeated references were made in the literature to the “unintended consequences” of medical training, such as increased cynicism, arrogance, and indifference (Cohen, Youakim, & Balaicuis, 2009). These data were particularly distressing given other reports—namely, the Papadakis studies—that found associations between professionalism lapses in medical school and future citations by medical licensing boards (Papadakis, Loeser, & Healy, 2001; Papadakis, Tehrani, Banach, Knettler, Rattner, Stern, Veloski & Hodgson, 2005).

In fact, the Papadakis studies were cited again and again to justify the need for explicit professionalism training. Their articles (and others
that followed, i.e., Yates & James, 2006) emboldened medical school administrators to address perceived lapses of professionalism as soon as they could be identified. In this view, early intervention was key to preventing long-term problems, and so even first-year medical students who committed previously tolerable offenses, such as frequently arriving late for class or failing to respond to administrator emails, were now considered in violation of professional standards.

**The Problem of Teaching Professionalism**

Promoting professional values, particularly in light of the hidden curriculum, would be the mission of the professionalism movement. However, when it came time to translate the mission into coursework and policy, medical educators balked. What was most important to teach? How and when should students be assessed? Such discussions stalled professionalism program development at many institutions. Like the medical ethics curricula, every medical school was expected by the LCME to interpret the teaching and evaluation of professionalism principles in its own way. As such, there was no uniform approach to professionalism across medical schools in North America.

Both the specific content and the mode of teaching professionalism were debated (Kirk, 2007). Some educators focused on students’ observation of faculty role models, deemphasizing didactics. However, when professionalism was thought of in behavioral terms, assessment
measures became a contentious issue (Hodges, Ginsburg, Cruess, Cruess, Delport, Hafferty, Ho, Holmboe, Holtman, Ohbu, Rees, Ten Cate, Tsugawa, van Mook, Wass, Wilkinson, & Wade, 2011). What was an observable professionalism competency? Were student performances that merely suggested a professional attitude enough evidence of competence?

Furthermore, questions arose about remediating students who were lacking in professionalism. Unlike knowledge and skill remediation, supporting students in their moral and character development (assuming that was, in fact, what was needed) seemed like an unrealistic aim of a standard remediation protocol which might involve only a few sessions of individual tutoring. The influential article, “The Professionalism Movement: Can We Pause?” argued that in the rush to promote virtue in medical students, those in the field neglected to formulate concrete goals for such training (Wear and Kuczewski, 2004). And, without clear objectives, institutions could not transcend operational problems with this reform.

**Origins of the Professionalism Movement**

Generally, two narratives about the origins of the professionalism movement and its impact on medical education dominate the literature. One attributes the professionalism movement to changes that have occurred “outside” the profession—that is, to the transformation in
healthcare delivery since the 1960s. The other attributes it to stubborn problems “inside” the profession.

*Internal Factors*

One explanation for the surge of professionalism in medical education is based on factors internal to the profession, problems embedded in the ideology of medical education and in the bureaucracy of clinical training environments. In medical school, students must reconcile an apparent contradiction in their training—remaining objective and removed from patients while simultaneously attending to their social and emotional concerns.

Hafferty argues that present-day clinical dilemmas, such as patient quotas, are a direct affront to ideal patient treatment (1998). When the complexities of outside forces are seen as less relevant to development, students sense that they are getting blamed for problems inherent to the system, which increases the likelihood of student detachment and unprofessional behavior (Hafferty, et al., 2010). At the same time, trainees find themselves at the bottom of a strict pecking order, where residents and senior physicians may display the very behavior that students are told is wrong, contributing further to student disillusionment.
External Factors

Today students are often trained in a clinical culture with conflicting priorities, so professionalism education is needed to foster virtue by explicitly teaching students what is potentially absent in actual practice. This narrative is challenged by Stevens (2002), who voiced criticism of the tendency to explain the history of the medical profession in terms of a “rise and fall myth” in which the heroic mid-twentieth century physician succumbs to a twenty-first century monster of capitalism (Stevens, 2002, p. 3). The relationship between the medical profession, the market, and the federal government is much more mutually dependent, she argues. The Affordable Care Act with its medical insurance “exchanges” is one example of this complex relationship. Furthermore, the quality of care may be improved by the checks and balances afforded by the three entities (market/government/profession).

The rise and fall myth is also challenged by those who point out that it is medical students and physicians themselves who no longer identify with an antiquated notion of the profession. The new generation of physicians looks askance at medical professionalism characterized by professional insularity and paternalism; and, they are also less apt to join physician organizations like the American Medical Association (AMA), finding the policies and politics of the healthcare system
impenetrable. Finally, not necessarily accepting the vocational and “on
call” expectation of the role, some physicians today may choose to work
part-time (Eckleberry-Hunt & Tucciarone, 2011). These changes
underscore Hafferty & Castellani’s (2010) argument that many
expectations—such as Swick’s edict “subordinate [one’s] own interests to
those of others—stem from a longing in the field to return to a notion of
professionalism associated with an earlier, less complex healthcare
system; thus, they refer to this as “nostalgic professionalism” (p. 296).

Admittedly, both of these narratives about the origins of the
professionalism in medical education describe long-standing criticisms in
the field. In 1915, Flexner discussed the potential for self-interested
physicians to threaten the core values of the profession (Flexner, 1915,
quoted in Levinson, et al., 2014, p. 39). And, the hidden curriculum was
suggested in the sociological work of Becker (1958) in The Fate of
Idealism in Medicine Education, which described the growing pessimism
of students as they entered medical practice. Although such concerns
have remained relatively constant in the field since the practice of
medicine was professionalized, several important changes have occurred,
particularly in the past twenty-five years.

First, the ostensible crisis in medical professionalism (or “nostalgic
professionalism”) has intensified and paralleled the growth of empirical
research validating the concerns of educators and the public. Secondly,
theoretical models of professional formation and training have been developed, and some support explicitly teaching professionalism in order to foster professional identity formation (Goldie, 2012). Finally, and as discussed, the context for training physicians has changed dramatically; today clinical learning environments have multifaceted public and private financial and regulatory priorities.

Some who aim to address a lack of professionalism in medical students focus on forces largely external to schools and teaching hospitals; others look inside institutions, at the hierarchical structures within student learning environment. Of course, trainees are the product of both external pressures and internal settings and the dynamic between the two. Moreover, students bring their own inherent qualities and unique cultural experiences to their training, experiences that may in turn impact their institution and learning environment.

**Goals of this Dissertation**

The recent history of medical professionalism has been reviewed by several authors, in particular Hafferty, Wynia and Ludmerer. However, what is lacking in the literature is a comprehensive study of how professionalism became incorporated into medical school curricula. Moreover, while previous analyses have described professionalism programs at medical schools, few have examined specific institutional circumstances preceding such changes. Anchoring a broad discussion
in a single medical school’s professionalism requirement could support a
more nuanced understanding of the concept and its impact. In the
following, the actions taken by Tufts University School of Medicine
(TUSM) to develop a professionalism curriculum will provide an
illustrative case.

The goals of this dissertation are to 1) examine the social and
historical circumstances preceding TUSM’s implementation of an explicit
professionalism curriculum, and to 2) explore the changing and current
status of the TUSM reform within the context of American medical
education. The questions posed are:

- Why were explicit professionalism educational objectives added to
  medical school curricula and to TUSM’s curriculum specifically?
- How did medical schools like TUSM adapt its curriculum to
  include professionalism training?
- How have medical educators approached unprofessionalism?

While the answers to these questions often pertain to one institution –
and is a limitation of this research – it is nonetheless anticipated that
they will have broader implications for understanding the background of
professionalism training in American medical schools as well as for
projecting future curricula and relevant policy. A rationale for studying a
single case is that as a representative instance of a phenomenon, it may
be instructive for understanding typical institutional approaches to a
problem (Yin, 2009, p. 48).
The investigation focuses on American undergraduate medical education, the four years of medical school prior to residency. Three general time periods are explored: first, the years preceding the professionalism movement, primarily in the 1990s; secondly, the professionalism movement of the 2000s; and finally, professionalism in the current decade.

Articles reviewed for this dissertation were limited to those published between 2000–2014, focusing on the professionalism movement that occurred after the ACGME and LCME accreditation changes in 1999 and 2003, respectively. The databases Psychinfo, ERIC, and Web of Science were searched. Literature criteria were restricted to peer-reviewed journals in English. Bibliographies of these articles were then examined to find other relevant articles. The review consisted of theoretical papers and commentaries, other literature reviews, and quantitative and qualitative studies. The articles primarily pertained to students at the undergraduate medical education level.

For this research, TUSM documents from archival and current records were collected and analyzed (Brundage, 2013). These documents, which were available to me as an employee of TUSM, are described in Appendix II. I acknowledge that my experience at the school as an administrator may have biased my interpretation of the material; my hope is that my familiarity did not pose a barrier to the analysis but
instead provided useful insights into the study findings (Maxwell, 2005).

**Conclusion – Chapter One**

While training competent and humane medical students in America is in the interest of the public welfare (or, “the commonwealth”), there are few assurances that medical students will embody the values associated with medical professionalism. Good students may become good doctors – or they may not. As a consequence, those working in medical education have sought better ways to clarify, teach and foster traditional values to students in training.

Chapter Two will explore the definition of professionalism and the stages of medical student professional identity formation. Historical changes in the American medical profession and its effects on students in training will be the subject of Chapter Three. The response of medical schools to these changes and their efforts to implement a professionalism curriculum are the focus of Chapter Four. In Chapter Five, Tufts University School of Medicine will serve as an illustrative case for such reforms. Chapter Six will discuss students’ experiences with the professionalism curriculum and their socialization into the medical field. Finally, Chapter Seven offers a number of recommendations for the future of professionalism education.

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* The study was declared exempt by the Institutional Review Boards (IRB) of both TUSM and Boston University.
CHAPTER TWO: Conceptualizing Professionalism in Medical Education

The term professionalism has been interpreted in a variety of ways. To date, there is no single, universally-accepted definition of medical professionalism, nor is there a consistent theoretical model to guide its integration into medical curricula (Birden, Glass, Wilson, Harrison, Usherwood & Nass, 2014; Wear & Kuczewski, 2004; Wynia, Papadakis, Sullivan, & Hafferty, 2014).

The connotations of the term have complicated its understanding. A “professional” was once a term used to refer to someone who was paid for their work, such as a professional athlete. Today this term may be used colloquially to refer to someone who is good at what they do. Therefore, it is evaluative, referring to the perceived quality of a person’s work (Kinghorn, 2010). The root term “profession” is contested, as well – one definition posits that working in a profession includes:

- A body of specialist knowledge and skills
- A commitment to high standards of service
- Varying degrees of self-regulation and autonomy
- Moral and ethical standards of behavior (Hilton & Southgate, 2007, p. 267)

This definition could apply to medicine, the law, the clergy, and the military, and some types of business. However, medicine is considered unique in its “aspirational ethic,” continually striving to uphold a social contract between physicians and society (Shah, Anderson & Humphrey,
Historically, upholding this contract has been accomplished by professionals who, Pellegrino argues, were virtuous. He states that

...the ethic of the profession was, until very recently, a virtue-based ethic which associated the good physician with certain character traits. The personal ethics of some of the most worthy physicians in the history of medicine was a virtue ethic — e.g., physicians of the Confucian, Hindu, or Hippocratic schools. In modern times the ethics of Thomas Percival, Francis Peabody, William Osler and Florence Nightingale were essentially virtue-based. (2002, p. 380).

Yet, the specific attributes of “worthy physicians” remain difficult to define.

There have been dozens of attempts to clarify the term professionalism, starting with the Swick (2000) definition as well as the Physician Charter (2002). Appendix I lists the elements of professionalism according to four frequently-cited sources. For the purpose of this study, the group of characteristics delineated by the Accreditation Council of Graduate Medical Education (ACGME) will be considered the definition of professionalism: respect; compassion; integrity; responsive to needs; altruism; accountability; commitment to excellence; sound ethics; sensitivity to culture, age, gender, disabilities (ACGME). This definition was chosen because it is the one used by TUSM, from which the study examples are drawn. The descriptors within the definitions of professionalism denote a wide range of personal
qualities, from integrity to the ability to recognize and attend to social issues. While in practice the professionalism concept has more often focused on individual attributes than public health concerns, some continue to promote a version of the concept emphasizing the physician’s role as patient advocate—recognizing and attempting to address healthcare disparities (Wynia, 1999).

By contrast, the term *unprofessionalism* means – as would be expected – lacking the virtues of professionalism. In a study of medical students who had been characterized as unprofessional, researchers found that the term was commonly associated with three specific problems: irresponsibility or lack of accountability; inflexibility and inability to improve behavior; and, lack of motivation (Teherani, Hodgson, Bahach, & Papadakis, 2005, p. S17).

**Professionalism versus Professional Identity Formation**

“Professionalism” has been called “semiotically messy” (Castellani & Wear, 2000, p. 493). From a psychological perspective, it focuses on an individual’s observed virtues, which could include anything from attire to communication style. Less commonly, professionalism is understood from a sociological perspective and is regarded as “extremely value-laden ... with society, institutional, historical and contextual expectations built into it” (Martimaniakis, Maniate, & Hodges, 2009, p. 830).
Another perspective is that professionalism is a developmental goal rather than a discrete set of personality traits (Baldwin, 2006; Gordon, 2003; Rees & Knight, 2007). Throughout the course of their training, students will develop qualities and attitudes that will be eventually expressed in corresponding behaviors, an evolution known as *professional identity formation*. This view proposes that identities are constructed via a transformative process of practice and are crucially dependent on social interactions within a cultural context – as opposed to viewing identities (or virtues) as stemming from innate or intrinsic qualities. Daaleman, Kinghorn, Newton & Meador summarize professional identity formation this way:

Virtues are always generated within groups of people capable of articulating and sustaining them. They do not arise spontaneously and solipsistically but are instead embedded in a particular history, housed within institutions, and cultivated and honed from practical wisdom. Formation provides a way of thinking about the development of physicians as persons, which occurs within communities of practice that are themselves shaped over time and have a shared history (2011, p. 326).

**An Evolving Professionalization Theory**

Cultivating the values associated with professionalism in students has been informed by theories of ethical and moral development (Patenaude, Niyonsenga, & Fafard, 2003; Bebeau & Monson, 2012). One theory of moral development described four, non-linear stages: “[1] moral sensitivity, an awareness of how action affects others; [2] moral
reasoning and judgment, and integration of moral principles in decision-making about which course of action is most just; [3] moral identity and motivation, an identification with moral values over other types of values (pragmatic or psychological); and [4] moral implementation, an ability to enact moral values in the face of impediments” (Holden, Buck, Clark, Szauter, & Trumble, 2012, 249).

The literature on professional identity formation tends to focus on positive transformations and the expected stages of growth. However, professional identity formation also includes changes that are unexpected and unintentional: a distancing from patients in the name of scientific objectivity and taking on the stone-faced visage of a clinician (a person many students observed in practice).

Of the perspectives on professional identity formation, the dominant view was that it was an acquired state, an internalized set of societal values and expectations (Hilton & Slotnick, 2005; Elliott, May, Schaff, Nyquist, Trial, Reilly, & Lattore, 2009). Becoming a professional was seen as a progressive process that occurs throughout the many years of medical training (White, Borges, & Geiger, 2011). Moving from one developmental stage to the next is a result of a series of “crises” that disrupted student’s perception of self and their understanding of their own professional role (Jarvis-Selinger, Pratt, & Regehr, 2012). Students who inadvertently injured patients, for example, would have to come to
grips with the incongruity between their healer role and the consequences of their actions. Another view, and one that aligned with practical professionalism training, conceptualized professional identity as observable behaviors or performances (Lesser, Lucey, Egener, Braddock, Linas, & Levinson, 2010).

Some authors also emphasized the need for students to work with experienced physicians as they acquired skills so that they would gain acceptance into a “community of practice,” continuing to learn through active participation and interaction with peers (Mann, 2010, p. 64). The process of developing professionalism was, therefore, hypothesized as occurring when medical students accrued and refined a set of internalized, virtuous qualities that would be expressed in corresponding behaviors among peers – who would then validate them (or not) and provide students with constructive feedback (Monrouxe, 2010).

Students on hospital wards are immediately immersed in a community of practice – a hierarchical social system that involves not just MDs but also other healthcare providers like physician assistants, nurses, midwives, and technicians. Development of professional identity may be complicated or thwarted by students’ adjustment to their rank in the work place, where the attending physician is at the top of the pecking order followed by fellows, residents, interns (first year residents), medical students, and then nurses and others who have not attended medical
school. Thus, medical students are socialized into their community of practice by means of a ladder of power, its codes of conduct, and the potential abuses of its power (Ludmerer, 1999).

**Unprofessionalism in Learning Contexts**

Up until the 1990s, lapses of physician conduct typically described behavior with patients, not necessarily with colleagues and students. If physicians were viewed as having a wonderful bedside manner yet were disrespectful of nurses or dismissive of students, their negative qualities would not necessarily diminish their reputation (Levinson, et al., 2014). However, as the “culture of abuse” in medicine became more openly acknowledged, the term professionalism was applied to physician interactions with the medical *team* (fellows, residents, and students) (Kassebaum & Cutler, 1998). Lapses of physician professionalism were also apparent in conflicts of interest cases, which were becoming an increasing concern in the era of physician-business partnerships.

In light of their training settings and faculty influences, student unprofessionalism has been complicated to identify. Were problems due poor role models, or were concerns specific to students?

**Stages of Development**

Medical school offers students a number of developmental hurdles, what Jarvis-Selinger (2012) refers to as “crisis moments,” that give rise to students’ reassessment of themselves as professionals (p. 1186). The
first time a student faces a cadaver, experiences the death of a patient, or performs surgery disorients the student’s sense of self. Each stage of medical training was thought to provide a novel set of lessons and rituals, formal and informal, for building a professional identity.

**Years One & Two (Pre-Clinical)**

Early in medical student training is the Gross Anatomy course, when students learn with cadavers for the first time. One small study described the identity changes of students before, during, and after the experience of human dissection (Madill and Latchford, 2005). The authors found that students reported a high level of involvement and dedication in their course but also emotional distancing. Students learned to suppress emotions in order to cope with the stress of dissecting corpses and to be perceived as professional by others.

Researchers have also studied second-year students prior to their entering clerkship rotations in an attempt to assess their approach to ethical dilemmas (Ginsberg & Lingard, 2011). Students at this stage have had limited first-hand experience with patients, and the authors questioned the students’ ethical reasoning processes when introduced into clinical settings. They were surprised to find that the students made judgments that were nearly equivalent to more experienced students. However, they also found that the students had a low tolerance for
ambiguity and, again, felt a need to suppress emotions in an attempt to impress their faculty supervisors (even though the faculty in the study stated that they accepted the students’ emotional expressions).

*Years Three & Four (Clinical)*

In the third and fourth year of medical school, students are immersed entirely in clinical work. A rotation through the surgery clerkship was thought to create another “crisis” in students’ identity as they learned to confront the cultural taboo of cutting into human flesh (Veazy, Brooks & Bosk, 2012). Additionally, treating patients at the end of life brought about another transformative experience. One study found that students encountered conflicts between their training to be scientifically “dispassionate” and their desire to express human emotions in these contexts (Baker, Wrubel, and Rabow, 2011, p. 447). Students looked to role models, whom they deemed “great clinicians,” to show them how to balance both. This report found that students needed “reassuring role model-mentors,” who were able to confront mortality, make clinical decisions, and still exhibit appropriate feelings in public settings (Cohen, et al., 2009, p. 46).

**Discourses of Professionalism**

In addition to professional identity formation, frameworks for understanding the meaning and use of professionalism are found in the
discourse analyses of Burford, Morrow, Rothwell, Carter & Illing (2014) and Hodges et al., (2011). In their extensive review of the literature, Hodges, et al. (2011) proposed that there are three over-arching professionalism discourses today: that of the *individual*, the *interpersonal*, and the *societal-institutional*. The *individual* discourse considers professionalism a relatively constant quality, measurable with a number of valid and reliable instruments, particularly those focused on corresponding professionalism behaviors. The Physician Charter is one example.

The *interpersonal* discourse sees professionalism through the lens of social interactions, particularly student-teacher relationships. From the interpersonal perspective, the contexts of displays of professionalism are the salient factor in assessment, as opposed to individual expressions of the same. The *interpersonal* discourse is found in the research of Ginsburg, et al. (2000; 2002; 2003; 2004; 2007; 2009; 2012) who have examined faculty perceptions of professionalism after viewing recordings of students in ethically-challenging case vignettes. They found evidence that faculty have variable and context-bound interpretations of student professionalism and unprofessionalism. For instance, when faculty offered their interpretations of a possibly unprofessional action, such as a student who accepted a gift from a patient, they were inconsistent in their judgments about what the student should have done. Contrary to
the conceptualization of professionalism as individual virtue, faculty
tended to take into consideration the student’s problem, the student’s
reasoning in a given situation, and other personal and social pressures
(Ginsburg, Regehr, & Lingard, 2004).

The third discourse, the *societal-institutional*, interprets
professionalism as situated within historical and cultural expectations
and goals of the given profession in conjunction with its educational
institutions. According to Hodges, et al., the societal-institutional
discourse gives “more focus … to processes that create different
conceptions of professionalism (or make it possible to exist at all) than
the actual attributes or behaviors of individuals or groups” (2011, p.
361).

These three discourses – *individual, interpersonal, societal-
institutional* – offer another means for considering the evolving views on
the subject. Yet, one perspective continues to frame the policy at most
medical schools today, including TUSM – the discourse of the *individual*. Medical schools may continue to focus on student characteristics and
personality traits because, as Mann observed, an emphasis on the
“individual … [is] congruent with the values of medicine, which has
traditionally viewed the doctor as autonomous and self-reliant” (2011, p.
63). This is also a pragmatic choice for schools: breaches of
professionalism that are quantifiable, such as cheating, do not require
interpretation, and are therefore easily documented.

The majority of the literature on the professionalism movement never questions the philosophical underpinnings of the term. A notable exception is Kinghorn (2010), who is critical of the assumptions made by many medical educators; he asserts a conceptual framework based on contemporary interpretations of Aristotle's writings, stating that modern writers on professionalism threaten to subsume professionalism into the “technical project” of medicine and medical education, in which professionalism is understood as a product of a particular educational system or process rather than as a description of the way that morally excellent clinicians practice. (Kinghorn, 2010, p. 89)

In this view, “morally excellent clinicians” have practiced their virtue, have cultivated it as a habit; rather than being a technique, their professionalism is accrued practical wisdom, or *phronesis*. This perspective coincides to some extent with those who approach professionalism developmentally, as a process of identity formation.

**Conclusion – Chapter Two**

Since its inception, professionalism has been a contested concept in medical education. Some educators grew uneasy with a simple virtue-ethics approach to assessing individual student’s professionalism, favoring a developmental, context-based perspective. Other medical educators stressed observable qualities that could be easily evaluated (e.g., with checklists) (Cruess, McIlroy, Cruess, Ginsburg, & Steiner,
2006; Lesser, et al., 2010). Yet, another view is that virtue is something that is practiced and formed as a habit. Ultimately, professionalism training has attempted to produce doctors who “can be trusted to do what is right when stressed, burned out, and especially when no one is watching” (Antiel, Kinghorn, Reed, & Hafferty, 2012, p. 652).

These conceptions of professionalism evolved as a consequence of the changes that occurred in the medical profession, particularly in the last quarter of the twentieth century. The transformation of the American medical profession and the subsequent impact on the training of medical students is explored in the next chapter.
CHAPTER THREE: The Transformation of the Medical Profession and its Impact on Training

Throughout the twentieth century, the medical profession changed from a guild-like entity to one with complex relationships with commercial enterprises and with the federal government. Shifts in the medical profession would subsequently alter the strategies used by medical schools to train future doctors. Medical schools and teaching hospitals worked to prepare students for the healthcare field that they would enter, attempting to preserve and promote the traditional principles of the profession.

The AMA and the Social Contract

By the early twentieth century, nearly every physician joined the American Medical Association (AMA). Working with state agencies to revoke licenses of charlatans, the AMA enforced standards of practice; and, in turn, members were expected to do their part by paying dues, attending meetings, and studying the latest medical journals. As a member of the AMA, it was the physician’s duty to disseminate scientific knowledge to colleagues and also to continually police the profession, with an eye toward raising the quality of medical practice. Such professional self-regulation would assure both society at large and individual patients, who trusted physicians with their care.

In exchange for the trust of patients, physicians were permitted to
“practice” their new skills so long as they put their patients’ interests above their own. This social contract was made explicit in the AMA Code of Medical Ethics, published in 1847. Based on the influential *Medical Ethics* (1803) by English physician Thomas Percival, the AMA Code revolutionized the field (Sox, 2007). According to Wynia, *Medical Ethics* had “articulated specific social roles for all physicians,” yet it was ultimately rejected by Percival’s colleagues because the “sentiment in England at the time was that proper gentlemen didn’t need written ethical standards ... they already knew how to behave” (2008, pp. 566–567). By contrast, an explicit contract was welcomed in the United States, a country founded on egalitarian principles. The first edition of the AMA Code of Medical Ethics included three chapters of detailed rules for both patient and doctors – and underscored the reciprocal relationship between the burgeoning medical profession and society.

**Diminishing Physician Authority and Autonomy**

The explosive growth of medicine as a profession in the first half of the twentieth century, according to sociologists, was due primarily to the occupation’s close control over its education, standards, and membership (Friedson, 1970). At the height of the profession’s power in the 1950s, physicians operated with little outside regulation and were trusted by society to behave by its code of ethics. At this time an emphasis on individual physician autonomy in clinical decision-making
and practice surpassed implied allegiances to the professional organization as a whole. Autonomy had come to mean that each doctor “… [treated] patients as they wanted,” and physicians conflated … classical professional autonomy (the right of the group to self-regulate) and personal autonomy (the right of individual members to do as they please). Hence, while professionalism had been born around the notion that the group would set then enforce shared standards, it came to be construed as granting individual physicians the right to choose how to treat each patient. In effect, “professionalism” came to be understood, wrongly, as a license to practice without meaningful oversight (Wynia, 2006, p. 29).

This distorted conception of physician autonomy could not be sustained, economically or politically. By mid-century, the profession became burdened by the implications of the rising costs of healthcare as well as societal expectations that medicine would provide fast, reliable treatment at any cost.

In the mid-twentieth century, when the barbaric actions of Nazi physicians were made known after World War II, patients grew more suspicious of their doctors and skepticism about the profession took root (Duffin, 2010). American physicians at this time had unparalleled professional power and autonomy. Over time, this power was called into question, and by the 1960s, when so many institutions and authoritative individuals were tested and defied, the profession of medicine was a wide target, criticized by medical sociologists for its monopolistic control over the field (Starr, 1984). Given these and other factors, the profession
became less and less unified and confident in its practices; the AMA’s membership declined steadily as well, as did physician self-regulation (Collier, 2011).

A “crisis in American medicine” was evident as early as 1961 with the publication of a volume of physician-authored essays bearing this very title (Sanders, 1961). Furthermore, it was no secret that many American citizens did not have access to healthcare due to financial and geographic constraints. In the early 1960s, President Johnson took what some saw as a radical step in proposing a federal program to supplement the cost of healthcare for, principally, older and poor citizens, the Medicare and Medicaid Act of 1965. With the passing of the Act, the new role of the federal government in medicine was a considerable threat to the independence and professional dominance of medicine, and as such the American Medical Association (AMA) waged a (failed) propaganda campaign to sour public sentiment on the Act (Wynia, 2008).

The AMA had additional concerns in the 1960s—primarily, a rapidly diminishing membership. To some physicians, the AMA’s politics were focused on preserving the profession’s privileged status and were out of step with the needs of the American people. Also, more and more doctors were becoming specialized and participating in their own associations, which more closely represented their interests. While the AMA was once the unifying organization of general practitioners in
America, to many it was no longer as relevant during the years of decreasing professionalization.

For physicians who were accustomed to practicing independently, the emerging role of the federal government was just one problem – another was the expectations of patients who claimed “rights” to their own healthcare decisions. Indeed, the 1970s has been described as a “rights” era, a time when women’s rights, civil rights, disability rights, and patient rights all became significant social themes (Keirns, Fetters, & De Vries, 2009; p. 186). Finally, contributing to and compounding physicians’ diminishing authority and autonomy, was the rapid growth of commercialized medicine.

**The Commercialization of Medicine**

New types of profit-oriented healthcare delivery systems that emerged in the 1960s and grew to prominence by the 1990s have been associated with the deprofessionalization of American medicine (Starr, 1984). Throughout this time period, physicians increasingly became the employees of managed care organizations and beholden to the medical insurance industry. Working for these organizations, physicians were expected to respect the economy of the healthcare business, which is dependent on third-party reimbursements, drug trials, and other market-based revenue streams. Therefore, as employees, it was no longer acceptable for physicians to rely solely on their own clinical judgment
when devising plans for patients; instead, they were expected to align patient treatment plans with the standards imposed by health maintenance organizations (HMOs). Furthermore, privately-owned hospitals emphasized efficiency in patient care. This meant that each practitioner was responsible for more and more patients with the expectation that less time would be spent with each one. Medical technology, such as imaging devices, also reduced the time physicians spent interacting directly with patients. The reduction in the time devoted to appointments frustrated both doctors and patients. “Stereotypes began to emerge of doctors greeting patients with their hand on the examining room doorknob, using body language to encourage patients to leave before the consultation had begun,” Ludmerer writes (1999, p. 384).

Since the era of managed care began, doctors have been expected to keep a close eye on costs and reduce them, whenever possible. Yet, physicians have always had a professional obligation to treat each patient appropriately; so, the costs associated with the treatment have not been the immediate priority for the practitioner. Unlike the doctors in the mid-twentieth century who were known to write orders and prescriptions with little regard to expense, HMO-governed physicians have been pressured to be fiscally responsible to the point that justifications for their clinical decisions became expected as did the
rationing of care. Doctors, therefore, were (and are) at an intersection of patient-care and profit-making, navigating conflicts between professional and organizational priorities – and progressively more dissatisfied (Zugar, 2004).

Additionally, legal arguments were made in the 1980s that medical professional standards could restrict free trade, such as direct-to-consumer drug advertising. Federal regulations that had previously constrained physicians-industry relationships were eventually relaxed (Greene & Herzberg, 2010), so it became much easier for physicians to form lucrative corporate alliances with, most commonly, pharmaceutical companies and medical device manufacturers (Breen, 2001; Weatherall, 2000). It was not a coincidence, then, that the number of physician-industry conflict of interest cases increased at this time. As these cases became media spectacles, the loss of trust in the profession was exacerbated.

Furthermore, with the exponential growth of medical data and the expansion of resources to manage disease, physicians found that they were increasingly associated with their abilities as “technical experts” and specialists (Hafferty, 2006a, p. 36). Swick observed that

The rise of this ‘expert professionalism’ has paralleled a decline in the older sense of ‘social-trustee professionalism.’ … But to rely solely on expertise is to diminish the special nature of a profession, especially insofar as it addresses societal needs (Swick, 2000, p. 613).
With these changes to the profession came concomitant revisions to the implied social contract between the physician and the patient. The AMA Code of Ethics was revised and simplified three times between 1957 and 2001, attempting to stay relevant to clinical practice and to public expectations (Sox, 2007). Patients rejected physician paternalism and expected to make final decisions about their care; new pharmaceuticals also allowed more control over one’s own therapy. Informed consent, confidentiality, and access to medical records emphasized a patient-centered (as opposed to doctor-centered or disease-centered) approach to healthcare. Today the doctor who displays professionalism is likely to prescribe medication and order tests only when there is an evidence-based need (Breen, 2001).

Given that many hospitals are also the settings where medical students learn and adopt occupational norms, it has been hypothesized that a decline in professional values and behavior is nearly inevitable in the face of such ideological conflict (Frankford & Conrad; 1998). Some senior physicians found that students were in fact abandoning professional standards, observing with frustration and disappointment as the younger generation no longer viewed medicine as a vocation which came with long hours of duty and significant self-sacrifice (Smith, 2005).
Medical School in America

The training and socialization of medical students begins in classrooms and soon shifts to clinical settings. The apprenticeship relationship between established physicians and students was, and perhaps still is, the foundation of medical education.

In the 1800s, a student could study with doctors who worked in one of several different medical traditions—allopathic, homeopathic, eclectic, and osteopathic. By the turn of the twentieth century, scientific medicine, based on laboratory experimentation and evidence, replaced other traditions. Students attended medical school to learn basic scientific principles prior to clinical apprenticeship with experienced physicians. While a scientific curriculum offered a standard for medical practice, the “lessons” learned in apprenticeships were often unpredictable and inconsistent; and, students typically adopted the habits and protocols of their mentors.

In the early 1900s, there were hundreds of medical schools in North America varying widely in the quality and quantity of their educational programs. The Flexner Report of 1910, commissioned by the Carnegie Foundation, described the curriculum and facilities at American and Canadian medical schools. Flexner’s 346-page analysis arose from research he conducted himself, visiting each of the 155 medical schools in existence at that time. He based his critiques on the
ideal model represented by Johns Hopkins University’s medical program which offered two years of basic science courses followed by two years of clinical practice. (This format, or versions of it, continues to frame medical school curricula today.) In his research, Flexner found many schools to be of such poor quality that he recommended that they close or consolidate – and a great number did in the years following the report’s publication (Ludmerer, 1999). By 1920 there were just 85 schools still in operation. Flexner’s report was eventually credited with having created universal standards in medical education and providing the blueprint for an organized curriculum (Flexner, 1910; Ludmerer, 1999).

With such standards, attending medical school soon became an expected and necessary component of physician training. It was assumed that such rigorous, scientifically-oriented medical education would yield superior doctors, and the formation of professional attitudes and habits would occur organically as trainees practiced. Additionally, it was expected that, as trainees became autonomous, they would stay affiliated with their profession by participating in the AMA, which would reinforce their professional identification and assure credibility.

After the 1910 publication of Flexner’s influential report, medical schools gradually transformed from proprietary schools into university-based “public trusts”, complex institutions that embraced a threefold
mission—education, research, and patient care (Ludmerer, 1999; p. 337). These three missions maintained a dynamic balance throughout the twentieth century, supported in part by state and federal funding of education and basic science research. According to historian Ludmerer, education was the focus of medical schools from their inception (in the late 1800s to early 1900s) until 1945. After World War II, the focus of medical schools shifted to conducting research. And, after 1965 the priorities of medical schools changed yet again— to patient care (with research a close secondary priority). The initial focus of medical schools on education coincided with the emergence and strengthening of medicine as a profession, while the second phase of medical schools—associated with the relatively stable “golden age of doctoring”—coincided with a research agenda, and the third phase—described as a period of deprofessionalization—paralleled an emphasis on patient care (Hafferty & Castellini, 2009). To medical educators in the 1970s, it seemed the training of students was returning to the pre-Flexner era, when medical education was practice-based and dependent on clinical apprenticeships.

**Teaching Hospitals**

Physicians working in medical school teaching hospitals customarily spend a percentage of their clinical time devoted to student and resident training, integrating spontaneous lessons into their hospital ward rounds. While some medical schools own their teaching hospitals
and can dictate, at least to some degree, that the education of students find a prominent place in workplace routines, others – like TUSM – does not and cannot. As a result, they have had minimal leverage with regard to how and how much clinical faculty train students. TUSM’s main teaching hospital is Tufts Medical Center (TMC) in Boston. Given its relatively small size and the large, uninsured population that the hospital has served over time, it has never been on solid financial footing, so clinical teaching responsibilities were and continue to be a stress on an already overburdened system.

Because TMC provides a substantial amount of charity care, they have relied on government aid and private gifts to remain solvent. However, in the early 1970s there was a drastic reduction in government spending on undergraduate medical education as well as on biomedical research. Later in the decade, there was evidence that the United States was experiencing a glut of physicians, so federal support of medical schools was capped in an attempt to reduce the numbers of graduates. With costs escalating, medical schools like TUSM scrambled to shore up their operating budgets, seeking private sources of funding as well as foundation and grant support.

Given these difficult circumstances, clinical care and innovative research (and the revenue they brought in) were promoted by stakeholders while education became less a priority. Medical sociologist
Samuel Bloom summarized the situation at teaching hospitals this way:

The corporate bureaucracy of the medical school [became] an ever-expanding institution, requiring a flow of resources that exceeded the income which is available from education itself; [as such,] educational values [became] subordinate to ... policy that [was] determined by external groups who provide the means and regulate the activities of the major persons within the institution. (2002, p. 399).

Clinical faculty were also encouraged by hospital administrators to reduce time allocated to educational activities so that they could increase their patient loads.

Schools like TUSM could not easily combat the trend in the reduction of educational time at clinical teaching sites, so instead repositioned itself to accommodate the contemporary version of physician practice, restructuring the curriculum to focus more specifically on patient care. Accordingly, a number of reform measures between 1985–1995 were proposed to support this clinical emphasis, which will be discussed in Chapter Four.

**Conclusion – Chapter Three**

In the past several decades, medical professionals become both more and less powerful – more so as arbiters of medical knowledge and technology and less so in their traditional role as benevolent healer. The social contract between physicians and society was based on a trust that would seem naïve in the face of for-profit medicine. Over time, the terms used to describe doctors and patients have come to reflect a more
business-oriented and potentially contractual affiliation. Physicians are described, too, as “partners” with patients, a term that reinforces a democratic ideal of medical practice and coincides with American values, giving the impression that doctors and patients are equal decision-makers. 5

Despite changes in the doctor-patient relationship at clinical sites, trainees have been expected to demonstrate the traditional values associated with medical professionalism. The next chapter discusses specific reforms that took place at medical schools to foster professionalism.

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5 “Partners” is, in fact, the name of a dominant hospital conglomerate in the Boston area.
CHAPTER FOUR: Medical Education Reforms and the Emergence of Professionalism

Curricular Reforms to Promote Professional Values

Acculturation to Medical School

In October 1995, the AAMC held a conference on “Students’ and Residents’ Ethical and Professional Development” attended by 150 in the field (Hundert, 1996). Attendees met to discuss the factors that affect medical trainees’ development in these areas, particularly the lessons learned informally or via the hidden curriculum. Edward Hundert, then Associate Dean for Student Affairs at Harvard Medical School, published an account of the opening plenary session soon after. In it, he states that

One of the few areas of universal agreement concerning students’ development is that medical training can make students … more cynical and insensitive. Ironically, I would offer this as perhaps the most convincing evidence that whatever the neural structures involved in professionalization, they clearly remain plastic enough at this age to be influenced. We should, therefore, be optimistic about reinforcing altruism and the highest standards of integrity (Hundert, 1996, p. 624).

While the hidden curriculum had been long-acknowledged, it was a leap to conclude that negative aspects permeating the medical school culture were responsible for thwarting professional socialization. Significantly, too, Hundert used the language of science – citing brain plasticity as evidence – to appeal to his audience, rather than attempting to make a
frank moral case for “reinforcing altruism and the highest standards of integrity”.

Much has been written about hidden curriculum in medical education, in fiction like the 1978 novel *House of God*, and in academic commentaries, but research in this area has been limited. By the mid-1990s, more data were generated suggesting the conclusions of Hundert and others were accurate. One article, for example, “On the Culture of Abuse in Medical Schools,” reported on the results of three surveys conducted by the AAMC Graduate Questionnaire in the mid-1990s (Kassebaum & Cutler, 1998). Faculty, residents, and nurses were found to be abusive towards medical students, to a greater or lesser extent. Public belittlement, humiliation and intimidation were the most commonly reported types of abuse taking place. Specific examples given were “rapped (and cut) knuckles when students were thought not to be sufficiently attentive or facile with surgical instruments ... and, commands by residents that students fetch their shopping parcels, provide babysitting, supply transportation to and from the hospital” (Kassenbaum, et al., 1998; p. 1156). The authors conclude that despite institutional efforts to identify, study, and mitigate the sources of the problems, the traditions of medical teaching and learning have been entrenched and are “transgenerational,” as those who were victims of abuse become the unwitting abusers (Kassebaum, et al., 1998; p. 1157).
Like many articles referring directly or indirectly to the hidden curriculum in medicine, Kassenbaum & Cutler cite the seminal 1958 ethnographic study by Howard Becker, *Boys In White*. In this study, Becker described the processes by which medical students become doctors at the University of Kansas in the 1950s—how they lived, their schedules, their efforts to please professors, and the sub-cultures within the student body (e.g., division into alphas and betas, fraternity and non-fraternity men). Still pertinent today, *Boys in White* remains a frequently-cited study about the negative social processes by which students assimilate into the profession.

Several decades after the publication of *Boys in White*, the accrediting body of medical schools, the LCME, acknowledged the need to include in the medical school curriculum coursework to foster professional values (Eckles, Meslin, Gaffney, & Helft, 2005). Such changes did not happen without institutional struggle; indeed, the curricular structure of medical schools has been stubbornly locked in the model that began in the late 1800s.

*The Curricular Battleground*

For over one hundred years, the structure of medical school has been two years of basic science coursework, with lectures and
laboratories, followed by two years of clinical experience, as outlined below.\(^6\)

Year 1 - Lecture-based coursework  
Year 2 - Lectures and some clinical exposure  
Year 3 - Core clerkships, rotating through different hospital sites  
Year 4 - Specialty clerkships at hospital sites

The continuous growth of medical knowledge and practice has meant the on-going reassessment of what future physicians should learn. Consequently, the training of medical students (both its form and content) has never been a settled matter; on the contrary, it has been the frequent subject of debate and critique among educators, with repeated calls for reform, particularly since the 1950s when the study of medical education became a discrete academic discipline (Darley, 1955). Yet, as many have observed, medical education has been resistant to fundamental change (Bloom, 1988; Christakis, 1995; Ludmerer, 1999). In fact, Bloom describes the continual attempts to overhaul the medical school curriculum as “reform without change” (1988).

In his analysis of Stanford University School of Medicine, Cuban (1997) posits several reasons why medical schools are so inflexible. First, he states that “to every generation of medical school reformers, the central questions have been (and continue to be): What do those preparing to become physicians have to believe, know, and do, in order

\(^6\) This has started to change in the past ten years. For example, at more and more medical schools, the clerkships of third year start earlier, at the end of the second year.
to practice first-rate medicine?”, as well as, “How can medical school faculty best communicate those believes, values, knowledge, and skills?” (1997, p. 84). These questions have been answered differently by the faculty who were basic scientists and by the faculty who were clinicians. As a result, struggles ensued between those who supported a school’s focus on research and those on the side of clinical training. As Cuban explains it,

Faculty conflicts between doing research and preparing humane and competent practitioners … have produced a hybrid curricula constructed from faculty compromises negotiated to avoid open warfare over admitting students, budget allocations, new pedagogies, and departmental organization (1997, p. 108).

Flexner’s report had the effective of drastically increasing basic science preparation and lab work, but clinicians argued that it had less relevance today given modern practices and technologies available to aid clinical work. Others argued that a research orientation remained absolutely fundamental – without it, medical school would be merely vocational training.

While basic science researchers protected their stake in the medical curriculum, they also had to respond to long-standing criticisms about the overwhelming amount of material taught in such courses. Students devoted most of their study time memorizing a vast amount of technical information – a nearly impossible task and one considered to be like asking students to “sip water from a fire hose,” a former academic
dean at Tufts told me (Lee, personal communication, 2004). In fact, in 1967 TUSM medical students voiced their frustration to administration with “more than 80 students ... [signing] a petition criticizing the curriculum of the first two years for containing too many lectures, providing too much detail, and emphasizing rote memorization” (Ludmerer, 1999, p. 203).

When cutting hours to specific courses was proposed by administrators, basic science faculty fought back, sensing that their discipline was being unfairly targeted. What was more important, anatomy or physiology—and who would decide? How could students interpret drug interactions if they did not understand biochemistry? “Turf wars” amongst the basic science faculty stalled discussions and further action.

Additionally, and not incidentally, another criticism of the basic science curriculum was that it overemphasized a positivist-rational perspective and paid little attention to the social and cultural aspects of disease and health (Relman, 1998). In light of medical school’s increasing emphasis on patient care, introducing courses in the medical humanities and public health seemed long overdue. New lectures and small group sessions in these areas would mean that reducing hours in the basic science courses was nearly inevitable.
Medical Ethics Education

As mentioned previously, “the golden age of the doctoring” in America began to give way to public concerns about the trustworthiness of scientists and physicians following World War II (Le Fanu, 1999; Jonsen, 2000). Advances in biotechnology in the 1970s raised unprecedented questions about experimental drug protocols and the uses of medical equipment, such as artificial hearts, feeding tubes and breathing machines. Additionally, seemingly miraculous new drugs affected patient expectations about both the limits of disease and the limitlessness of medical treatment (Duffin, 2010). The medical field found that it was under intense pressure to sustain lives, not only to promote health, which often came at enormous financial cost. As a result, physicians and those in training were exposed to ethical conundrums never before experienced. Medical ethics, or “bioethics” as it became known in 1972, emerged as an academic field to grapple with such issues (Duffin, 2010).

Specific aims of bioethics curricula were considered. Some medical ethics educators argued that the goal of such coursework was to impart skills in moral reasoning and clinical decision-making while others believed the education should foster virtuous and principled individuals (Eckles, et al., 2005). The skills/virtue dichotomy persists today. An additional obstacle for medical schools was finding adequate
teachers; even when a curriculum was agreed upon, it was unclear who should teach such courses. Clergy and academic philosophers were equipped to address ethical questions, but an understanding of the clinical context and implications for patients would be needed in order for the lessons to move out of the realm of theory.

The inclusion of medical ethics has paralleled and overlapped with the movement to include professionalism in the medical school curriculum. How have medical educators distinguished “ethics” from “professionalism”? While there was and continues to be notable ambiguity in the literature in the use of these terms (and at times they are used interchangeably), one apparent distinction is that professionalism tends to stress “virtue in action,” or observable demonstrations of virtue, and ethics more often pertains to reasoning strategies (Brody and Doukas, 2014; Inui, 2003, p. 4).

Based on the number of relevant publications in each academic area, the focus of the reform in medical education appears to have shifted from ethics to professionalism in the late 1990s. Medical ethics publications increased from 1985–2005 and have since stabilized (Duffin, 2010, p. 157). As ethics publications slowed, a steady rise in the number of medical professionalism publications has been evident, particularly in
the past fifteen years.\footnote{The number of articles in the Web of Science database found using the search terms “professionalism” and “medicine” has quadrupled since the year 2000, from 25 to over 100 in 2014 (Levinson, Ginsburg, Hafferty, & Lucey, 2014).}

The LCME added a standard in 1985 requiring that “ethical, behavioral, and socioeconomic subjects pertinent to medicine” be taught in medical programs, ED-23 (Appendix III). At this time, many American medical schools were already in the process of adding medical ethics courses. In 1972, only 4% of U.S. medical schools offered a special course in medical ethics; by 1989 that number increased to 34%, and by 1994 all medical schools offered such a course (Fox, Arnold, & Brody, 1995, p. 762). Content typically included:

- Moral aspects of medical practice
- Obtaining valid consent for treatment
- Assessment of competence to consent
- Principles for managing patient refusals
- Justifications for withholding information and breaching confidentiality
- Management of terminal illness (Culver et al., 1985; pp. 233.)

Topics would be discussed after studying representative cases.

Educators were unhappy, however, with the common placement of the course early in the medical school curriculum. After all, most students at this point in their education would not have had any meaningful patient experience so might find the ethical principles and case studies to be only of theoretical value. Others also argued that this effort would be more effective if content were distributed over the course of the
student’s four years in medical school, not just in one discrete course. According to Fox, et al. (1995), who reviewed the then twenty-five year history of medical ethics education, both the goals and methods of this coursework “have grown progressively broader and more complex. The field’s goals have begun to reach beyond identifying and analyzing ethical issues into the realm of influencing students’ attitudes and behaviors” (p. 761).

The authors drew a distinction between “traditional” and “alternative” models of medical ethics education. The former stressed analytic methods based on ethical theories (e.g., utilitarianism) applied to clinical cases, with an emphasis on “the process of moral deliberation more than its conclusions” (Fox et al., 1995; p. 762). Alternative models, on the other hand, had the chief aim of shaping students’ values and behavior while secondarily fostering knowledge and cognitive skills. Although the article never refers to “professionalism” per se, the author’s schema suggest the dual direction medical ethics education will take in the next decade – with an emphasis on instilling virtue becoming professionalism training, and medical ethics training continuing to emphasize the process of clinical decision-making.

The increased interest in ethics in medical education had a variety of antecedents – among them were new technical capabilities and “a complex network of providers, insurers and health care monitors under
new legal and regulatory control" (Lakhan, Hamlat, McNamee, & Laird, 2009, p. 2). Some sociologists were skeptical of the focus on bioethics at medical schools and argued that it represented a transformation in the subject from its original role as “watchdog,” overseeing physician practice decisions, to “showdog,” or “a cosmetic effort to demonstrate concern with the important ethical problems of medicine” (Keirns, et al., 2009; p. 186).

Yet another factor in the formation of medical ethics education was, as hypothesized by Abbott (1983), the growing diversity in medical school’s student population. He argued that when those who entered medical school were drawn from the upper class, a uniform ethic of disinterested service was assumed, and so there was no need for coursework in professional ethics; only after admission decisions became more democratic was it necessary to standardize ethical education. Abbott also concluded that bioethics coursework would serve to bolster the special status of the medical profession, serving as both a public symbol and, presumably, ensuring professional socialization.

Ultimately, the teaching and assessment of bioethics was inconsistently implemented at medical schools and a standard curriculum was never agreed upon by medical educators. Hafferty & Frank (1994) criticized the approach most medical schools took to this reform. Because the goals of the curriculum were unclear, it had the
danger of becoming either conflated with moral training (as if a bioethics coursework would ensure the development of virtue) or, conversely, distancing questions of morality. Would ethics be thought of as an outcome of the long years of training – or as a skill? Hafferty et al., theorizes that

There is a fundamental distinction between a pedagogical approach that highlights ethical principles as residing squarely within the physician’s professional identity and a view of ethics that frames ethical principles as tools to be employed in the course of clinical work ... as [a tool], ethics becomes cast as an entity whose locus of control is external both to the situation and to the actors involved—an instrument for manipulation much like any of the more technological tools medicine at its disposal (1994, p. 862).

Of course, even if medical school faculty viewed bioethics education as an opportunity to foster professional identity, there was no reliable way to ensure that they had achieved this outcome.

**The Liaison Committee on Medical Education**

*The Role of the LCME*

Medical educators were acutely aware not only of the need to make training relevant to the changing healthcare system but also of the need for all curricular revisions to conform with the standards set by the Liaison Committee on Medical Education (LCME), the accrediting agency for American and Canadian medical schools. Founded at a 1942 meeting of leaders of the Association of American Medical Colleges (AAMC) and the American Medical Association (AMA), the LCME monitors the
structure and quality of medical school training, ensuring that medical school resources are appropriate for the number of students enrolled (a particular concern at mid-century when many universities launched new schools). Today medical school eligibility for federal grants depends on LCME accreditation, and students must graduate from an accredited medical school in order to qualify for the licensing examinations and to move on to accredited residency programs (Kassebaum, Cutler, & Eaglen, 1997).

Over time, the LCME has gathered strength as accreditation processes have become more elaborate. Medical schools have found themselves under increasing scrutiny, so administrators have made greater efforts to stay current with the ever-evolving LCME standards. Reforms to the curriculum that had been considered in committees for years suddenly become high-priority items once the LCME revises its standards. However, given the vague language of the standards, medical schools have had a formidable task in interpreting and implementing LCME mandates. This was particularly true in the 1980s when the LCME determined that schools needed to add instruction on “human values” (as in standard ED-23; Appendix III). Educators were, however, eager to make such changes.
Accreditation Changes

In 1999, the Accreditation Council of Graduate Medical Education (ACGME), which accredits U.S. residency programs, drew up a set of guidelines for resident knowledge and behaviors called the General Competencies. These competencies focused on six areas: Patient Care, Medical Knowledge, Practice-Based Learning, Interpersonal Communication, Systems-Based Practice, and Professionalism. With this, the ACGME “shift[ed] the educational landscape ... radically” by attempting to standardize it (Doukas, 2006, p. 46). Residency programs had no choice but to comply with the ACGME because their successful accreditation site visits meant that full federal funding would continue.

Several years later, the LCME, the accreditation agency for undergraduate medical education, updated its standards, aligning its goals for professionalism with the ACGME competencies (see Appendix III for LCME professionalism standards).

LCME Standards for Professionalism

The LCME created new professionalism standards for medical schools in 2009, mandating the assessment of the “the learning environment.” The standard MS-31 states that

It is expected that a medical education program will define the professional attributes it wishes its medical students to develop in the context of the program’s mission and the community in which it
operates. Such attributes should also be promulgated to the faculty and staff of the medical education program. As part of their formal training, medical students should learn the importance of demonstrating the attributes of a professional and understand the balance of privileges and obligations that the public and the profession expect of a physician (LCME, 2013, p. 22).

From this it is clear that the professionalism discourse had shifted: the “professional attributes” demonstrated by students were considered by the LCME to be promoted or constrained by their social and physical setting. This was a move away from the original LCME professionalism standard of 2003 highlighting the need to nurture personal virtues and to ferret out those of poor character. In this revision, no longer was the source of professionalism located solely in the student; it was located within their social contexts, the learning environment. However, the mandate was problematic in that it expected institutions to “conduct and develop appropriate strategies to enhance the positive and mitigate the negative influences” as well as to create “suitable mechanisms....to identify and promptly correct recurring violations of professional standards.” This placed a new burden on schools like TUSM not only to continue to discipline individual students, but also to monitor clinical teaching sites – which were and are learning environments medical schools have limited control over.

By 2013 the LCME professionalism standard had become multi-faceted. It included: 1) professionalism as identity development (i.e.,
fostering individual virtues); and, 2) professionalism in the context of the learning environment. And, to complicate matters further, the LCME mandated a third component of professionalism which involved a student’s active engagement with communities in need – formerly under the rubric of “professionalism” but rewritten as a separate standard (see Appendix III).

**Professionalism Training & Formal Assessment**

Undeniably, the question had shifted at medical schools from “Is professionalism teachable?”, heard in the 1990s (e.g., Shelton, 1999), to “How exactly should we teach it?” in the following decade. Educators agreed that the historical notion of apprenticeship was inadequate for current professionalism training because its success depended on “the presence of shared values in a relatively homogenous medical profession serving a similarly homogenous society,” a social reality that no longer existed (Cruess and Cruess, 2006, p. 205). Over the course of the twentieth century not only has the demographics of the United States shifted (e.g., the increasing populations of Asian-Americans and Spanish-speaking citizens), the medical student body has changed as well. Moreover, women now make up over half the students in a typical medical school.
Explicit Professionalism Instruction

Women medical schools in the 2000s offered courses pertaining to ethics and professionalism in the first year of the curriculum. Because students have little or no clinical exposure at this point in their training, the coursework was meant to provide an abstract foundation for later concrete experiences. According to medical educators, professionalism, like ethics, was a topic that should be taught in a formal context before it is reinforced informally, so first-year didactics were justified (Kalén, Ponzer, Silén, 2012). Theoretically, the learning of ethical principles and professional practices early on would start students on the “right” course of behavior in their medical career. And, because medical students did not necessarily intuit societal expectations of the physician role and the attributes that constitute professionalism, professionalism training was needed to spell out these expectations (Bebeau, et al., 2012; van Mook, de grave, van Luijkk, O’Sullivan, Wass, Schuwirth, & van der Vleuten, 2009). However, projecting professionalism would be a challenge for students starting to work with patients; due to the context-dependent nature of clinical encounters, regulating behavior and gauging appropriate responses often caused confusion (Ginsburg, et al., 2011).

Despite general agreement by many in the field that professionalism should be taught explicitly, the aims of do so were still questioned. Are we training future doctors to put on a satisfactory show
of professionalism, or are we fostering professional habits – and beings? Is the ultimate goal of a professionalism curriculum to promote ideal behaviors and attitudes, or is it to merely avoid their deterioration? After all, admissions committees choose students who display the desired qualities for being a physician, and the threshold for normative professionalism is thought to be low – so, the vast majority of medical students would advance in their training, developing professional identities, without specific concerns (Coulhan, 2005). Many medical educators have responded by saying that in fact we are attempting to nurture ethical students who, over time, demonstrate professionalism in both a thoughtful and automatic manner.

Unlike in the classroom, teaching professionalism at the bedside was inherently linked to the student’s supervisor and to the clerkship site where the student treated patients. Both the quantity and the quality of patient encounters affected professionalism formation as well, and so a large and varied caseload was found to be most beneficial to students (Bebeau, et al., 2012; Goldie, Dowie, Cotton & Morrison, 2007). Authors on this topic reinforced that experience is, in fact, the best teacher, and that the more clinical opportunities students have, the more quickly they develop the attributes of a professional.

Additionally, the literature highlighted several other techniques for fostering student professionalism:
• Crafting narratives and creating stories about experiences (e.g., Konkin, & Suddards, 2012)
• Reflecting on one’s own experience (journals, blogs, portfolios) (e.g., Stern, et al., 2006).
• Enrolling in unique programs (i.e., Healer’s Art, to be discussed later) as well as taking arts and humanities courses during medical school (e.g., Cohen, et al., 2009).

Of all of these, the technique that was still stressed the most was role modeling, particularly when professionalism was exemplary and role models represented culturally diverse populations (Butani, Iosif, Kelley, Washington, & Seritan, 2013).

Providing positive role models was found to be even more successful when it was coupled with purposeful discussion and reflection to ensure that lessons were truly assimilated (Hafferty, 2006; Stern, et al., 2006). Talking it out, telling stories and reflecting on them was also thought to reduce the negative effects of hidden curriculum. In her research, Monrouxe exemplified this perspective, stating that

..... ‘static’ policy documents, handbooks and didactic lectures alone are insufficient for the development of the deep understanding of professionalism in students ... By contrast, the more active sense-making opportunities students have within the formal curriculum (e.g. discussing and exploring their experiences via story telling), the less likely it is that the students’ understanding of professionalism will be negatively influenced by the hidden curriculum. (2010, p. 599).

Even if there were no simple remedies for the apparent incongruities students faced, merely exposing or expressing problems was thought to aid in students’ overall development. When students and faculty have an
opportunity to discuss experiences together, students may realize that when they become frustrated or confused, their reactions are warranted. For example, students may not know how to sensibly refuse gifts from well-meaning patients, and talking about such situations with experienced physicians may allow students to not only learn the appropriate course of action but also how to think through the conundrum.

In the past fifteen years, related programs have been experimentally added to medical school curricula, such as the Healer’s Art elective. The intended outcome of this unique course was “the development of the physician’s humanity as a therapeutic tool” (Rabow, Evans & Remen, 2013, p. 13). During this first-year elective, which was started in 1993 at UCSF School of Medicine and is now offered at 76 medical schools internationally, small groups of students met for three, five-hour sessions, led by a faculty person. Sitting in a circle, each session was devoted to a particular theme, such as compassionate care, and students were encouraged to tell stories and express their feelings. The course stood in stark contrast to the students’ other coursework and was criticized by some faculty who saw it as insubstantial. In an attempt to explain its value, one account states that

[this] ... course capitalized on the transformative potential of human storytelling, namely, its capacity to forge meaningful relationships between people to help human individuals organize
or gain clarity on their experiences, beliefs and personal ethics and values ... By telling one’s stories in full confidence, and measuring one’s day-to-day experiences in medicine with the noble ideals intrinsic to the profession, a student can begin to develop a professional identity, one not foisted upon them by their medical superiors, or put to them in the esoteric form an antediluvian oath, but ... rather [one that is] formed through interactive thought processes with others who are currently dealing with, and have long dealt with, the humbling professional challenges they themselves are facing (George, Gonsenhauser, and Whitehouse, 2006, p. 70).

When offered, the Healer’s Art elective has been popular with students. (At TUSM, the course has been thought too expensive at ten thousand dollars per year, so it was and is offered erratically, depending on the will – and budget – of the dean for educational affairs.)

Another method for fostering professionalism was the longitudinal integrated clerkship (LIC). Unlike the traditional clerkship rotation, an LIC allowed students to “follow” several patients, often patients with chronic conditions, over the course of their illnesses and outside of the hospital setting. This experience cultivates stronger relationships between students and patients and is considered an ideal clinical experience for students (Konkin & Shudder, 2012). However, the LIC is complex for medical schools to implement, and it is time-consuming for both faculty and administrators relative to traditional clerkships – so, such programs tend to be kept small.
Assessment Strategies

As professionalism curricula were formed at American medical schools, the subject of assessment approaches incited debate. Merely recognizing the presence or absence of an abstract professional attribute in students was much easier for faculty than evaluating it in a nuanced manner. While there was no agreement among educators about the best means for assessing professionalism, many methods and instruments were created that were (and still are) used at different institutions – despite weak validity and reliability (Levinson, et al, 2014). Examples include:

- Assessment of trainees at the end of a clerkship rotation (as in Appendix X)
- Peer assessment
- Multisource (or 360-degree) feedback
- Standardized Patients (SPs) or OSCEs
- Professional Mini-Evaluation Exercise or P-MEX (Cruess, McIlroy, Cruess, Ginsburg, Steiner, 2006); this is a 24-item checklist-type report card used during clerkships.

While the P-MEX, which is focused on student behaviors, was thought more reliable than other instruments, no one method or tool was found to be sufficient. In fact, utilizing a variety of measures would enhance validity, though it still would not ensure it (Hodges, Ginsburg, Cruess, Cruess, Delport, Hafferty, Ho, Holmboe, Holtman, Ohbu, Rees, 2006).

8 In 2006, the president of the AAMC underscored the value of using the OSCEs to measure “ethical behavior and professionalism” for the purpose of formative feedback, writing that OSCEs “designed to simulate challenges to professionalism can be useful for desensitizing students to the ambiguous and difficult situations they are likely to confront in the clinical setting” (Cohen, 2006, p. 614).

Complex assessments of students, like multisource feedback, would be another time-consuming and resource-dependent undertaking, so institutions were not able to measure students’ professionalism in other than a general manner.

Performance-Based Assessment

In the early 1990s, measuring medical student learning and development, both cognitive and non-cognitive, was debated in the field. How could sit-down, multiple-choice tests ensure that students were progressing in ways that would prepare them for patient care? In 1991, the LCME published another standard requiring medical schools to develop systems of assessment that would show students had acquired and could demonstrate appropriate skills, behaviors, and attitudes (Kassebaum, et al.; 1997). It was no longer sufficient for medical schools to administer paper exams; they would be expected to also include practical assessments throughout the curriculum.

As a result, exercises and examinations using “standardized patients” (SPs) – actors who were trained to portray patients in mock-clinical scenarios – were developed. These assessments were called OSCEs – Objective Structured Clinical Examinations – and were not necessarily new to clinical training but would become a requirement in
order to fulfill the LCME mandate. Using SPs would also address the problem of inconsistency in training due to variation in patient cases at clinical sites as well as the variation in faculty teaching. While there was enthusiasm by administrators for conducting such exercises, the expense was considerable and program development labor-intensive.

Encounters with SPs were analyzed by faculty to gauge student’s clinical reasoning as well as their communication and interpersonal skills. Perhaps the shift that occurred at medical schools in the 1990s from medical ethics education to professionalism education was driven, in part, by this new emphasis on performance-based assessment. For many medical educators, professionalism was thought to be an outward manifestation of personal virtues, a learnable and demonstrable skill. As such, faculty should be able to ascertain student’s professionalism in their communication, mannerisms, comportment, and interaction with SPs.

**White Coat Ceremony**

An institutional response to fostering professionalism was the development the White Coat induction ceremony at medical schools. This induction ritual, which includes the recitation of the Hippocratic Oath and a formal “cloaking” of students by medical school administrators and senior physicians, was meant to mark and solidify
student’s entry into the profession. Starting at the University of Chicago in 1989 after a professor complained that “first-year students were showing up in shorts and baseball caps” for sessions “where the patients are pouring their hearts out,” the rite was formed to reinforce the expectation of professional conduct (Warren, 1999). The dean of students at the University then decided to create a special ceremony attended by the student’s family. At this ceremony, the students were given physician coats by faculty and administrators and told that “for any session where we have patients present, we expect you to look like professionals, wear the white coat and behave appropriately” (Warren, 1999).

Several years later, in 1993, the Arnold P. Gold Foundation sponsored the first formal White Coat ceremony at Columbia University College of Physicians and Surgeons. In addition to the “cloaking,” the entering class recited a modern version of the Hippocratic Oath. This version of the oath was written in 1964 by Louis Lasagna, a professor at Johns Hopkins (who twenty years later became a dean at TUSM). Before this time, the Hippocratic Oath had been recited by students at medical school commencement ceremonies.

Despite its popularity among medical schools and its symbolic appeal, some took issue with the ceremony, its apparent elitism and questioned “whether the professional oath or ‘affirmation of professional
commitment’ taken in this setting has any legitimacy,” and further argued that the rite was “morally meaningless,” fostering a sense of entitlement in students (Russell, 2002; Veatch, 2002, p. 5).

**Milestones & Competencies**

As mentioned, the Accreditation Council for Graduate Medical Education (ACGME), which accredits residency programs, included Professionalism as one of its six core competencies when they were established in 1999.9 Because the ACGME has also recently called for “milestones that establish benchmarks for the behaviors that physicians ... must demonstrate for each competency,” it is now necessary for institutions to define specific behaviors that reflect professionalism competence (Carrese, Malek, Watson, Lehmann, Green, McCullough, Geller, Braddock, & Doukas, 2015, p. 2). The ACGME graduate medical education mandates have been adopted by the American Association of Medical Colleges (AAMC) and by medical schools, including TUSM. In addition, two related competency domains have been suggested by the AAMC: 1) Personal and Professional Development, which refers to trustworthiness, the ability to manage stress, flexibility, understanding one’s limits, confidence, the ability to manage ambiguity, and the capacity for leadership; and, 2) Interprofessional Collaborative Practice

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9The ACGME six core domains of competence (1999) are Patient Care, Health Science Knowledge, Practice-based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, and Systems-based Practice (ACGME).
(Englander, Cameron, Ballard, Dodge, Bull, & Aschenbrener, 2013).

Establishing “benchmark” behaviors in these areas is a project that is currently underway at medical schools.

**Conclusion – Chapter Four**

Despite the historical difficulty changing medical school curricula, American medical schools were motivated by evidence of the erosion of student professionalism and by the ever-evolving LCME mandates. An induction rite, the White Coat ceremony, was adopted quickly by institutions and coursework was added to the curriculum. Rooted in ethical principles and didactics, the professionalism curriculum would also include performance-based assessments, special programs and novel clerkship experiences. While the LCME mandated the explicit teaching of professionalism, role modeling – often considered an implicit actively – was still the primary vehicle for learning it.

Evaluating outcomes of programs designed to foster ethics and professionalism education was difficult given that it took many years to see measurable results (if measurable). Medical schools instead assessed cognitive abilities and obvious concerns in student performances and in their attitude.

The next chapter explores in detail how one medical school, Tufts University School of Medicine, developed its professionalism curriculum.
CHAPTER FIVE: Tufts University School of Medicine’s Reforms

Tufts University School of Medicine (TUSM) is a large, urban medical school in Northeast United States. Each class has approximately 200 students, who are 55% female and 45% male. Most students are white and have grown up in the United States. The setting was chosen for this research because of its convenience and because the TUSM professionalism curriculum is thought to be typical of medical schools today, according to the course director for Ethics & Professionalism (Glickman-Simon, personal communication).

TUSM has the dubious distinction of being one of the most expensive medical schools in the United States. The school has a relatively low endowment and does not own its teaching hospital (as many other medical schools do), so TUSM is fundamentally dependent on its tuition dollars (Banks, 1993; Ludmerer, 1999). TUSM students often carry heavy loan debt when they graduate. To add to the financial stress on both the school and the students, TUSM is located in downtown Boston, where the cost of living is high relative to other cities. Given this, financial stress has been a factor when considering the ostensible professionalism of students. For example, a poor record of attendance for mandatory sessions is usually considered a lapse in professionalism; however, some students may choose to reduce commuting expenses by minimizing trips to the school. Therefore, the context of absences, and
similar instances of questionable professionalism, are taken into consideration by TUSM administrators before punitive action is considered.

Additions or subtractions to the professionalism curriculum are decided by the Curriculum Committee, which meets monthly from September–June. Indeed, any changes to the TUSM curriculum must be proposed and put to a vote by the Curriculum Committee. The voting members of the committee are appointed to a three-year term and are expected to attend a minimum number of meetings over the course of an academic year in order remain on the committee. There are approximately forty members, primarily faculty, as well as two student representatives from each class (eight total students). Additionally, a number of non-voting or ex-officio members, mostly staff, attend the monthly meetings. (I am one such member of this committee.) The chair and vice-chair of the committee in consultation with the Dean for Educational Affairs determine who will be invited and removed from the committee roster.

It is noteworthy that TUSM has little in the way of professionalism policy. The few published institutional guidelines about professionalism available to faculty and students are located in handbooks and lack specificity. Institutional expectations of professionalism are, therefore, conveyed indirectly to students.
Background of TUSM’s Professionalism Curriculum

The Research Imperative

Research at TUSM has been an imperative since its founding in 1893 (Banks, 1993). The research enterprise grew, and as federal funding became available in the mid-twentieth century, TUSM faculty were increasingly awarded competitive research grants. By the 1980s, faculty success rate in receiving research support from the National Institutes of Health (NIH) was about twice the national average. With 80% of the school’s research support coming from the federal government, basic scientists become dependent on outside sources of funding. However, as NIH grants dwindled in the 1990s, TUSM found itself under pressure to make up for the research budget losses. (These difficulties continue today.) And, although there has been a steady reduction in grant funds, and the concomitant decline in TUSM research activities, the school still takes great pride in its research mission.

Given the divisions between the basic science researchers and the clinicians discussed previously, as well as the increasing clinical pressures on the teaching faculty, a new office was created to support and regulate curricular changes, the Office of Educational Affairs (OEA). The OEA was established in 1994 to “[provide] TUSM a much–needed infrastructure of educational support and coordination as well as
leadership” to the school, wrote a former dean of the OEA (Lee, 2000, p. s159). Previously, it was up to individual departments and the medical school’s dean’s office to manage educational programs, including teaching and evaluation. Shifting administrative management to this new entity was a relief for many faculty, particularly when major curricular changes became necessary.

“Socialization of the Student Into a Professional”

Earlier, in the academic year 1984–1985, TUSM had convened a Task Force on Curriculum Planning to strategize revisions. Archival documents show that the committee focused on defining the fundamental skills students should develop in medical school for future practice. “The Subcommittee on Student Skills” – composed of seven faculty (six MDs and one attorney) – drafted a report in November 1984, based on the solicited feedback from six faculty “consultants” and “10–15 graduating students” (Tufts University archives). The report included a number of recommendations, including a list of four essential skills that students should develop, namely:

1) Intellectual Skills
2) Skills in Empathy and Understanding of Human Psychiatric Functioning
3) Socialization of the Student Into a Professional
4) Technical Skills
Skills numbered two and three are particularly salient in an analysis of the growing TUSM ethics and professionalism curriculum. In the text of the task force’s report, which is excerpted below, the authors write:

...[Skill] groups ... 2 and 3 will be discussed together since the methods for teaching them and to some extent the informational component overlap extensively ... Perhaps during the first week at Medical School, as part of being introduced to their new career, students might attend a series of presentations which cover such topics as:

- The philosophical and legal concept of personhood
- The doctor-patient relationship: paternalism vs. nurturing; mutual response; the contract between patient and doctor
- Medicine and society: medical care as a right vs. privilege: who pays?
- Medicine and the heterogeneous society: cultural/ethnic factors and illness; religious factors
- The limits of competence: error; malpractice
- The impaired physician: illness/aging; alcohol/drugs; incompetence
- Communication, the essence of doctor-patient interaction: enhancing factors, inhibiting factors (Tufts University archives)

These topics would be included in a Medical Ethics course as well as a course called Doctor-Patient-Society, both launched in academic year 1986–1987.

The report goes on to suggest that small group discussions would be the best format for these topics, and that each small group should be led by faculty who were trained beforehand and were “adequately compensated for time spent” on this activity. The report then concludes this section with the following recommendation, emphasizing the significance of faculty role models:
...the most critical reinforcement of professionalism and the best guarantee of acquiring empathy has to be role modeling. Contacts between faculty (and/or other practicing physicians) and students must be frequent ... Not only must students have the opportunity for observation of faculty but also there must be one or more forum for making this process conscious and deliberate. This should entail some form of group discussion of topics around the meaning of professionalism, the doctor-patient relationship, the relationship of medicine and society, and medical ethics. It need not take large amounts of time but it should be done on a regular and recurrent basis, preferably through a student’s stay at the school (Tufts University archives).

Of particular note is this relatively early use of the term professionalism to characterize student development in these areas. Moreover, the authors state that the development of these “skills” should be accomplished by “making this process conscious and deliberate” which will be discussed in the next chapter as an essential aim of professionalism training.

While an explicit professionalism curriculum would not materialize for several decades, the seeds were certainly planted in this report. By the early 1990s, TUSM could announce that its curriculum had been reformed, with a successful shift in emphasis towards the “social, cultural, and psychological aspects of illness” and away from an exclusive focus on scientifically-based competencies (Banks, 1993; p. 284).
In a special report on the curricular goals of medical ethics published in 1985 – based on a grant-supported conference held in the summer of 1983 – a group of educators (eight PhDs and two MDs) from different institutions acknowledged the growth of the new field and highlighted the lack of agreed-upon standards. They argued that the curriculum had a tendency to focus on “sensational cases” rather than on “the kinds of moral problems that physicians encounter most frequently in practice” (Culver et al., 1985; p. 253). Furthermore, they questioned the depth of institutional commitment to the endeavor of teaching medical ethics: “A medical school dean or curriculum committee surveying the current state of education in medical ethics might conclude that ... courses in ethics are fine so long as one or more interested faculty members want to teach them ...” (Culver et al., 1985, p. 253).

For most medical schools, finding appropriate faculty to teach bioethics coursework was easier said than done, and TUSM was no exception. Indeed, over the past thirty years, only three faculty have been responsible for sustaining the Medical Ethics (now Ethics & Professionalism) course at TUSM. Additionally, several influential Tufts figures, with both clinical and non-clinical backgrounds, promoted ethics at the medical school from the 1990s–2000s: Jerome Kassirer, MD;
Sheldon Krimsky, PhD; and Norman Stearns, MD, PhD.10 While Kassirer, Krimsky, and Stearns were never responsible for the actual ethics curriculum, their committee work and publications galvanized efforts to expand ethics-related activities at the medical school and the entire University.

At TUSM, the Medical Ethics course was added to in the academic year 1986–1987. A curriculum schematic from that year (Appendix IV) shows it in the Spring semester of the first year of medical school. Over the next two decades, Medical Ethics would shift between first and second year, depending on other curricular priorities.

Syllabi in the early 1990s indicate that the course was run by faculty in the Family Medicine department and stressed a logical, systematic approach to complicated cases.11 The course, which met five times in the Fall, covered four basic topics: 1) An overview of approaches to medical ethics; 2) Informed consent, truth-telling, and uncertainty; 3)

10 Jerome Kassirer, MD, a faculty member since 1961, served as Editor-in-Chief of the New England Journal of Medicine between 1991 and 1999. Dr. Kassirer has written extensively about medical ethics, particularly conflicts of interest between medicine and industry. Sheldon Krimsky, PhD, who has appointments at both the Tufts School of Arts and Sciences and the School of Medicine, lists over a dozen books on his Tufts web page published from 1982–2014 “...for those readers who are interested in the social assessment and management of new technologies, science and ethics, and the normative dimensions and moral implications of science in its social context.” (http://www.tufts.edu/~skrimsky/, retrieved May 15, 2015). Norman Stearns, MD, PhD, was a TUSM faculty member and administrator, who funded a grant “to promote and support teaching and learning innovations developed by [TUSM] faculty [to] enhance student and resident education in Ethics and Professionalism.” (http://medicine.tufts.edu/Education/OEA/Educational-Grants/Stearns-Grant, retrieved May 15, 2015).

11 The current edition of the course is still directed still by a Family Medicine faculty member but is now managed through the OEA.
Allocation of resources; and, 4) “Care of patients who are terminally ill or in a persistent vegetative state” (Tufts University archives). For each topic, students were given a case to analyze using a specific formula. One case, for example, was about a young man with AIDS (i.e., HIV+) who was being treated in a small hospital in a conservative, Christian community. Students were instructed to approach this case using a recipe-like series of steps and then to write a one-page ethical analysis. While referencing a table of Moral Principles (Appendix V), the students were expected to

1) Outline the facts of the case;
2) Consider the values of patients, physicians and society;
3) Consider any conflict of values for the parties involved;
4) Decide which value should be given priority;
5) Choose a course of action. Justify that choice based on the moral principles it preserves.

The syllabus suggests that the “discipline of ethics” should be employed when confronted with ambiguous cases and that it be used as a tool, as one would employ a scalpel, to make incisive decisions – precisely the approach that would be criticized by medical educators like Hafferty, et al. (1994).

Despite the discomfort some had with this approach, it was not easy to remedy. Without clinical experience, invariably students would be exposed to ethical and moral conundrums on paper at the beginning of their education. So, while the ethical content was certainly taught,
whether or not students were learning and employing the principles was another matter. Measuring student learning, particularly when it pertained to clinical judgment, had been (and remains) a persistent concern of medical schools like TUSM.

**From an Ethics to a Professionalism Curriculum**

TUSM’s efforts to include professionalism as a discrete subject started with discussions in the 1984 task force, and specific changes were implemented two decades later with the 2009 Educational Strategic Plan. Compared with the comprehensive professional programs instituted by other medical schools, TUSM’s endeavor to reform the curriculum was limited, often piggy-backing professionalism onto the existing ethics curriculum.¹²

Judging from archived syllabi, committee minutes, and students’ schedules, the TUSM professionalism curriculum developed slowly from the vestiges of the Medical Ethics course. By the mid-1990s, Medical Ethics was no longer on the student’s schedule. Some of its content was integrated into the course Doctor-Patient-Society, which notably included

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¹² Drexel School of Medicine, for example, has a longitudinal Professionalism Formation Curriculum, which includes “special sessions in addition to core components of required courses. It addresses the hidden curriculum in a manner that is explicit and developmentally appropriate, with the intention of preparing our students to be moral agents of change.” [http://webcampus.drexelmed.edu/professionalism/](http://webcampus.drexelmed.edu/professionalism/). Other examples include the Physicianship program and McGill University (Boudream, Creuss & Cruess, 2011) and the professionalism program at the University of Southern California (Elliott, May, Schaff, Nyquist, Trial, Reilly, & Lattore, 2009).
a stand-alone lecture called Medical Professionalism.13 Doctor-Patient-Society, positioned in the fall of the student’s first year, included just enough ethics content to satisfy accreditation standards and also appeased those who felt the curriculum was overloaded with “non-essential” courses.

The Guiding Principles & Ethics Planning

Several years later, in 2003, the TUSM Curriculum Committee reviewed content gaps in the curriculum and found that ethics was one such gap (see Appendix VI). A new committee was formed to strategize revamping a medical ethics curriculum, and this time it would be more ambitious than the original five-session course. The Ethics Planning Committee (EPC) met five times in 2004 and drafted Guiding Principles for TUSM Ethics Planning Curriculum (Appendix VII). The Guiding Principles, which were consonant with the goals of professionalism training, focused on fostering virtuous student identities, and addressed previous criticisms of ethics curricula (e.g., using more than just “sensational” cases). It also acknowledged the inconsistencies between formal and informal teaching, between theory and practice, with the principle: “the lessons of formal ethics teaching often conflict with those of informal teaching (professional socialization vs. ethical development)”. (Of note is

13 This lecture was taught by a faculty person who continued with the course, Richard Glickman-Simon. He has been the course director for the current Ethics & Professionalism course since 2009.
a comment that appears at the bottom of the Guiding Principles page:
“**need clinical models/mentors of ethical practice** more faculty involvement”. These two issues, mentors and faculty participation, continue to be concerns for the development of an ethics and professionalism program.)

The committee then drafted a longitudinal program that would infuse ethics coursework and discussion throughout a medical student’s four years at TUSM (as delineated in Appendix VIII). Often topics were already covered in coursework and ethical aspects were highlighted, such as with the topic of cloning in Molecular Biology. No mention was made of the teaching and learning of professionalism, per se. It was implied in the topics and sub-topics that it would be a part of a new four-year ethics curriculum.

The dean of the office of educational affairs at the time, Mary Lee, MD, chaired the EPC. She and the committee worked to create a series of ethics workshops and panels in the first two years of the curriculum. In the clinical years, the EPC worked toward creating a series of mandatory ethics “rounds” each month. Each clinical round would be geared towards a specific topic:

1. Medical Team Relationships/Roles
2. Confidentiality
3. End of Life/hospice care
4. Euthanasia/withholding treatment
5. Medical Errors
6. Impaired MD
7. Consent/Competency
8. Culture, Biomedicine, and Alternative Healing Modalities
9. Concierge Medicine
10. Religion/Spirituality
11. Allocation of resources (clinical, societal)
12. The Reflective Practitioner
   (Tufts Archives)

The main challenge to this plan was maintaining consistency in teaching between hospital affiliates given the spectrum of disciplines and hospital settings. Students in the third year of medical school cycle through a series of six, 6–8 week clerkships in different disciplines – surgery, obstetrics/gynecology, pediatrics, psychiatry, medicine, and family medicine – at a variety of different settings, such as:

- Baystate Medical Center in Springfield, MA
- Caritas St. Elizabeth’s Medical Center in Boston, MA
- Faulkner Hospital in Boston, MA
- Lahey Clinic in Burlington, MA
- Newton–Wellesley Hospital in Newton, MA
- Tufts Medical Center in Boston, MA
- Maine Medical Center (after 2008) in Portland, ME

Therefore, a pediatrics ethics round at Lahey Clinic, which would be expected to have a suburban and affluent population, would have been approached in a vastly different manner than a psychiatry ethics round at Tufts Medical Center in Boston, with its large minority population.

One affiliate, Baystate Medical Center, was keen on advancing the programmatic goals of the EMC and offered to be a pilot site for other
hospitals. Students were excited about the rounds, and faculty noted that students truly appreciated a safe environment to talk about complex dilemmas. The positive results of the Baystate ethics rounds inspired several physicians on the EPC, as well as one ordained minister on staff at Tufts, to create on-line ethics cases, modules, as well as small group discussion sessions and Standardized Patient exercises to expand opportunities for students to practice.

Of these methods, using computer technology for teaching and giving feedback on ethical concerns proved to be a contentious topic among the committee members. An excerpt from the minutes of a 2004 meeting describes the following discussion (names have been fictionalized):

- Dr. Jones, of TMC, observed the generational differences between current students and the faculty with regard to internet-based teaching and learning. Communicating on-line may allow students to speak more easily about controversial subjects. Students have a comfort level with the “virtual” classroom.
- Father O’Leary was wary of relying too much on a computer interface for the ethics curriculum.
- Dr. Kelly raised the topic of ethics blogs, currently used at Baystate. Dr. Smith, of TMC, asked if they are anonymous. Dr. Kelly replied that they are not, but that blogs, along with small groups, allow students to become comfortable with the issues.
- Dr. Bean, of Baystate, commented that writing about a subject on-line (narrative medicine) gives students the opportunity to think about their clinical experiences, and that is really the goal.

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14 The clinical ethics program at Baystate Medical Center, with its enthusiastic faculty and leadership, continues to be a model for all other TUSM clerkships.
• Dr. Lo emphasized the fact that on-line tools are, first and foremost, tools. They allow students to bring difficult topics forward, but there must be a face-to-face context as well. (Tufts Archives)

Students would, the committee concluded, benefit from both on-line and off-line ethical discussions, and virtual formats should never replace in-person meetings.

The EPC wrapped up its work in December of 2005 with a broad discussion about ethics education and its objectives. They recognized the similarities between “ethics” and “professionalism” as well as the overlap with training in “communication skills,” all of which were deemed important in the curriculum. They also acknowledged that many of their plans (such as fourth-year ethics rounds) could not be realized due to lack of faculty involvement.

While the EPC never mentioned creating separate learning objectives for professionalism, that was a topic considered when a new dean of the Office of Educational Affairs, Scott Epstein, replaced Lee in 2007. He subsequently transformed the pre-clinical coursework in ethics to a distinct course called “Ethics & Professionalism,” launched in 2009.

At TUSM, students would be formally assessed on their professionalism in their applicable pre-clinical coursework, in small group narrative feedback from faculty, and in some exercises with peers.
Additionally, a wide-ranging question about professionalism was added to the third-year clerkship evaluation (below, and in Appendix X).

**Professionalism:**
Dresses appropriately; punctual; works collaboratively with others; interacts respectfully with patients/families; uses proper hygiene practices; understands informed consent; understands advanced directives and the concept of ‘patient autonomy’ in tests and treatments.

- Below Expectations
- Meets Expectations
- Exceeds Expectations
- Exceptional (well beyond expectations)
- Unable to Evaluate

This was one question out of 21 on the evaluation form (other areas included medical knowledge, clinical skills, and team-based practice). This information was then fed into an overall grade of Honors, High Pass, Pass, Low Pass and Fail. For the first time students were formally evaluated on the attribute of professionalism at TUSM; and, it is clear from this question, that the measure of professionalism included a variety of expectations, from basic conduct (punctuality) to specific knowledge (advanced directives).

*Standardized Patients*

TUSM also offered students an opportunity to receive feedback from Standardized Patients (SPs) – actor/patients – as well as faculty and peers in one educational exercise called the Interclerkship. The Interclerkship took place twice each year for a half of a day. On this day,
students in their third-year of medical school would leave their clerkship site in order to return to the medical school to participate in a small-group exercise in which SPs, who portrayed cases such as back pain or headache, presented themselves to students. In these exercises, students were in the role of physician – and therefore expected to embody professionalism. The exercises took place in mock-clinic rooms with several other students and one or two faculty preceptors present. During the timed SP-student encounters, students would use their new skills and demonstrate them to the group. After their encounter, students received feedback from SPs and potentially everyone else in the group. Interclerkships were, and remain, one of the few opportunities students have had to receive direct feedback on their clinical performances (including their professionalism), particularly in a non-graded (i.e., low-stakes) setting.

Another opportunity for students to receive feedback from SPs, albeit indirectly, was via the OSCE (Objective Structured Clinical Examinations), an exam that took place at the end of the third year. Unlike the Interclerkship, the OSCE was high-stakes, graded by SPs using validated checklists to assess students’ performances on history taking, interpersonal skills, and the physical examination. In the early 2000s, when the OSCE became a standardized test for students between third and forth year, TUSM students were expected to travel to Brown
University to take the exam at their OSCE site in Providence, RI. However, in 2008, TUSM opened a new Clinical Skills and Simulation Center (CSSC) on the Boston campus and, at the same time, started its own OSCE program that would take place at the CSSC. This enabled TUSM to design and control the exam. SPs who rated students in the OSCE did not necessarily comment on students’ professionalism specifically; however, they would be asked to give feedback on communication and other associated behaviors (e.g., “foaming in,” or washing hands when entering the clinic room), and these would serve as proxies for demonstrations of professionalism.

Faculty, SPs, and peer assessments were not the only way student professionalism would be considered at TUSM. Administrators, too, were on the look out for students who spoke or behaved “inappropriately” or who were otherwise unable to progress in medical school in the expected manner. The deans in the Office of Student Affairs monitored perceived lapses of professionalism carefully. A monthly Ethics and Promotions Committee meeting provided a formal means for reviewing students deemed unprofessional, usually with the student present in front of the committee to respond to allegations.

**Educational Strategic Plan & Key Themes**

TUSM engaged in an educational strategic plan (ESP) from 2007–2008, launching a revised curriculum in 2009. The major changes in the
curriculum were: student involvement with patients starting in the first year; reduced content in the basic sciences in the first and second year; and, a shortened second year (ending in March instead of May) so that students could start third-year clinical rotations earlier. The ESP also included a committee focused on the creation of “key themes” in the four-year curriculum that would underlie the revised curriculum of TUSM.

The Key Themes Working Group’s final report in 2008 states that the sources of potential themes “…included prior TUSM curricular goals and objectives, guidelines from oversight bodies such as the LCME and ACGME, the executive summary document of the National Academy of Sciences Improving Medical Education: Enhancing the Behavioral and Social Science Content of Medical School Curricula, committee members input from their own experiences and expertise, and guidance from the OEA…” (TUSM Archives). The key themes that were identified by the committee were:

1) Professionalism and Ethics  
2) Communication Skills  
3) Population Medicine and Health Care Systems  
4) Evidence Based Medicine/Information Mastery  
5) Community Service and Citizenship  
6) Culturally Competent Care  
7) Compassionate Care  
8) Physician Well Being  
9) Life Cycles

These themes were charted in a template (Appendix X) and included sub-themes. It is apparent that there is overlap between
themes and subthemes, for example, “Reflection and Growth” falls under Professionalism and Ethics, Compassionate Care, and Physician Well-Being. This categorization followed trends in how the LCME came to refine the notion of professionalism. By 2013, there were additional LCME mandates that differentiated some areas previously under the general “professionalism” rubric.

Detailed in the chart below, recent LCME mandates require medical schools to demonstrate and document effort in these new areas. The first three – Professionalism and Ethics, Community Service and Citizenship, and Physician Well-Being – were defined as TUSM key themes. The last two – Interprofessionalism and The Learning Environment – were mandates that TUSM would address separately.

<table>
<thead>
<tr>
<th>Topic</th>
<th>LCME Standard (2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism and Ethics</td>
<td>ED-23. A medical education program must include instruction in medical ethics and human values and require its medical students to exhibit scrupulous ethical principles in caring for patients and in relating to patients' families and to others involved in patient care.</td>
</tr>
<tr>
<td>Community Service and Citizenship</td>
<td>IS-14-A. An institution that offers a medical education program should make available sufficient opportunities for medical students to participate in service-learning activities and should encourage and support medical student participation.</td>
</tr>
</tbody>
</table>

Physician Well-Being | MS-26. A medical education program must have an effective system of personal counseling for its medical students that includes programs to promote the well-being of medical students and facilitate their adjustment to the physical and emotional demands of medical education.

Interprofessionalism | ED-19-A. The core curriculum of a medical education program must prepare medical students to function collaboratively on health care teams that include health professionals from other disciplines as they provide coordinated services to patients. These curricular experiences include practitioners and/or students from other health professions.

The Learning Environment | MS-31-A: A medical education program must ensure that its learning environment promotes the development of explicit and appropriate professional attributes in its medical students (i.e., attitudes, behaviors, and identity).

At the start of the ESP, the Professionalism and Ethics theme was considered partially developed in the TUSM curriculum: Ethics & Professionalism was a pre-clinical course, and, in the clinical years students were required to attend ethics rounds. Even though five years earlier the main aim of the Ethics Planning Committee, to create a comprehensive four-year curriculum, was unmet, Professionalism and Ethics was considered a model for all other key themes. Once the new curriculum was implemented in 2009, new or underdeveloped themes were given priority over Professionalism and Ethics, in particular Community Service and Citizenship and Physician Well-Being (both of which were viewed as related to Professionalism).
Professionalism and Ethics

It is notable that the key theme placed the word “Professionalism” before the word “Ethics”, as if to suggest that there would be a shift in focus from previous curricular efforts pertaining to this content. However, when the new curriculum was implemented, the fundamental course that covered these topics was called, Ethics & Professionalism. The stated course competencies in the syllabus are further evidence that, at least for the purpose of this first-year course, an emphasis would remain on ethics, expanding on the types of issues that had been proposed for an ethics curriculum since the 1980s (Appendix XI). Furthermore, it is also clear from the competencies of this course that “professionalism” continued to be an ambiguous term, sharing many common characteristics with ethics content. For example, anticipated competencies are that students will be able to “articulate their own moral assumptions about the goals of medicine and the professional obligations they are expected to fulfill towards their patients, their profession and society” and to “identify circumstances in which professional socialization may conflict with ethical principles and propose a justifiable course of action to address them”.

The Professionalism and Ethics theme was further strengthened from 2012 to 2014 by Norman Stearns, MD, who gave TUSM a gift to establish $5000 annual grants to “promote and support teaching and
learning innovations developed by our faculty that will enhance student and resident education in Ethics and Professionalism” (TUSM-Stearns).

In the past year, two other changes have been made to highlight this theme in the curriculum: a series of popular ethics sessions, organized by one Cell Biology professor, have become mandatory (rather than optional) for all first-year students, and Ethics and Professionalism was established as a graded requirement during the second-year (previously, it was ungraded). These changes were led by the OEA dean, Scott Epstein, with approval by the TUSM Curriculum Committee. From conversations with Epstein, I know that his decision to emphasize this content stemmed from his belief that students, generally speaking, need more guidance when it came to professionalism (S. Epstein, personal communication).

Community Service and Citizenship

Medical schools vary in the emphasis they place on a social mission; many schools, like TUSM, have specific programs for students who are interested in healthcare advocacy and working with underserved populations (Mullan, et al., 2010). By most definitions of professionalism, civic duty and a commitment to social justice are expected of all students. With IS-14-A, the LCME extracted and elaborated this aspect of professionalism, creating a new standard.
The Community Service Learning (CSL) program has been a part of the TUSM curriculum since 2004, but the requirement was minimal—just twenty-eight hours of service over an eight-week period in the first year. Many students fulfilled this requirement by volunteering at Sharewood, a student-run clinic that has been run out of church in Malden, MA since 1997. The ESP had a much more ambitious plan for CSL—to make CSL a fifty-hour requirement that could be completed at any time in the student’s four years at TUSM. Moreover, students were given the freedom to design their projects, rather than choosing from a menu of TUSM-approved service learning opportunities. As a result, some students embarked on elaborate projects. One student, for example, created a role for himself in a neighboring hospital, functioning as a liaison between patients and physicians in the emergency room and explaining medical treatments and protocols to the patients and their families. Another student started an after-school fitness program at a Boston high school. Other students, however, became overwhelmed by the flexibility of the CSL guidelines and avoided fulfilling the requirement. Some resented the imposition of community service altogether, equating it with the volunteer work they completed as undergraduates.
Physician Well-Being

In recent years, college student mental illness has been prominently reported in the media, and medical schools are now admitting more students with psychological problems. Studies demonstrate that depression, substance abuse, and suicide levels among medical students and physicians are at least twice as high as national averages (Dyrbye, Thomas, Shanafelt, 2006). By 2009, many U.S. medical schools had implemented wellness programs to support student socialization into their new profession. Such programs served as the inspiration for the Physician Well-Being key theme at TUSM. Moreover, the LCME MS-26 mandated that medical schools include programs to promote the well-being for all students. TUSM did this by first establishing a committee which in turn focused on two areas: 1) how and when students have access to advisors (both academic and non-academic), and 2) developing an optional course called “Practical Approaches to Wellness” (PAWs). PAWs is offered in student’s first year of school, and includes sessions on sleep hygiene, nutrition, meditation, and study skills. Like Ethics & Professionalism, the PAWs series is

intended as a launching pad for students, establishing positive habits, encouraging “work-life balance”, and inoculating doctors-to-be against burnout (Raja & Stein, 2014). The Physician Well-Being committee looks for opportunities to emphasize the idea that a healthier physician is a stronger physician and will be a better role model for patients.

*Medical Interviewing and the Doctor-Patient Relationship*

As a result of the Educational Strategic Planning endeavor, another course called *Medical Interviewing and the Doctor Patient Relationship* (referred to as “Interviewing”) underwent a significant transformation. The *Interviewing* course begins in the second week of medical school and is considered a foundational course for students to learn how to interact with patients and ask appropriate questions. Previously a lecture-based course, *Interviewing* became a practice-based course after the ESP. Every week for several months, students travel off-site to a community center for the elderly or to hospital sites in order to rehearse their new interviewing skills in small groups. Additionally, students have exercises with Standardized Patients to gain more experience.

These sessions are observed by faculty or by fourth-year student mentors, so they present an ideal opportunity for students to display their professionalism and receive feedback. At this novice level, student
professionalism is assessed by observing, for example dress, tone of
voice, and overall demeanor with patients. This course, unlike the
theoretical Ethics & Professionalism course, may give faculty a sense of
which students are having difficulty in their social interactions and who
may need further support before entering the clinical years.

The value of “practicing” virtue in clinical contexts is reflected in
the text of first-year TUSM Ethics & Professionalism syllabus:

Ethics training, like its clinical counterpart, has its greatest impact
when it occurs in the context of real decisions made on behalf of
real patients. Most of your ethics and professionalism education
will take place inadvertently while working alongside your clinical
mentors. When you reach this stage in your training, it is crucially
important you come prepared with the moral courage to question
what you witness, and an intellectual framework to grapple with its
ethical implications (TUSM, 2015).

Interprofessionalism

Another new mandate from the LCME (ED-19-A) pertains to
training students to work with clinical teams composed of other health
professions, such as nurses, physician assistants and technicians. As
discussed in a 2011 publication by American Association of Medical
Colleges (AAMC) called “Core Competencies for Interprofessional
Collaborative Practice,” the “old” notion of medical professionalism
ten
d to be more protective of the medical profession, fortifying the
borders of the physician’s scope of practice (AAMC, 2011, p. 17). The
newer concept of professionalism encourages collaboration with other
providers and, critically, ensuring public trust with a cooperative healthcare team. TUSM and other medical schools are now working to offer students opportunities to coordinate care with other providers before entering the clinical years, when students are thrust into teams (Blue, Zoller, Stratton, Elam, & Gilbert, 2010).

By the third year of training, students are still developing their individual professional identities while, at the same time, learning where they fit in the clinical staff hierarchy. Some evidence suggests that in order to support development of an interprofessional identity, student should work in teams at an early stage to learn their own work vis-à-vis the work of other professions (Adams, Hean, Sturgis, and Clark, 2006; Coster, Normal, Murrells, Kitchen, Meeraeau, Sooboodoo, d’Avray, 2008). Students who displayed more solidified pre-clinical professional identities had an easier time adjusting to the challenges of interprofessional groups, where there may be unclear roles and responsibilities.

Working in teams may also present new ethical and moral dilemmas for students. Often students will do whatever is expected to “get along” even if they doubt a team’s decision (Weaver, Peters, Koch, & Wilson, 2009, p. 514). After a healthcare team examines a patient, a student may question a diagnosis, but, as it was reported in one paper, the student “realized [she] must accept and carry out the consensus treatment plan of the team,” otherwise she would be considered a “poor
team player” and receive a poor grade (Cohen, James, Youakim, & Balaicuis, 2009, p. 49). Given the often rigid hierarchy in clinical settings, it would be difficult – if not “unprofessional” – for students to speak up with possible contrary opinions or even with probing questions. Therefore, students may face risky decisions in their education and in the care of patients—confronting the authority of the supervisor, questioning a team decision, or ignoring the possibility of treatment error. This is yet another example of the hidden curriculum – the “lessons, especially about norms and values, that are embedded in a school’s organizational structure and culture but not explicitly intended to be taught, which may be supportive of or contrary to the formal curriculum” – and also speaks to the challenges inherent in clinical learning environments (Hafferty, Gaufberg, and O’Donnell, 2015, p. 132).

**Monitoring the Learning Environment**

Today the deleterious effects of the hidden curriculum in medical education have been widely acknowledged by medical educators. The LCME mandated (MS-31-A) that the medical school learning environment promote “the development of explicit and appropriate professional attributes in its medical students (i.e., attitudes, behaviors, and identity).” Like interprofessionalism, this mandate interpreted professionalism less in terms of individual students’ inherent attributes and more in terms of the social and institutional contexts in which
students performed. Towards that end, in 2010 TUSM joined 27 other schools participating in an AMA-sponsored Learning Environment Study, described by the AMA as “a longitudinal prospective study of the learning environment in medical schools from across the United States and Canada [that seeks] to gauge the relationship and interaction between the educational climate of medical schools and the development of professional attributes of students” (AMA, 2015).

The Learning Environment Study uses several established measures of student attitudes, personalities, and perceptions, such as the Jefferson Scale of Physician Empathy, the Tolerance of Ambiguity Scale, and the Ways of Coping Scale. Responses are then correlated with questions specific to the learning environment (see Appendix XII for a sample of these questions).

Scrutiny of the learning environment for the purposes of this survey and by the LCME has meant that institutions have had to closely examine their own practices. TUSM began conducting its own internal survey after the AMA survey was completed last year. Students are asked to complete the comprehensive questionnaire at the beginning as well as at end of each year in medical school. Results of these surveys are yet to be compiled and analyzed.

Because the medical school has little oversight and influence over clinical sites, the data from the survey pertaining to the learning
environment at specific hospitals – e.g., Baystate Medical Center, Lahey Clinic, Tufts Medical Center – will be of particular interest to TUSM administrators. If, for example, the survey shows that there is wide agreement that “faculty are reserved and distant with students” and students “hesitate to express their opinions and ideas to faculty” at a particular hospital site, this information could be used in at least two ways. First, it may give administrators perspective about faculty-student relations at the site and reported concerns about the professionalism of particular students; and secondly, it may justify faculty development and other efforts to improve overall organizational quality and consistency.

**Conclusion – Chapter Five**

During the first decade of the twenty-first century, the teaching and assessment of professionalism became a reality at United States medical schools. Tufts University School of Medicine had added a five-session course in medical ethics by 1986; this was taught for approximately ten years before the content was integrated into other courses, such as the *Doctor-Patient-Society* course. Other ethics-related efforts – seminars, workshops and grant-funded curricular projects – were offered sporadically throughout the 1990s and 2000s, and relied on the essential leadership of several dedicated individuals. Without a systemic approach to a medical ethics program, however, opportunities were unpredictable and remained peripheral to the scientifically-based...
In the mid-2000s, an attempt was made to form a longitudinal ethics program at TUSM. In 2009, a new curriculum was implemented and with it came an attempt to bolster specific professionalism content. One result was that professionalism objectives were bundled together with medical ethics coursework in the first- and second-year, and the course was renamed *Ethics & Professionalism*. Perhaps the most significant change was that an additional question pertaining to professionalism was added to the evaluations of students completed by clerkship directors after each rotation in the third- and fourth-years. Also, administrators began to view other new curricular requirements as avenues for students to display their professionalism, such as with Community Service Learning, a program that focuses attention on the often-neglected social advocacy aspect of professionalism.
CHAPTER SIX: Student Experiences of Professionalism Formation

From the student’s perspective, becoming a part of the medical field is a long and sometimes confusing educational process. Students often look for guidance from experienced physicians, who may be grappling with their own professionalism or with understanding the professionalism that they witness in students and in peers. Furthermore, factors outside of the medicine – such as the rapid growth of digital technology – may influence professionalism and interpretations of it.

Professional Socialization

In addition to becoming more objective and detached throughout training, students develop awareness that their actions are the subject of scrutiny by faculty supervisors on the wards. While direct feedback on performance is expected and essential in medical school, it also may trigger psychological defensiveness in some students. One study noted that students on clerkship rotations tended to operate with a heightened sense of anxiety due to the fear of public humiliation during routine “Socratic questionings” by supervisors in front of patients and peers (Pitkala and Mantyranta, 2003). While faculty perceived this method as a routine part of student training, if done insensitively it was thought to have a detrimental impact on students, who would then avoid the faculty
and potentially useful feedback.

A further challenge to students’ professional socialization was their discovery that compromises were necessary – that is, that clinical events did not always play out as they learned in lectures or case studies. Yet, students at this stage did not understand when or if specific compromises should be made. For example, students may have learned that there is one optimal drug for a particular patient, but then observe a supervising physician administering a drug considered less effective. The supervisor may have justified this decision by explaining that the hospital pharmacy had a surplus on the shelves. Coming to terms with the apparent contradiction between patient care and clinical decision-making could be a cause for confusion and disillusionment if left unexplained, potentially confounding positive professional identity formation (Stern and Papadakis, 2006).

**Student Skepticism**

In 2003, the American Association of Medical Colleges (AAMC) commissioned a report called *A Flag in the Wind: Educating for Professionalism in Medicine*, which attempted to elucidate the paradox of promoting medicine’s professional values in the context of the hidden curriculum. The author of the report illustrated the perceived continuum between professional ideals and actual experiences in the following:
The Struggle to Stay Centered on Values in the Profession of Medicine (Inui, 2003, p. 21)

<table>
<thead>
<tr>
<th>Ideal</th>
<th>Foundational Value</th>
<th>Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence-based</td>
<td>Truth/Science</td>
<td>Uncertainty</td>
</tr>
<tr>
<td>Caring, healing</td>
<td>Curing</td>
<td>Risk-harming</td>
</tr>
<tr>
<td>Open-mind/heart</td>
<td>Accepting, Empathetic</td>
<td>Arrogant, unmoved</td>
</tr>
<tr>
<td>Error-free</td>
<td>Right action</td>
<td>Mistake prone</td>
</tr>
<tr>
<td>Analytic</td>
<td>Reflective</td>
<td>Hassled, knee-jerk</td>
</tr>
<tr>
<td>Self-sacrificing</td>
<td>Altruistic</td>
<td>Avaricious</td>
</tr>
<tr>
<td>Conflict of Interest</td>
<td>Therapeutic Alliance</td>
<td>Conflict of Interest (confluence)</td>
</tr>
</tbody>
</table>

These contradictions were obvious to students, who tended to roll their eyes at the professionalism edicts – not so much because they rejected them in principle, but because of the hypocrisy they found within the environments in which they learned. Medical educators, who ignored the implications of the incongruities between espoused professionalism and what took place in a given setting, unwittingly reinforced a kind of skepticism in students, who would view their professionalism lessons as false (Brainard & Brislen, 2007; Leo & Eagen, 2008).

Clinical settings, by their harried, business-oriented nature, limit opportunities to recognize student concerns. As a result, it is common for students to experience “moral distress,” which was defined in one study as, “negative feelings that arise when an individual believes he or she knows the morally correct response to a situation but cannot act because of the hierarchical or institutional constraints” (Lomis, Carpenter, & Miller, 2009, p. 107). Faculty and administrators who overlooked this
compounded student frustration. Some students have been compelled to speak up; and, those who have stated that while addressing issues with supervisors felt risky, reporting their experiences ultimately reduced their distress.

*Rejection of Professionalism Training*

As medical educators increasingly supported explicit professionalism training, students increasingly voiced their objections to it. Two essays authored by medical students offered insights into their peers’ reactions to professionalism education, which included “disdain, frustration and hostility” and a sense of being “persecuted” by their supervisors and the system in general (Brainard, et al., 2007, p.1010; Leo, et al., 2008, p. 508). Their criticisms focused on the overemphasis institutions placed on unprofessionalism, as well as the double-standard that existed between poorly-behaved supervisors and the students.

The manner in which professionalism was taught was also rejected. Instead of didactics, students preferred curricular elements that involved direct human interaction, and would rather that faculty and administrators just “led by example,” modeling the lessons of professionalism (Brainard et al., 2007, p. 1013). Moreover, students resented that they were being evaluated on essential qualities of their character as opposed to their potential as a doctor (apparently viewing
these as mutually exclusive). In one study, students even commented that the expectation to behave in a prescribed professional manner felt intrusive, that they were constantly judged by superiors, which effectively robbed them of their freedom (Finn, Garner & Sawdon, 2010, p. 823).

**Generational Differences Between Students and Faculty**

In the 2000s, additional research emerged suggesting that a “generation gap” existed between faculty and students. Referring primarily to the clinical workplace, Smith (2005) discussed the different approaches to practice between Veterans (born 1922–1945); Baby Boomers (born 1946–1964), Generation X (born 1964–1980), and Generation Y (born 1981–2000) (p. 440). The Baby Boomers, who were now “in charge of the medical system,” valued long work hours, following rules, and dedication to the job (Smith, 2005, p. 441). For them, medical professionalism meant absolute devotion to being a physician, inside and outside of the doctor’s office. However, the younger generation of physicians appeared to be “skeptical of ‘total commitment’ [and] may resent the personal transformation to physician,” preferring to work toward a balance of work and life-outside-of-work (Smith, 2005, p. 440). Generation Y, in particular, has had a reputation among Baby Boomers of being entitled, “lazy, unmotivated, and selfish,” a belief that has fostered resentment and disagreement about the limits of professional
practice (Eckleberry-Hunt & Tucciarone, 2011, p. 459). Given this, Eckleberry-Hunt & Tucciarone (2011) recommend that faculty clearly articulate expectations and appropriate actions, and then evaluate student professionalism *only* in terms of observable behaviors. However, behavioral assessments were found to be insufficient when estimating professional identity development (Ginsburg, Regehr, & Myopoulos, 2009).

**Assessment by Faculty**

Severe lapses of professionalism (i.e., criminal behavior or substance abuse) usually lead to the medical student's dismissal. Such egregious cases have been uncommon, perhaps 1–3% of all reported unprofessionalism problems. There have been many more students identified, however, as failing to meet professionalism expectations for much less extreme infractions, an estimated 4–15% of a medical student body (Yates & James, 2006). Although these have been comparatively benign cases, such as chronic tardiness, they have been persistent, time-consuming for faculty to manage, and difficult to remediate (Bennett, Roman, Arnold, Kay & Goldenhar, 2005; Hays, Lawson & Gray, 2011).

Furthermore, while faculty reported the rare student who displayed extreme unprofessionalism, they have typically tolerated a much broader range of indeterminate attitudes and behaviors – such as the student who seemed unusually sluggish about completing assignments or
apparently lacked self-awareness relative to other students (Bryden, Ginsburg, Kurabi, & Ahmed, 2010; Cleland, Knight, Rees Tracey & Bond, 2008).

*Interpreting Unprofessionalism*

Where would the line be drawn between professionalism and unprofessionalism? What should be a reportable offense? Some studies in the mid-2000s reported that there were three prevalent categories of unprofessionalism: irresponsibility or lack of accountability; inflexibility and inability to improve behavior; and, lack of motivation (Ainsworth & Szauter, 2006; Teherani, Hodgson, Banach & Papadakis, 2005, p. S17). In clinical situations, the degree to which lapses were considered serious was ultimately determined by the person who perceived the lapse and how the perceiver interpreted it within a given context. However, the meaning of “irresponsibility” could range from the minor concern of a student not completing a course evaluation to the more troublesome problem of a student’s failure to report information in patient charts.

Additionally, interpretations of the phenomena have been shown to vary from situation to situation, with some faculty observing that what may be considered “unprofessional” in one context could be “professional” in another (Ginsburg, Regehr, & Myopoulos, 2009). Further, some studies suggested that faculty become desensitized to
situations that are troubling to students. They often assumed that students would acclimate to clinical reality without explication. In fact, there was evidence that faculty took for granted students’ ability to make sense of clinical situations that were unclear or unusual. In interviews with faculty, researchers found that faculty had expectations of students’ tacit knowledge that did not coincide with students’ level of training or prescribed clinical role. Faculty thought students would know, “when to fudge the truth, when to step up to the plate, and when to go with their gut instinct” in tricky situations (Ginsburg, Lingard, Regehr, & Underwood, 2007, p. 945). Such ethical and formal ambiguity has led to students requesting structured guidelines about clinical decision-making. Some faculty have resisted giving such support because they believed students should learn more independently without “hand holding”.

*Failure to Fail*

Given the moral connotations of the term, “unprofessionalism” is fraught for the students in question, for the faculty, and for student affairs administrators. Faculty in particular have been reluctant to label students in this way, disinclined to document a problem without adequate evidence or conviction.

Both over and under reporting by faculty have been possible since
professionalism entered the medical school discourse, but the underreporting of lapses of professionalism has been shown to be much more prevalent (Dudek, Marks & Regehr, 2005). While usually aware when students fall outside the accepted parameters of professionalism, faculty have hesitated to give students critical feedback when lapses were seemingly minor. In one study, faculty were also reluctant to report unprofessional conduct because lapses seemed like isolated cases or because they too were guilty of the same behaviors (Ainsworth, et al., 2006). Faculty said that they were unsure of their own judgment, that they had not spent enough time with the student to adequately assess them, documenting problems was time-consuming, and that they feared stigmatizing the student with the “unprofessional” tag (Cleland, et al., 2008). Moreover, because there may have been few institutional structures in place to manage lapses or to remediate such students, faculty have had little incentive to take action (Cleland, Arnold, & Chesser, 2005). It would seem that faculty have been ambivalent about their role as arbiter of professionalism, sensitive to inherent the

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17 Important to note is that studies of medical students have aggregated overall clinical performance behaviors, lumping measures of professionalism with medical knowledge. Therefore, the actual figures pertaining to such concerns were ultimately extrapolated from various findings (Frellsen, et al., 2008; Guerrasio, et al., 2014). Additionally, because some studies have used different terms for students who demonstrated poor professionalism – e.g., “struggling,” “learner in difficulty,” and “problem learner” – it was not immediately apparent that, in fact, these studies referred to the same students who were elsewhere described as “unprofessional” (e.g., Frellsen et al., 2008; Steinert, 2013; Mavis, Wagner, Henry, Carravallah, Gold, Mauer, Mohmand, Osuch, Roskos, Saxe, Sousa, & Prins, 2013). The conflation of these terms underscores the difficulty of merely naming, describing and categorizing the problem.
difficulties of the learning environment (Dudek, et. al., 2005).

**The Conundrum of Professionalism Remediation**

While it may be a relatively straightforward project to correct a student who uses an otoscope incorrectly, correcting students who are uncommunicative or lack self-awareness may require a psychological intervention. There are no comprehensive remediation programs to date for unprofessionalism; medical schools typically refer students to counseling and hope that this will be enough to address the problems identified by faculty and administrators (Guerrasio, Garrity, & Aaraard, 2014).

Only a very small percentage of medical students – up to about 3% – will be judged as egregiously unprofessional, displaying aberrant behaviors that are criminal or psychopathological, such as the crimes presumed to have been committed in 2009 by Boston University second-year medical student, Philip Markoff (also known as the “Craigslist Killer”). But, what about the students who display questionable judgment or actions? The students who naively overstep professional boundaries or who develop unusually close relationships with patients or supervisors? Or, the students who fall asleep in chairs during night call duty? While such students, up to 15% of the medical student body, may be borderline unprofessional, they are generally expected to outgrow their problems as they mature and become socialized into their
communities of practice (Mann, 2010).

Some of these students, however, will have persistent troubles that intensify over the course of training (Guerrasio, et al., 2014). Because their problems are not so obvious or easy to interpret, these students may fly under the radar, never receiving feedback from supervisors; and, it is likely that they will advance in their training without any intervention (Hauer, Cicconie, Henzel, Katsufrankis, Miller, Norcross, Papadakis, & Irby, 2009). By the time such students graduate and go on to residency programs, their problems may become clearer – but, at the same time, they are more difficult to address due to the practical realities of the resident’s position and the limited resources of many hospitals (Dupras, Edson, Halvorsen, Hopkins, & McDonald, 2012).

Identifying unprofessionalism and intervening at an early stage of training, therefore, is a goal for medical schools. But, as discussed, faculty may be unlikely to identify students who are borderline unprofessional. Additionally, faculty realize that if students are viewed as another “patient” to “diagnose” and treat – which has been explicitly recommended in the literature (Evans, Alstead & Brown, 2010) – professional roles will become blurred. Further, such a diagnosis associates the problems observed in students with known illnesses that require and respond to medical intervention. While it is possible that extreme unprofessionalism, as in the case of substance abuse, is
appropriately treated in this way, most students who fall into the unprofessional category do not have “conditions” that lend themselves necessarily to a convenient prescription (Teherani, Hodgson, Banach, & Papadakis; 2005).

Additionally, factors outside of the control of medical schools complicate student professional development in unpredictable ways – below several are discussed.

**Factors Affecting the Development of Student Professionalism Today**

*Technological Tools*

The practice of medicine has been transformed fundamentally by technological tools and digital media. MRI scans allow patients to forgo exploratory surgery, and electronic medical records track patient progress and also ease the coordination of care with numerous providers. Diagnosing and treating many problems virtually (via “telemedicine”) is becoming more commonplace, saving time and money, and allowing patients living in rural areas access to expert care just by logging into a computer portal.

The volume of scientific and medical information available today is overwhelming, so teaching students how to manage evidenced-based data has become an important aspect of medical training. Today
physicians require current, valid information to guide decision-making with patients (Worster & Haynes, 2012). Applications used on WiFi-enabled hand-held devices, such as smartphones or iPads, are now another tool in the doctor’s black bag (or, they supplant the black bag altogether). With data literally at their fingertips, clinicians may work with students to confirm or deny a suspected diagnosis quickly.

While those in the field once reached for the Physician’s Desk Reference, today they access a resource called UpToDate, a Wikipedia-like on-line textbook for physicians. According to a description of the application on the UpToDate website, “The knowledge contained in UpToDate is evidence-based and continuously updated, but it is not merely an aggregation and report of the latest research; UpToDate presents a comprehensive synthesis of the evidence, followed by recommendations that can be acted on at the point of care” (UpToDate, 2015). The significance of such applications cannot be overstated in their potential to improve diagnostic accuracy and aid in practice efficiency. However, the danger of such applications is that they may give students false confidence, a sense of certainty that would typically follow years of experience.

UpToDate and other medical applications have no doubt increased clinical efficiency; but, the acceleration of clinical work has come at the
cost of the time doctors and patients spend together during consults.\textsuperscript{18} A 2013 study found residents spend less than eight minutes with actual patients while they spend almost four times as long with computers, studying the patient’s electronic record (Block, Habicht, Wu, Desai, Wang, Silva Niessen, Olivers, & Feldman, 2013). With such limited time, doctors may not ask patients open-ended questions or even sit down to take a medical history. Some students will note the irony of training that espouses compassionate and patient-centered care as inherent to professionalism while the context of a medical system undermines such efforts. For other students, this fact may go unnoticed—they are simply too busy puzzling through problems and procedures.

Students today are likely familiar and adept with remote communication (e.g., email, texting, and messaging) before they start their clinical training, so they could be as comfortable or even more at ease relating to computers as they are interacting with humans – and all the social, cultural and linguistic nuances that are implied by direct interaction.

In \textit{Reclaiming Conversation: The Power of Talk in the Digital Age}, Sherry Turkle\textsuperscript{19} summarizes data drawn from studies of students in their

\textsuperscript{18} At a doctor’s appointment last month with my neurologist, who double-books all of his appointments (bouncing back and forth between clinic rooms), lamented that he had only “eleven minutes” to give to me.

\textsuperscript{19} Sherry Turkle is Abby Rockefeller Mauzé Professor of the Social Studies of Science and Technology in the Program in Science, Technology, and Society at Massachusetts
twenties showing a decline in empathy with the now ubiquitous use of smartphones. Turkle hypothesizes that the increased use of smartphones, with their constant flow of distracting information, is correlated with a waning of conversational skills—and, with that breakdown comes a decline of empathy. Empathy, many medical educators have observed, is an “essential feature” of medical professionalism (Crandall & Marion, 2009, p. 1174).

Of course, empathy and advanced technology need not be antithetical. Some technologies are meant to foster and reinforce empathic qualities in medical school. Special suits used by medical students at the University of Lublin in Poland, for example, “place strain on ... the muscles and the bones of their spine, restricting mobility, [while] goggles ... reduce vision to 20 per cent” in order to give students “the chance to experience first-hand how it can feel to be an ageing patient” (Reuters, 2015).

At TUSM’s Clinical Skills and Simulation Center (CSSC) mannequins have been used with increasing frequency and deliberate efforts are made to humanize and animate them. The CSSC mock surgical suite is adjacent to a monitor room separated by a two-way mirror. Students practice their skills in the surgical suite while faculty

observe them from the monitor room, speaking into a microphone that is broadcast into the surgical suite, perhaps correcting an error, offering guidance, or asking a question. Another use of this audio system is to give a perceptible voice to the patient/mannequin on the operating table, such as loud moans and groans to indicate pain. Students’ reactions to the patient, empathetic or not, may then give faculty useful information for assessing their professionalism.

Social Media

How technology is employed, not the technology itself, is critical when considering its effect on student professionalism. Communication technologies, and social media in particular, have become particular concerns for educators. Social media encourages personal expression writ large, and public messages may not necessarily align with professional standards (Jain, Petty, Jaber, Tackett, Purkiss, Fitzgerald, & White, 2014). Students have been known to discuss patient cases on Facebook and post sensitive material on YouTube without regard to privacy concerns (Farnan, Paro, Higa, Edelson, & Agora, 2008). Medical schools are creating policies to address this, drawing the line at posts referring to confidential patient information; however, students may still post content that raise eyebrows, such as pictures at parties and in bars. Savvy students will get around this problem by creating separate,
professional “selves” or profiles; indeed, this is one of several recommendations to students in an article on the subject (i.e., Mostaghimi & Crotty, B, 2011, p. 561). It is also possible for institutions to employ educational interventions to cultivate self-awareness in students around social media and to, more specifically, encourage the use of privacy settings (Walton & White, 2015).

On-line Learning

The use of digital technologies for the advancement of ethics and professionalism has been met with ambivalence by faculty in the past. Members of the TUSM Ethics Committee did not want students using only on-line cases because in-person discussions of ethical ambiguities were thought to be more effective than lessons via a digital mode. Indeed, it is difficult to ascertain students’ development and embodiment of professionalism if the faculty do not interact with students directly.

This is a current dilemma at TUSM, as attendance in non-mandatory lectures in the first two years of school has dropped dramatically.

Opting to spend their time with recorded lectures and notes, students study off-campus. More so than in past years, students live with family further away from Boston, so commuting into the city is minimized in order to save time and expense. To date, low attendance and studying with recorded lectures is not correlated with poor
performance on exams; however, faculty and administrators are concerned that interpersonal and communication skills suffer in isolated students, and that they will be unprepared for settings in which they must react skillfully and sensitively in medical teams and with patients.

In recent years, TUSM has attempted to address this concern by increasing the number of mandatory small groups, a change that is thought to benefit students both socially and pedagogically (Steinert, 2004).

Technology has transformed the medical student experience and patient care, bringing a variety of new and convenient strategies for practicing, learning and communicating. While digital tablets and smartphones seem to be an extension of the human body today, their potential impact on professional development, specifically to what extent it supports care or distracts from it, is worth further consideration. A student who displays professionalism today is expected to approach technological tools – whether in the form of Twitter or mannequins – critically and responsibly, which means that they must gain an awareness of their professional role, even when the context is “virtual”.

**U.S. Demographics & Medical Student Bodies**

The ethnic composition of the Unites States, and attitudes towards ethnic and minority populations, are vastly different than they were
when Flexner wrote his report about medical education in 1910. In 2014, minorities made up 35–40% of the general population, according to U.S. government census data, and were about 10–15% of all American medical students (Mullan, Chen, Petterson, Kolsky, & Spagnola, 2010; United States Census Bureau, 2015). Medical schools today aggressively compete with each other for African-American students rather than barring them entry.

Diversity versus Standardization

Despite demographic shifts and the promotion of diversity in education, interpretations of professionalism still tend toward universalism, and trends in medical school’s curricular design toward standardization. A cross-cultural survey of 500 physicians in the United Kingdom, Europe, North American and Asia analyzed the universality of the concept of medical professionalism (Chandratilake, McAleer, & Gibson, 2012). The researchers found a number of similarities across cultural notions of professionalism. In fact, twenty-nine core attributes were identified which overlap considerably with the professional characteristics of doctors as defined by professional and governing bodies around the world ... [They are] the presence of reflective practice, recognition of limitations, openness to constructive criticism and motivation for professional development ... (Chandratilake et al., 2012, p. 262).
There were also cultural dissimilarities that the authors hypothesized resulted from how healthcare is publically or politically regarded, i.e., as a universal right rather than a privilege. Relevant to this finding is a cross-cultural literature review in which Hafferty & Castellani (2009) observed differences in the professionalism publications in the United States and in Europe. They reported that the former literature was “more individualistically framed, altruism-centered and reflectively focused,” mirroring American values, while the latter is more “public-centric, social policy-oriented,” which coincides with Europe’s acceptance of universal coverage in particular and socialized medicine in general (Hafferty, et al., 2009, p. 827).

Another literature review concluded that there are, in fact, competing discourses of professionalism that students must negotiate in the process of constructing their identity as physicians: one promoting diversity and the other promoting standardization (Frost and Regehr, 2013, p. 1). The diversity discourse emphasizes “respect for and the value of individual students and their unique life experiences, educational backgrounds, and identities (such as gender, race, religion, ethnicity, and socioeconomic status)” (Frost et al., 2013, p. 2). Such a discourse seems to collide with standardization, which underscores the “importance of uniformity, consistency, and the commonalities both amongst trainees and physicians and across the profession” (Frost et al.,
Inherent in the standardization discourse, the authors write, “is a drive to concretely define what is core or essential to being a physician—what every physician should be, what each should be able to do, and what knowledge and skills each should master” (p. 2). Over the course of training, students may experience conflicts between self-expression and conforming to social and institutional expectations. While some students may learn easily to accommodate both discourses in their professional identity, others have difficulty ascertaining what is appropriate in a given situation.

The tension between diversity and standardization in medical professionalism parallels the American democratic values of liberty and equality. Often positioned as opposing forces, they need not be contradictory but instead viewed as in a constant, dynamic balance. Medical students may find that over time they do in fact have the liberty to express their individual qualities while, simultaneously, adhering to the essential and equalizing expectations of the profession.

Physician role models – particularly those who have themselves experienced the tensions between diversity and standardization – could guide young medical students. Yet, today there is more ethnic homogeneity among senior physicians (who serve as role models) than there is among medical student bodies. That is, most role models for all students are Caucasian, and they occupy higher status positions at
teaching hospitals than their minority counterparts (Lemmp, 2009). As a result, African-American and Latino medical students find few similar role models to emulate throughout their training (Goldie, 2007). Women, on the other hand, have become much more visible in medicine, particularly since the 1970s, today making up fifty percent or more of medical school classes in most western countries (Riska, 2009). Although Howard Becker’s 1958 sociological study of medical student culture, Boys in White, remains relevant in its description of institutional hierarchy, it is obsolete when it comes to the very subjects of the research.

**Feminization of Medicine**

The increasing presence and influence of women in medicine – also known as the “feminization of medicine” – has raised questions about traditional interpretations of professionalism. Do female medical students construct a unique, gendered professional identity? Have women in medicine affected the concept of professionalism for both men and women? It has been postulated that women bring a more humanistic and empathetic approach to medicine, bringing back “the golden age of doctoring when the family doctor was familiar with the social context and complexity of ordinary diseases” (Riska, 2009, p 92). This view is reflected in a 2011 New York Times article, The Changing
According to Dr. Fiona Cornish, a general practitioner who worked part-time while raising four children, “All doctors have changed the old patriarchal style of ‘I am the all knowledgeable doctor, and I tell you what to do’. If one had to make a generalization, women are more cautious. Women spend longer talking to the patient and listening” (Carvajal, 2011).

A more pessimistic view of the impact of women in medicine is that they have contributed to the weakening of the profession by working shorter hours, taking long maternity leaves, and specializing in less lucrative fields, such as Family Medicine and Pediatrics. Previously, professional commitment was associated the quantity of time on the job and being on call (and thus working nights and weekends). Women, who are typically the primary caretakers of children and other family members, may request flexible hours and a part-time schedule. Consequently, the notion of professional commitment, which has been associated with round-the-clock responsibility, must now accommodate physicians’ responsibilities to both their patients and to their families.

Part of what is considered the hidden curriculum in medical education includes the pressure for female students (and minorities) to conform to the standardized, culturally acceptable images of professionalism – historically based on a white, male prototype – and to tolerate overt and covert chauvinism (Martimianakis, et al., 2009).
Studies of third-year female medical students found that they commonly experienced sexual harassing behavior and attitudes from male supervisors (Babaria, Abedin, Berg, & Nunez-Smith, 2012). But, because other females on healthcare teams did not raise objections, students were simply resigned to such treatment, commenting that they were “too used to it” and “too tired to care” (Babaria, et al., 2012, p. 1014).

Specialization

It is the general practitioner, the Primary Care Physician, who may come to mind when one imagines a medical professional, a white-coated man who is seen for an annual physical or to fill a prescription. Yet, the trend in medicine for several decades has been toward specialization; today students often enter medical school already considering their residency area. Specialists, by definition, no longer treat the “whole” patient, but instead focus on a particular problem in that patient—a skin rash may eventually bring the patient to a dermatologist, a sprained ankle to an orthopedist, or stomach ache to a gastroenterologist. Reducing Mr. Perez and Mrs. Brown to their component problem part runs the risk of physicians merely treating pathophysiological “cases” based on a chief complaint. This may be necessary in today’s healthcare system, but it could both dehumanize the patient and lead to diagnostic error if physicians’ history-taking and physical exams are overly focused,
filtered through their area of specialization. (For example, Mrs. Brown’s skin rash may look like poison ivy, and perhaps she was exposed to poison ivy, but she also has a gluten allergy that results in similar rashes. If food allergies are not pursued by dermatologists, then they may not immediately arrive at an accurate diagnosis.)

Given a nation-wide physician shortage of Primary Care physicians for the past several decades, medical educators have encouraged students to consider careers in this general discipline (Petterson, Liaw, Phillips, Rabin, Meyers, & Bazemore, 2012). Students, however, are often burdened with school loan debt so opt for more profitable specialties, like Surgery or Cardiology – despite expressed interest in Family Medicine (Phillips, Weismantel, Gold, Schwenk, 2010). In an interview with medical educator Lawrence Smith, he notes that Primary Care is a lower status area in medicine relative to specialties and that “young doctors often work with specialists more than generalists. As a result, their role models and heroes when they’re young and impressionable are those specialists …” (Smith, 2015).

**Conclusion – Chapter Six**

The culture of medicine encourages students to cast an objective eye on patients and their illnesses, which may further undermine espoused professionalism edicts of compassion and altruism. Distancing themselves from patients in a disciplined and ritualistic manner,
students could claim that they are imitating residents and physicians, who themselves stare at patient electronic records rather than asking patients questions directly, and who identify patients by a diagnostic category (e.g., “kidney failure in room four”) rather than by their name.

The clash of values between the profession and the institutions in which students train and faculty teach and practice is evident to both. For medical students, the professionalism concept has remained abstract and difficult to translate into action at best, with moralistic and hypocritical implications at worst. Faculty, too, have been uneasy with the professionalism mandate and identifying students who seem to have deficits. Furthermore, interpreting professionalism is complicated by other factors outside of medicine – such as, rapidly changing technologies, U.S. demographics, and the composition of the medical school student bodies.

At TUSM, a new educational strategic plan is now underway, and the priority given to professionalism in the future curriculum has yet to be determined. One area under consideration is faculty development, particularly in the training of humanistic values and role modeling. This is one of several recommendations made in the final chapter for improving professionalism education at medical schools.
CHAPTER SEVEN: Recommendations for the Future of Medical Professionalism Education

Since professionalism emerged in the medical education discourse, it has been viewed principally as a demonstrable virtue or “virtue in action” (Levinson, Ginsburg, Hafferty, Lucey, 2014; Shelton, 1999). The complexity of interpreting this concept for the purpose of teaching, assessing, and remediating professionalism contributed to a shift that occurred in the late 2000s, from a focus on individual student character to group (or team) interactions and to the context of learning. Seeing professionalism in terms of students’ learning environments indirectly acknowledges the effects of the hidden curriculum on students. Indeed, in recent years the LCME has mandated that medical schools examine their own learning environments. Now that the importance of social and cultural contexts in the formation of students’ professionalism identities is emphasized, institutions may be held accountable for their own professionalism.

Below are several recommendations for furthering professionalism at medical schools, starting with a look at the professionalism of organizations, followed by ideas for engaging students in professionalism endeavors, and concluding with the proposal for faculty development programs and further research.
Organizational Professionalism in Medical Schools

Medical school classrooms and clinical settings are learning environments that exist within complex organizational systems. Some medical educators have proposed that it is not sufficient to have standards for students that are not shared by all members of the organization; healthcare organizations should, in fact, uphold the same values expected of individuals, such as beneficence (Levinson, Ginsburg, Hafferty, & Lucey, 2014). The beneficence of an organization may mean that hospitals, clinics and medical schools proactively provide healthcare to those in need.

Over the past decade, several institutions have attempted to promote a culture of professionalism and have documented their efforts. Their guidance to other organizations seeking to do the same share several key points:

- Conduct internal reviews using methods of appreciative inquiry, which fosters organizational development through attention to strengths (Freyer-Edwards, et al. 2007)
- Communicate with all members of an organization about professionalism efforts, “from department chairs to groundskeepers” (Smith, et al., 2007, p. 1016), and establish an open process of feedback
- Mandate training programs and workshops for all members of an organization to establish a common vocabulary and purpose
- Establish events to award exceptional professionalism

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20 For example: Indiana University School of Medicine (Suchman, Williamson, Litzelman, Frankel, Mossbarger, & Inui (2004), the University of Washington (Fryer-Edwards, Van Eaton, Goldstein, Kimball, Veith, Pellegrini, & Ramsey, 2007), and the University of Texas Medical Branch (Smith, Saavedra, Raeke, & O’Donell, 2007).
• Benchmark progress toward improvement
• Connect patient satisfaction survey results to organizational success

Additionally, the leadership of organizations must be committed accountability and to supporting this type of comprehensive effort which could affect hiring, promotion and decisions about disciplinary actions. Organizational efforts may then support efforts focused on students.

**Student Engagement in Professionalism**

Having grown up with frequent classroom surveys, American students today are prepared to evaluate their medical school experiences. In fact, at TUSM, students are required to evaluate every aspect of their courses and programs at school; and, their critical responses on surveys are the basis of many changes made to the curriculum. While medical school administration, such as TUSM’s, have processes for analyzing the curriculum and policy with students, the conversation might not extend to the topic of professionalism. Because the meaning of the term is often assumed, institutional expectations of student professionalism (apart from course competencies) continue to go unstated. If the expectations are beyond merely appropriate dress and adhering to the honor code, they could be made clear.

Furthermore, to promote a dialogue on the topic with students, medical school administration might also admit to students in a public forum that they are aware of the challenges to professional identity
development, particularly the hidden curriculum at clinical sites, and their hope for improving students’ experiences. So, rather than an institutional mandate with punitive connotations, professionalism might become a cooperative project at medical schools. Such a dialogue is an opportunity, too, to talk with students about why things work the way they do in medical practice, how students might manage themselves and their patients within the healthcare system, and to underscore the need for students to develop fair and principled habits despite the obstacles before them. As one TUSM administrator stated recently, the learning environment is a “two-way street”, so students might be encouraged to actively construct a functional workplace.

Coursework to Contextualize Professionalism in Today’s Clinical Settings

Students might benefit from coursework that allows them to investigate healthcare economics, federal regulations of healthcare practice, as well as the history of the medical insurance industry in the United States (and the public ambivalence toward insurance provisions which has in turn affected federal and state policies) (Starr, 2011). These topics are all the more important today given the changes brought about by the Affordable Care Act and the on-going political discourse pertaining to it. Students could also be taught to critically analyze commercially-sponsored medical research as well as to consider the past and current
disparities in the access Americans have to healthcare. Studying the political, economic and social history of the healthcare system, and who has been served by it, might support a student’s understanding of the medical profession and the significance of the very concept of professionalism.

_Honoring Superior Professionalism_

Medical schools could also find opportunities to honor students who exemplify professionalism with small awards and in institutional communications. This could be done by having faculty identify students who stand out in classrooms and in their interactions with their healthcare team. Highlighting positive examples of professionalism may help to counter the punitive connotations that come with the term. Moreover, such efforts could help faculty to develop their sensitivity and perspective on the range of professional attitudes and behaviors found in their groups of students.

Each year TUSM gives a _Humanism and Excellence in Teaching Award_ to residents who, as determined by third-year students, exhibit strong teaching skills and are role models for compassionate, relationship-centered care. The awardees are given a certificate, a gold lapel pin, and a check for $250. This award is sponsored by the Arnold P. Gold Foundation, the same foundation that sponsors the White Coat
ceremony. A similar model could be used to honor medical students.

Expand Admissions Procedures

Another recommendation to medical schools that is often cited in the literature is to consider the admissions process, adding interview questions or “tests” that pertain to professionalism. An increasingly popular interview method is the mini medical interview (MMI), which is a series of 3–12 stations with 7–10 minute sessions with interviewers who ask questions like, “A patient verbally threatens you; what would you reply?” (Phillips & Garnel, 2014, p. 316). It is hypothesized that both professional and unprofessional attitudes and behavior are revealed during this type of admissions interview and would give institutions information about students that may not be otherwise found in student applications. However, this interviewing technique is considered labor-intensive and more expensive than traditional methods (and, for these reasons, is not used by TUSM at this time).

Faculty Development

While faculty mentors could certainly support students in this socialization process, providing guidance and encouragement, many may be unfamiliar of the strategies for advising students regarding professionalism, especially in ambiguous situations (Steinert, Cruess, Cruess, & Snell, 2005). Therefore, medical schools could foster student
professionalism by allocating resources to the creation of faculty courses and programs on this topic. Such opportunities might also raise faculty awareness of their influence on students and prompt faculty to reflect on their own professionalism. Role modeling, thought of as an implicit activity, is emphasized in the literature as one of the most effective methods for teaching professionalism (Creuss, Cruess, & Steinert, 2008). Faculty development in professionalism could focus on role modeling, how and what to model, and suggest ways for making role modeling more overt (e.g., “Jane, I am now going to model for you the correct way to approach an unhappy patient in the waiting room”) (Branch, Frankel, Gracey, Haident, Weissmann, Cantey, Mitchell, & Inui, 2009). Moreover, role modeling of professionalism is preferred by students over other forms of professionalism instruction.

As mentioned previously, it is a tremendous challenge for TUSM to maintain teaching consistency among hospital affiliates. TUSM does offer residents a teaching program as well as a Residents-As-Teachers (RAT) Guide (TUSM). According to the TUSM Faculty Development website, the RAT program recognizes that residents are “important educators for medical students, peers, junior and senior colleagues” and tailors the program to “the specific needs of the target audience/department/site, and may consist of one-hour workshops, full-days retreats, month-long seminars or individual coaching” (TUSM). The
RAT Guide, disseminated via clerkship directors and other officials at hospital sites, addresses topics relevant to teaching professionalism such as *Giving and Receiving Constructive Feedback* and *Learner’s in Difficulty* (TUSM). The Residents-As-Teachers model could be expanded to include experienced clinical educators and might then serve as a vehicle for reinforcing institutional values.

**Expansion of Research**

Expanding the research in this field would also benefit curricular and institutional reforms. Future research that is conducted in America should continue to ask questions that place medical professionals within the context of our cultural value system, a system in which academic medicine confronts intensifying profit motives and where the citizenry is far from united in its stance towards medicine’s public duties (Ludmerer, 1999; Starr, 2011). Also, professional identity formation is a field in its infancy in medical education, so there is much room for robust studies, particularly studies with standardized definitions of professionalism and identity formation, a cohesive theoretical strategy, and consistent subject sampling. A question that could be pursued is whether or not a set of principles for fostering professional identity formation exists across professional disciplines (e.g., the law, business, the military) or whether there are expectations that are unique to medicine (and sub-disciplines within medicine)?
Finally, fostering medical professionalism would be strengthened generally if there were a recognition by faculty and administrators that students continually juggle two roles: learner and novice practitioner. As learners, students may be accustomed to having their unique abilities and identities affirmed; but, as practitioners, they must become acclimated to a white-coated uniform with many non-negotiable norms and expectations. Also, as discussed, the generation gap between millennial students and the faculty who evaluate them may lead to misunderstandings about professionalism, so clarifying and repeating expectations of medical students is essential.

**Final Thoughts on Medical Professionalism**

As students progress through medical training, they must learn to reconcile their new disease-based orientation to patients with giving empathetic care, as well as to reconcile working in for-profit hospital settings while respecting the humanistic priorities of their profession. Faculty are in a position to model for students the professionalism they wish them to emulate, but clinical learning environments may conspire against both faculty and students in their efforts, and so the virtues of professionalism become eclipsed by the vices of expediency.

While the traditional notion of professionalism is characterized as dispassionate and paternalistic, the “new professionalism” promotes emotional engagement and patient-centeredness (Borgstrom, Cohn,
Barclay, 2010, p. 1331). Conceptualizations of professionalism and the doctor-patient relationship could allow for a more balanced view, one in which a form of paternalism (or “maternalism” given the growing presence of women in the profession today) is possible, one that is associated with benevolence and not merely with a condescending authority that robs patients of their agency.21

Of course, if doctors continue to attend to dozens of patients per day in ten-minute increments, it is unclear how they are to establish the emotional engagement that the new professionalism so optimistically espouses. In fact, it could be that the doctor-patient dyad, critical to care (and its mythology), has become less meaningful in light of the medical team-patient dynamic. Therefore, displaying professionalism in the future would occur primarily in coordinated, interprofessional teams. If that is the case, then the “bedside manner” exhibited by physicians would be less focused on individual patients and instead generalized across many patients, even diffused across populations. Indeed, there is a great need today for that scope of professionalism, a professionalism

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21 In my own, sometimes comic, interactions with physicians who are careful to share the decision-making with me, I have found myself returning their questions about my treatment to them, “Well, what do you think I should do? YOU are the doctor after all!” I asked one of my doctors about his approach to shared decision-making, particularly when there is a complex and chronic problem, and particularly when a patient would rather have the doctor make the decisions. He replied that my question points to why it is so important for him to get to know his patients over time—so that (to paraphrase) “I can know how they make decisions, how they think and feel about things, what they value before making suggestions about a course of treatment. There needs to be trust.”
that leverages physician’s expertise in order to influence public health and to advance policy to support equitable access to healthcare (Mechanic, 2000; Wynia, 1999).

An example of a physician who has demonstrated a uniquely public interpretation of professionalism is Adnan Khera, also known as #DoctorBeDancing. Dr. Khera is an anesthesiology resident at Tufts Medical Center and a 2012 graduate of TUSM. He is also a street performer who has publically danced at least weekly for the past two years to raise money for a wide variety of charities, from the Animal Rescue League of Boston to the Union of Concerned Scientists. Before he begins dancing, Khera props up a hand-written sign that reads: “I'm an anesthesiologist. I don't need your money. But someone out there does. And so all proceeds go to charity. So, donate with me!” (A fuller description of this project is found on his Facebook page and website, along with a list of charities his dancing supports; Appendix XIII.) Khera draws a large crowd, drawn to the ABBA soundtrack heard from his portable stereo and the spectacle of a physician, dressed in scrubs and white lab coat, exuberantly dancing on the sidewalk. For some, he may push the limits of professionalism. Khera exploits his status after all, deliberately juxtaposing the dignified image of a doctor with his cartoonish street performance, a show that is meant to entertain and fundraise. However, he also exemplifies an imaginative rendering of his
professional responsibility to social advocacy, one that could serve as a model for others, including but not limited to medical professionals.

Professionalism education in medical schools teaches students that while the profession has changed, and approaches to doctoring have changed, there are broad professional standards that are largely unchanged. In order for professionalism to be embodied by medical students, the virtues that are integral to forming a professional identity as a physician should be continually practiced, despite the many situations that will discourage forming such habits. Medical students, with the guidance of faculty, may then use their new knowledge and accruing influence to be and do good in order to contribute to the greater good, perhaps becoming policy-makers themselves who work towards transforming the healthcare system so that the structure and environment of medical practice coincides, finally, with the values of the profession.
APPENDIX I: Professionalism Definitions

(Summarized in Inui, 2003, p. 11)

**American Association of Medical Colleges (AAMC) Medical School Professionalism Objectives** (1999)
- Knowledge: Scientific method
- Skillful: Reasoning, communication, clinical skills
- Altruistic: Respect, compassion, ethical probity, honesty
- Dutiful: Population health, advocacy and outreach to improve non-biologic determinants of health

**Accreditation Council on Graduate Medical Education (ACGME) Competency** (1999)
- Professionalism: respect, compassion, integrity: responsive to needs; altruism; accountability; commitment to excellence; sound ethics; sensitivity to culture, age, gender, disabilities.

**A Physician Charter** (2002)
- Professionalism: a foundation of the social contract for medicine
- Principles: primacy of patient welfare, patient autonomy, social justice
- Commitments:
  - Professional competence
  - Professional responsibilities
  - Patient confidentiality
  - Improving quality of care
  - Appropriate relationships
  - Scientific knowledge
  - Managing conflicts of interest
  - Honesty with patients
  - Improving access to care
  - Just distribution of finite resources

**Swick** (2000) took a slightly different approach, arguing for a normative definition of professionalism based on observable physician behaviors. In addition to the above, she states that physicians should be expected to:
- Subordinate their own interests to those of others
- Adhere to high ethical and moral standards
- Demonstrate continuing commitment to excellence
- Exhibit commitment to scholarship
- Deal with complexity and uncertainty
- Reflect on their actions and decisions (Swick, 2000, p. 614)
APPENDIX II: Dissertation Research Sources

TUSM institutional documents listed and described below served as the primary sources.

• *Curriculum Committee meeting minutes and summary reports* (2003–2008). The minutes from this meeting are detailed and outline discussions that took place between committee members. The five-year period (2003–2008) represents the first year of the LCME professionalism mandate through the final year of an educational strategic planning process – which led to the explicit professionalism curriculum.

• *Educational Strategic Planning Steering committee minutes* (2007–2008). The two-year period was selected because it captures the first year after the LCME updated its professionalism mandate, and the final year of an educational strategic planning process that led to the explicit professionalism curriculum.

• *Curricular schematics* (1990–2013). These are snapshots of the four-year TUSM curriculum. When changes were made from one year to the next, schematics provide a clear illustration.

• *Special ethics committee minutes* (1998–2013).

• *Ethics and Professionalism syllabi* (2003–2014). The syllabi for courses at TUSM are large volumes, some 400 pages in length. The goal of reviewing syllabi was to analyze changes that took place in the years prior to the restructuring of the course from Medical Ethics (2003–2008) to Ethics and Professionalism (2009–2014).
APPENDIX III: LCME Standards Pertaining to Professionalism


PROFESSIONALISM

IS-16. An institution that offers a medical education program must have policies and practices to achieve appropriate diversity among its students, faculty, staff, and other members of its academic community, and must engage in ongoing, systematic, and focused efforts to attract and retain students, faculty, staff, and others from demographically diverse backgrounds.

The LCME and the CACMS believe that aspiring future physicians will be best prepared for medical practice in a diverse society if they learn in an environment characterized by, and supportive of, diversity and inclusion. Such an environment will facilitate physician training in:

- Basic principles of culturally competent health care.
- Recognition of health care disparities and the development of solutions to such burdens.
- The importance of meeting the health care needs of medically underserved populations.
- The development of core professional attributes (e.g., altruism, social accountability) needed to provide effective care in a multidimensionally diverse society.

ED-23. A medical education program must include instruction in medical ethics and human values and require its medical students to exhibit scrupulous ethical principles in caring for patients and in relating to patients' families and to others involved in patient care.

The medical education program should ensure that medical students receive instruction in appropriate medical ethics, human values, and communication skills before engaging in patient care activities. As students take on increasingly more active roles in patient care during their progression through the curriculum, adherence to ethical principles should be observed, assessed, and reinforced through formal instructional efforts.

In medical student-patient interactions, there should be a means for identifying possible breaches of ethics in patient care, either through faculty or resident observation of the encounter, patient reporting, or some other appropriate method. The phrase "scrupulous ethical principles" implies characteristics that include honesty, integrity, maintenance of confidentiality, and respect for patients, patients' families, other students, and other health professionals. The program's educational objectives may identify additional dimensions of ethical behavior to be exhibited in patient care settings.
LEARNING ENVIRONMENT

MS-31. In a medical education program, there should be no discrimination on the basis of age, creed, gender identity, national origin, race, sex, or sexual orientation in any of the program’s activities.

MS-31-A: A medical education program must ensure that its learning environment promotes the development of explicit and appropriate professional attributes in its medical students (i.e., attitudes, behaviors, and identity).

The medical education program, including its faculty, staff, medical students, residents, and affiliated instructional sites, shares responsibility for creating an appropriate learning environment. The learning environment includes formal learning activities and the attitudes, values, and informal "lessons" conveyed by individuals who interact with the medical student.

These mutual obligations should be reflected in agreements (e.g., affiliation agreements) at the institutional and/or departmental levels.

It is expected that a medical education program will define the professional attributes it wishes its medical students to develop in the context of the program's mission and the community in which it operates. Such attributes should also be promulgated to the faculty and staff of the medical education program. As part of their formal training, medical students should learn the importance of demonstrating the attributes of a professional and understand the balance of privileges and obligations that the public and the profession expect of a physician. Examples of professional attributes are available from such resources as the American Board of Internal Medicine’s Project Professionalism or the AAMC's Medical School Objectives Project.

The medical education program and its faculty, staff, medical students, and residents should also regularly evaluate the learning environment to identify positive and negative influences on the maintenance of professional standards and conduct and develop appropriate strategies to enhance the positive and mitigate the negative influences. The program should have suitable mechanisms available to identify and promptly correct recurring violations of professional standards.

MS-32. A medical education program must define and publicize the standards of conduct for the faculty-student relationship and develop written policies for addressing violations of those standards.

The standards of conduct need not be unique to the medical education program; they may originate from other sources (e.g., the parent institution). Mechanisms for reporting violations of these standards (e.g., incidents of harassment or abuse) should ensure that the violations can be registered and investigated without fear of retaliation.
The medical education program’s policies also should specify mechanisms for the prompt handling of such complaints and support educational activities aimed at preventing inappropriate behavior.

**SERVICE LEARNING**

S-14-A. An institution that offers a medical education program should make available sufficient opportunities for medical students to participate in service-learning activities and should encourage and support medical student participati
**APPENDIX IV: Curriculum Schematic 1986–1987**

### First Year Curriculum

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
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<tbody>
<tr>
<td>BIOCHEMISTRY</td>
<td>GROSS ANATOMY</td>
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<tr>
<td>MOLECULAR BIOLOGY</td>
<td>PHYSIOLOGY</td>
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<td>CELL BIOLOGY</td>
<td>HISTOLOGY</td>
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<td>HISTOLOGY</td>
<td>IMMUNOLOGY</td>
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<td>IMMUNOLOGY</td>
<td>GROWTH AND DEVELOPMENT</td>
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<td>HEMATOLOGY</td>
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<tr>
<td>EPIDEMIOLOGY/BIOSTATISTICS</td>
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<tr>
<td>ISSUES IN COMMUNITY HEALTH</td>
<td>ISSUES IN HEALTH CARE POLICY</td>
</tr>
<tr>
<td>INTERVIEWING</td>
<td>MEDICAL ETHICS</td>
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<tr>
<td>INTRODUCTION TO THE PHYSICAL EXAMINATION</td>
<td>C A S E S</td>
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</table>
### APPENDIX V: Table of Moral Principles

| Human Relations on Which Perceived Obligations Are Based | Moral Principles—Constitutive rules, or "rules without which the community cannot function"
---|---
Previous acts of the agent(s) involving fidelity | **Promise-keeping** (the duty of fidelity)
Previous wrongful acts | **Truth-telling** (the duty of truthfulness)
Previous beneficial actions of others | **Reparation** (the duty to repair injuries previous done)
Distribution of rights, benefits, and injuries | **Gratitude**—Most stringent form of this obligation is gratitude to those who give & sustain life.
Benefiting others | **Justice** (fairness, equality of rights and treatment of others)

| Not injuring ourselves and others | **Beneficence** (neighborly love, example: the Good Samaritan)
Doing good, Removing evil, Preventing evil Showing respect for other persons (allowing autonomy or self-determination) |

| Nonmaleficence (refraining from evil). [Most stringent forms of evil, because most destructive of institutions requisite to community, are: |
| Stealing |
| Killing |
| Bearing false witness (lying) |
| Marital infidelity] |

| Improving ourselves | Being morally virtuous: Moral conscientiousness, Moral perceptivity |

APPENDIX VI: Professionalism in Curriculum at TUSM

<table>
<thead>
<tr>
<th>Undergraduate Medical Education at TUSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One (Aug–May)</td>
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<tr>
<td>Year Two (Aug–March)</td>
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<tr>
<td>Year Three (May–April)</td>
</tr>
<tr>
<td>Year Four (May–April)</td>
</tr>
</tbody>
</table>

“Medical Ethics”
After 2009: “Ethics & Professionalism”

After 2003:
Ethics “rounds”; discussion groups

After 2009:
Assessment question on clerkship evaluation (see Appendix IX).
**APPENDIX VII: Guiding Principles for TUSM Ethics Curriculum**

December 12, 2003

- medical training includes moral training (professional morality)

- ethics is central to physicians’ professional identity, requires development and integration

- professional ethical sensitivity, knowledge, and analytical skills can be taught

- ethics is learned formally (in classroom) and informally (clinical role models/experience, peer interactions, rounds)

- the lessons of formal ethics teaching often conflict with those of informal teaching (professional socialization vs. ethical development)

- need more formal and informal ethics education, offered developmentally over 4 years

- effective start by examining own moral assumptions about the ends/goals of medicine, about patients, about own role in medicine: why did you choose medicine and not, say law? Encourage introspection

- need to learn various ethical frameworks (modes of moral reasoning): principlism, virtue ethics, narrative ethics, ethics of care, casuistry

- attend to the ethical dilemmas of medical STUDENTS

- include the daily, “mundane” ethical dilemmas of physicians, as well as the sensational cases

- allow the pluralism and ambiguities of ethical medical practice; resist simple dichotomies: doctor vs. patient, autonomy vs. beneficence

- ethics teaching must be rigorous, mandatory, graded (not pass/fail)

- pedagogies: lectures, discussions facilitated by ethicists and practicing physicians (years 1 and 2); intentional ethical mentoring by faculty esp. 3rd and 4th years

- involve students in developing materials, peer teaching, and peer review (e.g. PBL)

- address obligations to self, profession, and society

** need clinical models/mentors of ethical practice** more faculty involvement
APPENDIX VIII: TUSM Undergraduate Medical Ethics Curriculum

DRAFT – May 2004

Year 1
Two two-hour freestanding sessions (perhaps including one hour of small group discussion within each session)

1) Introduction to Medical Ethics
   Medical and religious precedents to contemporary ethics
   Bioethics since 1960
   Oaths
   Ethical approaches; principlism, narrative, ethics of care, casuistry etc.
   The goals/ends of medicine
   Role of law, legal cases
   Cultural and religious contexts

2) The Doctor-Patient Relationship
   Respect for the Person/Autonomy, informed consent, refusal of treatment, bias/discrimination, paternalism
   Professional Responsibility/Obligation, truth-telling, fidelity
   Dealing with evaluation process—authority, peers

Material to be Integrated into Existing Year 1 Courses/Sessions
   Orientation—HIPAA, introduction to professionalism (and specifically its relationship to ethics)
   Growth and Development—end of life issues (introduction)
   Interviewing—Identification of self as student, appropriate relationships with patients, confidentiality
   Epidemiology/Biostatistics—IRBs and Ethics committees, research ethics, informed consent
   Problem Based Learning—medical errors, add ethical dimensions to existing cases
   Cell Tissue and Organ Biology—stem cell research, reproduction issues
   Molecular Biology—cloning, gene therapy
   Anatomy—autopsy ethics (the acquisition of bodies, confidentiality, respect for person/body), organ donation issues

Year 2
Two two-hour freestanding sessions (perhaps including one hour of small group discussion within each session)

1) The Social Responsibilities of MDs and the Ethics of Practice; ethics committees, ethics consultations, organization ethics, scarce resources/resource allocation, justice,

2) The End of Life – DNR/DNI, Codes, withholding/withdrawing life sustaining treatment (adults and children), nutrition and hydration, pain relief, medical futility, organ/tissue donation, advance planning, assisted suicide, euthanasia, palliative care

Material to be Integrated into Existing Year 2 Courses/Sessions
   Genetics—genetic testing and diagnosis, genetic technology (separate session?)
   Physical Diagnosis – medical error, physician-patient relations, pharmaceutical
rep issues/conflicts of interest (gifts, samples)

Problem Based Learning—add ethical dimensions to existing cases

Neurology—determination of death, brain death definition

Addiction Medicine—the impaired physician (responsibilities toward peers and patients)

Pharmacology—relationships with pharmaceutical industry/reps, FDA approval process

Population Medicine—health care ethics, public health ethics, end of life

Evidence Based Medicine—relationships between research and industry (research ethics), CAM

Psychopathology—competency and autonomy

Pathophysiology

Infectious Disease—duty of warn others, public health, HIV/AIDS

Renal—transplantation ethics, conflict on lists, allocation of scarce resources

Cardiology—research ethics: new interventions, off-label usage

Pulmonary—intubation issues—DNI vs. DNR, withdrawing life support

GI—Hep B/C, EtOH abuse and transplantation, appropriate care

Reproduction—termination of pregnancy, conscious clauses, infertility, stem/use of embryos

Endocrine—Growth hormones in short patients, anabolic steroid use

Muscular-Skeletal—genetic testing, pain management

Year 3 Monthly Ethics Discussion Sessions

One per month at each clerkship site, combining all students in that location.

1. Medical Team Relationships/Roles
2. Confidentiality
3. End of Life/hospice care
4. Euthanasia/withholding treatment
5. Medical Errors
6. Impaired MD
7. Consent/Competency
8. Culture, Biomedicine, and Alternative Healing Modalities
9. Concierge Medicine
10. Religion/Spirituality
11. Allocation of resources (clinical, societal)
12. The Reflective Practitioner

Year 4 Potential Topics/Cases

Monthly open sessions or sub-internship consultations.

Conflicts of Interest

Managed Care Incentives

Defensive Medicine

Resident issues—trainee vs employee
APPENDIX IX: Professionalism Evaluation Question

Student “Professionalism” Question on Clinical Clerkship Final Evaluation Form Completed by Faculty Clerkship Director

Professionalism (This is one of 21 evaluation questions): Dresses appropriately; punctual; works collaboratively with others; interacts respectfully with patients/families; uses proper hygiene practices; understands informed consent; understands advanced directives and the concept of 'patient autonomy' in tests and treatments.

- Below Expectations
- Meets Expectations
- Exceeds Expectations
- Exceptional (well beyond expectations)
- Unable to Evaluate

Evaluator’s Formative Comments on Student Performance: Provide the student with specific suggestions and directions for further learning and development. Comments of concern noted here will be brought to the Dean of Students’ attention.

Evaluator’s Summary Comments on Student Performance: Comments for potential use in the Dean’s Letter. These comments should note specific examples or anecdotes of particular strengths, weaknesses or inconsistencies in the student’s performance.

HONORS: Outstanding overall performance, well beyond expectations: comprehensive knowledge base, utilizes evidence effectively with regard to clinical decision-making; outstanding patient care/clinical skills; outstanding communication/interpersonal skills; demonstrates a zeal for learning and self-improvement; consistently meets highest standards of professional conduct and behavior.

HIGH PASS: Excellent overall performance, meets and often exceeds expectations: strong knowledge base, very good to excellent patient care/clinical skills; very good to excellent communication/interpersonal skills, eager to learn, sound clinical reasoning, meets high standards of professional conduct and behavior.

PASS: Adequate overall performance, meets all expectations: Adequate fund of knowledge and reasonable clinical decision skills; good patient care/clinical skills, adequate interpersonal skills; able to respond to feedback and shows self-improvement; meets standards of medical professionalism.

LOW PASS: Marginal performance; does not consistently meet expectations in all domains: May demonstrate limitations in any of the following areas: knowledgebase, clinical decision-making; organizational skills; communication/interpersonal skills; level of interest/initiative; response to feedback/self-improvement. Does not
consistently meet standards of medical professionalism. For promotion and graduation, conditions outlined by Promotions Committee must be satisfied.

FAIL: Exceptionally poor performance, does not meet expectations: Serious unacceptable deficiencies in one or more domains: does not accept responsibilities; insufficient fund of knowledge; inadequate clinical skills; ineffective communication skills; not always sensitive to patient’s needs, disorganized; unprofessional behavior. For promotion and graduation, conditions outlined by Promotions Committee must be satisfied.

Clinical Grade:
- Honors
- High Pass
- Pass
- Low Pass
- Fail
## APPENDIX X: TUSM Key Themes Template

<table>
<thead>
<tr>
<th>Key Themes Template</th>
<th>Professionalism and Ethics</th>
<th>Quality and Safety</th>
<th>Population Medicine &amp; Health Care Systems</th>
<th>EBM/Information Mastery</th>
<th>Community Service and Citizenship</th>
<th>Culturally Competent Care</th>
<th>Compassionate Care**</th>
<th>Physician Well being</th>
<th>Life Cycles</th>
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<tbody>
<tr>
<td>Medical Errors</td>
<td>Patient Safety &amp; Medical Errors</td>
<td>Health Determinants</td>
<td>Health Determinants</td>
<td>Teamwork</td>
<td>Understanding Attitudes and Biases</td>
<td>Doctor/Patient Relationship</td>
<td>Reflection and Growth</td>
<td>Pediatrics</td>
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<td>Law and Medicine</td>
<td>Apology</td>
<td>Prevention</td>
<td>Prevention</td>
<td>Prevention</td>
<td>CAM</td>
<td>Reflection and Growth</td>
<td>Balance of Personal and Professional Life -Self-care</td>
<td>Geriatrics***</td>
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<td>Conflict of Interest</td>
<td>Systems approaches</td>
<td>Teamwork</td>
<td>CAM</td>
<td>Reflection and Growth</td>
<td>Informed Consent</td>
<td>Attentive Listening and Mindfulness</td>
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<tr>
<td>Confidentiality</td>
<td>Quality improvement</td>
<td>Medical Errors</td>
<td>Clinical Decision-Making</td>
<td>Relief of Suffering</td>
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<tr>
<td>Doctor/Patient Relationship</td>
<td>Information (incl Reporting) systems</td>
<td>The Business of Medicine</td>
<td>Lifelong Learning</td>
<td>Understanding Attitudes and Biases</td>
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<tr>
<td>Informed Consent</td>
<td>Human Factors</td>
<td>Disaster Management</td>
<td>Shared Decision Making</td>
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<td>Root Cause Analysis</td>
<td>Continuity Care</td>
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</table>

*Includes: (1) oral, written and non-verbal communication skills; (2) variety of interlocutors (physician/patient, physician/family, physician/health care team, physician/public).

**TUSM Compassionate Care Faculty Advisory Group is developing this theme.

***The Geriatric Task is developing this theme.
APPENDIX XI: TUSM Ethics & Professionalism – Competencies

Year One

By the end of the course, students will be able to:

• Articulate their own moral assumptions about the goals of medicine and the professional obligations they are expected to fulfill towards their patients, their profession and society
• Recognize that a professional community is responsibility for its own standards of professionalism and that the duty to adhere to those standards is largely self-regulated
• Describe various methods of moral reasoning and explain how the most influential moral philosophers have contributed to the development of modern clinical ethics
• Illustrate the major ethical principles (or guidelines) available to clinicians in their attempt to resolve ethical dilemmas
• Explain the major strategies used to methodically analyze ethically controversial cases affecting the interests of physicians, patients and the rest of society
• Persuasively argue a given ethical position by identifying the relevant facts, weighing the ethical principles involved, and arriving at a defensible conclusion that justly balances all competing interests at stake
• Identify circumstances in which professional socialization may conflict with ethical principles and propose a justifiable course of action to address them
• Recognize ethically questionable behavior wherever and whenever it occurs and describe how to make use of safe, productive venues to express ethical misgivings without fear of retribution
• Describe and apply the ethical principles governing the rights of patients as they pertain to informed consent, refusal of care, deception, non-disclosure, fidelity and confidentiality
• Demonstrate an understanding of major ethical issues that tend to arise at the end of life including medical futility, determination of death, euthanasia, physician-assisting dying, palliative care and organ procurement
• Demonstrate an understanding of major ethical issues that tend to arise early in life including the presumption of parental authority, status of minors, confidentiality, and handicapped newborns
• Demonstrate an understanding of major ethical issues that tend to arise in neuropsychiatry including competency, confidentiality, involuntary confinement, and suicide
• Describe the rights of human and animal research subjects and explain the inherent contradictions faced by physicians serving dual roles as clinicians and researchers
• Ethically weigh the opposing obligations the medical profession must uphold towards the care of individuals versus the welfare of the public
• Describe how the principles of distributive justice influence the debate over disaster management, beside rationing and access to quality health care

Year Two

• Argue a given ethical position by identifying the relevant facts, weighing the ethical principles involved, and arriving at a defensible conclusion that justly balances the competing interests at stake
• Describe the major statutory laws governing the patient-physician relationship and malpractice litigation in Massachusetts and how they influence physician behavior
• Explain tort law as it pertains to medical malpractice, and identify strategies physicians may use to lower their risk of a claim on the one hand and avoid practicing defensive medicine on the other
• Take any position regarding significant ethical controversies in pulmonary medicine, nephrology, cardiology, oncology, gastroenterology, nutrition, infectious diseases and reproductive medicine, and convincingly defend i
APPENDIX XII: TUSM Learning Environment Survey

– Sample Questions

Please complete this survey by placing a check in the box that most closely approximates your perception of the item relating to the learning environment at your school.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
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</thead>
<tbody>
<tr>
<td>The environment of the school allows for interests outside of medicine</td>
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<td>Students gather together for informal activities</td>
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<td>Competition for grades is intense</td>
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<td>Students hesitate to express their opinions and ideas to faculty</td>
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<tr>
<td>Faculty are reserved and distant with students</td>
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<tr>
<td>Courses emphasize the interdependence of facts, concepts and principles</td>
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<td>Students spend time assisting each other</td>
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<tr>
<td>Students are reluctant to share with each other problems they are having</td>
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<tr>
<td>Faculty, administrators and staff give personal help to students having academic difficulty</td>
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APPENDIX XIII: #DoctorBeDancing


#DoctorBeDancing is a grassroots charity busking project revolving around the idea that our individuality can be used positively to help the community around us. Basically, I travel with my boombox and perform on the streets to raise money for charity. It is as much as about raising money for those in need as it is for encouraging others to use whatever they can offer to inspire the world to become a happier place.

Charities Supported to Date
- Cradles to Crayons - $750 + $25/month recurring since 8/9/15 (https://www.cradlestocrayons.org/)
- Animal Rescue League of Boston - $250 + $25/month recurring since 8/12/15 (http://www.arl航道.org/)
- Community Servings - $760 + $25/month recurring since 8/13/15 (http://www.servings.org/index.cfm)
- Union of Concerned Scientists (UCS) - $25/month recurring since 7/27/15 (http://www.ucsusa.org/supportUCS)
- Starlight Children's Foundation - $25/month recurring since 7/27/15 (http://www.starlight.org/)
- Rosie's Place - $25/month recurring since 8/12/15 (http://www.rosiesplace.org/)
- Wounded Warrior Project - $25/month recurring since 8/12/15 (http://www.woundedwarriorproject.org/)
- GiveDirectly via GiveWell - $25/month recurring since 9/11/15 (http://www.givewell.org/international/top-charities/give-directly)
- Enabling the Future - $50/month recurring since 9/22/15 (http://enablingthefuture.org/)
- Boston Police Foundation - $250 (https://bostonpolicefoundation.org/)
- DonorsChoose - $50/month recurring since 10/9/15 (http://www.donorschoose.org/)
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Tufts University School of Medicine website. *Intramural Faculty Development Venues*. http://medicine.tufts.edu/Education/OEA/Faculty-Development/Intramural


CURRICULUM VITAE

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annmaderer@gmail.com
Born: 1967

EDUCATION

EdD 2016     Educational Leadership & Policy Studies;
             Boston University School of Education; Boston, MA
MA 1993      Communication Studies;
             University of North Carolina, Chapel Hill, NC
MAc           New England School of Acupuncture; Watertown, MA
BA 1987      History
             Indiana University of Pennsylvania, Indiana, PA

ADMINISTRATIVE EXPERIENCE

3/12 –        Curriculum and Administrative Director
Tufts University School of Medicine
Office of Educational Affairs; Boston, MA

• Deliver the first- and second-year curriculum with the creation
  and dissemination of course schedules and the production of
  the syllabi.

• Design and implement OEA projects and programs involving
  Standardized Patients (actors), such as the third-year Clinical
  Skills Interclerkship, the Objective Structured Clinical
  Examination.

• Finalize and report first- and second-year course and exam
  grades to Course Directors and Registrar.

• Direct office workflow and procedures for 15-person office (in
  two locations), supervise Curriculum Manager, the Curriculum
  Administrative Coordinator, and the Community Service
  Learning Administrative Coordinator.

• Collaborate with Program Director on developing OEA budget
  projections and monitoring expenditures.

• Partner with medical school leadership, support the Dean’s
  activities with curricular revision and implementation, short
  and long-term strategic planning, special projects and course
  evaluations.

• Manage human resources and payroll for support staff and
  work-study students.
2/07–2/12 **Administrative Director**
- Develop and implement educational programs, curricular activities involving Standardized Patients (actors) in clinical simulation exercises. Faculty recruitment and management of case development for such activities.
- Develop and manage medical education research events, such as the biennial Medical Education Research Day.
- Oversee intramural faculty grant program for curricular innovation.
- Direct OEA communications: Design, write, edit and distribute bi-monthly newsletter (circulation: 900+). Create and maintain websites for OEA, Clinical Skills & Simulation Center and other related TUSM pages. Draft documents for Dean for OEA.
- Collaborate with Assistant Dean for Faculty Development on educational research, grants and submissions to medical education conferences and publications.

7/03–1/07 **Program Manager**
- Manage OEA projects and programs, including basic science and clinical faculty development; assist with the design and execution of new and existing programs for both faculty and students.
- Coordinate grant preparation, including identifying funding sources, planning preliminary faculty meetings, preparing budgets, compiling supporting documents, and coordinating final submission; manage internal faculty educational grant program, including tracking progress reports and budgets.
- Administrative support for Dean; serve as point person for University-wide activities, affiliated hospitals and programs, local/national/international organizations and committees; drafting and editing all communications.

5/00–7/03 **Founder, Administrative Manager**
Sandburst Corporation; Andover, MA

**TEACHING EXPERIENCE**

9/09–8/12 **Facilitator**
Tufts University School of Medicine; Problem-Based Learning

1/06–5/06 **Tutor**
Univ. of Massachusetts-Boston, Ross Center for Disability Services

8/98–8/01 **Teaching Assistant**
New England School of Acupuncture, Watertown, MA

8/92–12/93 **Teaching Assistant**
University of North Carolina, Chapel Hill, NC
PUBLICATIONS


PRESENTATIONS

2013 AAMC NORTHEASTERN GROUP ON EDUCATIONAL AFFAIRS ANNUAL MEETING. Short Communication: Blanco, M.A., Maderer, A. and Epstein, S. Launching Tufts University School of Medicine Student-As-Teacher (SAT) Required Program. New York City, NY, April 12–13, 2013.


2011 AMERICAN EDUCATIONAL RESEARCH ASSOCIATION ANNUAL MEETING. Paper Presentation: Blanco, M., Maderer, A., Aarons, R., Sung, YC., Epstein, S. Cultivating a Culture of Constructive Feedback Between Medical Students and Faculty Members: A Survey Study of PBL Facilitators’ and First-Year Medical Students’ Feedback Experiences; New Orleans, LA; April 8–12, 2011.


**POSTERS**


TUFTS UNIVERSITY SCHOOL OF MEDICINE, MARY Y. LEE MEDICAL EDUCATION DAY. Poster Presentation: Blanco, MA., Richardson, E., Ichord, J., Hendler, G., **Maderer, A.**, Epstein, SK. Tufts University School of Medicine’s Medical Education Literature Alerts: A Faculty Development Initiative to Keep Faculty Up-to-Date with Educational Literature. Boston, MA, March 31, 2010.

2010 AAMC NORTHEAST GROUP ON EDUCATIONAL AFFAIRS CONFERENCE. Poster Presentation: Blanco, M., Richardson, E., Ichord, J., Hendler, G., **Maderer, A.**, Epstein, S. Tufts University School of Medicine’s Medical Education Literature Alerts: A Faculty Development Initiative to Keep Faculty Up-to-Date with Educational Literature. Farmington, CT, March 12–13, 2010.