Medical Professionalism Best Practices:

Professionalism in the Modern Era

Edited by

Richard L. Byyny, MD, FACP Douglas S. Paauw, MD Maxine Papadakis, MD Sheryl Pfeil, MD

> 2017 Alpha Omega Alpha Honor Medical Society Aurora, Colorado



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> 2017 Alpha Omega Alpha Honor Medical Society



Dedicated to the members of Alpha Omega Alpha Honor Medical Society and the medical profession.

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Preface Medical Professionalism In the Modern Era

Richard L. Byyny, MD, FACP George E. Thibault, MD

Medicine is based on a covenant of trust, a contract we in medicine have with patients and society. Medical professionalism stands on the foundation of trust to create an interlocking structure among physicians, patients, and society that determines medicine's values and responsibilities in the care of the patient and improving public health.

It starts with physicians understanding their obligations and commitments to serve and care for people, especially those who are suffering. Physicians must put patients first, and subordinate their own interests to those of others. They should also adhere to high ethical and moral standards, and a set of medical professional values. These values start with the precept of "do no harm." They include a simple code of conduct that explicitly states: no lying, no stealing, no cheating, and no tolerance for those who do. The Golden Rule, or ethic of reciprocity, common to many cultures throughout the world—"one should treat others as one would like others to treat oneself"—should be the ethical code or moral basis for how we treat each other.

In 2000, The Royal College of Physicians and Surgeons of Canada (CanMEDS) stated it well: "Physicians should deliver the highest quality of care with integrity, honesty, and compassion and should be committed to the health and well-being of individuals and society through ethical practice, professionally led regulation, and high personal standards of behaviour."

Today is a very exciting time in medicine and medical education. There have been more changes in the last decade than in the past 50 years. While much of the change is for the better, there could be unintended consequences that threaten professionalism. One of these changes that has raised concerns is the trend toward more physicians being employed by large organizations. For this reason, the Institute on Medicine as a Profession—with support from the Josiah Macy Jr. Foundation and the Commonwealth Fund—has convened a group of experts on professionalism to write a white paper on professionalism in this new organizational era.

In addition, begun in 2010, the Beyond Flexner Alliance focuses on health equity and the social mission of health professions education. They are working to develop a more equitable health care system through an enhanced awareness of the role of our academic institutions in teaching and modeling our professional responsibilities to society.¹

These groups, along with $A\Omega A$ and several others, have made professionalism a top priority. For instance, the American College of Physicians and the American Board of Internal Medicine have developed a physician charter with three fundamental principles:

1. The primacy of patient welfare or dedication to serving the interest of the patient, and the importance of altruism and trust.

2. Patient autonomy, including honesty and respect for the patients' desire to make decisions about their care.

3. Social justice, to eliminate discrimination in health care for any reason. $^{1}\,$

Many professional organizations have also developed a set of professional responsibilities around:

- Professional competence;
- Honesty with patients;
- Patient confidentiality;
- Maintaining appropriate relations with patients;
- Improving quality of care;
- Improving access to care;
- Just distribution of finite resources;
- Scientific knowledge;
- · Maintaining trust by managing conflicts of interest; and
- Professional responsibility.

Although most schools have curricula related to professional values, what students learn and retain is from what is called the "hidden curriculum"—the day-to-day experiences of students working in the clinical environment while watching, listening, and emulating resident and physician behaviors. Fortunately, many schools and teaching hospitals have implemented curricula to improve medical professionalism, and some have attempted to develop methods of evaluating aspects of professionalism. The most effective programs lead by changing the entire culture and environment to respect and reward professional behavior, and to diminish the negative impact of the hidden curriculum. However, we shouldn't presume that professional core values in medicine are intuitively apparent. There is ongoing debate about the importance and value of a physician's oath or solemn promise. We must have clear professional expectations that are explicit for all physicians, and a commitment for physicians to respect and uphold a code of professional values and behaviors. These include the commitment to:

• Adhere to high ethical and moral standards—do right, avoid wrong, and do no harm.

- Subordinate personal interests to those of the patient.
- Avoid business, financial, and organizational conflicts of interest.
- Honor the social contract with patients and communities.
- Understand the non-biologic determinants of poor health, and the economic, psychological, social, and cultural factors that contribute to health and illness—the social determinants of health.

• Care for all patients regardless of their ability to pay, and advocate for the medically underserved.

- Be accountable, both ethically and financially.
- Be thoughtful, compassionate, and collegial.
- Continue to learn, and strive for excellence.
- Work to advance the field of medicine, and share knowledge for the benefit of others.

• Reflect dispassionately on your actions, behaviors, and decisions to improve knowledge, skills, judgment, decision-making, accountability, and professionalism.²

Efforts in medical professionalism continue to be a work in progress. As physicians, we are continually learning about medical professionalism, and how to maintain and improve the standard of physician behavior. We need to remember that we call our work "the practice of medicine" because we are always practicing our profession to learn and improve. Our goal is not perfection, but continuous learning, improvement, and focusing on what is best for the patient.

We are committed to focusing our efforts at A Ω A, and defining our role in the development of professionalism in medicine. Many A Ω A members are leaders in medicine, and we need to recognize that development of effective leadership in medicine must always be grounded in professional values. The combination of leadership and professionalism is the basis for a synergistic and positive impact on our profession.

To continue the development and ongoing scholarship of medical professionalism, $A\Omega A$ hosts a biennial Professionalism Conference bringing together leaders in the field of medical professionalism. In September

2016, more than 20 medical educators and specialists in medical professionalism came together in Chicago for three days to discuss Medical Professionalism Best Practices: Professionalism in the Modern Era. The meeting was co-chaired and moderated by Douglas S. Paauw, MD, Maxine Papadakis, MD, and Sheryl Pfeil, MD.

The following chapters are taken from the 2016 conference speakers' presentations and resulting discussion.

The hope is that this monograph will aid medical schools, professional organizations, practitioners, and all involved in health care in their very important work on professionalism in medicine.

References

1. American Board of Internal Medicine (ABIM) Foundation; American College of Physicians (ACP)-American Society of Internal Medicine (ASIM) Foundation; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. Ann Intern Med. 2002; 136: 243–6.

2. Byyny RL. A Ω A and professionalism in medicine—continued. The Pharos Spring 2013; 76: 2–3.

Chapter I Introduction

Richard L. Byyny, MD, FACP

The modern era of medicine has brought about incredible advances in science and technology designed to improve the care of patients and population health. At the same time, major social changes are occurring that impact society, patients, physicians, medicine, health care, and medical education.

Medical professionals are governed by ethical codes, and profess a commitment to competence, integrity, morality, altruism, and support of the public good. This is a social contract, a covenant of trust with patients and society that determines medicine's values and responsibilities in the care of the patient.

Medical professionalism continues to be a core value and responsibility of physicians in the care of patients. Sir William Osler made the point, "the good physician treats the disease; the great physician treats the patient who has the disease." ¹ As physicians and medical professionals committed to caring for patients, meeting professionalism responsibilities requires that we identify, understand, develop, and implement best practices in the education and development of future generations of physicians.

As an important part of our commitment to medical professionalism we must address the role of changes in society, our profession, scientific medicine, students, residents, colleagues, the business of medicine, government, and other aspects of the modern era.

The changes presented by this modern era require leadership and education on the critical core values and ethics in medicine, and the care of the patient.

Professionalism Past, Present, and Future

The first oath for medical ethics was written as The Code of Hammurabi in 1754 BC. Hippocrates and Maimonides subsequently developed oaths codifying the practice of medicine as the sacred trust of the physician to protect and care for the patient, and a set of values for physicians.^{3,4} Both emphasized teaching and learning, and the primacy of benefiting the sick according to one's ability and judgment while adhering to high principles and ideals. These oaths were a form of social contract that partially codified what patients and society should expect from the physician.

Hippocrates combined physicians' scientific and ethical promises with the precept against intentional harm as a central ethical duty, and humility as a core virtue.

In the 1800s, Thomas Percival developed the concept of shared professional responsibilities with the Manchester Infirmary Rules.⁵ He recognized the complexity of the medical environment in hospitals, coined the terms "medical ethics" and "professional ethics," and wrote the profession's compact with society.

The 1847 code of medical ethics of the American Medical Association was a landmark in medical professionalism.⁶ Derived from Percival's earlier work, it was the first national code of ethics for any profession. It was an explicit professional compact defining obligations to patients, colleagues, and community, along with reciprocity. It implied social and economic rewards for those in the profession in exchange for putting patients' interests first, and required competence of practitioners and guarding of the public's health.

A Ω A was founded in 1902, before the Flexner report and the Liaison Committee on Medical Education. Medical student William Root, and a group of his fellow students, were shocked by the lack of interest in high academic achievement by their faculty and other students in medical school. They found the behavior of students and faculty to be boorish, and clearly lacking in professional values. In establishing A Ω A, they wrote: "the mission of A Ω A is to encourage high ideals of thought and action in schools of medicine, and to promote that which is the highest in professional practice."

They established the A Ω A motto as "Be worthy to serve the suffering," and developed the mission of A Ω A:

Dedicated to the belief that in the profession of medicine we will improve care for all by:

- Recognizing high educational achievement;
- Honoring gifted teaching;
- Encouraging the development of leaders in academia and the community;
- Supporting the ideals of humanism; and
- Promoting service to others.

They defined the duties of $A\Omega A$ members:

To foster the scientific and philosophical features of the medical profession and of the public, to cultivate social mindedness as well as an individualistic attitude toward responsibilities, to show respect for colleagues and especially for elders and teachers, to foster research, and in all ways to strive to ennoble the profession of medicine and advance it in public opinion. It is equally a duty to avoid that which is unworthy, including the commercial spirit and all practices injurious to the welfare of patients, the public or the profession.

In 1912, U.S. Supreme Court Justice Louis Brandeis wrote:

A profession is an occupation for which the necessary preliminary training is intellectual in character, involving knowledge, and to some extent learning, as distinguished from their skill; a profession is an occupation which is pursued largely for others and not merely for oneself; it is an occupation in which the amount of financial return is not the accepted measure of success.⁷

In 2004, Drs. Richard and Sylvia Cruess wrote, that the profession of medicine is:

An occupation whose core element is work based upon the mastery of a complex body of knowledge and skills. It is a vocation in which knowledge of some department of science or learning or the practice of an art founded upon it, is used in service of others. Its members are governed by codes of ethics and profess a commitment to competence, integrity and morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession a monopoly over the use of its knowledge base, the right to considerable autonomy in practice, and the privilege of self-regulation. Professions and their members are accountable to those served, and to society.⁸

Today, the profound and rapid advances in medical knowledge, technology, specialized skills, and expertise are changing faster than medical schools and practitioners can keep up. These rapid changes, along with the fact that many physicians are now employees in the corporatization of medicine, have created different values.

These changes make it even more important that we practice medicine based on core professional beliefs and values in the doctor-patient relationship and the care of the patient. Physicians must understand their obligations and commitments. They must put patients first and subordinate their own interests to those of others. They must adhere to the highest ethical and moral standards.

Medical professionalism continues to be one of our profession's most important commitments, and signifies our trustworthiness, accountability, and commitment to patients. Medical professionalism must be recognized as an active, ongoing, and iterative process that involves debate, advocacy, leadership, education, study, enforcement, and continuous transformation. There should be no capitulation to efforts or circumstances that undermine ethics, values, or medical professionalism.

Transformation

There has been drastic transformation in medicine over the last several decades, from the private independent practitioner to the organization of a common group of physicians, to a union-oriented corporate group of physicians, often employed by hospitals and systems. Medicine has also seen the introduction of entrepreneurs, investors, and corporate executives. No matter where or how they are employed, physicians are obligated to adhere to an ethical ideal and professional values that focus on providing care in the best interest of patients.

In the modern era, professionalism is threatened by issues of self-interest, power, prestige, profit, pride, privilege, and lifestyle. Venality, character deficiencies, irresponsibility, and greed can be underlying factors for unprofessional behavior.

The commodification of health care as a product, like any other left to the ethos of the marketplace, competition, commercialization, and profit-making, is a current day social factor influencing the profession and professionalism. Commodification results from the legitimization of profit, competition, and self-interest inherent in a free-market economy in which medicine is just another product or commodity. The physician is now conflicted between the values and needs of patients and the medical organization that is the employer.

Medical organizations often strive for increased profits and efficiencies by curbing costs and increasing profitability. This results in conflict between medical professionalism, the ethics, and values of business. Physicians, as healers and professionals, are often not evaluated or respected for their competent and professional caring of patients. A physician's professional worth is now measured in productivity—how many patients can be scheduled and quickly seen.

Medical professionalism and its tenets are challenged, and its content considered negotiable or a changeable construct of societal mores. This was foreseen by Paul Starr in 1982 in "The Social Transformation of American Medicine."⁹ He predicted the growing privatization and monetarization of medicine.

The Generation Gap

There are evolving generational differences in students, residents, faculty, and practitioners. Each generation has its own set of characteristics, defining moments, and values, with shared conflicts, and achievements. There are traditionalists or the Silent Generation, Baby Boomers or Generation Xers, and now the Millennials. These generations have differing ethical values, lifestyles, work styles, and leisure activities.

More than 10 years ago, when I was Chancellor of the University of Colorado at Boulder, I had the privilege of teaching undergraduate students in the President's Leadership Class. There were some pre-medical students, along with those majoring in engineering, business, science, and humanities and arts. Using case-based teaching, I presented a 56-year-old president of a successful company in diverse businesses including technology. He was married and had three pre-collegiate children. He was wealthy, and prominent in the community. The company had increasing profitability until the last few years when they leveled off and began to slow. He was under increasing pressure to turn the company around. He had a vacant executive position. It was such an important position that after his staff had screened and interviewed all the candidates he decided to personally interview the finalists.

One candidate was a highly successful mid-career male executive. The CEO began the interview with the usual preliminary questions. He then asked how the candidate could contribute to the company. The candidate smiled while answering, "I know you have been struggling recently, and you know I work for one of your competitors." He opened his briefcase and pulled out some DVDs and said, "All of my current employer's database and information is on these DVDs. If I get the job they are yours."

The students were asked, "If you were the CEO what would you do?"

It was a shock when more than 60 percent of the students said they would hire the candidate and take the DVDs. They rationalized that it would help the company through a difficult time in a competitive business. Some said the CEO needed to maintain his job, income, and stature in the community. Some worried about his wife, and if he lost his job how the children would fare and be able to attend an expensive exclusive college. They worried that he may have to move out of his huge home in a gated community.

When the students who would not hire the man were asked why, half said what he was doing was illegal, while the other half felt it was unethical and the wrong thing to do.

This is a generation that has grown up with computers and social media. They view the world in a different context than previous generations. Today's medical students have never used a rotary phone or pay phone.

They have never had to get up off the couch to change the channel on a TV that only gets three or five channels. They have never held a transistor radio to their ear. Their textbooks are provided to them in electronic format. The world is at their fingertips through the Internet. For many, the presentation of information has become an insidious influence in losing intellectual independence.¹⁰

In today's world, anyone with a computer, tablet, cell phone, or other electronic device is bombarded with jibber-jabber, rumor, opinions from people who presume to know, remember, or have biases with inaccurate or false information.

When information is presented, listening with a discerning ear is required. Confirmation of the information presented through trusted, reliable sources is vital. Technology, information, and data presented may be an impediment to knowledge, learning, and core values.

Is medicine nothing special? Is it just an occupation like any other? Is the marketplace the appropriate venue for health care? Is the assumption that patients will fare better if competition is unfettered and profit is encouraged and acceptable? We are facing a critical dilemma with ethical and moral capitulation, and unprofessional accommodations.

Defining Best Practices

Many times during the 2016 A Ω A Professionalism Conference there were new or different insights that influenced the group's learning and understanding of medical professionalism in the modern era. The discussions were thoughtful, insightful, inspiring, and educational. The sharing of information was designed to instill creativity and develop best practices to learn how to better care for patients, and each other in the modern era.

It is our hope that in the coming chapters, and the subsequent reflections section, you will be encouraged, energized, motivated, and roused to think about professionalism in the modern era in a new and different way.

References

1. Bliss M. William Osler: A Life in Medicine. United Kingdom: Oxford University Press; 1999.

2. Byyny RL. A Ω A and professionalism in medicine. The Pharos. Summer 2011; 74: 1–3.

3. Edelstein L. The Hippocratic Oath: Text, Translation and Interpretation. Baltimore (MD): Johns Hopkins University Press; 1043.

4. Tan SY, Yeow ME. Moses Maimonides (1135-1204): Rabbi, philosopher, physician. Singapore Med J. 2002; 43: 551–3.

5. Manchester Infirmary Rules. University of Manchester Special Collections; 1922. https://archiveshub.jisc.ac.uk/data/gb133-mmc3-16/mmc/9/6/1/14.

6. Editorial. Thomas Percival (1740–1804) Codifier Of Medical Ethics. JAMA. 1965; 194(12): 1319–20.

7. Justice Louis Brandeis. A Profession. Address at Brown University Commencement; 1912.

8. Cruess SR, Cruess RL. Professionalism and Medicine's Social Contract with Society. Virtual Mentor. April 2004; 6(4).

9. Starr P. The Social Transformation of American Medicine: The rise of a sovereign profession and the making of a vast industry. New York: Basic Books; 1982.

10. Byyny RL. Information and Cognitive Overload. The Pharos. Autumn 2016; 79: 2–7.

Chapter 2 Constructs of Professionalism

David M. Irby, MDiv, PhD

Professionalism, as a construct, has changed dramatically over the past 40 years. Initially, professionalism was associated with personal character, virtues, ethics, and humanism. Later, professionalism became a competency with behaviors to be demonstrated and assessed. More recently, professionalism is viewed as a matter of professional identity formation. No matter the construct, concerns about the professionalism of physicians continue unabated. With limited agreement on what professionalism means,¹ recommendations for addressing these problems vary. Clarity about the underlying constructs of professionalism is needed in order to guide definitions of the problem as well as recommendations for curriculum, pedagogy, and assessment.

Three Models of Professionalism

The centuries old model of professionalism is associated with virtues and ethics. A good physician is a person of character who is able to apply ethical principles, curb self-interest, demonstrate the virtues of compassion and respect, and be humanistic, trustworthy, and caring.

In the 1990s, a different model arose around behaviors and competencies. The behavioral model emerged in response to the perceived failure of the virtues model to translate ethical instruction into ethical action. The good physician, according to behaviorists at the time, was a person who manifested a defined set of behaviors, and demonstrated professionalism competencies.

In the past decade, a third model appeared: professional identity formation. This approach developed in reaction to concerns about the reductionist, behavioral model, and described the progressive incorporation of the values and aspirations of the profession into the identity of the person. The good physician takes on the identity of a community of practice, and is socialized into the values, aspirations, and behaviors of the field.

The Virtues Model of Professionalism

A contemporary articulation of the classic virtues model of professionalism can be found in a 2014 Brody and Doukas article.³ Their argument is that the good physician is one who is characterized by the virtues and aspirations of altruism, humility, and integrity. The good physician is humanistic because she/he is caring, compassionate, and respectful. The good physician operates from ethical principles, which are classically defined as autonomy, beneficence, non-malfeasance, and justice. Many of these ethical principles have been codified into rules, such as informed consent, human subjects review, and the Health Insurance Portability and Accountability Act (HIPAA) privacy rules. As a person of character, the good physician incorporates these ethical principles and professional virtues as habits of the heart and mind.

In order to develop into that kind of physician, medical students and residents need aspirational goals, which are often ensconced in codes of conduct. One example of such a code can be found at the University of Texas Medical Branch in Galveston, which made professionalism and their honor code a focal point of education and employment. Everyone at the institution is required to subscribe to a simple pledge:

On my honor, I pledge to act with integrity, compassion and respect in all of my academic and professional endeavors.⁴

Another example of a virtues-oriented activity is the white coat ceremony. During this ceremony, which typically occurs at the start of medical school, inspirational speakers extol the virtues of being a humanistic, caring, and ethical physician. This is an exceptionally inspiring ceremony.

Advocates of the virtues model recommend the use of positive role models, discussion of case studies of ethical dilemmas, and reflective writing to engender this humanistic and ethical approach to medicine. Appreciative inquiry is often used to highlight what can be, and to celebrate it. Recommendations regarding learner assessment include observations of learner performance, feedback, and coaching—experiential learning.

The strengths of this model are the focus on the inner habits of mind and heart; internalization of high moral values; and an inspirational approach to motivation. The limitation is that it's very difficult to assess character and moral reasoning.^{5–7}

The Behavioral Model of Professionalism

In response to the failures of the virtues model to instill high ethical standards in physicians, and to evaluate professionalism effectively, the behavior model emerged in the 1990s. The power of the behavioral model is its focus on performance rather than character, and the tight connection between behavior and assessment. By 2000, accrediting authorities had all embraced this model.

Professionalism is recast from good moral character to a competency to be demonstrated. Professionalism is one among many competencies expected of a physician. The Accreditation Council for Graduate Medical Education (ACGME) describes professionalism as demonstrating compassion, integrity, and respect; being responsive to patient needs; and accountability to patients, society, and profession. Not only can intended outcomes be articulated but milestones of performance can also be defined.

An excellent example of this model is found in the book "Understanding Medical Professionalism." ⁸ The authors recognize that both teaching and learning professionalism is not easy; it is a skill to be learned. They describe useful tools including communication training, faculty role modeling, and the use of checklists.

They also add an important new perspective: professionalism is not just a competency to be mastered by the individual physician-in-training, but it is also a characteristic of health care teams and systems. High conflict situations often trigger professionalism lapses that need to be examined and appropriate actions and training scheduled. When people are stressed and tired, they are more likely to need negotiation skills and conflict management training. These difficult situations require a systems approach, root cause analysis, application of diplomacy, and crisis communication skills.

Advocates of this model argue that the best way to develop these skills is through coaching and direct interventions when incidents occur, followed by guided self-reflection. Assessment can include rating forms, critical incident reports, and professionalism observations.

The strength of this model is the clarity of expectations, variety of approaches to assessment, and recognition that teams and systems provoke professionalism lapses. The limitations of the behavioral model are that learners can feel judged, micromanaged, and barraged by assessments. Faculty members similarly express concerns about unrealistic demands on their time, and requirements to render judgments on professionalism.

The behavioral model asserts that professionalism can be assessed effectively if behaviors are defined in detail, leading to a reductionist approach to outcome objectives, sub-competencies, and competencies. This model assumes that the environment can be controlled, behaviors can be externally reinforced, and learning can be socially engineered.

The Identity Formation Model of Professionalism

Identity is an adaptive developmental process of adopting, or being formed into the values, habits, and behaviors of a community of practice. It involves taking on the ideas, aspirations, language, and practices of that community; being socialized into thinking and acting like a professional.

People have multiple identities that are often shaped by the roles they play (e.g., student, professional), and by their choices about which identities to emulate and value. This model is best articulated by Drs. Richard and Sylvia Cruess and their colleagues.^{9–11}

Identity develops through identification with, and socialization into, a group. It involves choices about which identity is desirable.

Identity is shaped through observation of role models, through seeing how other people interact, and through agency or choice. Direct instruction is also helpful, as is reflection on what is observed. Points of transition are often important learning opportunities that impact identity. Examples of these transitions are entry into medicine as a first year student; entry into clinical practice in clerkships; and entry into more significant levels of responsibility as a resident. Each transition becomes an opportunity to more fully explore the identity of a physician in that context.

Exploration of identity questions often occur within doctoring and ethics courses. Assessment is multi-modal, although typically anchored in an aspirational framework.

The strength of this approach is that it describes both the inner individual, psychological development of the person, and the socialization process that is part of moving from a peripheral to a central participant in a community of practice. It is inspiring and motivational, like the virtue model. The challenge is in describing, interpreting, and assessing identity.

Conclusion

Each model has strengths and limitations, and each adds to the greater whole. Professionalism can be viewed as a matter of character, humanism, and ethical reasoning, which is inspiring to learners and practitioners. Professionalism can also be seen as adoption of appropriate behaviors, and demonstration of an area of competence, which tightly aligns instruction and assessment. Professionalism can be viewed as a process of being and becoming—of taking on the identity of a professional, which is also inspiring, and encourages self-reflection.

Professionalism lapses are dealt with differently, depending on whether this is considered to be an inability to apply ethical principles, an instance of inappropriate behavior, or a lack of insight into one's own professional identity.

There are three levels of professionalism: individual, organizational, and societal. At the level of the individual learner and practitioner, one of the areas of opportunity is to move from talking about ideals and aspirations of professionalism to helping students and faculty members negotiate value conflicts and balance tensions at moments of stress. With the changing demographics of learners, the values of professionalism must be made explicit and taught directly. Students need to be taught how to negotiate situations where unprofessional actions are being observed. This prevents cynicism about professionalism.

At the organizational level, schools and hospitals need to teach professional standards and practices—hand washing, open communication, patient-centeredness. However, communicating these standards is not enough. Explaining the consequences of not meeting the standards is equally important thereby ensuring that learners understand why these standards exist.

Monitoring systems are also needed to identify lapses and provide data for interventions—remediation and/or dismissal. Patients are harmed by failure to disclose errors, mistakes, and to apologize. This requires peer support, coaching on disclosing errors to patients, and a supportive system that values transparency and humility. Such actions support trustworthy relationships, which is another way of defining professionalism.

Given the privileged position of medicine in society, there are strong obligations for self-regulation to overcome the perception that physicians hide errors, and are not held accountable for unprofessional behavior. Thus, some argue for more public involvement in oversight of the profession, and stronger sanctions for bad behavior.

Professionalism can be applied to challenges that emerge for individuals, organizations, and society. At the level of the individual, professionalism describes the process by which students and residents psychologically develop through social processes of instruction, coaching, feedback, reflection, and identity formation.

At the institutional level, professionalism addresses challenges arising from health care teams and organizations.

At the societal level, professionalism can help create and sustain policies, procedures, and funding to ensure the health and vitality of the profession of medicine.

The approaches taken, and the assumptions made, about professionalism at these three levels can be viewed through the lens of the three models of professionalism. By increasing clarity about which model is being used, the recommended actions can be better understood by all.

References

1. DeAngelis CD. Medical Professionalism. JAMA. 2015; 313(18): 1837–8.

2. Irby DM, Hamstra SJ. Parting the Clouds: Three Professionalism Frameworks in Medical Education. Acad Med. 2016; 91(12): 1606–11.

3. Brody H, Doukas D. Professionalism: a framework to guide medical education. Med Educ. 2014; 48(10): 980–7.

4. University of Texas Medical Branch in Galveston. The UTMB Honor Pledge. http://www.utmb.edu/professionalism/about-us/the-utmb-honor-pledge.aspx.

5. Bebeau MJ. Enhancing professionalism using ethics education as part of a dental licensure board's disciplinary action. Part 2. Evidence of the process. J Am Coll Dent. 2009; 76(3): 32–45.

6. Rest JR. Development in Judging Moral Issues. Minneapolis: University of Minnesota Press; 1979.

7. Self DJ, Baldwin DC. Moral Reasoning in Medicine. In: Rest JR, Narvaez DF, Editors. Moral Development in the Professions. Hillsdale (NJ): Lawrence Erlbaum; 1994.

8. Levinson W, Ginsburg S, Hafferty F, Lucey C. Understanding Medical Professionalism. New York: McGraw Hill; 2014.

9. Cruess R, Cruess S, Boudreau J, Snell L, Steinert Y. Reframing medical education to support professional identity formation. Acad Med. 2014; 89(11): 1446–51.

10. Cruess R, Cruess S, Boudreau J, Snell L, Steinert Y. A schematic representation of the professional identity formation and socialization of medical students and residents: a guide for medical educators. Acad Med. 2015; 90(6): 718–25.

11. Cruess RL, Cruess SR, Steinert Y. Editors. Teaching Medical Professionalism: Supporting the Development of a Professional Identity. Second edition. Cambridge, (UK): Cambridge University Press; 2016.

Chapter 3

Transforming a Medical Curriculum to Support Professional Identity Formation

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Professional identity formation—the development of professional values, actions, and aspirations—should be the backbone of medical education.¹

edical education has always been concerned with more than knowledge and skills.^{1–3} The necessity to pass on the characteristics traditionally associated with the profession has been present since at least the time of the Hippocratic Oath. The values and attitudes associated with the "good physician" have for generations been encompassed in the word professionalism.⁴

Medicine has always leaned heavily on role models and mentors functioning in clinical situations, thus ensuring continuity within the profession.⁵ Until recently, this essential educational experience was rarely made explicit, with individual learners modeling their own behaviors after those whom they respected. Professionalism was not taught.⁴

This situation became untenable in the latter half of the 20th century as medicine came to believe that its professionalism was under threat from within, and outside of, the profession.⁴ All forms of authority were greeted with skepticism, and medicine became a much more lucrative occupation.^{6,7} Failure to control conflicts of interest and lax self-regulation were seen to be within medicine's own domain.⁶ The reliance on the market-place to control both the quality and costs of health care forced physicians to become entrepreneurs in a competitive environment, thus threatening the traditional values of the profession.^{6,7}

Medicine's response, which has often been termed defensive, centered on its educational system.⁸ As has been pointed out by Irby and Hamstra,⁹ once the issue was joined, three approaches emerged. The first, which built on the traditional emphasis on role modeling was virtue-based. Because of perceived difficulties in contemporary secular society with this approach, a second emerged which emphasized the measurement of observable behaviors. The third, which we espouse, concentrates on assisting learners to acquire the identity of a medical professional.

Teaching Professionalism

"Professionalism must be taught" became a rallying cry in medicine, and a consensus developed that what had been an implicit part of the curriculum must be made explicit.¹⁰ It became apparent that the profession knew very little about professionalism. The literature on the subject, that had been developed since the early part of the 20th century, existed largely in the social sciences, and was not readily available to medical educators.⁴ Thus, before meaningful educational interventions could be undertaken, it was necessary to reinterpret and merge this literature with that found in the medical domain, thereby developing educational principles and strategies to guide these interventions.

Following pioneering work of the American Board of Internal Medicine and its Project Professionalism, ¹¹ general agreement emerged that professionalism should be taught and assessed throughout the continuum of medical education using multiple strategies dependent on the culture of each educational institution.¹²

When anything is to be taught and assessed, both teachers and learners must clearly understand the nature of the subject. In developing a curriculum to specifically teach professionalism it became necessary to develop definitions and lists of the attributes characteristic of the "good professional." We have termed these essential elements the "cognitive base" of professionalism.¹²

Several acceptable definitions appeared, including a widely accepted International Charter on Medical Professionalism developed by the international internal medicine community.¹³

To serve as the foundation of a teaching program at McGill University, we chose to define profession as the foundational word of both professional and professionalism:

Profession—An occupation whose core element is work based upon the mastery of a complex body of knowledge and skills. It is a vocation in which knowledge of some department of science or learning or the practice of an art founded upon it is used in the service of others. Its members are governed by codes of ethics and profess a commitment to competence, integrity and morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession a monopoly over the use of its knowledge base, the right to considerable autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served, to the profession and to society.¹⁴ Professionalism is the basis of a profession's social contract with society. Society uses the concept of the profession to assist in the organization of the delivery of essential services that are required.^{4,15} In medicine, it is the services of the healer that are to be organized.⁴

Healers have existed in society since before recorded history. While there was some organization of the profession before the mid-19th century, only at that time, through the enactment of licensing laws, did the modern profession come into being.^{6,7,15} This concept allows one to identify the attributes of both the healer and the professional.



Figure 1

The attributes traditionally associated with the healer are shown in the left hand circle, and those with the professional on the right. As can be seen, there are attributes unique to each role. Those shared by both are found in the large area of overlap of the circles. This list of attributes is drawn from the literature on healing and professionalism.

A further fundamental part of the cognitive base is the nature of the social contract that constitutes a bargain between professions and society.^{15,16} Society grants to a profession considerable autonomy in practice,

prestige, financial rewards, and the privilege of self-regulation on the understanding that the profession will demonstrate honesty and integrity in its activities, be altruistic, devote itself to issues of importance to society, and ensure competence through rigorous self-regulation.^{15,17} There are expectations that medicine has of society, and that society has of medicine. Failure to meet societal expectations will inevitably lead to an alteration in the social contract.^{15,17}

With a cognitive base as its foundational element, virtually every medical school developed a longitudinal curriculum with the important elements being found throughout the educational continuum.



Figure 2

Teaching Professionalism

The cognitive base of professionalism, including definitions and lists of attributes, must be presented early in the course of medical education, and repeated with increasing levels of sophistication throughout the educational continuum. As learners gain in both maturity and experience, opportunities to reflect, appropriate to the learner's level, must be provided on these experiences.

The cognitive base must be introduced early in the educational process, and reinforced by repetition with increasing levels of sophistication throughout the curriculum.^{12,17} However, the subject must not remain theoretical. It is important that learners internalize the value systems of the medical profession, a process that is facilitated by reflection. Role models are powerful influences, and are encouraged to make what they model explicit.⁵ Opportunities to reflect on important issues relevant to professionalism must be provided at regular intervals throughout the curriculum, with the emphasis being on points of tension or uncertainty that will be experienced by most students.^{18,19} The importance voiced by students on work-life balance which often conflicts with altruism is an example, as are the constant problems posed by both conflicts of interest and self-regulation.²⁰

Methods to assess the professionalism of learners were also developed. Because values and attitudes are subjective in nature, the emphasis devolved into the assessment of observable behaviors representative of professional values.^{21,22} An assumption was made that if individuals behaved like professionals, they would be professionals.

An important action was taken by the medical educational establishments throughout the English-speaking world. The teaching and assessment of professionalism was made a requirement for accreditation at both the undergraduate and postgraduate levels, thus ensuring that all educational programs comply.^{23–25}

The Change in Emphasis to Professional Identity

Can professionalism actually be taught?²⁶ Or, as Hafferty asked, does medical practice require "a professional presence that is best grounded in what one is rather than what one does?"²⁷

A small group of medical educators examined the concept of identity formation in medicine, basing their approach on the very rich literature found largely in developmental psychology and the world of business.^{27–34} An understanding emerged that medical students and residents come to acquire the identity of a physician during the course of their educational experiences.^{30,32–35} This development did not have a significant impact until the landmark study of medical education carried out by the Carnegie Foundation recommended that identity formation become a foundational element of the education of all professions, including medicine.¹ This required a reassessment of the movement to teach professionalism, and it became apparent to many that one of the ultimate objectives of medical education was to support individuals as they develop their professional identities.³⁶

Thus, the teaching of professionalism was, and always had been, a means to an end, not an end in itself.

This concept was not new. Merton, in the first comprehensive study of the sociology of medical education in 1957, wrote that it is the function

of undergraduate and postgraduate medical education to "transmit the culture of medicine and...to shape the novice into an effective practitioner of medicine, to give him the best available knowledge and skills, and to provide him with a professional identity so that he comes to think, act, and feel like a physician."²

There has been a fundamental re-evaluation of medical education, with a large number of institutions reorienting their curricula with the specific objective of graduating practitioners who think, act, and feel like physicians.^{15,37,38}



Communities of Practice and Professional Identity Formation

Figure 3

Individuals voluntarily join medicine's community of practice at a particularly formative phase, but with an existing identity. The process of socialization leads to the development of an identity appropriate for a student, a resident, and finally a practicing physician. (Reprinted with permission by Academic Medicine, 2016.)

Professional education can be better understood if it rests on a base of sound educational theory. Concomitant with interest in identity formation has been a growing belief that the social learning theory "community of practice," proposed by Lave and Wenger,³⁹ can be of assistance in both understanding medical education and guiding educational strategies.

A community of practice is composed of individuals who voluntarily engage in a process of collective learning in a shared domain of human endeavor. This shared domain is the basis of the identity of its members. Membership implies a commitment to the domain, and therefore a shared competence distinguishes members from others.⁴⁰

The concept is clear.^{36,39–42} An individual wishes to join a group engaged in a common activity—the practice of medicine—by learning how to carry out the activities in which the group is engaged. In doing so, the individual becomes a member of the group by moving from legitimate peripheral participation to full membership. Their early membership is viewed as legitimate because they have been accepted as novice members of the community. Inherent in the move is the gradual acquisition of the required knowledge and skills, along with the identity of members of the group. This entails acceptance of the norms and values of the community, and achieving competence within the domain, with the standards of competence being determined by the community.

Learning is primarily a social activity and much of it occurs at the unconscious level, resulting in the acquisition of a large body of tacit knowledge. The learning is situated in the community, and the content is given authenticity because it is acquired in the same context in which it is applied. Learner participation with members of the community is essential, as it allows each individual to recreate meaning, transforming knowledge from the abstract and theoretical into something personal and unique.

Professional Identity Formation

The emphasis on professional identity formation resulted from the recognition by medical educators that an individual's identity begins to emerge at birth and proceeds in stages throughout life^{30,33,35,36} with the period beginning in the late teens, and stretching into early adulthood being particularly important.^{30,33,36} The process of professional education in medicine is superimposed on this normal development, and has a profound impact on the identities that emerge.

Understanding the nature of a professional identity, the factors that influence its formation and the process of socialization, will lead to curricula built around supporting identity formation that fits the purpose.

Professional identity, defined as "a set of values, behaviors, and relationships that underpins the trust the public has in doctors" ⁴³ is different from professionalism.

Professional identity is "a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and
feeling like a physician." ³⁶ This identity is not only how an individual is perceived by others, but how each individual perceives their own self.^{30,33}

Socialization, the process through which identities are formed, is "the process by which a person learns to function within a particular society or group by internalizing its values and norms."⁴⁴ This involves the melding of knowledge and skills with an actual altered sense of self.²⁷

Individuals, at a particularly formative stage of their lives, enter medical school with preexisting identities that have been shaped by both nature and nurture. During the long period of undergraduate and postgraduate education, each learner must come to terms with these norms of the community of practice that they are entering. These norms are actually outlined in the definition of profession and professionalism, as well as its list of characteristics or attributes.³⁶ Each learner must cope with these norms. Many will be accepted outright, some will require compromises, and some norms may be rejected. The current emphasis on lifestyle²⁰ actually represents a collective rejection of previously accepted standards in medicine. However, outright rejection of many of the core standards of the profession can result in an individual being either marginalized or rejected by the community.²⁷

Each individual emerges from each stage of the educational process with an altered identity that contains elements of who they were, and who they have become. Within medicine's educational community, there is a strong feeling that individuals must be able to remain themselves as they acquire professional identities, retaining core elements of their personalities.^{30,31,45}

Factors Influencing Identity Formation, and Learners Responses to the Process

The major factors impacting identity formation in medicine are role models and mentors, and both clinical and nonclinical experiences.^{5,31–33,36,39,41} All have a profound impact and work through both conscious and unconscious mechanisms, leading to both explicit and tacit knowledge.^{18,31,36} All are amenable to educational interventions that ensure a positive impact on identity formation, and are implemented in ways that are specific to the desired end result.

The foundational importance of reflection on the development of a professional identity cannot be overestimated.^{18,19} Reflection on any experience through the lens of communities of practice and identity formation can be of benefit, and has been shown to be more effective when guided by a mentor and carried out as a group activity.

Formal teaching of the cognitive base must be present, and the learning environment must be open, transparent, and welcoming. It is recognized



Figure 4

Of the multiple factors impacting the process of socialization, role models and mentors as well as clinical and nonclinical experiences, are the most powerful. However, there are other influences that, depending on both the individual and circumstances, play a significant role. (Reprinted with permission by Academic Medicine, 2016.)

that how individuals are treated by patients, family, and friends is also important. Isolation from peers appears to be inevitable in professional training, and it actually serves to strengthen the sense of community. It is recognized that the nature of the health care system must impact identity formation. It is not the task of medical education to alter health care systems, but learners must be aware of the impact of the system on who they become.

Assessment by each individual, assisted by a mentor or role model, of their progress towards the acquisition of a professional identity is essential.

Learners are expected to play the role of physician from a very early stage when they have neither the knowledge base nor experience.^{30,35} They therefore pretend, and continue to pretend to play the role until



Figure 5

Learners must react to the process of socialization by exhibiting expected behaviors and by coming to understand the internal workings of medicine's community of practice. The result can be stress, joy, and increasing levels of competence. (Reprinted with permission by Academic Medicine, 2016.)

they have actually acquired the identity of a physician. In the process of pretending, in addition to acquiring knowledge and skills, they must learn the language of medicine, come to understand its internal hierarchy and power relationships, and realize the high degree of uncertainty involved in medical practice.

Altering one's identity involves either suppression⁴⁶ of the previous identity, or a considerable degree of identity dissonance³⁰ as new aspects are merged into an individual identity. This can lead to anxiety and fear, along with stress. However, this is diminished as competence and confidence increases, tending to stabilize a professional identity. Joy and satisfaction are associated with increased competence.³⁶

Transforming a Curriculum

For institutions such as McGill University that have experience in teaching professionalism,⁴⁷ the reorganization of the curriculum to one devoted to supporting identity formation can benefit from the experience gained.³⁷ In the absence of such experience, it is still possible to institute a comprehensive program, as has been accomplished for all six medical schools within the University of Texas system.³⁸

An essential first step is the establishment of professional identity formation as a principal educational objective, and to do so publicly through an alteration of the mission, vision, values statements, etc.⁴⁸ The preamble to the mission statement of McGill's Faculty of Medicine was changed to:

The physician fulfils two roles in service to the patient: that of a healer and a professional. This is referred to as Physicianship. Identity formation is an important goal of medical education; the program guides students in developing a coherent professional identity, assists them in understanding healer and professional roles and obligations, and supports them in retaining core aspects of their personal identities and values.



Figure 6

Supporting Professional Identity Formation

In reorienting a curriculum to support professional identity formation, both the cognitive base and the objective of the reflective exercises require modification.

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The importance of the cognitive base cannot be overestimated. It has been expanded to include knowledge of the processes of socialization and professional identity formation. Time devoted to experiential learning and reflection has also been changed so that identity formation becomes the principal focus of the reflective exercises.³⁷

A series of whole class and small group activities is integral to the program:

1. The first activity on the first day of medical school is an interactive introduction to the cognitive base of the Physicianship Program, devoted to supporting identity formation—communities of practice, professionalism, professional identity formation, and socialization. The schematic representations included in this article are given to learners for discussion. The class then breaks into small groups with trained group leaders, and each student is encouraged to analyze their own identity and articulate the type of physician they wish to become.

2. Authentic clinical experiences with real patients begin in the first week of medical school, with each student assigned to a family practitioner. The emphasis is on identity formation, as experience has demonstrated that when an individual is functioning like a physician with patient contact, even at a very early stage, professional identity is enhanced.³⁰

3. There are regular whole class activities throughout the curriculum, with lectures always followed by small group discussions devoted to the physician as healer and professional as seen through the lens of professional identity.

4. There are required reflective writing exercises devoted to identity formation throughout the clinical years.

5. A White Coat Ceremony takes place in which students don the healer's habit, in the presence of their friends and family. This occurs at the end of the second year when students become fully engaged on the wards. This, along with the recitation of the Hippocratic Oath at the end of medical school, represent important symbolic events that have been shown to contribute significantly to the development of professional identity.^{30,31}

6. A mentorship program, present at McGill for many years, has been altered to focus on identity formation.⁴⁹ The mentors—called Osler

Fellows after Sir William Osler, a McGill graduate and early faculty member—are assigned six students whom they mentor throughout the four years of medical school. They have required and discretionary activities, meeting six times a year during the first two years of medical school, and four times in the last two years. They have a specific mandate to discuss progress toward a professional identity at regular intervals throughout the educational continuum. A published analysis of this program has shown that there is a profound impact, not only on the students, but also on the Osler Fellows, who experience a renewed consciousness of, and devotion to, their own professional identities.⁴⁹

7. Periods of transition can be stressful for learners as their roles undergo substantial change. Identity dissonance appears to be a significant factor leading to stress.³⁰ There has been a movement within medicine to attempt to prepare medical students for these changes through courses designed to inform them of what will be required, and how they might cope. The two major points in the curriculum where this has been found to occur is at the end of the second year when students begin working full-time with patients, and just prior to graduation when they are contemplating residency training.³⁰ McGill University has instituted two-day courses at the end of the second year, and just prior to graduation. One day of each course is devoted to addressing the issue of identity formation, and promoting reflection on the issues. Students are encouraged to think about their own progress, where they have been, where they wish to be, and what worries they have about the immediate future. The group leaders include senior medical students, residents, health care professionals, and faculty. While no data is available on the impact of the courses, student and faculty feedback is enthusiastic.

8. All major educational initiatives require assessment of progress toward the educational goals, and identity formation is no exception. During the period when professionalism was taught, methods of assessment were developed in an attempt to assess the professional behaviors of students, residents, and faculty.^{21,22} The emphasis was on observable behaviors that were either professional or unprofessional. McGill developed, and has used for some years, its own assessment tools for students and residents,⁵⁰ and for student assessment of the professionalism of faculty members.⁵¹

Progress toward the acquisition of a professional identity can be measured, but the methods available are not yet feasible on a large-scale.⁵² There has been continued progress to assess observable professional behaviors using the tools already developed, and to use them as a surrogate for charting progress toward a professional identity. In addition, the Osler Fellows, and other faculty members who have prolonged contact with individual students, are encouraged to engage students in a program of self-assessment where they reflect on where they are on the journey to becoming a physician. They are asked to identify factors that have helped them on the way, and others that may inhibit their progress. There is some evidence in the literature that this is a reasonable approach.⁵³

Summary

The ultimate objective of medical education that has been implicitly present for generations is not just to ensure that those entering medicine's community of practice possess the knowledge and skills necessary for the task. They should be individuals whose behavior is professional because of who they have become. One way to achieve this essential objective is to specifically design educational programs that support individuals as they develop the professional identity necessary for the practice of medicine, so that each practitioner has come to think, act, and feel like a physician.²

"The central issue with learning is becoming a practitioner, not learning about practice."⁵⁴

References

1. Cooke M, Irby DM, O'Brien C. Educating physicians: a call for reform of medical school and residency. San Francisco: Jossey-Bass; 2010.

2. Merton RK. Some preliminaries to a sociology of medical education. In Merton RK, Reader LG, Kendall PL, Editors. The student physician: introductory studies in the sociology of medical education. Cambridge (MA): Harvard University Press; 1957: 3–79.

3. Ludmerer KM. Learning to Heal: The Development of American Medical Education. New York: Basic Books; 1985.

4. Cruess RL, Cruess SR. Teaching medicine as a profession in the service of healing. Acad Med. 1997; 72: 941–52.

5. Kenny, NP, Mann, KV, MacLeod HM. Role modeling in physicians' professional formation: reconsidering an essential but untapped educational strategy. Acad Med. 2003; 78: 1203–10.

6. Starr P. The Social Transformation of American Medicine. New York: Basic Books; 1982.

7. Krause E. Death of the Guilds: Professions, States and the Advance of

Capitalism, 1930 to the Present. New Haven(CT): Yale University Press; 1996.

8. Hafferty FW, Castellani B. A sociological framing of medicine's modern-day professionalism movement. Med Ed. 2009; 43: 826–8.

9. Irby DM, Hamstra SJ. Parting the clouds: three professionalism frameworks in medical education. Acad Med. 2016; 91: 1606–11.

10. Cruess SR, Cruess RL. Professionalism must be taught. BJM. 1997; 315: 1674–7.
11. American Board of Internal Medicine. Project Professionalism. Philadelphia, PA; 1995.

12. Cruess R, Cruess S. Teaching Professionalism: general principles. Medical Teacher. 2006; 28: 205–8.

13. Brennan T, et al. Medical professionalism in the new millennium: A physician's charter. Lancet. 2002; 359: 520–2. Ann. Int. Med. 2002; 136: 243–6.

14. Cruess SR, Johnston S, Cruess RL. Profession: a working definition for medical educators. Teaching and Learning in Medicine. 2004; 16: 74–6.

15. Sullivan W. Work and Integrity: The crisis and promise of professionalism in North America, 2nd edition. San Francisco: Jossey-Bass; 2005.

16. Cruess RL, Cruess SR. Expectations and obligations: professionalism and medicine's social contract with society. Perspectives in Biology and Medicine. 2008; 51: 579–98.

17. Cruess RL, Cruess SR. Professionalism and professional identity formation: the cognitive base. In Cruess RL, Cruess SR, Steinert Y, Editors. Teaching Medical Professionalism. Cambridge (UK): Cambridge Univ Press; 2009: 5–25.

18. Epstein RM. Reflection, perception and the acquisition of wisdom. Med Educ. 2008; 42: 1048–50.

19. Mann K, Gordon J, MacLeod A. Reflection and reflective practice in health professions education: A systematic review. Adv Health Sci Educ Theory Pract. 2009; 14: 595–621.

20. Brainard AH, Brislen HC. Viewpoint: Learning professionalism: A view from the trenches. Acad Med. 2007; 82: 1010–4.

21. Wilkinson TJ, Wade WB, Knock LD. A blueprint to assess professionalism: results of a systematic review. Acad Med. 2009; 84: 551–8.

22. Hodges BD, Ginsburg S, Cruess R, Cruess S, Delport R, Hafferty F, Ho M, Holmboe E, Holtman M, Ohbu S, Rees C, Ten Cate O, Tsugawa Y, van Mook W, Wass V, Wilkins T, Wade W. Assessment of professionalism: Recommendations from the Ottawa 2010 Conference. Med Teach. 2011; 33: 354–63.

23. Liaison Committee on Medical Education. Functions and structure of a medical school: standards for accreditation of medical education programs leading to the M. degree. Regulation MS 31A. American Association of Medical Colleges and American Medical Association. 2012.

24. Frank JR, Danoff D. The CanMEDS initiative: implementing an outcomesbased framework of physician competencies. Med Teacher. 2007; 29: 642–7.

25. Accreditation Council for Graduate Medical Education (ACGME) and the

Medical Professionalism Best Practices: Professionalism in the Modern Era

American Board of Medical Specialists. The Outcome Project. ACGME; 2000. 26. Coulehan J, Williams PC. Vanquishing virtue: the impact of medical education. Acad Med. 2001; 76: 598–605.

27. Hafferty FW. Professionalism and the socialization of medical students. In Cruess RL, Cruess SR, and Steinert Y, Editors. Teaching Medical Professionalism. Cambridge (UK): Cambridge University Press; 2009: 53–73.

28. Lempp H. Medical school culture. Pierre Bourdieu, and the theory of medical education: thinking "rationally" about medical students and medical curricula. In Brosnan C, Turner BS, Editors. Handbook of the sociology of medical education. London: Routledge; 2009: 69–71.

29. MacLeod A. Caring, competence and professional identities in medical education. Adv in Health Sci Educ. 2011; 16: 375–94.

30. Monrouxe L. Identity, identification and medical education: why should we care? Med Educ. 2010; 44: 40–9.

31. Monrouxe L, Rees CE, Hu W. Differences in medical students' explicit discourses of professionalism: acting, representing, becoming. Med Educ. 2011; 45: 585–602.

32. Burford B. Group processes in medical education: learning from social identity theory. Med Ed. 2012: 46; 143–52.

33. Goldie J. The formation of professional identity in medical students: considerations for educators. Med Teach. 2012: 34: e641–8.

34. Helmich SE, Bolhuis S, Dornan T, Laan R, Koopmans R. Entering medical practice for the very first time: emotional talk, meaning and identity development. Med Ed. 2012; 46: 1074–87.

35. Jarvis-Selinger S, Pratt DD, Regehr G. Competency is not enough: integrating identity formation into the medical education discourse. Acad Med. 2012; 87: 1185–91.

36. Cruess RL, Cruess SR, Boudreau DB, Snell L, Steinert Y. Reframing medical education to support the development of professional identity formation. Acad Med. 2014; 89: 1446–51.

37. Boudreau DJ. The evolution of an undergraduate medical program on professionalism and identity formation. In Cruess RL, Cruess SR, Steinert Y. Teaching Medical Professionalism: supporting the development of a professional identity, 2nd Edition. Cambridge (UK): Cambridge University Press; 2016: 217–31. 38. Holden MD, Buck E, Luk J. Developing and implementing an undergraduate curriculum. In Cruess RL, Cruess SR, Steinert Y. Teaching medical professionalism in support of professional identity formation. Cambridge(UK): Cambridge University Press; 2016: 231–48.

39. Lave J, Wenger E. Situated Learning: Legitimate Peripheral Participation. Cambridge (UK): Cambridge University Press; 1991

40. Cruess RL, Cruess SR, Boudreau DB, Snell L, Steinert Y. A schematic representation of the professional identity formation and socialization of medical

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students and residents: a guide for medical educators. Acad Med. 2015; 90: 718–25. 41. Wenger-Trayner E, Fenton-O'Creevy M, Hutchison S, Kubiak C, Wenger-Trayner B. Learning in Landscapes of Practice: Boundaries, identity, and knowledgeability in practice-based learning. Abingdon-on-Thames (UK): Routledge; 2014.

42. Kaufman DM, Mann KV. Teaching and learning in medical education: how theory can inform practice. In Swanwick T, Editor. Understanding medical education: evidence, theory and practice, 2nd Edition. New York: John Wiley & Sons; 2014: 7–29.

43. Royal College of Physicians of London. Doctors in society: medical professionalism in a changing world. 2005.

44. Oxford English Dictionary, 2nd edition. Oxford (UK): Clarendon Press; 1989.

45. Frost HD, Regehr G. "I am a doctor": negotiating the discourses of standardization and diversity in professional identity construction. Acad Med. 2013; 88: 1570–7.

46. Erikson EH. The lifecycle completed. New York: Norton; 1982.

47. Boudreau DJ, Cruess SR, Cruess RL. Physicianship: Educating for professionalism in the post-Flexnerian era. Perspectives in Biol & Med. 2011; 54: 89–105.

48. Cruess SR, Cruess RL. General principles for establishing programs to support professionalism and professional identity formation at the undergraduate and postgraduate levels. In Cruess RL, Cruess SR, Steinert Y. Teaching medical professionalism in support of professional identity formation. Cambridge (UK): Cambridge University Press; 2016: 113–4.

49. Boudreau JD, MacDonald ME, Steinert Y. Affirming professional identities through an apprenticeship: insights from a four-year longitudinal case study. Acad Med. 2014; 89: 1038–45.

50. Cruess RL, Herold-McIlroy J, Cruess SR, Ginsberg S, Steinert Y. The P-MEX (Professionalism Mini Evaluation Exercise): A preliminary investigation. Acad Med (RIME supplement). 2006; 81; S74–9.

51. Young ME, Cruess SR, Cruess RL, Steinert Y. The professionalism assessment of clinical teachers (PACT): the reliability and validity of a novel tool to evaluate professional and clinical teaching behaviors. Adv Health Sci Educ. 2014; 19: 99–113.
52. Cruess RL, Cruess SR, Steinert Y. Amending Miller's triangle to include professional identity formation. Acad Med. 2016; 91: 180–5.

53. Bebeau MJ, Faber-Langendoen K. Remediating Lapses in Professionalism. In Kalet A, Chou CL, Editors. Remediation in medical education: a mid-course correction. New York: Springer; 2014: 103–27.

54. Seeley Brown J, Duguid P. Organizational learning and communities of practice: toward a unified view of working, learning, and innovation. Organization Sci. 1991; 2: 40–57.

Chapter 4 Generational Differences in the Interpretation of Professionalism

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The generational differences in the interpretation of professionalism can challenge professional interactions, particularly between more senior faculty and junior trainees. These variances can make it difficult to align definitions of professionalism, and to establish a shared mental model. Worse yet, these differences, combined with the hierarchical authority between attending physicians and trainees, can lead to perceived professionalism lapses on the part of the learner. As points of discussion, provided are case scenarios to highlight these often divergent generational perspectives.

Case 1: Faculty Conversation with Student Affairs Dean

Around 5 p.m. yesterday, one of the students on my service said she was particularly interested in gastroenterology and asked if she could accompany us to the emergency department to evaluate a patient with an acute gastrointestinal (GI) hemorrhage. I let her participate in everything—the assessment, resuscitation, the discussion with the family, and consult with the on-call endoscopy team. Then, just as we were preparing to scope the patient in the intensive care unit, she excused herself saying it was after 6 p.m., and she needed to leave.

Frankly, I found that highly unprofessional. What ever happened to seeing an acute patient through to stability? Is it all about shift work? If responsibility for the patient isn't a cornerstone of professionalism, then I don't know what is. I honestly think her comments about being interested in GI were pretty disingenuous based on her actual behavior.

This situation is not unique, and the learner could be any resident or student who is on a clinical rotation and participating in the care of an ill patient. To senior attending physicians, departure of a student (or handing over patient care in the case of a resident) may be perceived as having less interest in the case, or less investment in the care of the patient, or abandonment.

Conversely, trainees have heard professional messages of self-care, the need for work-life balance, the importance of attending to their own needs, and the risk of professional burnout. They view patient care as a team collaboration, and may perceive the attending physician's perspective as an exaggerated sense of personal responsibility. This is at odds with the current care models and policies surrounding limitations on work hours.

This non-alignment of perspectives and values can result in frustration for attending physicians and trainees, and an adverse evaluation of the trainee. The trainee may not be aware of the differing expectations, and may not anticipate or understand a low evaluation. Faculty members may not recognize their biases that influence how they evaluate a trainee's performance. When trainees encounter these differing expectations they sometimes succumb to the pressures of the hidden curriculum, but is this really what we want to, or should, be teaching students?

A frank conversation might help each understand the other's viewpoint. Articulating explicit expectations at the outset of a rotation can help set appropriate expectations and avoid reactionary responses to a circumstance.

Being invited to witness and participate in the care of a patient is a privilege, one that brings a reciprocal responsibility. This privilege of inclusion in an important moment of a patient's life may at times mean prioritizing the continuity of patient care or the learning experience over personal needs. However, at all times, it requires honoring and respecting the privilege of participation.

Depending on the response of the attending physicians to the situation, they, too, may risk a professionalism lapse. Supervising physicians who fail to have open and direct conversations with trainees when there is a difference in professional identities, and instead talk disparagingly about the participants and circumstances, are just as culpable. Attending physicians need to have training and resources to empower them to recognize and respond to these situations in a direct and productive manner. These professionalism disconnects are opportunities for critical conversations. Faculty need to recognize when issues arise, and have the courage to communicate directly and productively. They must ask about, and listen to, the perspective of the other person, be prepared to articulate their own view, and seek to genuinely understand the perspectives of one another. These strategies will help faculty and trainees evolve toward a cohesive, shared understanding of professionalism.

Case 2: Referral to Student Honor and Professionalism Council

A third-year medical student is upset about her grade on the Medicine clerkship. She protests the grade on the grounds that she felt two of her 10 evaluators did not grade her fairly. On appeal, her grade remains the same. She posts an angry response on her Facebook account and sends out a tweet to many of the students in the second- and third-year classes using insulting language aimed at the clerkship administrator.

Social media is a potential quagmire of professionalism. Some boundaries related to patient privacy are obvious, but what about the student who, upset about a grade, posts an angry retort on Facebook, or sends a tweet to classmates that contains insulting remarks about the administration? How do we account for the social media culture and the ease of sharing personal information with large groups of people?

While in the past such sentiments might be aired to a few close friends over dinner, they are now shared more openly and with larger communities. When students, trainees, or physicians express themselves on social media, they represent themselves as individuals, members of their institution, and members of a professional community. The recipients of the message often find these types of posts offensive and raise objections or become whistleblowers.

The lack of discernment in the comments and posts shared via social media can be the result of conflict between personal and professional identities. People's personal identity (which they have lived with), and their professional identity (which they are developing) can, at times, be in conflict and discordant. Trainees, as the most junior members of the medical profession, are particularly vulnerable, but not exclusively so. Social media expressions become part of an individual's public presence, and as such require self-regulation—an important tenet of the medical profession. The pervasive use of social media as a means of connection is an additional professionalism peril that is particularly relevant to newer members of the profession.

The additional issue that this case highlights is the remarkable—perceived or real—importance of grades. With such fierce competition, students are focused on achieving constant exceptional performance in order to be considered for admission to medical school and competetive residency training programs. Some have achieved at extreme levels since the beginning of their childhood education. With growing competition for medical residencies, and many medical schools eliminating grades in the first two years, students have great angst over their clerkship grades. They are often deeply concerned about the subjectivity of clinical grading.

Helping students reflect on the bigger picture of medical training is important. The goal is to get them back in touch with why they want to be a doctor, and what skills they want to make sure they learn. A disappointing grade does not negate their desire to become the best doctor they can be. Remind students that there is subjectivity in a physician's work, and every day physicians are judged by patients in a largely subjective way. As unfair as that feels, it is very much a part of medical work. Institutions must have the highest possible quality evaluation and grading systems, but there will never be a way to fully remove the subjective component.

We need to be cognizant of the system issues that are involved, especially the system pressures that are put on students, and we need to help students maintain perspective and accept constructive feedback.

Case 3. Student Conversation with Curricular Dean

I don't know what to do. My resident on service met with me and the other students yesterday to warn us to stop using our iPads or phones during rounds, as the attending thinks we aren't paying attention. She said that if we do it again, the attending will likely start firing questions our way—she's seen him do this. Honestly, I was shocked to hear this, as I was just trying to look up the answer to a question he asked earlier. The more I thought about what my resident said, the more upset I became. Honestly, I don't know what I'm supposed to do. If the college didn't want us to use our iPads, then why did they give them to us?

Generational differences in the use of technology, such as smart phones and tablets, have the potential to create discordant interpretation of professionalism. Students and trainees are digital natives who are accustomed to a world of connection, immediacy, and accessibility. They often perceive a "right of use" of electronic devices. They are seldom without their smart phones, which they use for both social and professional purposes. They seek answers to questions in the moment, and use their smart phones and tablets to access electronic health records and medical references, as well as their peers and social networks.

The contextually appropriate use of technologic devices can be a source of conflict regarding professionalism. In this example, the attending physician is angered by the trainees' use of their phones and tablets during rounds, which he perceives as a sign of inattention to the teaching and to the patients. Intentionally or not, he quizzes the trainees more frequently, which the learners perceive as retributive. In addition, patients may feel a lack of attention or caring when their providers are perceived as focused more on their technology than on them.

Technology is an indisputable part of the delivery of patient care, and we need to communicate the use of technology to the patient, and to others. Letting the team members, and the patient, know when you are looking up pertinent information, and avoiding unnecessary interruptions or the distracted use of mobile devices, will go a long way toward establishing a shared understanding regarding the appropriate use of these devices.

The other disturbing feature of this scenario is the indirect communication that occurred. The resident (rather than the attending physician) spoke with the students. The attending physician's intent was presumed by the resident, and the students spoke with the curricular dean rather than the attending physician. Indirect communication does not enhance communication skills, and can lead to professionalism misunderstandings. When a faculty member clearly states expectations at the start of a rotation, when there is negotiation and ultimately a shared understanding, there is less likelihood for misinterpretation. The student needs, the faculty needs, and the doctor-patient relationship needs must all be negotiated.

Underscoring this discourse is the fundamental need to be taught during medical school to recognize and manage professional conflict, and to learn language to optimize communication.

Case 4. Student Conversation with a Student Peer

I can't believe this place. After this morning's Grand Rounds about work-life balance, I figured it would be a good time to talk with my new attending about the days off that I'll be needing this month for a wedding and some other stuff. I wrote out my schedule and the weekends that I'll be gone. When I gave it to my attending, he asked me right away if I realized how demanding surgery as a specialty is, and told me that maybe I'd better rethink my career choice. I didn't know what to say. You know that I really want to go into surgery, and I need a letter of recommendation from this rotation. I am afraid that might not work out, or worse, that I might get a bad evaluation that could hurt my chances.

This scenario represents a misalignment in expectations. As an example of the hidden curriculum, there is a difference between what students are told, and the culture they witness and experience. When learners encounter this difference they face dilemmas and contradictions that can be difficult to navigate. Faculty talk about work life balance but aren't always the best role models. Educators need to help learners recognize these areas of tension, and provide them with tools to navigate these challenges. Faculty need to guard against allowing unintentional biases to adversely impact interpretation of professionalism.

Case 5. Clerkship Director's Dilemma

A third-year medical student contacts the clerkship director's office six weeks before the start of the rotation to request three days off to attend a friend's wedding. He is informed that the clerkship policy allows no more than 48 hours off, and that he will only be excused for two days. The student contacts the chief resident at the site where he will be rotating and makes the same request. The chief resident contacts the student program office to discuss the issue.

Requests for time off during clinical clerkships are common. Frequently, when the time off is not granted by the first person, the student asks others until a desired answer is received.

Standardized rules ensure clerkship requests are dealt with in a consistent manner. In this case, the student went to the appropriate person, the clerkship director, and was given the parameters for a two-day leave. He did not accept that, and decided to asked elsewhere. This approach does not respect structure, rules, and authority.

In the past, students would often refrain from requesting any time off during a required clerkship, as they understood that they should be present for all required elements of the clerkship. The millennial generation seems more in tune with the significance and importance of all relationships, not just the teacher/supervisor relationship. This generation of students is more likely to ask for time off for important family and personal events. It is important to have policies that are up-to-date, consistent, and fair to all students.

There is an opportunity to engage in a dialogue with the professionalto-be about the challenge of workarounds, non-adherence to policies, and how one person's behavior can have an effect on the entire community of practice.

Summary

Whether the situation involves work hours, social media, or digital devices, a shared understanding of professional comportment is essential. Generational differences can lead to different interpretations of professionalism, and communication is the key to avoiding misunderstanding.

Some effective strategies for mitigating a generational divide in the interpretation of professionalism include:

• Define appropriate and inappropriate behavior. Review expectations and their rationale at the outset of a rotation or learning experience. Encourage and respond to questions from team members. Establishing a shared understanding of rules and consequences in a structured environment will help prevent unintended professionalism conflicts.

Role model professional behavior. Actions are often more powerful than words. Learners watch what we do, and how we recognize and respond to conflicts and stresses. Be aware of inadvertent lapses in your own professionalism, and acknowledge them when they occur.
Communicate directly. When a professionalism conflict arises, timely communication in an appropriate environment is key. Articulate the concern in an objective manner, seek to understand the perspective of the learner, and clearly state the expectation going forward.

Professionalism disconnects can arise from different personal and generational viewpoints. Professionalism can be contextual and situationally nuanced. Establishing safe spaces for direct communication, and educating faculty and learners about the ways to communicate and navigate professionalism differences will help reduce the generational angst, allowing us to work together as professionals, in healthy environments, and on collegial teams.

Chapter 5 Medical Professionalism in the New Millennium: A Neo-Oslerian Call to Caring

Charles S. Bryan, MD, MACP

The book *True Professionalism* by former Harvard Business School Professor David H. Maister says it best, "A real professional is a technician who cares."¹

An essay in *The Lancet* by the French medical historian Danielle Gourevitch lays out the prophecy for the new millennium, "The year 2000 will witness the triumph of medicine, but also the substitution of doctors by health care technicians. Today's technical and dehumanized medicine has no past, has no cultural language, [and] does not even have any books. ...I do not believe in the pretense of teaching literature to first-year medical students, which is done only for political correctness....[One] wonders whether doctors really need academic training."²

To the extent that professionalism presupposes a profession replete with power, prestige, autonomy, moral authority, and a body of knowledge that is largely inaccessible to the laity, physicians of the new millennium face daunting challenges. However, if physicians can build upon a tradition of caring, they can do more for people and have more fun than we can ever imagine.

Today's medical students and young physicians must commit to caring—caring not only for their patients, but also for their fellow health care workers, their local communities, the global community, and the ideal of a profession in which the whole transcends the sum of its parts. They must care about the nature of caring, its relationship to technology, and its importance as a career-long pursuit, never quite perfected, but with the aim of saying at the end, "I gave it my best."

Professor Gourevitch called Sir William Osler (1849–1919) "the last *maître à penser* for a noble-minded general medicine." It is pointless to ask what Osler would do were he alive today, even though U.S. physicians ranked him "the most influential physician in history" in a recent poll conducted by *Medscape*.³

Osler was neither a visionary nor an answer man. His style of practice now seems primitive, his essays lack wide appeal, and most of the books he recommended for students' bedside libraries gather dust.⁴ However, he matters for two reasons. First, for his generation he helped soothe the perceived tension between detached objectivity and humanistic concern, as evinced by his last major address, "The Old Humanities and the New Science." ⁵ Second, he, arguably more than anyone in history except Hippocrates, gave physicians a sense of belonging to "a remarkable world-unit in the progressive evolution of which there is a fuller hope for humanity than in any other direction." ⁶

Competence, Caring, and Professionalism

Competence and caring constitute the twin pillars of medical professionalism (Table 1). But, does caring really matter when technical competence is readily available?

Intrigued by this question, between 1980 and 2015 I kept a list of MEDLINE-indexed articles containing "competence" and "caring" (for which MEDLINE usually substitutes "empathy") as keywords. Those lacking discussions of these terms were discarded, leaving 358 articles. Of these, 50 percent were in nursing journals, 26 percent in medical journals, and 24 percent in miscellaneous journals. Nursing journals contained twice as many articles about the relative roles of, and perceived tensions between, competence and caring than did the other journals (P < 0.0001, chi-squared test with Yates's correction, two-tailed).

These data confirm that nurses and nursing educators, compared to their physician counterparts, pay more attention to the problem of how best to balance competence and caring. Perhaps this is how it should be.

Medical educators nonetheless voice concern that science-heavy curricula and throughput-oriented clinical rotations erode students' humanistic qualities. They also voice concern that top students disproportionately choose procedure-heavy specialties and subspecialties that don't require close doctor-patient relationships.

What will happen to these specialties if and when business executives and politicians determine that even the most technically-demanding procedures can be done equally well by people who never memorized the Krebs cycle? What will happen to the primary care specialties if and when business executives and politicians determine that nurse practitioners and physician's assistants are more cost-effective?

The pediatrician-bioethicist John Lantos wrote the book *Do We Still Need Doctors*?⁷ Cardiologist Eric Topal entitled his 2012 book *The Creative Destruction of Medicine*,⁸ and his 2015 book *The Patient Will See You Now*.⁹ Will Gourevitch's prophecy of wholesale replacement of physicians by health care technicians prove correct?

Competence lends to operational definition, but caring can be slippery. Caring can be parsed into four terms—beneficence, empathy, sympathy, and compassion (Table 2). Many authors now conflate empathy and sympathy, and trivialize compassion as empathic concern as opposed to its literal meaning, "suffering with," ¹⁰ which introduces ambiguity.

	Competence	Caring
As expressed in the Hippocratic maxim	Love of the art of medicine (philotechnia)	Love of humanity (philanthropia)
As expressed by medical school applicants	"I like science."	"I want to help people."
Importance	The key attribute of the physician <i>qua</i> physician (that is, acting in the capacity of a physician, not a layperson)	An essential aspect to what physicians do, at least at the level of beneficence (see text, and Table 2)
Key virtues**	Practical wisdom; also, justice, temperance, and courage	Love; also faith and hope
Perceived metaphysical position	Mechanistic monism	Dualism/holism
Perceived epistemology	Objective knowing	Subjective knowing
Perceived ethic	Emotionally-detached concern	Empathic care
Methods of evaluation	Definable standards of care as brought out by peer reviews and, on occasion, by the legal system; reputation among colleagues	Patient satisfaction surveys; patient compliance with recommendations including kept appointments; reputation in the community at large
Overlap	Competence must always include caring at least at the level of beneficence, and in non-urgent situations, should include empathy (understanding something about how the recipient of care feels)	Caring must always include competence at what the phyician does <i>qua</i> physician. Caring without competence at what the physician professes to be capable of doing constitutes fraud

*From various sources, including Marcum.40,41

**Competence derives mainly from the four cardinal virtues (from Plato's *Republic*) —wisdom, justice, temperance, and courage—along with technical proficiency. Caring beyond the level of beneficence (see text and Table 2) calls into play the three transcendent virtues (from St. Paul, 1 Corinthians 13:13): faith, hope, and love.

Empathy entered the English language in 1909 as a translation from the German *Einfühlung* (in-feeling), coined in 1873 by the philosopher Robert Vischer to denote the human capacity to look at a work of art and understand how the artist might have felt.^{11,12} Many now divide empathy into cognitive empathy (understanding how another person feels), and emotional empathy (experiencing feelings like another person's). From

Table 2. Caring terms: Strict meanings based on Latin or Greek roots				
	Root	Meanings in medicine		
Benficence	Latin, <i>benficentia</i> , "active kindness"	Doing good for the patient; serving the patient's best interests		
Empathy*	Greek en ("in") plus pathos ("feeling")	Understanding (intellectually) how the patient feels		
Sympathy*	Greek, <i>sympatheia</i> ("like-feeling")	Experiencing feelings similar to those of the patient		
Compassion**	Latin, <i>com</i> ("with") plus <i>pati</i> ("to suffer")	Becoming a fellow sufferer: suffering on the patient's behalf		
*Many authors subdivide "empathy" into "cognitive empathy" and "emotional empathy" (see text).				

their roots, empathy designates the former, whereas emotional empathy is the same as sympathy. Compassion connotes altruism.

"For by compassion we make another's misery our own," wrote the 17th-century English Physician Sir Thomas Browne, whom Osler took as his lifelong mentor.¹³ Compassion is demonstrated when caring for others poses economic, social, emotional, and/or physical disadvantages or risks to ourselves. The HIV/AIDS epidemic afforded insights into these caring terms and how they relate to professionalism (Figure 1).

For infectious diseases (ID) specialists, 1981 to 1996 was a truncated history of medicine. In the beginning, we resembled medieval doctors who watched helplessly as patients wasted and died. We had little to offer except ourselves: unreimbursed time, drained emotions, and occasional risk-taking procedures. Our care ethic was compassion-based. Our consciences struggled with whether we were caring enough.

In 1996, new drugs made AIDS eminently treatable. Patients no longer needed home visits or lots of talk and listening. Our care ethic became competence-based. Our consciences struggled with whether we were using the drugs and related technologies as well as the leading experts. Compassion in the strict sense of fellow-suffering became unnecessary. Caring at the level of beneficence and empathy sufficed.

Many ID specialists regard those early years of the HIV/AIDS epidemic as the most fulfilling of their lives,¹⁴ but only a misanthrope would want to relive them.

Medical professionalism should be seen as a tiered construct divided into basic professionalism (doing the right thing well), and higher professionalism (service that transcends self-interest (Table 3)).¹⁵ Both require a



Figure 1

The work ethic of infectious diseases (ID) specialists who dealt with the HIV/AIDS epidemic between 1981 and 1996 amounted to a truncated history of medicine. The initial work ethic was largely "compassion-based" because there was no effective technology. Introduction of highly-active antiretroviral drug therapy in 1996 made the work ethic largely "competence-based" since caring at the level of compassion ("suffering with") became seldom necessary. The wavy line approximates the emotional well-being of ID specialists as reconstructed from the author's experience supplemented by oral histories obtained from other ID specialists in the United States.⁴¹⁵

technician who cares, but the level of caring depends on the availability of effective technology. Compassion comes into play when effective technology is lacking.

Medical Professionalism and the Profession of Medicine

Professionalism has concerned medical educators for more than two decades, but how does it relate to medicine as a profession?

The body of literature on professionalism did not emerge until the midto-late 1990s, well after sociologists such as Paul Starr¹⁶ saw trouble brewing for the medical profession (Figure 2). Most of the literature addresses what educators and physicians must do, with little or no attention to what society must do to ensure conditions for medical professionalism. The literature emanates almost exclusively from academic medical centers, with

Basic professionalism	Higher professionalism
In brief, doing the right thing well — beneficent service that is competent and done in a timely manner	In brief, "service that transcends self-interest"— beneficent service that is clearly above and be- yound the call of duty
An <i>occupation</i> , the purpose of the work typi- cally being well-defined, and with a circum- scribed scope	A <i>calling</i> , the purpose of the work sometimes being ill-defined, and with the scope of the work often being open-ended.
Financial compensation is usually well- defined (<i>quid pro quo</i>) according to a specific or implied contract for a specific service	Financial compensation is usually insufficient or even absent, since the service is beyond the call of duty (that is, supererogatory)
The ethical framework is rights- and duty- based; the provider has a clear obligation to the client	The ethical framework is not only rights- and duty-based, but also virtue-based, at least in part.
Power between the provider and the client is usually equal or nearly equal, and can be defined by law, as in a typical business enterprise	The provider may hold significant power over the client's welfare, which obliges the provider to be worthy of the client's trust, as in a moral enterprise
Rendering service to the client meets the pro- vider's own "deficit needs", such as financial security, personal ego, and/or self-esteem**	Rendering service to the client helps the provider reach the plane of "being needs"—self- actualization, or "being all one can be"**
The provider assumes few if any personal risks	The provider often assumes substantial personal risks
The service rendered is that of a minimally- decent Samaritan (that is, one who does what should be expected of any citizen) †	The service rendered is that of a good Samaritan (who goes out of his or her way) or even a splendid Samaritan (who takes major risks on the client's behalf) †

**The concept of "deficit needs" and "being needs" were advanced by Abraham Maslow and have been previously discussed in the context of medical professionalism. ⁴³

 \dagger The distinctions among "minimally-decent," "good," and "splendid" Samaritans as made by Judith Jarvis Thompson are discussed by Stuart. 44

little or no reference to any unique concerns of self-employed or hospitalemployed doctors. Few articles delve into what is known in academic circles as the sociology of the professions.

The sociologist Elliott Krause in *Death of the Guilds* observed that during the 20th century professions throughout the Western democracies morphed from "something special" into "just another way to make a living."¹⁷ And, the Sociologist Eliot Friedson in *Professionalism: The Third Logic* foresaw "the not unlikely possibility...that professionals will be slowly transformed into especially privileged technical workers."¹⁸ These, and other sociologists, consider medicine's case qualitatively similar but quantitatively more severe than those of most occupations. Physicians of the new millennium face what can be described as a perfect storm



Numbers of MEDLINE indexed articles with "professionalism" as a keyword in Academic Medicine (upper panel), and in all MEDLINE indexed journals (lower panel) by year, 1980–2015.

resulting from at least three forces: the declining status of medicine as a learned profession; the commercialization and commoditization of medical practice; and the lifestyle preferences of today's young people.¹⁹

Medicine, law, and the clergy were the principal subjects taught in medieval universities, and thus became the learned professions. People turned to them for guidance through personal crises (medical, legal, or spiritual) fraught with uncertainty. Medicine's marriage to science and technology shrinks uncertainty, and therefore, the value of a learned person's judgment and counsel. Medicine moves inexorably toward becoming an array of technical services that do not require nuanced insights into the human condition, or caring beyond the level of beneficence. "I just want a good doctor," said one of my relatives, "if she has personality, fine; if he reads Shakespeare in bed, fine; but, I just want a good doctor."

The Canadian Physician-bioethicist Nuala Kenny perceives today's relentless commercialization and commoditization as a fourth pivotal event in the evolution of the medical profession—the others having been the Hippocratic tradition (fifth century B.C. Greece and second century A.D. Rome); the adoption of medical ethics (18th century Great Britain and 19th century United States); and the Flexner Report (1910). Consequences include confusion about the relative roles of physicians and patients; creation of a complex web of conflicts of interests and obligations; reduced trust in the physician's judgment; loss of the physician's ability to make recommendations on the basis of potential benefit versus potential harm; devaluation of what cannot be measured objectively; and increasing reliance on devices and procedures at the expense of clinical judgment. Kenny questions whether the new conditions, if unchecked, will allow even the possibility of professionalism.²⁰

Today's medical students and young physicians do not lack for idealism, but as with their predecessors, prevailing social conditions will shape their lifestyle preferences. We should applaud them for wanting more balanced lives. We should applaud them for wanting to spend most evenings at home. We should applaud them for preferring shift work. However, the employment model exacts a price. Poses and Smith point out that employment contracts contain clauses—non-compete clauses, termination-without-cause clauses, productivity-incentive clauses, leakage-control clauses against outside referrals—that may compromise patients' best interests.²¹ Such clauses can compromise doing the right thing well, and can make service that transcends self-interest (that is, "higher professionalism" as we have defined it here) a dismissible offense.

Is professionalism as previous generations have known it even possible?

Five Clusters of Suggestions

New physicians will need to come up with their own best practices for fostering professionalism, but need to keep in mind five tried and true empiricisims:

Table 4. Some characteristics about recent generations, and their implications for medicine					
Generation	Birth Years	Values and characteristics	Implications for medicine		
Veterans	Before 1946	Value discipline, law and order, and stability; trusting, respectful, hopeful, and loyal; uncomfortable with change	Traditionalist physicians who view their profession as a constant, uninterrupted calling; focus on professionalism and duty		
Baby Boomers	1946–1964	Value job status and social standing; believe that employment is for life; more critical, assertive, and demanding than Veterans	Although similar to traditionalist physicians on the surface place more value on status and tangible rewards		
Generation X	1965–1979	Resourceful, individual, self-reliant, and skeptical of authority; place less value on corporate loyalty and status symbols	Value being a physician as only one aspect of their identity; seek a balanced life and also security; often change employers		
Generation Y	1980–1994	Technologically-aware; comfortable with ethnic diversity; values similar to Veterans' values in many ways, with a strong sense of morals	Expect an employment model with limited, well-defined hours and patient-care responsibilites		
Generation Z	1995–	Internet-dependent, valuing online resources and so- cial media such as Google, Twitter, Linked-In, and Facebook	Determined, but hold the potential for bringing about globalized value systems and positive change through massive Internet-based collaborations		

Humanize the patient—thought experiment #1

You are "found down" in a distant city, treated by emergency medical services (EMS) personnel, taken to a hospital, and stabilized. What would you want caregivers to know about you as a person, not just as a physiologic preparation?

Osler taught students to appreciate a patient's individuality, "Nothing will sustain you more potently than the power to recognize in your humdrum routine, as perhaps it may be thought, the true poetry of life—the poetry of the commonplace, of the ordinary man, of the plain, toil-worn woman, with their loves and their joys, their sorrows and their griefs."²²

Many EMS personnel do not want personal information about someone found down. They care at the level of beneficence and empathy, and

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sympathy might get in the way. Emergencies aside, most people would probably want caregivers who know something about them as individuals. Here are three suggestions for educators:

1. Require students and residents to read Faith Fitzgerald's article "Curiosity," an account of how an elderly woman thought to be the least interesting person on a medical service became, on questioning, the most interesting person in the San Francisco Bay Area.²³

2. Exhort students and residents to describe each new patient, in the opening paragraph of the write-up (history and physical examination), as an amazing human being whom everyone should want to help. Grade these efforts.

3. Establish a system whereby someone empathically asks each patient, "What would you want caregivers to know about you as a person should you become incapacitated?" Display the patient's edited answer in the electronic medical record just beneath the demographic information. Encourage caregivers to use this information in ways that reassure the patient, honor the patient's humanity, and facilitate empathy.

Care about caring—thought experiment #2

There are two candidates for a humanism-in-medicine award. One is a beloved primary care physician who models friendliness and sometimes cries with her patients. The other is a stern-faced surgeon who models technical excellence and never fails to get out of bed when a patient might be in trouble. Which gets your vote?

Osler became controversial when latter-day critics began accusing him of devaluing emotions. They cited his 1889 "*Aequanimitas*" address in which he told graduating medical students the importance of imperturbability, "coolness and presence of mind…clearness of judgment in moments of grave peril," and its mental counterpart, equanimity (*aequanimitas*). One critic rebuked Osler for never using the word empathy, even though empathy did not enter the English language until 20 years later!

Such critics overlook Osler's main point, which was to suppress emotions during "moments of grave peril" that require riveted focus on the problem at hand. Osler told students, "Cultivate, then, gentlemen, such a judicious measure of obtuseness as will enable you to meet the exigencies of practice with firmness and courage, without, at the same time, hardening the human heart by which we live."²⁴ Osler often spoke of head and heart, implying that the level of caring should match the circumstances.²⁵ Here are three suggestions for educators:

1. Encourage medical students to learn everything they can about their personalities and caring styles. The extent to which they prefer "head" or "heart," as suggested by self-reflection, by the impressions of peers and teachers, and by such tests as the Myers-Briggs Type Indicator^{*}, should be factored into their choice of specialty.

2. Teach students and residents to monitor their capacity to care, and to recognize warning signs that they might be losing it. Osler said, "I would warn you against the trials of the day soon to come to some of you—the day of large and successful practice. Engrossed…in professional cares, getting and spending, you may so lay waste our powers that you find, too late, with hearts given away, that there is no place in your habit-stricken souls for those gentler influences which make life worth living."²⁴

3. Regard caring as an academic subject worthy of continued attention. Pay attention to new insights from psychology and neuroscience. Consider for discussion Paul Bloom's 2016 book *Against Empathy: The Case for Rational Compassion*.²⁶ Bloom, like others, conflates empathy and sympathy, and trivializes compassion. However, his argument resembles Osler's in that emotions should not be allowed to interfere with technical excellence and/or sound judgment. Educators might also consider the Effective Altruism Society, self-described as "a growing social movement that combines both the head and the heart: compassion guided by data and reason."²⁷

Resist balkanization—thought experiment #3

Your financial adviser, concerned about your cash flow, reviews the medical societies to which you pay dues and subscription fees. These include national, regional, state, and local medical societies, two specialty societies, and a subspecialty society. He recommends you drop at least three. Which would you drop?

You should concentrate on your specialty, unless people pay you to be a consummate generalist. However, for most of us, strong identification with a specialty lessens an ideal expressed by Osler, the "complete organic unity" of the medical profession.

Osler recognized balkanization when he said, "So vast…and composite has the profession become, that the physiological separation, in which dependent parts are fitly joined together, tends to become pathological."²⁸

Balkanization has gotten much worse. Brief mention should be made of a phenomenon known to sociologists as "the professional project," defined as "the effort of an occupational group to organize itself to maintain a monopoly over a service and control of the market," in order to achieve "collective conquest of status." ²⁹ Numerous medical specialties maintain their separate professional projects, complete with offices in the nation's capitol. Other health-related occupations do likewise. These efforts are useful but detract from the ideal of complete organic unity.

Here are three suggestions for educators:

1. On the first day of class, tell students to think of their classmates and their peers around the world as an organic whole, a cohort committed to serve the collective good long after they have gone their separate ways into specialties, subspecialties, and sub-subspecialties.

2. Foster an appreciation of the history of medicine. A sense of history matters to the definition of a learned profession, and also to at least several dimensions of medical professionalism as currently construed.³⁰

3. Celebrate examples of higher professionalism (service that transcends self-interest). Publicize local examples of physicians who work in free medical clinics or serve as medical missionaries. Publicize extreme examples, such as that of Dr. Carlo Urbani, the Italian physician who sacrificed his own life to contain an outbreak that endangered the entire world.³¹

Monitor expert testimony—thought experiment #4

A defense attorney urgently needs an expert witness in a negligence case brought against a primary care physician in the next county. You determine that the physician met a reasonable standard of care. The attorney then informs you that your closest subspecialty colleague will be a witness for the plaintiff. What will you do?

There are few, if any, articles dedicated to physician-expert testimony

as it pertains to medical professionalism. Yet few areas are more harmful to professional morale and to the ideal of the medical profession as an organic whole.

Especially damaging is the propensity of a relatively small number of physicians to say things in court that contradict the standard, peer-reviewed medical literature. Anecdotes abound of highly-accomplished physicians who, in testimony, manifest classic signs of betrayal of professionalism such as arrogance, lack of conscientiousness, misrepresentation, and, for a few physicians, greed.³²

Those injured by medical negligence surely deserve access to legal remedy, but lawsuits demoralize physicians, cause serious psychological distress, damage doctor-patient relationships, and increase the cost of health care. Serving in this capacity, whether for plaintiff or defense, demands the highest standards of professionalism, ethics, and intellectual honesty.

Here are three suggestions for medical professionals:

1. Make at least two hours of continuing medical education a prerequisite for serving as a physician-expert witness. One should demonstrate understanding of the legal process; the harmful effects of lawsuits on plaintiffs; the possible devastating effects of lawsuits on physiciandefendants; the need to empathize with both plaintiff and defendant; and the ideal role of the physician-expert as *amicus curiae*—an emotionally-neutral witness committed entirely to helping a jury determine whether the defendant(s) met the standard of care.

2. Set up procedures for peer review of physician-expert testimony, perhaps through the ethics committees of specialty and subspecialty organizations.³³ Physician-expert witnesses whose statements clearly contradict the weight of medical knowledge and/or the prevailing style of medical practice should be made known to their colleagues.

3. Start a nationally-coordinated program whereby potential plaintiffs—people who want to know whether unfavorable outcomes resulted from physicians' failure to meet a reasonable standard of care—can obtain expert opinions at no cost. Two identical sets of medical records would be sent to a distant medical center. Faculty, residents, and students, joined perhaps by attorneys and/or law students, would form two teams, hold moot court, and release the findings to the potential plaintiff. Such an activity would discourage some lawsuits, and render others less expensive since much of the research would have been done. This could be an incredible learning experience.

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Make the world better—thought experiment #5

Your daughter or granddaughter comes home from college despondent about the future of humankind and of the planet. She talks about overpopulation, nuclear warfare, bioterrorism, global warming, the coming mass extinction, and her reluctance to bring a child into this godforsaken place. She asks, "What can we do about it?"

Osler's sunny disposition masked deep concern about the future of humanity. He expressed hope that doctors could make a difference when he wrote, "Distinctions of race, nationality, colour, and creed are unknown within the portals of the temple of Æsculapius. Dare we dream that this harmony and cohesion so rapidly developing in medicine...dare we hope, I say, that in the wider range of human affairs a similar solidarity may ultimately be reached?" ³⁴ Such optimism was more characteristic of the Progressive Era (1890–1920) than of our own, as reflected by Osler's 1910 lay sermon "Man's Redemption of Man." ³⁵

Few scholars now hold such a roseate perspective on human progress. However, Michael Bliss, an Osler biographer, makes a strong case for "medical exceptionalism," wherein medical history, unlike most of human history, points toward steady progress and ever-greater achievements.³⁶ Medicine, joined by other health care professions, could become the true "city on a hill," a beacon for the rest of humanity.

Here are three suggestions for physicians and students:

1. Brighten the day of everyone you meet with cheerfulness and a latitudinarian high positive regard.

2. Consider taking part in activist causes. Some argue that physicians should refrain from partisan causes.³⁷ But, should we not concern ourselves with the root causes of problems that show up in hospitals and clinics?³⁸ Weigh the pros and cons.

3. Use Internet-based social media to form a global coalition of physicians and other health care workers committed to making the world a safer, more sustainable place to live. Physicians of the new millennium have, for the first time in history, an inexpensive way to expand Osler's ideal of solidarity among physicians into "the wider range of human affairs." Such a coalition might start small and work toward the larger problems that endanger life on earth.

Conclusion

In 1902, Osler told members of a medical society, "The times have changed, conditions of practice have altered and are altering rapidly, but... we find that the ideals which inspired [our predecessors] are ours today ideals which are ever old, yet always fresh and new, and we can truly say in Kipling's words:

The men bulk big on the old trail, our own trail, the out trail, They're god's own guides on the Long Trail, the trail that is always new."³⁹

The trail for the men and women of the new millennium presents steep climbs, especially if they are to be more than technicians who care. However, if they can achieve a level of caring in which service transcends self-interests; if they can care not just for individual patients but also for the greater good; if they can care about "caring" as a subject deserving their continued attention, then their capacity for good knows no limits.

Dare we hope that their trail will lead to a gorgeous summit for all of humanity? Let us wish them well!

Note: The previously-unpublished data pertaining to MEDLINE-indexed articles with both "competence" and "caring" as keywords were presented in part at the A Ω A Induction Banquet at the Johns Hopkins University School of Medicine, May 22, 2012.

References

1. Maister DH. True Professionalism. New York: Touchstone; 1997: 16.

2. Gourevitch D. The history of medical teaching. Lancet. 1999; 354 (Supplement 2000): SIV.

 Rourke S, Ellis G. The most influential physicians in history, Part 4: The top ten. http://www.medscape.com/features/slideshow/influential-physicians-part-4.
 Coulehan J. What's in your library?: "The leaven of the humanities." JAMA. 2016; 316(13): 1340-1.

5. Osler W. The Old Humanities and the New Science. Boston: Houghton Mifflin Company; 1920.

6. Osler W. Unity, peace and concord. In Osler W. Aequanimitas, With other Addresses to Medical Students, Nurses and Practitioners of Medicine, Third Edition. New York: The Blakiston Company; 1932: 395–423, 425–43,

7. Lantos JD. Do We Still Need Doctors? New York: Routledge; 1997.

8. Topal E. The Creative Destruction of Medicine. How the Digital Revolution Will Create Better Health Care. New York: Basic Books; 2012.

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9. Topal E. The Patient Will See You Now: The Future of Medicine Is in Your Hands. New York: Basic Books; 2015.

10. Goleman D. The empathy triad. In Goleman D. Focus: The Hidden Driver of Excellence. New York: Harper; 2013: 98–115.

11. McLaren K. The Art of Empathy: A Complete Guide to Life's Most Essential Skills. Boulder (CO): Sounds True, Inc.; 2013: 24.

12. Greiner R. 1909: The introduction of the word "empathy" into English. In BRANCH: Britain, Representation and Nineteenth-Century History, Extension of Romanticism and Victorianism on the Net, Felluga DF editor. http://www.branchcollective.org.

13. Browne T. Religio Medici, part 2, section 2. In Killeen K, editor Thomas Browne. Oxford (UK): Oxford University Press; 2014: 62.

14. Bayer R, Oppenheimer GM. AIDS Doctors: Voices from the Epidemic: An Oral History. New York: Oxford University Press; 2000.

15. Bryan CS. Theodore E. Woodward Award. HIV/AIDS, ethics, and professionalism: where went the debate? Trans Am Clin Climatol Assoc. 2003; 114: 353–67.

16. Starr P. Social Transformation of American Medicine: the Rise of a Sovereign Profession and the Making of a Vast Industry. New York: Basic Books; 1982.

17. Krause EA. Death of the Guilds: Professions, States, and the Advance of Capitalism, 1930 to the Present. New Haven (CT): Yale University Press; 1996: ix.
18. Friedson E. Professionalism, the Third Logic: On the Practice of Knowledge. Chicago: The University of Chicago Press; 2001: 209–10.

19. Bryan CS. Medical professionalism meets generation X: a perfect storm? Texas Heart Inst J. 2011; 38: 465–70.

20. Kenny NP. Selling our souls: The commercialization of medicine and commodification of care as challenges to professionalism. cms.cws.net/content/ ameicanosler.orga/files/...2010-Nuala-P-Kenny-McGovern.pdf.

21. Poses RM, Smith WR. How employed physicians' contracts may threaten their patients and professionalism. Ann Intern Med. 2016; 165: 55–6.

22. Osler W. The student life. In Osler W. Aequanimitas, With other Addresses to Medical Students, Nurses and Practitioners of Medicine, Third Edition. New York: The Blakiston Company; 1932: 395–423.

23. Fitzgerald F. Curiosity. Ann Intern Med. 1999; 130: 70–2.

24. Bryan CS. "Aequanimitas" Redux: William Osler on detached concern versus humanistic empathy. Perspect Biol Med. 2006; 49: 384–92.

25. Osler W. Aequanimitas. In Osler W. Aequanimitas, With other Addresses to Medical Students, Nurses and Practitioners of Medicine, Third Edition. New York: The Blakiston Company; 1932: 1–11.

26. Bloom P. Against Empathy: The Case for Rational Compassion. New York: HarperCollins; 2016.

27. http://www.centreforeffectivealtruism.org.

28. Osler W. Chauvinism in medicine. In Osler W. Aequanimitas, With other Addresses to Medical Students, Nurses and Practitioners of Medicine, Third Edition. New York: The Blakiston Company; 1932: 263–89.

29. Kultgen J. Ethics and Professionalism. Philadelphia: University of Pennsylvania Press; 1988: 100.

30. Bryan CS, Longo LD. Perspective: Teaching and mentoring the history of medicine: an Oslerian perspective. Acad Med. 2013; 88: 97–101.

31. Reilley B, Van Herp M, Sermand D, Dentico N. SARS and Carlo Urbani. New Engl J Med. 2003; 348(20): 1951–2.

32. Stobo JD, Cohen JC, Kimball HR, et al. Project Professionalism. Philadelphia: American Board of Internal Medicine; 1995.

33. Bryan CS. Peer review where it counts. J SC Med Assoc. 1989; 85: 209–11.

34. Osler W. British medicine in Greater Britain. In Osler W. Aequanimitas, With other Addresses to Medical Students, Nurses and Practitioners of Medicine, Third Edition. New York: The Blakiston Company; 1932: 163–88.

35. Osler W. Man's Redemption of Man. A Lay Sermon, McEwan Hall Edinburgh, Sunday July 2nd, 1910. New York: Paul B. Hoeber; 1913.

36. Bliss M. Medical exceptionalism. Perspect Biol Med. 2012; 55: 402–8.

37. Huddle TS. Perspective: Medical professionalism and medical education should not involve commitments to political advocacy. Acad Med. 2011; 86: 378–83.

38. Geiger HJ. The political future of social medicine: Reflections on physicians as activists. Acad Med. 2017; 92: 282–4.

39. Osler W. On the educational value of the medical society. In Osler W. Aequanimitas, With other Addresses to Medical Students, Nurses and Practitioners of Medicine, Third Edition. New York: The Blakiston Company; 1932: 327–45.

40. Marcum JA. Reflections on humanizing biomedicine. Perspect Biol Med. 2008; 51: 392–405.

41. Marcum JA. Care and competence in medical practice: Francis Peabody confronts Jason Posner. Med Health Care Philos. 2011; 14: 143–53.

42. Bryan CS, Babelay A. Building character: a model for reflective practice. Acad Med. 2009; 84: 1283–8.

43. Bryan CS. Medical professionalism and Maslow's needs hierarchy. The Pharos. 2005; 68: 4–10.

44. Stuart J. A virtue-ethical approach to moral conflicts involving the possibility of self-sacrifice. J Soc Philos. 2004; 35: 21–33.
Chapter 6

Resistance and Radicalization: Retraining Professionals for the Modern Era

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The following is a synthesis-account of a presentation at the 2016 A Ω A Professionalism Conference, structured around prepared comments (didactics); session-based group exercises (data); and discussion. All session elements, from opening remarks through the questions that fronted the group exercises, to the presenter-facilitated discussion, were intentionally framed in extremis. Much of what unfolded happened because of the good graces and willingness of conference participants to dance along edges of issues that often lacked balance or evenhandedness. The intent was to move the discussion of 21st century professionalism in both unconventional and unanticipated directions.

The thesis is simple, if complex in its implications. If bureaucratic and professional forms of organizing work are fundamentally antagonistic,¹ then how should the training of future physicians best acknowledge these tensions?

Before addressing this question, there are two additional caveats. First, based on experiences as medical school faculty, and familiarity with the medical education literature, most medical education programs do not formally and substantively address the tensions that exist between bureaucratic and professional forms of organizing work. A similar conclusion holds for market-driven versus professional forms of organizing work, albeit to a lesser degree.² In both respects, many medical professional training programs fail to adequately prepare their charges to optimally function within a 21st century work environment.

Second, most schools operationalize their professional preparation mission by continuing to emphasize clinical-technical competence over "softer" (a term still widely deployed in medical education circles) social and behavioral competencies, the latter often being mashed together under a largely heterogeneous smattering of "communications," "social medicine," and "on doctoring" course offerings.^{3–5}

The notion that medical schools might need to prepare 21st century

practitioners who can best resist the siren calls of bureaucratic or market masters, including the conundrums of dual agency,^{6–7} is not yet part of the educational equation.

The Rise of a Contested Profession, and the Threats of an Emerging Industrial Complex

The 1960s and 1970s were a time of great ferment for medical sociology as an academic discipline. Although its roots extended into the late 1800s⁸ and early 1900s,⁹ medical sociology did not emerge as a formal academic and sociologic subdiscipline until the 1950s and 1960s.¹⁰ During these two decades, disciplinary pioneers struggled to define their own thematic turf relative to other established sociological domains, such as the sociology of education, religion, and social psychology.

It was no small event within this band of identity upstarts when, in 1970, Eliot Freidson published his dual tomes *Profession of Medicine*¹¹ and *Professional Dominance*.¹² Both challenged earlier structural-functional accounts of medical training and practice where medicine's existence as a powerful social institution was uncritically interpreted as evidence of its necessary role in advancing the public's welfare.

While Freidson was critical of medicine's hegemonic moves to increase its power and privilege, he also insisted that medicine was maintaining its traditional prerogatives and powers over the structure and content of its work. Not all medical sociologists agreed. A number of analytically distinct and countervailing voices (John McKinlay, Marie Haug, Sol Levine) began to offer an array of alternative conceptual frameworks (e.g., proletarianization, deprofessionalization, corporatization) to what was being termed "Freidson's professional dominance thesis." The result was a firestorm of point-counterpoint articles as Freidson and his critics debated the nature of medicine as a profession.¹³

Organized medicine showed little interest in the arguments being made or the conclusions being drawn as to how large-scale socio-political changes were having an appreciable effect (or not) on traditional control over the structure and content of its work. However, absent from organized medicine's lexicon were terms like profession, professionals, and professionalism.

Both sets of indifferences (e.g., the socio-political seismics along with the semantics of professionalism) can be seen in Arnold Relman's 1980 *New England Journal of Medicine* article "The New Medical-Industrial Complex."¹⁴ Although much of what Relman had to say was socio-structural in nature, he made no direct reference to either sociology or to professions/professionalism. These lacunae would be short lived, for waiting in the analytic wings was Paul Starr's 1982 Pulitzer Prize winning book *The Social Transformation of American Medicine*. The opening sentence reminds, "The dream of reason did not take power into account."¹⁵

Shortly thereafter, and following his own review of Starr's book,¹⁶ Relman would avail himself of sociological frameworks and language in warning medicine about threats to its status as a profession, and in calling for "an agenda for responsible professionalism."¹⁷

Relman's and Starr's warnings are more than 30 years old. Are their concerns about an emergent industrial complex (Relman), and medicine's sovereignty (Starr) still salient to the state and status of 21st century medicine? Is industry still a professional/professionalism issue?

We asked conference attendees to address these questions. The exercises were framed as an opportunity for group wisdom, with conference attendees being told that there were no wrong answers and that all results of the exercises would be posted for group consideration.

Group Exercises

Participants were directed to take an index card, place a #1 in the upper right corner, and to draw a line similar to the following.

Exercise 1:

Participants were instructed to write TBTI under the left end of the line, OH under the right, and to consider the following question:

Today (and to build upon Relman) the medical-industrial complex's threat to professionalism is...

Left, TBTI: The biggest threat imaginable—This threat is the beast of all beasts. There cannot be a bigger threat.

Right, OH: Old hat—The medical-industrial complex is not an issue any more. It is not a threat at any level. Perhaps it is even professionalism's best friend!

Each end point is an absolute.

Where do you see the medical-industrial complex-professionalism issue falling on the line? Mark that point with an X.



On Encountering Cats, Sheep, and Other (Possible) Barnyard Creatures

A medical student blog posting "What the USMLE Step 2 CS Protects,"¹⁸ appeared on *in-Training*. Although most of the post focused on the USMLE clinical skills exam, one quote stood out:

As medical students, we need to understand something about ourselves: we are a bonanza waiting to happen. We are invested to the point of ultra-obedience and will jump through any hoops placed in front of us to advance in order to one day become working doctors. We will have good incomes and will never be unemployed. We are too absorbed in the details of medical knowledge acquisition and the fulfillment of educational and professional requirements to organize in any meaningful way. We have been following rules compulsively since high school because that is how one becomes a medical student.

The student went on to characterize his peers as "perfect borrowers" (financially), and ready fodder for exploitation by lenders and educational and licensing bodies. This depiction sparked interest in a different kind of entity—something that stood in contrast to the more traditional characterization of physicians as feline antagonists (e.g., "getting physicians to do anything is like trying to herd cats").

Exercise 2:

Participants were instructed to take a second index card and draw a line. Under the left end of the line write US, and under the right end of the line write UC.

Remembering that both ends of the line are absolutes, answer the question:

How are we educating medical students today—as sheep or cats? Where do you see students on this continuum?

Left, US: Ultimate Sheep—perfect followers.

Right, UC: Ultimate Cats—independent beyond belief.



Untangling the Knotworks of the Formal, and Other-than-Formal, Dimensions of Teaching and Learning

What follows is more personal to the lead author, and is told as such. In the mid 1970s, the transition into my first medical school faculty position was an unsettling process. I found myself closer in age—and outlook—to my students than to my faculty peers. Generationally, most of us were products of the 1960s. Quickly my world became populated more by future cats than older goats. I also discovered there were appreciable gulfs and disjunctures between how faculty and students viewed things.

Faculty focused on content, on knowledge delivery, and on strategies of command and control. They were consumed with teaching.

Students were more interested in learning. They struggled to make sense of the medical school experience. They battled to master the material deluge the faculty had created for them.

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By the mid 1990s, issues of professionalism had established residence within this contested domain of betwixt and between.¹⁹ I was inundated within an emerging professionalism literature, and the formal course materials I was supposed to deliver—the formal curriculum. I also began to see (and hear about) the variety of other-than-formal ways (sometimes referred to as the hidden curriculum) students were learning about what it meant to be a professional. Sometimes these two curricula dovetailed. Often they did not. Countervailing messages were rife. Students began to push back.²⁰ They began to vociferously complain about "the P word."²¹ It was a pedagogical nightmare—which meant it was a wonderful time to be a medical sociologist.

I began, with the help of colleagues, to consider different ways of thinking about professionalism. We wondered if there might be different types of professionalism, and if so, whether these types might exist within a complex set of relational dynamics.²² We labeled one of these types as "the activist professional," although our conceptualizations at this time had nothing to do with resistance or radicalization. Lurking within all this thinking was the notion that learning to do the right thing, as in being a professional, might be a rather complicated or enigmatic process. Perhaps it might depend on who was doing the defining and whose definitions were dominant within the various settings that made up the medical school learning environment.

These complexities also brought issues of pedagogy. What kind of professional (or professionals) were we trying to produce, and how were we trying to do this? Were we engaged in the preparation of an occupational group society considered to be professionals, and in the preparation of professionals, or were we claiming that there was something particular or special about the process itself—professional training?

We sought answers by focusing on context, and on how changes in clinical practice and the organization and delivery of health care might be implicitly pushing messaging about what it meant to be a good doctor.

Also feeding this overall lexiconic swirl was a chance encounter with two different literatures on occupational/professional socialization. Each approached socialization and professionals from a different mindset—socialization from an organizational sciences perspective;²³ and the processes and practices of military socialization.²⁴ These are two different framings on what might be considered a singular issue—how best to train future members of a given occupational group.

The predominant voice within the organizational socialization camp emphasizes issues of on-boarding and fitting in. The operative problems are work force management and retention. Professionals, as a distinct type of worker, have a minuscule presence within this body of scholarship. The military training literature fronts a different set of concerns and messages. As opposed to "fitting in," it is concerned with how bureaucracy and bureaucratic functioning might provide some tension to the professional soldier, and to military leadership as professionals. This literature is more explicit about the potential for problems to arise within this domain (e.g., soldiering) when standardized solutions are ritualistically applied to nonstandard problems.

The military socialization literature doesn't portray bureaucracies as evil. Far from it. This literature is quite explicit in identifying the armed services as a highly bureaucratic enterprise. It also acknowledges bureaucracies as incredibly good at identifying and implementing common solutions to common problems. However, a key issue is that battlefield situations often are awash with contingencies and complexities, so there is great risk to both the mission and to those charged with carrying out the mission when bureaucratic processes and bureaucratically socialized functionaries seek to apply standard solutions to non-standard circumstances. How best, this literature asks, can we train solders to resist these malignant tendencies?

This bifurcated rendering of socialization led us to consider how we might similarly problematize medical education. Could medical educators be approaching occupational preparation more as a process of onboarding, fitting in, or "drinking the Kool-Aid?"^{25–26} Is it possible that the bureaucratic scaffold supporting both the medical school and its clinical enterprises was essentially viewed as benign and non-problematic, and thus (incorrectly) as having little or no role in delivering a rule-based framing of doctoring?

We wondered how professionalism might be similarly constructed. Is professionalism all about following the rules? If so, whose rules? Were these rules generated by the profession? The organization? Some hard-tountangle mash-up of the two? How do formal framings, the bureaucratic scaffold of the educational enterprise, and the financial undercurrents of delivering health care, cause medical schools to function as little more than farms in the production of a certain sheep-like product?

Are we, as faculty, internalizing a sheep farming approach to professional preparation? How do the forces of unconscious bias, group preservation, and the homophilic desire²⁷ to select and train future generations of physicians to be "just like us" push a follow-the-rules, role-model-reverence, and etiquette-based approach to professionalism?

What might happen if we deliberately reimagine medical schools not as sites of cultural reproduction (a.k.a. factories), but rather as sites of cultural resistance? Resistance could be operationalized as skill sets designed to: 1. Problematize the application of routine solutions to non-routine problems; and

2. Recognize where and how market incentives and bureaucratic structures leak streams of tacit messages into the learning environment contrary to core professionalism principles.

What if we framed educational outcomes to be less about fitting in to a specific group (doctors) that claimed to be in service to another group (patients and the public), but rather as orienting personal and professional identities? The military socialization literature explicitly identifies soldiers as "public servants," a term infrequently used in the medical education literature (characterizations of medicine as a "service industry" notwithstanding). Conversely, the organizational sciences literature highlighted the onboarding of "employees."

Medical School Student Perspectives:

This last set of questions brings us to the results of another set of index card exercises, those done with first year medical students at (for our purposes) a medical school somewhere in North America.

A class of MS1 students was asked to complete several index card questions for the purposes of generating discussion. Two of these questions are germane to the session. The first question was based on two Star Wars characters. The second about the barnyard.

Question #1: Imagine your future selves as physicians. Is becoming a physician more like being trained as a...

Left, CT: Clone trooper—Cloned, hired gun and bounty hunter in unquestioning service to the Emperor?

Right, JK: Jedi Knight—Wise sage with special fighting powers whose group identity and training both serve, and, if necessary, question the Emperor for the sake of a higher good (the Force)?

Where do you see yourself on this continuum? Mark that point with an X. The end points are absolute.

Question #2: Professionalism is about...



Left, CON—Conformity/following the rules.

Right, COU—Courage/challenging authority and power.

How do you see professionalism on this continuum? Mark your card with an X.

These two sets of findings were presented to conference attendees as contrasting framings into how medical students might be thinking about

professional formation. On the one hand, students could think of their future selves as Jedi Knights—guardians of The Republic, and social actors who value knowledge, wisdom, and service to others. Conversely, Clone Troopers, thought of themselves as genetically modified human clones soldiers of the Empire whose function is to squash disorder, reduce anarchy, and promote stability and progress within the Empire. Knights are noble. Clones protect vested interests.

Most students placed themselves toward the Jedi Knight end of the continuum, albeit with some degree of Clone Trooper trappings.

The conformity-challenge question presented the group with a different distribution, and therefore, a different set of contingencies. Conformity appeared to be the reigning attitudinal monarch with professionalism (how one best exemplifies professionalism) viewed from a follow-the-rules perspective. Notions of resistance had minimal presence in this distribution.

This casting of professionalism as acquiescence, docility, and orthodoxy comes back to the barnyard, and the third of the index card exercises. What is the educational-professionalism problem we need to address? Are physicians loose cannons in need of controlling, or are they helpless and hapless pawns of management? Is medicine a culture of cats or sheep?

Discussion

The index card exercises and subsequent group discussion highlighted four key data-driven issues:

1. Conference attendees view the medical-industrial complex as a continued threat to the profession of medicine, and to physicians as professionals;

2. Attendees view medical schools as some combination of sheep farm and cat producing enterprise;

3. At least one group of first year medical students view professionalism as being more about rules and rule-following that produce Clone Trooper regularity, even as they aspire to become Jedi Knights; and

4. Students view professionalism as more about conformity than resistance.

There is considerable conflict between what students aspire to, and what they are being educated/programed/socialized to do. The overall

picture is one of medical schools as sites of cultural reproduction rather than sites of cultural resistance.

Where Do We Go From Here?

Medical education and medical educators must step back and ask themselves the teleologic question, "to what end?" What is the function of medical education? What are the challenges to which we seek to train professionals for the modern era? What are the practice environments of the future, and how should our future practitioners—as professionals—fit (and not fit)?

We need to subject educational practices to a more extensive array of theatrical, conceptual, and occupational lenses. The formal versus otherthan-formal messaging that takes place within learning environments, and lessons that may accrue from examining other occupational groups such as the military are two examples. A third example is the differential lens of a professionalism driven by phronesis versus one driven by techne.²⁸ An educational system driven by professionalism-as-product/technique/skill may be more in keeping with the production of good sheep, rather than curious and questioning cats.

It is not altogether clear whether the norms that currently guide medicine's professionalism movement remain its own, and are sufficiently distinct from a rules-based/command and control/professionalism-police framing of what it means to be a good doctor. There is concern about how medicine's professionalism movement is sufficiently generated internally, and renewed, as opposed to being set by external interests. If the agenda is internally set, medicine might be perverting its own core principles by promulgating a just-follow-the-rules framing of professionalism, thus becoming a version of the famous Pogo dictum, "we have met the enemy and he is us."

Medical educators must think long and hard about the structural and cultural context of their training environments. This means moving beyond a preoccupation with content. Learning is never context free. There is no such thing as an informationally indifferent, or message-balanced learning environment. There are no revenue neutral, or neutral-to-revenue, learning environments.

Learning environments are awash with messaging, much of which functions to shape the identity of physicians as professionals. The impact of industry and markets on the learning environments of medical trainees is both real and appreciable. So too are the bureaucratic messages of order and social control. All exert pressures on how work is carried out and valued, including the technical aspects of that work.

If being a good doctor is learned within a dynamic interplay of

professional, bureaucratic, and market messaging, where do we encounter a framing of professionalism as something other than top-down, sheeplike messaging (rules)? Or, as normative aspirational chants that ask practitioners to rise above or temporarily hold in abeyance any such antiprofessional pressures? Where do we find within the formal curriculum a view of professionalism where bureaucracy and markets are identified as countervailing forces that require resisting for the sake of medicine's soul?

All three of these ways of organizing work send an array of otherthan-formal/hidden curricula to trainees via the normal flow of medical work. The danger is when the messaging of professionalism prioritizes a fitting in and following-the-rules message, and where at least some of the rules are being set not by the profession, but by organizational prerogatives accompanied by the financial mantra of "no margin-no mission." Left formally unaddressed by medical educators, and potentially un- or under-identified, both bureaucracy and markets can easily become cast as friends of professionalism, or at least neutral to its mission.

The forces of professionalism, markets, and bureaucracy are all necessary to delivering good medical work.¹ Nonetheless, necessary does not mean unqualified or unopposed. A professionalism that fails to dissect and distinguish itself from its two counterparts is a professionalism that is more about conformity than resistance. This is a neutered professionalism more about sheep than cats.

There are some fundamental ironies and dialectics at work in resistance and radicalization. After all, who really wants to train organizational disruptors? Who really wants to educate boat rockers? If you are going to train for the capacity to rock boats, you cannot just train clowders (a.k.a. a band of cats) to rock other people's boats, and not yours. This would be fundamentally disingenuous, sociologically suspect, and pedagogically problematic. If you are successful in educating for the potential to disrupt, then one measure of success is that your best products will one day rattle the very system that produces them, thus ensuring continued change.

The challenge for medical educators is to resist stasis in the service of extra-professional forces by constructing learning environments that will cultivate the kind of curiosity and attentiveness to those forces that promote the capacity for boat rocking, while not swamping/sinking the overall enterprise. This is not an easy task; nonetheless, it is a necessary one.

Bureaucratic and market forces will continue to battle for the hearts and minds of 21st century professionals essentially unopposed by the ethos, ethics, and practice of professionalism. In the end, none of this is about saving the world for professionals, rather it is about saving health care for patients and the public in a world where mission increasingly is defined in terms of margins, and where standardization will deliver inappropriate care to both ends of any illness distribution.

To re-phrase Paul Starr's earlier quote, the dream of professionalism has yet to take countervailing powers into account.

References

1. Freidson E. Professionalism: The Third Logic. Chicago: University of Chicago Press; 2001.

2. Hafferty FW, Brennan M, Pawlina W. Professionalism, the invisible hand, and a necessary reconfiguration of medical education. Acad Med. 2011; 86: e5.

3. Slavin SJ, Wilkes MS, Usatine R. Doctoring III: Innovations in education in the clinical years. Acad Med. 1995; 70: 1091–5.

4. Westerhaus M, Finnegan A, Haidar M, Kleinman A, Mukherjee J, Farmer P. The necessity of social medicine in medical education. Acad Med. 2015; 90: 565–8.
5. Wilkes MS, Hoffman JR, Slavin SJ, Usatine RP. The next generation of doctoring. Acad Med. 2013; 88: 438–41.

6. Benatar SR, Upshur RE. Dual loyalty of physicians in the military and in civilian life. Am J Public Health. 2008; 98: 2161–7.

7. Tilburt JC. Addressing dual agency: getting specific about the expectations of professionalism. Am J Bioeth. 2014; 14: 29–36.

8. McIntire C. The importance of the study of medical sociology. B Am Acad Med. 1894; 1: 425–34.

9. Blackwell E. Essays in Medical Sociology. London: Ernest Bell; 1902.

10. Bloom SW. The Word as a Scalpel: A History of Medical Sociology. New York: Oxford University Press; 2002.

11. Freidson E. Profession of Medicine: A Study of the Sociology of Applied Knowledge. New York: Harper & Row; 1970.

12. Freidson E. Professional Dominance: The Social Structure of Medical Care. New York: Atherton Press; 1970.

13. Hafferty FW. Theories at the Crossroads: A Discussion of Evolving Views on Medicine as a Profession. Milbank Q. 1988; 66: 202–25.

14. Relman AS. The New Medical-Industrial Complex. NEJM. 1980; 303: 963–70. 15. Starr PE. The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry. New York: Basic Books; 1982.

16. Relman AS. Review: The social transformation of American medicine. NEJM. 1983; 308: 466.

17. Relman AS. The future of medical practice. Health Affair. 1983; 2: 5–19.

18. Weyrauch D. What the USMLE Step 2 CS Protects. in-Training. August 22, 2016. http://in-training.org/step-2-cs-protects-11845.

19. Hafferty FW. What medical students know about professionalism. Mt Sinai J Med. 2002; 69: 385–97.

20. Finn G, Garner J, Sawdon M. 'You're judged all the time!' Students' views on

Medical Professionalism Best Practices: Professionalism in the Modern Era

professionalism: A multicentre study. Med Educ. 2010; 44: 814-25.

21. Goldstein E, Maestas RR, Fryer-Edwards K, Wenrich MD, Oelschlager A-MA, Baernstein A, Kimball HR. Professionalism in medical education: An institutional challenge. Acad Med. 2006; 81: 871–6.

22. Hafferty FW, Castellani B. The increasing complexities of professionalism. Acad Med. 2010; 85: 288–301.

23. Wanberg C. The Oxford Handbook of Organizational Socialization. Oxford (UK): Oxford University Press; 2012.

24. Snider DM, Matthews LJ, Marshall J. The Future of the Army Profession. Boston: McGraw-Hill; 2005.

25. Segen J. New Medical Terms: Drink the Kool-Aid. http://www. newmedicalterms.com/media-medicine-2/popular-media/drink-the-kool-aid/.

26. Poses R. Drinking the Managerialists' Kool-Aid?—Why Did Medical Educators Launch Trials of Increased Sleep Deprivation of Physician Trainees Apparently in Violation of the Nuremberg Code? http://hcrenewal.blogspot.com/2015/12/ drinking-managerialists-kool-aid-why.html.

27. McPherson M, Smith-Lovin L, Cook JM. Birds of a feather: Homophily in social networks. Annu Rev of Sociol. 2001; 27: 415–44.

28. Kinghorn WA, McEvoy MD, Michel A, Balboni M. Viewpoint: Professionalism in Modern Medicine: Does the Emperor Have Any Clothes? Acad Med. 2007; 82: 40–5.

Chapter 7 Building an Infrastructure to Support Professionalism in the Modern Era: The Required Elements (People, Process, and Technology)

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earners develop their professionalism in many ways, but one of the more influential ways is from role models.¹⁻⁴ Traditional role models for learners, often champions of classroom education, play critical roles in developing curricula, directly providing education and training with appropriate debriefings, and modeling right behaviors and practice. However, because designated educational champions cannot be everywhere all the time, most education in professionalism occurs in the operating room, the clinic, the intensive care unit, the emergency department, and in the delivery room, with a wide variety of role models.^{3,5}

What medical students see far too often in clinical settings is reflected in the American Association of Medical Colleges (AAMC) Graduating Medical Student Questionnaire data, which suggest they learn a lot from role models—some of it ugly and unprofessional.⁶ One student reported, "I had questions about the recommendations from the consulting service. The attending interrupted me and said, 'Are you illiterate? It's all in the chart." Another student shared, "After the patient was intubated, the team huddled to review potential anesthesia risks. The attending declared, 'Well, it wouldn't be such a problem if she weren't so f***ing fat.' The residents all laughed. I wasn't sure what to do."

Negative role models undermine the best approaches to professionalism education,¹ and create moral distress for learners.⁷ Scholars in the field of professionalism education should be as concerned about developing curricula as they are about maximizing the possibility that the right lessons are presented, incorporated, and sustained. This means having plans in place to identify and address unprofessional behaviors of all medical team members—especially faculty—early and often.

Those who understand medical education should be at the forefront in encouraging health systems to create sustainable approaches to promote professional accountability, and to address disrespectful behavior and performance. To focus on one aspect of professionalism training without the other (i.e., a functional plan to address disrespectful behavior and performance) is akin to flying an airplane at 30,000 feet and only being concerned about the status of the right wing.

To support and sustain learners' development, it is crucial to identify and build sustainable models to ensure that learners are exposed to positive role models, and introduced to how professionals self-regulate and why. Curricula and experiential learning approaches are unlikely to have a lasting impact if organizations fail to put in place the right people, processes, and technology to address unprofessional behaviors among senior team members, as well as learners. Unless there is a balanced approach, professionalism education will not have a sustained and lasting impact on learners and delivery of care that is safe, effective, and patient-centered.

The Time-out Cadet

Ms. Student is conducting a quality improvement project as part of her research rotation with Dr. Anesthesia, assessing strategies to improve the reproducibility of surgical time-outs. Ms. Student reports to her Dean of Students:

"I was observing time outs with Dr. Anesthesia. Dr. Surgeon came in and said, 'Looks like our little Time-out Cadet is here again today. Ms. Student, don't you have something better to do? We're on the same page here, let's just get the case going.' My mentor, Dr. Anesthesia, was in the room and didn't say a thing. I felt embarrassed and disrespected."

What impact is the interaction with Dr. Surgeon (and Dr. Anesthesia) likely to have on Ms. Student? What elements of professional (or nonprofessional behavior) did Ms. Student observe in the interaction?

Did Dr. Surgeon model respect for the student? Did Dr. Surgeon's behavior threaten team work? Does Ms. Student feel that Dr. Surgeon has any awareness of how his behaviors may have impacted others in the operating room, including the patient? In what ways was Dr. Anesthesia modeling professionalism in the interaction? Given Dr. Anesthesia's role as Ms. Student's mentor, did Dr. Anesthesia have a responsibility to speak up in defense of Ms. Student, or the other staff, the patient, or the timeout process? What lessons might Ms. Student take from this interaction, and how might it affect her career choices and future behavior?

Student observations in course evaluations such as, "Wouldn't go into that field;" "Everyone was racist and rude. This seems to be a recurring pattern unaffected by student feedback so I needn't say any more;" and, "I was disappointed in the lack of residents and attendings who were willing to engage students with respect, and I have a hard time imagining wanting



Figure 1 Professionalism and Self-Regulation

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to have them as colleagues in the future," suggest that students are profoundly affected by their experiences. How often do interactions like these occur, and how often do we as educators know about them? If we know about them, how often do we respond?

Responses to questions on the AAMC's Medical School Graduation Questionnaire suggest that more than 50 percent of students experience or witness behaviors that publicly embarrass or humiliate them or other students.⁶ Yet, most medical schools document very few reports from learners about unprofessional interactions.⁸ Most medical schools lack robust processes to help learners overcome their hesitation to report and have their concerns documented. Many lack mechanisms to effectively address concerns to improve the culture and help faculty who generate more than their fair share of concerns to self-regulate and improve their interactions with students and other members of the team.

What are behaviors that undermine a culture of safety, learning, and trust? And, what does it really mean to be a professional?

Figure 1 illustrates the interconnectedness of technical and cognitive competence, behaviors that display respect, promote teamwork, and support individual/group regulation and accountability. While it is critical for all team members to model technical and cognitive competence, competence alone is not sufficient to ensure safe, high quality outcomes.

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Consider a conversation where one student says, "Dr. Surgeon (the same Dr. Surgeon from the Time-out Cadet case) is a fabulous surgeon, but be careful when you go into his operating room. He made four nurses cry the other day over the fact that the wrong tray had been delivered." The same "fabulous" surgeon (who by most measures has excellent technical and cognitive skills) has been associated with a pattern of reports of similar behavior. By failing to model the behaviors of professionalism, Dr. Surgeon threatens the team's shared goals to provide the highest quality care possible, and is likely to be associated with a greater risk for avoidable adverse surgical outcomes, and excessive medical malpractice claims.^{9–11}

But let's also reflect on the responsibilities of Dr. Anesthesia, particularly given Dr. Anesthesia's oversight of Ms. Student's quality improvement project.⁵ Why might Dr. Anesthesia remain silent in the face of the disrespectful behavior directed toward her mentee, and for the time out process? Dr. Anesthesia could be conflict averse, or have little confidence that the organization will support her speaking up in the moment, particularly if she has tried before and been dismissed or treated rudely. Dr. Anesthesia may be concerned that speaking up will have a negative impact on her future interactions with Dr. Surgeon. Dr. Anesthesia could feel that it is the student's responsibility to learn how to deal with this type of disturbance.

Dr. Surgeon's actions, and Dr. Anesthesia's inaction, deliver equally powerful messages about professionalism. Students hear about professionalism in lectures, and then may hear and see unprofessional behaviors in the clinical setting.

Role Models and Professional Identity Formation of Learners

Disclosure of medical errors is an important professional responsibility, and many programs have introduced formal training into the curricula. Studies suggest that role models play a critical role in whether disclosure training will be incorporated into students' future actions as professionals. In a study of >1,600 students and residents from seven medical schools, Martinez, et al., assessed the impact of positive and negative role models on learners' attitudes and behaviors following training in error disclosure.¹ Formal training programs and positive role models had positive impacts on trainee attitudes toward error communications. Negative role models had a significant negative impact on learner's likelihood to disclose errors.¹

Disclosure of errors is an important skill set for professionals to acquire, but there are many others subject to the impact of clinical role models, including handwashing, honoring time-outs, responding to pages, engaging in clear hand-offs, and others that can support or undermine a safety culture.^{3,4}

Medicine is inherently stressful, and nearly all professionals have an

occasional slip or lapse.¹² Most often, professionals self-regulate; they pause and reflect on their behaviors and commit to being more thoughtful or careful in future interactions. A small number of individuals lack the ability to self-regulate. The danger is that without an effective and reliable plan for feedback, patterns may develop. Individuals may be unable to self-regulate due to physical or mental challenges, or they may be part of an organization that lacks systems for support and accountability.

How do we address behaviors that undermine a culture of learning and trust in the modern era? What do health systems need to have in place to ensure that professionalism education will have a sustained impact on learners, and their role models?

Behaviors that undermine a culture of safety and reliability cannot be addressed on the basis of personal and professional courage alone.^{12,13} Organizations need to have the right people, processes, and technology in place to appropriately address "disturbances in the force" in a timely manner, and reduce the probability of pattern development in role models, and ultimately, in learners (see Figure 2).¹²

Figure 2 Essential Elements to Promote Reliability



People

To support the right learning environment, leaders throughout the system must understand and embrace the tenets of professionalism, and commit to holding everyone equally accountable.¹⁴ Leaders are accountable for modeling professional behaviors and enforcing codes of conduct consistently and equitably. Positive role models should be publicly recognized. However, before an award is presented, it is important that those with a right to know assess the individual's performance on all applicable metrics. It can be embarrassing, and promote cynicism, when a faculty member is recognized in an award ceremony and learners chuckle or sit in disbelief knowing how that faculty member is known to treat learners and other team members unprofessionally.

There must be alignment among leaders in medical education and the health care system (e.g., hospital CEOs, medical group leaders, board members, etc.). Leaders must have a willingness to invest in building infrastructure, including providing sufficient salary support for team members required to operationalize plans. In ensuring leader buy-in, champions of promoting professionalism in the learning environment need to ask leaders to support efforts, and be willing to share their own concerns with colleagues who appear to have behaved in ways inconsistent with the organization's core values. Leaders should hold some team members accountable, even if they hold special status or value to the organization because of their clinical role, financial contributions, or prestige.

Champions have the responsibility for lobbying for the right resources and advocating for professionalism efforts. They must articulate the case for professionalism, particularly when efforts stall.¹² Champions persevere and inspire others, and model a desire to see others succeed. A good champion is able to maintain confidentiality, and recruit others to share the vision. They routinely share plan performance at designated meetings to ensure that colleagues see the overall success, thereby helping to ensure the integrity of the program. Champions work closely with the implementation team to ensure smooth introduction, roll out, and sustaining efforts. They need to consider the values that are likely to resonate with their fellow professionals, particularly when addressing physician behavior.

Processes and Resources

Promoting professional accountability requires careful attention to process. The organization must have articulated goals and values (it may be helpful here to reflect on whether you actually know your organization's goals and values).¹² Appealing to a physician's desire to achieve best outcomes allows anything that might interfere with the team's intended goals to be defined as unprofessional. Practices such as washing hands,

respecting evidence-based guidelines, and fully draping when performing sterile procedures provide regular opportunities to model professionalism. Failure to return pages may be just as damaging as a thrown scalpel, and both are unprofessional acts.

Professionalism policies and codes of conduct need to support the organization's goals to create a safe health care and learning environment, and should describe ways to address deviations from expected performance.

Resources needed to establish and sustain efforts include information technology appropriate to capture, track, and trend patient and staff concerns. Resources are also needed for team members who may require physical or mental health screenings and interventions. A tiered model to guide interventions from single occurrences to mandated event evaluations, and to address pattern development early, enhances the organization's ability to operate a reliable process.

Technology

Tools, data, and metrics are required program elements for the modern learning environment. The ability to have team members easily submit their observations allows leaders to have confidence in pattern recognition.

How often do leaders sit and ponder whether three, four, or five reports suggest that a faculty member stands out from his/her colleagues? Do leaders know whether there are physicians who are associated with no complaints (the vast majority)? And, how often does that uncertainty lead to inaction, and missed opportunities?

Having reliable review processes for single events ensures that behaviors that require mandated investigations, and, if founded, interventions are identified and addressed in ways consistent with laws, regulation, and policies. Review of data patterns for individuals and departments by thoughtful leaders with the right to know can be helpful in increasing the likelihood that those who need help get it, and are restored to full practice. Reviewing responses to interventions from peer messengers or formal leaders helps to bolster leaders' confidence in the organization's approach to professionalism, and reduces the likelihood that leaders will be reluctant to require faculty members in distress to get the help they need. Review gives leaders insight, and helps with identification of dysfunctional systems, or poorly led departments.

Evidence of Effectiveness

In work done over the past 20 years, Vanderbilt University Medical Center, supported by the Center for Patient and Professional Advocacy, has focused on building an infrastructure with the right tools and processes to address early, and frequent, behaviors that undermine a culture of safety.^{15–17} The Patient Advocacy Reporting System (PARS[™]) is used at Vanderbilt, and more than 140 hospitals throughout the United States, to support peer-delivered interventions for more than 1,500 professionals.¹⁶

PARS uses unsolicited, coded, and aggregated patient complaints to identify clinicians at high risk for malpractice claims (e.g., "Dr. X told me that my questions were annoying. He put up his hand and said, 'STOP, STOP, STOP," Or, "I was told Dr. Y would call me with the biopsy results. It's been six weeks and I haven't heard. I'm worried they're afraid to tell me I have cancer."). PARS provides local and national discipline-specific comparative data for individuals who develop a pattern of patient complaints, and uses a tiered intervention model to promote self-regulation.¹⁶ To date, approximately 80 percent of individuals identified by PARS have reduced their patient complaints, and their associated malpractice risk.

The Coworker Observation Reporting System program has been built to address staff observations of unprofessional behavior, and uses a similar approach to PARS.¹⁷

Using the Vanderbilt Professionalism Pyramid,¹⁵ a tiered intervention approach with appropriate people, process, and systems, including comparative data, has been shown to improve handwashing rates for a large academic health system.¹⁸ It points out that failing to wash hands is an unprofessional act.

Special Considerations for Learners

An infrastructure to support professionalism for all individuals in an organization must be designed to address unprofessional behaviors directed at learners. Such infrastructure requires important considerations given the unique circumstances, and vulnerability of learners. Because of grading and power differentials, learners are often reluctant to share concerns in the moment, particularly when the involved party is in a position of authority over their grade or future career success, including faculty and house officers.⁸

Learners may fear direct, or indirect, retaliation if they voice concerns, which explains the disconnect for most organizations between reported events by learners and graduating medical student questionnaire results. Due to the power differential, and learners' fear of retaliation, many medical education settings create multiple reporting points for professionalism concerns, including peer learners, course directors, mentors, advisors, and deans. While multiple reporting points can be useful to ensure learners have ample opportunity to share concerns, educators and leaders who receive student concerns about unprofessional conduct have a responsibility to ensure that they provide appropriate encouragement for the student to speak up through a common reporting system that is guided by the organization's policies.

Having silos of data that are not captured centrally creates the possibility that patterns go unrecognized. Training learners and educators about the importance of sharing concerns about safety (a critical element of being a professional), and efforts to address retaliation, are important components of the infrastructure.

These events are rare, but organizations should have a plan to adequately refer and respond. User-friendly systems with feedback loops to express appreciation for reporters, and assurances about protection, are important elements of infrastructure. Providing updates to learners and organizational leaders about efforts, and aggregate data about successes, can reinforce the importance of having a consistent approach system to address unprofessional behavior.

Challenges

Even when learners are encouraged to bring a concern to a thoughtful leader who encourages reporting, some will remain reluctant to formally report. Leaders who hear concerns from a learner should provide counseling in the moment, and reinforce the learner's professional responsibility to officially report.

While encouraging self-reflection and resilience on the part of the learner about their responsibility to speak up in the moment, a leader may unintentionally place blame on the learner. Even in organizations with well-established norms about reporting and sharing of concerns in a non-judgmental way, key leaders may be tempted to blink when faced with addressing behavior of a team member believed to hold exceptional value to the organization.^{12,15} Mitigating risk of blinking highlights the importance of partnerships and ongoing dialogue between education champions and health system leaders.

Conclusion

Medical educators and leaders of health systems have enormous opportunities to shape the professional development of learners. The determining factor is whether they try to do so with a balanced approach.

Supporting the educational development and professional identity formation of learners through careful attention to life-long learning principles, self-directed learning, and reflection are important foundations of professionalism education. However, without an organized approach to support professional accountability with the right people, processes, and technology to address negative role models and sustain the effort, we are likely to see an unending cycle of unprofessional behaviors, moral distress, and cynicism that is all too common. We strongly support training, but submit that it is always reassuring to look out the windows of an airplane at 30,000 feet and see two welldesigned wings.

References

1. Martinez W, Hickson GB, Miller BM, et al. Role-modeling and medical error disclosure: a national survey of trainees. Acad Med. 2014; 89(3): 482–9.

2. Martinez W, Lo B. Medical students' experiences with medical errors: an analysis of medical student essays. Med Edu. 2008; 42(7): 733–41.

3. Wright SM, Kern DE, Kolodner K, Howard DM, Brancati FL. Attributes of excellent attending-physician role models. NEJM. 1998; 339(27): 1986–93.

4. Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. Acad Med. 1994; 69(11): 861–71.

5. Feudtner C, Christakis DA, Christakis NA. Do clinical clerks suffer ethical erosion? Students' perceptions of their ethical environment and personal development. Acad Med. 1994; 69(8): 670–9.

6. All Schools Reports—Graduation Questionnaire (GQ)—Data and Analysis. American Association of Medical Colleges; 2017. https://www.aamc.org/ download/481784/data/2017gqallschoolssummaryreport.pdf.

7. Lomis KD, Carpenter RO, Miller BM. Moral distress in the third year of medical school: a descriptive review of student case reflections. Am J Surg. 2009; 197(1): 107–12.

8. Mavis B, Sousa A, Lipscomb W, Rappley MD. Learning about medical student mistreatment from responses to the medical school graduation questionnaire. Acad Med. 2014; 89(5): 705–11.

9. Hickson GB, Federspiel CF, Pichert JW, Miller CS, Gauld-Jaeger J, Bost P. Patient complaints and malpractice risk. JAMA. 2002; 287(22): 2951–7.

10. Catron TF, Guillamondegui OD, Karrass J, et al. Patient Complaints and Adverse Surgical Outcomes. Am J Med Qual. 2016; 31(5): 415–22.

11. Cooper W, Guillamondegui O, Hines OJ, Hultman CS, Kelz RR, Shen P, Spain DA, Sweeney JF, Moore IN, Hopkins J, Horowitz IR, Howerton RM, Meredith JW, Spell NO, Sullivan P, Domenico HJ, Pichert JW, Catron TF, Webb LE, Dmochowski RR, Hickson GB. Use of Patient Complaints to Identify Surgeons with Increased Risk for Postoperative Complications. JAMA Surg. 2017; 152(6): 522–9.

12. Hickson GB, Moore, IN, Pichert JW, Benegas M Jr. Balancing systems and individual accountability in a safety culture. In Berman S, editor. From the Front Office to the Front Line: Essential Issues for Healthcare Leaders, 2nd Edition. Joint Commission Resources, Inc.; 2012: 1–36.

13. Reiter CE, Pichert JW, Hickson GB. Addressing behavior and performance issues that threaten quality and patient safety: What your attorneys want you to know. Prog Pediatr Cardiol. 2012; 33: 37–45.

14. Behaviors that undermine a culture of safety. Sentinel event alert. 2008(40): 1–3.

15. Hickson GB, Pichert JW, Webb LE, Gabbe SG. A complementary approach to promoting professionalism: identifying, measuring, and addressing unprofessional behaviors. Acad Med. 2007; 82(11): 1040–8.

16. Pichert JW, Moore IN, Karrass J, et al. An intervention model that promotes accountability: peer messengers and patient/family complaints. Jt Comm J Qual Patient Saf. 2013; 39(10): 435–46.

17. Webb LE, Dmochowski RR, Moore IN, et al. Using Coworker Observations to Promote Accountability for Disrespectful and Unsafe Behaviors by Physicians and Advanced Practice Professionals. Jt Comm J Qual Patient Saf. 2016; 42(4): 149–64.
18. Talbot TR, Johnson JG, Fergus C, et al. Sustained improvement in hand hygiene adherence: utilizing shared accountability and financial incentives. Infect Control Hosp Epidemiol. 2013; 34(11): 1129–36.

Chapter 8 Professionalism Education at Drexel University College of Medicine

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Drexel University College of Medicine (DUCoM) is one of the largest private medical schools in the United States, accounting for one in 72 of all U.S. medical students. The institution has a rich history, drawing from its parent institutions, the Medical College of Pennsylvania (founded in 1850 as the Women's Medical College, the first U.S. medical school for women), and Hahnemann University (founded as Hahnemann Medical College in 1869).

In 2003, a Curriculum Committee task force developed a list of graduation competencies in professionalism. Another task force revised the list in 2010 to reflect Accreditation Council for Graduate Medical Education (ACGME) professionalism competencies.¹

Also in 2010, a task force was charged by the Curriculum Committee to develop new methods and content for professionalism education, assessment, and remediation. Key faculty members have been meeting regularly since then to contribute to a process of ongoing innovation and improvement.

Key to these efforts was a culture change as faculty and administrators became more attuned to professionalism goals and standards; more proactive in identifying and responding early to lapses in professionalism behavior; and more collaborative across courses in achieving professionalism goals and identifying worrisome patterns of individual student behavior. This culture change was driven by conversations and presentations within Curriculum Committee and Promotions Committee meetings, presentations at faculty development events, development of robust student and course policies, and a more visible online presence with links and a dedicated website. A faculty project leading to a publication on how medical schools address lapses in professionalism contributed greatly to the conversations.²

A major challenge to curriculum delivery is the large size of DUCoM's enrollment (approximately 1,040 students), and the wide geographic distribution of students across 21 sites in three states during clinical years. A curriculum-wide redesign initiative resulted in implementation of additional changes and enhancements in the 2017-2018 academic year.

Medical Professionalism Best Practices: Professionalism in the Modern Era

Content Areas

The Drexel curriculum has been informed by diverse frameworks of professionalism.³ Historically, professionalism education was a convergence point of ethics, humanities, health care communication skills, and the biopsychosocial model. The new curriculum brings focus to three overlapping domains:

1. Social Contract. Medicine's contract with society establishes it as a profession, and from this contract are derived guiding principles, commitments, and fiduciary responsibilities. These are reflected in the Hippocratic tradition and articulated in the widely endorsed Physician Charter.⁴

2. Professional Formation. This is the process by which an individual becomes a person able to serve the calling of medicine.⁵ Attention is paid to the personhood of trainees, not just their knowledge, attitudes, and behaviors.

Students must be supported to grow as persons—psychologically, socially, and morally. This growth *prima facie* surpasses general lay standards as students are to take on extraordinary responsibilities, and integrate extraordinary experiences related to illness, suffering, death, and dying.

Drexel employs a developmental model informed by humanistic psychology that orients to transformative growth and moral development, and is applied to educational contexts.⁶ Personal growth is necessary for the cultivation of physician virtues and ideal attributes, such as compassion and altruism toward which one aspires through a lifelong commitment to practicing and modeling.^{3,7}

3. Culture of Trustworthiness. Trustworthiness is a moral *sine qua non* of physician behavior. The Drexel curriculum fosters an intentional community in which all members actively uphold an honor culture. It makes explicit:

a. The transition from premedical academic environments to membership within a community of professionals;

b. The moral continuity across academic, clinical, research, and social domains; and

c. The absolute requirement of trustworthiness for academic advancement and graduation.

Curricular Overview

Professionalism content is delivered longitudinally via multiple core courses and periodic stand-alone sessions. Drexel employs a developmental approach with attention to transitions in training. The negative hidden curriculum is explicitly addressed with the intention of preparing students to be moral change agents. The curriculum employs didactics, independent learning, team-based learning, and small group activities.

Longitudinal peer learning groups of eight to 10 students are a core component of professionalism education. Groups form at the start of medical school and meet longitudinally throughout the four years. In the first year, students attend a doctoring course, and community-service learning course. Year two includes a bioethics course, for the third year a professional formation course, and intersession in the fourth year.

Small groups employ specific process tools that support professional formation. Reflective practice is done through prompts, responsive writing, and group conversation. Inquiry is a method of exploring a question in-depth, rather than seeking a definitive answer, for example, "What core values do I bring to my practice of medicine?"

Appreciative inquiry and appreciative debriefing enrich group process and culture by affirming and building on the strengths and vision of the group.⁸ Peer small groups play a prominent role in the professionalism curriculum.

Year 1 Curriculum

Students are formally introduced to the DUCoM Code of Ethics during orientation week. There is a Code of Ethics Signing Ceremony that prepares them for the White Coat Ceremony, which takes place at the end of the week.

Wearing white coats for the first time, each student is given a copy of the code.⁹ Following opening comments, the student president of the Honor Court reads the code aloud. Every student then stands and affirms the code aloud with these words:

As a member of the Drexel University College of Medicine community, I give my word that I will adhere to the Code of Ethics. I therefore promise that:

I will be trustworthy and act with integrity in all spheres of professional life: academics, patient care, clinical research, and professional relationships;

I will safeguard and nurture a culture of integrity and trustworthiness at DUCoM and in our profession by encouraging my peers to act ethically and by responding appropriately to violations of the Code of Ethics; I will not cheat, plagiarize, use unauthorized materials, misrepresent my work, falsify data, or assist others in the commission of these acts; and

I will always respect patients as persons and protect patient autonomy, elevate patient welfare above all other concerns, and treat all persons with compassion and dignity.

All students sign a copy of the code, and two peers witness it by adding their signatures.

Students then engage in a team-based learning (TBL) session on the Code of Ethics and honor system facilitated by faculty and the student Honor Court president. Peer learning groups work through cases that explore trustworthiness and fiduciary responsibility toward patients and society, and the continuity of ethical conduct across academic, clinical, and social domains of behavior. The process of appreciative inquiry is introduced.

Special Session on Personal Growth and Professional Formation

In preparation for this session, students watch the documentary, *The English Surgeon*, about the collaboration between British and Ukrainian neurosurgeons. The session is set up in a TBL style with students moving in and out of huddles to reflect on and debrief themes of personal growth and professional formation conveyed in the film. In the final part of this session, groups practice appreciative inquiry.

Special Session on Building Robust Peer Relations and Psychological Health

This is a 90-minute presentation by a family and systems therapist that addresses psychological and social development, and the formation of authentic relationships. Students explore a framework for understanding personal reactivity, managing conflict, and establishing wholesome peer relationships.

Reflective Practice

Throughout the curriculum and across courses there are opportunities for reflective practice. Students respond to a trigger and post a piece of reflective writing to their peer small group discussion board. Students are invited to post a creative expressive piece in lieu of prose, accompanied by a brief commentary.¹⁰ Students review and inquire into each other's reflections during small group sessions, identifying themes that impact them personally and professionally. This practice is used in two of the first year courses, is incorporated into the second year bioethics course, and serves as the foundation of the third year professional formation course. The first year community service-learning course final reflection requires students to participate in didactics on social determinants of health, health disparities, and service learning at a community site that serves at-risk youth, elderly, immigrants, homeless, and other vulnerable populations. Leitmotifs of the course include the challenges of creating therapeutic relationships across lines of social difference, the nature of authentic service, and medicine's mission of social justice. At the end of the course, students write about a significant experience they had at their community site that was professionally challenging or affirming. These are explored in their professionalism peer groups, and peer-nominated narratives are shared with the large group in which students further reflect on core professional attributes and values relevant to these experiences.

The first year doctoring course has students reflect on spirituality and themes of meaning and connection, sharing in their small groups about a deeply held personal value. These conversations are then debriefed in the larger group. This is an opportunity for sharing about family and cultural values, personal role models, and professional aspirations. Personal awareness and professional formation are leitmotifs throughout this 26-session, year-long course.

Eleven of 26 of the physician and patient classes are devoted to group inquiry, self-reflection on personal attitudes and behaviors, and exploration of professional standards and expectations. In addition, 13 clinical sessions include professionalism components (e.g., empathy, demeanor, non-judgmental communication, etc.). Students not only learn to perform histories and physical exams, but also reflect on major themes of family, culture, identity, end-of-life, addiction and recovery, coping with chronic illness, and aging. Students meet in their professionalism small groups, and complete and discuss reflective assignments. Appreciative debriefing is included throughout the course.

Other first year special professionalism sessions include a presentation on providing peer feedback. In addition, peer evaluations are a component of small groups in gross anatomy, microbiology, the physician and patient course, and three TBL activities. There are also presentations on confidentiality, HIPAA, and electronic professionalism.

Second Year Curriculum

Bioethics is a 21-hour course that utilizes TBLs, independent learning, team presentations, standardized patient exercises (informed consent, error disclosure), lectures, and faculty-facilitated small group activities. Students meet in their professionalism small peer groups. Major themes include trustworthiness; self-awareness and self-regulation of personal bias; challenges and obstacles to doing the right thing; and moral distress and moral courage.

Principles of moral psychology, limits of principlism, and the meaning of virtue for professional formation are explored. In large and small group sessions devoted to delivering care across lines of social difference, content includes health disparities and the social mission of medicine; discussion of implicit bias after taking the Implicit Association Test; ethics of cultural accommodation; and culture-based communication challenges.

There are large and small groups on medical error that explore the psychological response to error and barriers to transparency; second victim syndrome; and communication strategies of disclosure and apology using a standardized patient scenario.

Other session topics include informed consent; confidentiality with a focus on HIV status; withdrawal of care; futility and quality of life judgments; advance directives with students completing a living will (Five Wishes); physician aid in dying; dilemmas in pediatrics and adolescent medicine; ethics in public health crises; research ethics; resource allocation; organ transplantation; and social justice.

Students participate in a series of hospital-based sessions to learn physical diagnosis. Professionalism is an explicit component of student assessment—professional deportment, attention to patient comfort, and managing challenging social interactions.

Third Year Curriculum

Into the Woods—Case-based Learning Session is a 90-minute session given during the week prior to the beginning of third year clerkships. It explicitly addresses the negative hidden curriculum. In one case, a student witnesses a resident fabricate data when presenting to her attending. A second case revolves around dishonesty and coercion of a patient who consents to a procedure done for teaching purposes only. The session raises awareness, and explores with students a repertoire of appropriate responses to unprofessional behaviors they may witness. It brings focus to moral distress, and how to reach out to trusted faculty or administrators in a way that feels safe.

The professional formation course was implemented in academic year 2012–2013. It extends professionalism peer small group learning into the clerkship year. Virtual classroom technology provides for this faculty-facilitated, small group experience. Students meet on campus at the beginning of the third year, have an additional four virtual sessions, then a final on-campus session in the spring. Each session has a content theme, but allows for emergent topics and just-in-time learning. Themes include stress and adaptation; moral distress and the hidden curriculum; resilience, meaning, and compassion; and being with patients at the end of life. In preparation for each session, students post a reflection to their small group's bulletin board, and the reflections are explored during the online small group session.

An essential dimension of this course is how Drexel responds to student reports of the hidden curriculum. Beyond sharing and reflecting, students are encouraged, when appropriate, to move from moral distress to moral action. Faculty are available offline to further process a student's experience. Recognizing a student's sense of risk in reporting behavior of an attending or resident who is an evaluator, possible actions and the timing of those actions are explored as part of the small group.

Students are reminded of Drexel's web-based anonymous reporting portal, and of the supportive role of clerkship directors, site directors, and the dean of students. The course website features a prominent section entitled, "Should I do something about it? When a student reports an event that is concerning or may need follow-up." This is a key part of the faculty development process.

A formal policy covers requirements for mandated reporting, and manages the tension between maintaining group safety, privacy, and confidentiality while fulfilling obligations of mandated reporting. The policy distinguishes among information that stays in the group (almost everything), information that ought to be shared in some way outside of the group (e.g., unprofessional behavior of a faculty member), and information that must be reported to administration (e.g., gender discrimination).

A faculty development seminar and a lively faculty email thread following each session enhances faculty understanding of student issues, and helps improve their facilitation competencies.

This course may be an important factor in the preservation of empathy and growth in reflection skills observed in third year students.¹¹ Student feedback also points to the value of social support provided by these sessions, especially for students who are at clinical sites where they have no contact with peers.

At the beginning of the psychiatry clerkship in the third year, students spend the morning in the clinical skills center. They move through a series of eight standardized patient cases, observed by faculty through one-way glass. Most cases have an explicit ethical theme such as:

A woman presenting with a headache whose real issue is domestic violence;

A wife with newly diagnosed HIV positive status, presumably as a result of an extramarital affair, who refuses to disclose to her husband;
A daughter who refuses to honor her mother's living will and have a ventilator withdrawn;

 A mother of a neonate with multiple organ failure who is told by the nephrologist that initiating dialysis is futile;

 A police officer who had an alcohol withdrawal seizure who wants to return to work;

A women with heart failure who needs an advance directive; and
An attending physician insisting that the student perform an intubation even though the patient was overheard stating that no students were to be involved in her care:

During the debriefing at the end of the morning, professional expectations, ethical dilemmas, and communication strategies are explored.

In addition, there is an awards ceremony honoring students who demonstrated exemplary professionalism in their first and second years of medical school, and there is a presentation on confidentiality and electronic professionalism at the beginning of the third year.

Fourth Year Curriculum

Professionalism competencies are essential to all clinical courses. In the spring of the fourth year, students participate in an intersession devoted to transitioning to internship. Students assemble in their professionalism small groups for a 90-minute faculty facilitated advanced communication skills workshop that utilizes standardized patients. A major theme is the professional management of difficult conversations. Standardized patient cases include breaking bad news, discussing DNR, managing conflict, and responding to patient demands for an inappropriate (low value) test or treatment. Students prepare with online content.

Other intersession presentations include response to patient death and managing physician grief, self-care, and care for vulnerable populations. Students also receive a 90-minute presentation by a family and systems therapist on maintaining healthy personal and professional relationships.

In addition to curricular requirements, Drexel offers rich extracurricular opportunities for professional development including a medical humanities program that provides monthly talks and eight 10-hour elective seminars each year.

There is also a Women's Health Education Program, and a Health Outreach Project that provides students with the opportunity to run free clinics and health projects at seven sites. The Alpha Omega Alpha Honor Medical Society Chapter, the Gold Humanism Honor Society Chapter, and multiple student government interest groups are dedicated to service and professional growth.

Assessment

Meaningful evaluation of professionalism as a competency is based on both formal and non-formal assessment. Assessments are continuously performed within the context of preclinical and clinical courses, and professional interactions within the academic, clinical, research, and social domains addressed by the Code of Ethics.

In the preclinical years, faculty evaluation of professionalism is a formal component of four course grades—Physician and Patient, Community Service-Learning, Introduction to Clinical Medicine, and Bioethics. It is also a formal component of five faculty facilitated, case-based learning activities.

Peer evaluations are performed at 10 points during the first and second years. These are reviewed by course directors. Students who receive concerning feedback from multiple peers across courses receive a professionalism report of concern, and are reviewed by the Professionalism Advisory Board and the Dean of Students. Students who fail to complete peer evaluations receive a professionalism report of concern. Students who provide detailed and thoughtful feedback to peers, or students who are acknowledged for exemplary behavior, receive a letter of commendation.

Between five percent and 10 percent of students receive professionalism commendations for peer-acknowledged exemplary behavior. Ten percent of students receive a professionalism commendation for contributing to peer development with thoughtful and constructive comments, and less than five percent of students are cited for failure to complete multiple peer evaluations. Two percent of students are cited for unprofessional behavior based on peer comments. All students who are cited are discussed by the Professionalism Advisory Board, and undergo coaching, monitoring, and remediation as appropriate.

Professionalism is evaluated in every clinical clerkship/rotation. A student may fail a course solely on the basis of failure to meet the professionalism competency. Specific items on every evaluation include:

– Demonstrates honesty and integrity in all interactions with patients, families, colleagues, and other professional contacts;

- Maintains patient confidentiality;
- Demonstrates professional image in behavior and dress; and

– Demonstrates reliability and responsibility in all interactions with patients, families, colleagues, and other professional contacts.

Any faculty member, at any time, can submit a report of concern about a student, independent of the final course evaluation.
Student Assessment of Professionalism in the Learning Environment

Students must complete evaluations for every course. Students are prompted to report any professionalism concerns with two questions:

1. Did you observe any unprofessional or unethical behavior by faculty or staff?

2. Did you observe any unprofessional or unethical behavior by fellow students?

Students are provided with a hotlink to a web page that provides contact information for the Dean of Students, and a web portal through which reports may be submitted (signed or anonymous). Submitted reports are promptly reviewed by senior deans.

There are also opportunities for students to honor peers for exemplary behavior, leading to formal commendations, awards, and/or election to the Alpha Omega Alpha Honor Medical Society and the Gold Humanism Honor Society.

Remediation

In academic year 2013-2014, Drexel initiated a formal remediation process that continues to undergo improvement and refinement. The Dean of Students receives information from faculty, peers, and others through formal written reports, informal verbal reports, formal peer review, formal course evaluations, and the web portal for reporting professionalism concerns. He/she makes a determination of the significance of a single episode, or a pattern of behaviors over time. Depending on the degree of concern, initial action is taken resulting in informal counseling and coaching; referral to the Physician Health Program for addiction-related concerns; referral to the Professionalism Advisory Board for ongoing monitoring and advising; referral to Honor Court; referral to the promotions committee for review and potential dismissal; or immediate dismissal.

The Professionalism Advisory Board is a group of senior faculty members who meet monthly and function as an advisory body for the Dean of Students, review and make recommendations in regard to individual students, and provide one-on-one advising and mentoring to students referred to the Board. Performance improvement plans are developed that include reflective writing, assigned readings, and other learning tasks as appropriate. Students sign contracts and are held to them. Faculty report back to the Board on student progress.

The need to feed-forward information regarding a student's lapse in professionalism is determined on a case-by-case basis. Because of concerns

of creating a negative bias toward the student, especially in the clinical years, the minimal amount of information is conveyed by written letter to the clerkship or course director. Information is included in the professionalism and summary sections of the medical student performance evaluation (Dean's Letter) as appropriate. Institutional actions such as an Honor Court violation are automatically included. The need to notify a post-graduate training program directly is considered on a case-by-case basis.

Next Steps

Drexel continues to engage in curricular redesign. Recent developments include a higher degree of discipline integration, and utilization of active and participatory learning.

Peer small groups play an more important role, and sessions are delivered to guide the formation of intentional communities of learning that support personal growth and professional formation, and cultivate a culture of responsibility, social safety and inclusivity, support, and active learning. The development of a social networking app through ProfessionalFormation.org will support just-in-time communication, and group member exchanges in response to patient experiences.

A faculty development program to enhance facilitation of small group learning of professionalism, to role-model professional behaviors during ward rounds, and to intervene or give immediate feedback when confronting unprofessional behaviors of peers and trainees is in development.

ProfessionalFormation.org (PFO), funded by the Arthur Vining Davis Foundations, creates an online multimedia learning management system with 13 modules devoted to professionalism education, assessment, remediation, and research, with an emphasis on professional formation.¹² The modules, authored by nationally and internationally recognized educational experts, cover core topics relevant to undergraduate medical education, graduate medical education, and nursing and physician assistant education. PFO will support educational research on students' professional development, and the influences of curricular elements and ward culture. It is based on success with DocCom,¹³ which contains a number of modules that relate to professionalism education, such as managing relationship boundaries and managing challenging communication issues. This project benefits from rich collaborations with the Academy for Professionalism in Health Care and the American Academy on Communication in Healthcare.

Summary

Drexel University College of Medicine has developed a comprehensive, longitudinal professionalism curriculum with elements across courses and clerkships that promote understanding of professionalism and professional formation of trainees. The curriculum includes clinical ethics; humanism; personal awareness and reflective practice; empathic communication skills and compassion responsiveness; commitment and accountability to the professional community; and cultivation of physician virtues.

Appreciative debriefing and appreciative inquiry promote a positive culture of social support among students. A multi-faceted assessment system identifies at-risk students who may benefit from additional faculty support or remediation strategies.

Challenges ahead include studying the many factors that support professionalism, and the efficacy of curricular interventions including ongoing faculty development initiatives.

References

1. Drexel University College of Medicine. Professionalism Objectives. http://webcampus.drexelmed.edu/professionalism/Objectives.asp.

2. Ziring D, Danoff D, Grosseman S, Langer D, Esposito A, Jan MK, Rosenzweig S, Novack D. How Do Medical Schools Identify and Remediate Professionalism Lapses in Medical Students? A Study of U.S. and Canadian Medical Schools. Acad Med. 2015; 90(7): 913–20.

3. Brody H, Doukas D. Professionalism: a framework to guide medical education. Med Educ. 2014; 48(10): 980–7.

4. American Board of Internal Medicine Foundation, American College of Physicians, American Society of Internal Medicine Foundation, and European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. Ann Intern Med. 2002; 136(3): 243–6.

5. Inui TS. A Flag in the Wind: Educating for Professionalism in Medicine. Association of American Medical Colleges; 2003.

6. Rogers CR. On becoming a person: a therapist's view of psychotherapy. Boston: Houghton Mifflin; 1961.

7. Pellegrino ED. Toward a virtue-based normative ethics for the health professions. Kennedy Inst Ethics J. 1995; 5(3): 253–77.

 May ND, Becker M, Frankel RM. Appreciative Inquiry in Health Care: Positive Questions to Bring Out the Best. Brunswick (OH): Crown Custom Publishing; 2011.
 Drexel University College of Medicine. Code of Ethics. http://webcampus.drexelmed.edu/professionalism/CodeOfEthics.asp.

10. Lane JE, Mitchell M, Rosenzweig S. Artist's Statement: Medicine, Humanities, and Abstract Art. Acad Med. 2017; 92(3): 351.

11. Duke P, Grosseman S, Novack DH, Rosenzweig S. Preserving third year medical students' empathy and enhancing self-reflection using small group "virtual hangout" technology. Med Teach. 2015; 37(6): 566–71.

12. Professional Formation.org. http://professionalformation.org/.

13. Drexel University College of Medicine. DocCom. http://webcampus.drexelmed. edu/doccom.

Chapter 9

Becoming a Doctor: The Learner and the Learning Environment—A Complex Interaction

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The belief that all physicians must aspire to and attain the highest professional standards is as old as the Hippocratic Oath. These standards have evolved over centuries as the practice of medicine has changed. At the turn of the new millennium, concern over the way health care delivery systems were threatening the core tenet of medical professionalism—specifically the physician's commitment to the patient's best interests—led to a new initiative to redefine professionalism.

The Medical Professionalism Project, a joint effort of the European Federation of Internal Medicine, the American College of Physicians— American Society of Internal Medicine, and the American Board of Internal Medicine Foundation, oversaw the development of a new charter that laid out the principles of professionalism to which all physicians should adhere. This charter supports physician commitment to patient welfare; physician commitment to just distribution of finite health care resources; and a health care system that supports the highest quality of care.¹

Since the publication of the charter, medical educators, professional associations, and medical societies, like Alpha Omega Alpha Honor Medical Society, have focused their efforts on elucidating the best methods of promoting and evaluating professionalism among learners and in the learning environment of medical schools and academic medical centers.

The Learner

United States Census data shows that the profile of young Americans age 18–34 years has changed dramatically.² The proportion of young adults who are racial and ethnic minorities has doubled in the last 30 years; one in four of this cohort speak a language other than English at home; and far fewer of this group were born in the U.S. compared to their peer group in 1980.

Looking more closely at the subset of this generation applying to medical school, data from the Association of American Medical College's (AAMC) Matriculating Student Questionnaire (MSQ) provide a helpful overview of the national pool of students who are seeking to become part of the profession of medicine.³ According to the 2017 AAMC MSQ, more than 50 percent of all medical students decided to study medicine before

attending college. The questionnaire also reveals important information about the sources of intrinsic motivation leading young people into a career in medicine. It is telling that financial reward and social status are the least important factors when answering the question:

"When thinking about your career path after medical school, how important are the following considerations? (very important/essential)"

Stable, secure future	86.6%
Work/life balance	84.0%
Ability to pay off debt	75.1%
Availability of jobs	74.8%
Expression of personal values	74.8%
Leadership potential	66.8%
Creativity/initiative	65.4%
Working for social change	64.7%
Opportunity for innovation	63.5%
High income potential	34.6%
Social recognition/status	16.9%

In addition, more than 60 percent of matriculants had a gap of one or more years between college and medical school, with the great majority using that time to work at another career, participate in research, work to improve finances, and/or pursue graduate studies. This represents a 10 percent increase in the number of students taking a break between college and medical school from five years ago.

This change in the profile of medical school matriculants corresponds with, and may even be due to, an evolution in the way in which individual medical schools are assessing and evaluating applicants. In a seminal 2003 case addressing race as a factor in admissions, the U.S. Supreme Court endorsed a "holistic review" rubric to be used in the admissions process, which they described as a "highly individualized" review that takes into account all the ways in which an applicant might contribute to a diverse educational environment.⁴

In response, the AAMC began working with individual medical schools to implement a holistic review of medical education to incorporate key aspects of behavior, character, and performance that have direct impact on the practice of medicine, and which are not easily assessed by academic performance or standardized test scores.⁵ Through national presentations, on-site training at medical schools, and broad dissemination of resources, the practice of holistic review in medical school admissions has become widespread over the last 10 years.



By giving consideration to experiences and attributes along with metrics such as GPA and MCAT scores, admissions committees are broadening their perspective on the multiple ways in which an applicant might contribute value to the profession of medicine. New weight is given to diverse life experiences and the distance traveled on the pathway to a career in medicine. Attributes include components of identity, such as race, age, religion, gender. Other factors include interpersonal style, resilience, and motivation. Metrics such as grades and standardized test scores support the academic readiness of the applicant to manage the curriculum.

Holistic review allows medical schools to consider the qualities of an outstanding physician and look for experiences and attributes in the applicant that may presage the future attainment of such traits. In their perspective piece in the *New England Journal of Medicine*, Witzburg and Sondheimer describe how holistic review can identify key components of the application that might predict future desirable physician traits, such as

linking intellectual ability to an applicant's academic record, linking commitment to service to an applicant's history of engagement, and linking capacity for growth and emotional resilience to an applicant's ability to overcome adversities and distance traveled.⁶

Holistic review principles encourage each medical school to consider its mission in developing a uniquely-designed, individualized review of candidates. The University of Chicago Pritzker School of Medicine utilizes a mission-driven holistic review process to find candidates whose experiences and attributes are in alignment with the overall goals and objectives of the school:

At the University of Chicago Pritzker School of Medicine, in an atmosphere of interdisciplinary scholarship and discovery, the Pritzker School of Medicine is dedicated to inspiring diverse students of exceptional promise to become leaders and innovators in science and medicine for the betterment of humanity.

Utilizing the AAMC holistic review model, the Pritzker admissions team identified the attributes, experiences, and metrics that are characteristic of those candidates who meet the school's mission. Attributes might include diversity, research, scholarly achievements, potential as leaders and innovators, and commitment to the betterment of humanity. Each applicant is assessed for his/her academic strength, including performance in advanced coursework in science; a demonstration of commitment to service, including both institutional and community service; interpersonal effectiveness in leadership and on teams; exposure to, and enthusiasm for, science; response to prior challenges; and capacity to address unmet societal needs. Questions at interview, and rubrics for assessing applicants in committee discussion, reinforce mission elements.

Each applicant is required to read the University of Chicago Pritzker School of Medicine's mission statement and reflect on how they, personally, might contribute both to the diversity of the class—a component of the learning environment that the institution deems essential for educational excellence—and advance the Pritzker mission.

Just as students choosing the profession of medicine have evolved over time, so has the learning environment undergone change. Increased regulatory scrutiny on the part of the Liaison Committee for Medical Education (LCME) and the Accreditation Council for Graduate Medical Education (ACGME), the changing nature of technology for both patient care and as a pedagogic tool, the emergence of social media inside and outside of the classroom, and multiple other factors are modifying the environment in which medical knowledge and medical professionalism are conveyed.



Figure 2

The Learning Environment

The ongoing and intrinsic challenge of medical education is the balance between the educational needs of learners who require increasing independence to gain proficiency and the safety needs of patients. High profile cases of medical error, such as Libby Zion's death in New York Hospital in 1984 and Betsy Lehman's death at Dana-Farber in 1994, received extensive media coverage. These stories, and others like them, had a major impact on the profession of medicine and medical education.

In 2000, the Institute of Medicine published "To Err Is Human," which promoted a systems-based approach toward preventing errors through mandatory reporting, development of safe practices at the delivery level, and raising standards and expectations through the actions of oversight organizations and professional groups. In the ensuing years, multiple changes have been built into the structure of medical education, such as

the 80-hour work week for residents, additional reporting and paperwork for physicians, increased regulation by oversight bodies, and an emphasis on quality improvement. All of these changes have been implemented with the primary goal of protecting patients and ensuring the highest standard of care.

Another major change is the growth in the number of students. In 2006, the AAMC voiced concerns about the adequacy of the size of the current physician work force to care for America's growing and aging population. It called for a 30 percent increase in medical school enrollments. This led to an increase in class size at multiple medical schools, and the creation of 16 new allopathic medical schools in the last 10 years.

Overburdened faculty are now addressing concerns such as duty hour limits; managing an ever-increasing set of responsibilities related to paperwork; demands for increasing productivity in a challenging fiscal environment; increased regulation by oversight agencies; and a larger number of student learners, all of which combine to reduce time for teaching.⁷ Add to this advances in pedagogic technology, including the use of simulation and standardized patients as a replacement for direct patient contact due to safety concerns. The circumstances that characterize the learning environment are resulting in multiple new challenges. Medical schools and residency programs must overcome these challenges to provide a high quality medical education and to meet the requirements of regulatory bodies to formally train and assess professional behaviors in medical students and residents.

The LCME has a standard related to professionalism that has been in place since 2002. It reads:

A medical school ensures that the learning environment of its medical education program is conducive to the ongoing development of explicit and appropriate professional behaviors in its medical students, faculty, and staff at all locations, and is one in which all individuals are treated with respect. The medical school and its clinical affiliates share the responsibility for periodic evaluation of the learning environment in order to identify positive and negative influences on the maintenance of professional standards, develop and conduct appropriate strategies to enhance positive and mitigate negative influences, and identify and promptly correct violations of professional standards.^{8,9}

In 2014, the AAMC began a new project to identify a common core set of behaviors that should be expected of all medical school graduates. Content related to interpersonal and communication skills and professionalism are integrated in all of the 13 core "entrustable professional activities" (EPA) identified by the AAMC as skills that medical school graduates should have when entering residency.¹⁰ These EPAs are closely linked to the milestones identified by the ACGME for each educational residency/fellowship program sponsored by the institution.

The ACGME asks that all sponsoring institutions provide systems for education in, and monitoring of "residents'/fellows' and core faculty members' fulfillment of educational and professional responsibilities, including scholarly pursuits, accurate completion of required documentation by residents/fellows, and identification of resident/fellow mistreatment."¹¹ In addition, the ACGME sets standards for six areas of focus in the clinical learning environment, of which professionalism is one.

The ACGME has begun a process of regular evaluation and review of the clinical learning environments at academic medical centers. According to the Clinical Learning Environment (CLE) Review National Report of Findings in 2016,¹² there were multiple findings related to professionalism:

• Across nearly all CLEs, residents, fellows, and faculty members reported that they had received education about professionalism. For residents and fellows, this education most frequently occurred at orientation and through subsequent annual online modules.

• Across some CLEs, residents, fellows, and clinical staff described witnessing or experiencing incidents of disruptive or disrespectful behavior on the part of attending physicians, residents, nurses, or other clinical staff. These ranged from descriptions of isolated incidents to allegations of disruptive behavior that was chronic, persistent and pervasive throughout the organization.

• Some residents and fellows reported that they had to compromise their integrity to satisfy an authority figure. In many organizations, leadership was unaware of this perception.

• In most CLEs, residents, fellows, faculty members, and program directors appeared to lack a shared understanding of the process residents and fellows would follow to resolve perceived mistreatment if seeking assistance outside of the mechanisms offered by GME.

Medical educators must now navigate a new generation of learners and a learning environment contending with multiple new challenges and strict guidelines focused on teaching and evaluating professionalism. By exploring specific scenarios related to professionalism challenges, either from an individual learner's perspective or in the learning environment, we can assess the different options that might be utilized to address these incidents and what the potential results might be.

Case Studies

Following are cases drawn from actual situations encountered at the University of Chicago Pritzker School of Medicine. They explore various options for professional development of learners, and enhancement of professionalism in the learning environment. The framework used to consider various options for intervention and the potential outcome is derived from the work of Laurent Daloz to guide the development of adult learners.

Daloz, in his 1999 book *Mentor: Guiding the Journey of Adult Learners*,¹³ describes methods in guiding adult learners through difficult transitions. He posits that the mentor must provide the right balance of support and challenge to ensure developmental growth. Mentoring and educating for professionalism in medicine are often centered around the difficult transitions that Daloz references, and he provides a visual scheme to imaging the effects of support and challenge on development.



Daloz Model

If support and challenge are low, little growth is likely, and neither the learner nor the learning environment is likely to change. If support is enhanced, the potential for growth increases. The learner gains confirmation but does not gain the skills to engage productively with the environment, or to grapple meaningfully with differing world views. However, too much challenge in the absence of support can result in the student retreating, diminishing the possibility of positive personal and professional evolution. Development is most likely to occur with an appropriate mix of high support and high challenge.

The following cases are based on examples from the authors' institution. They are included for the purpose of presenting the possible institutional responses to complex situations.

Case Study 1: Pressure to Discharge

An 85-year-old woman with end stage renal disease on peritoneal dialysis fell at home. During her hospitalization, additional diagnoses are discovered, including high blood pressure, diabetes, and glaucoma. She lives alone in a second floor, walk-up apartment, and is socially isolated with few friends and no family. She has been stabilized, and there is pressure to discharge her as the insurance company will no longer cover the cost of inpatient placement, although the attending physician is concerned about not having the appropriate home supports in place.

The attending physician has the dilemma of how to manage this patient, adhering to principles of ethical and professional behavior. He must rolemodel for residents and students the highest standard of care for the individual, and a judicious understanding of the distribution of scarce health care resources. He chooses to protect the patient by ordering a work up for pulmonary embolism, and calls for a nutrition and speech/swallowing consult. These tests keep the patient in the hospital for two additional days, while the team works with the social worker to put in place the supports the patient needs, including outpatient peritoneal dialysis and a home health care nurse.

How should the attending explain his actions in calling for potentially unnecessary tests to buy more time to the residents and students on his team who look up to him as a mentor and role model?

To support confirmation, and potentially growth for the residents and students, rather than stasis or retreat, the physician must address directly the hidden curriculum¹⁴ in the clinical learning environment, which frequently pits what is best for the patient against financial considerations. This approach provides the highest amount of support, and the highest amount of challenge for the learner, preferably leading to growth among the residents who live on the fault lines of health care systems, and give voice to what life is like there.

Daloz Model: Case Study 1 – Pressure to Discharge



Case Study 2: Medical Student Versus Nurse

During her required surgery clerkship, a third-year student is asked to leave the operating room (OR) and scrub in again by the surgical nurse who believes that the student has become contaminated. The student disagrees with the surgical nurse's decision, and refuses to leave. A verbal altercation ensues, and the student is asked by the attending physician to leave the OR after she gives the nurse "the finger."

Multiple students have lodged complaints against this nurse regarding mistreatment and bullying. Also, earlier in the rotation, the student made a formal complaint against this nurse for making disparaging comments regarding the student's religious beliefs.

How should the medical school respond to this incident, holding the student accountable to the highest standards of professional behavior and patient safety, while considering the mitigating factors and the impact of institutional action on her future career?



The medical school has a formal system in place for addressing professionalism concerns, but recognizes that any reporting of adverse actions related to professionalism on the Medical Student Performance Evaluation (MSPE), which forms part of the residency process application, could have a deleterious impact on the student's future career.

The medical school chooses the High Challenge–High Support approach. The incident with the student and the nurse is brought before the Committee on Promotions who places the student on academic probation for three quarters. After no further incidents, the student is removed from academic probation in the summer quarter before the MSPE is released. As there are no further incidents of unprofessional behavior, no adverse actions are reported on the MSPE.

In addition, the medical school dean schedules a meeting with the chairman of surgery to discuss mistreatment concerns on the clerkship and with the chief nursing officer with specific concerns about the nurse. The surgery chair and clerkship director implement a mistreatment intervention in the department for all faculty, residents, and clinical staff, including nursing staff.

Case Study 3: Students and Social Media

One of the more creative students in the medical school writes and directs a rap song parody and video about Pritzker's anatomy class entitled, "Scrubin" which he posts publicly on YouTube.¹⁵ The video quickly has more than 250,000 views and generates significant controversy on the part of the viewers, particularly those affiliated with the university. Many viewers finding it amusing, while others find it offensive.

How should the medical school balance supporting student expression with demonstrating respect to those who donate their bodies while at the same time protecting the reputation of the school and the students who are shown in the video?



Daloz Model: Case Study 3 – Students and Social Media

The medical school meets with the student-director to make him aware of the spectrum of responses to his work. After consultation with university lawyers, the student is asked to retract the name of the university and medical school from the video, and to obtain written consent from all the students who appear in the video. The student is also asked to add a disclaimer which reads: "This video is meant for entertainment purposes only, and in no way reflects actual conduct in the lab. We maintain the utmost respect and gratitude for those who donate their bodies to science." The medical school also encourages the student to work with faculty on scholarly projects exploring the implications of social media on medical professionalism. This work results in several publications, and serves as the basis for a future statement from the American College of Physicians on online medical professionalism.¹⁶⁻¹⁸

Note: Multiple students develop online content regarding the medical school. Recently, the Pritzker School of Medicine entry, "I Don't Know" (a parody of the popular Disney song, "Let It Go") garnered close to three million views since it was posted in 2015, and was awarded a first place "Memmy" or "Medical Emmy" in a contest featuring entries from multiple health professions schools across the U.S.¹⁹

Case Study 4: Medical Student Mistreatment

Over a period of four years, the number of students reporting mistreatment on the AAMC Graduate Questionnaire and in school surveys is well above national averages, and increasing. While most relate to incidents of public humiliation, there is an increase in reports of students being subjected to racially or ethnically offensive and/or sexist remarks, and receiving lower evaluations or grades because of gender, race, ethnicity, and/or sexual orientation. Mistreatment is most often reported as coming from faculty, residents, and clinical staff, and most reports are clustered in two of the seven required clerkships.

How should the medical school intervene with individuals, departments, and students to decrease the number of incidents of mistreatment, while educating students regarding reasonable expectations for professional behavior in the clinical environment?

If mistreatment goes unaddressed or is minimized, it has consequences for the professional development of learners, and can undermine patient safety and quality of care.²⁰

The school addresses mistreatment and lack of professionalism in the learning environment by highlighting the issue at the highest level of the organization with the dean presenting on this topic to the department chairs and sharing departmental-specific data at departmental grand rounds. In addition, the school convenes focus groups composed of students, clerkship directors, and program directors to investigate the nature of the problem. An educational intervention, utilizing the MISTREAT and MODEL rubrics is implemented.²¹

MISTREAT

Malicious intent Intimidation on purpose Sexual harassment Threatening behavior Racism Excessive or unrealistic expectations Abusive favors Trading for favors MODEL

Model professional behavior
Offer feedback
Delineate expectations
Evaluate fairly
Learning is a priority

Daloz Model Case Study 4 – Medical Student Mistreatment

High CHALLENGE	Retreat: Faculty to Dean: "The students are naive and coddled. If a patient is unstable, I might need to push a student out of the way to get to the patient. They should 'man up.'"	Growth: Dean to Faculty: "The students are telling us something important. We need to take respnsibility to better understand and then address this issue."
СНА	<u>Stasis:</u> Dean to Faculty: "This is an intractable problem. Thank goodness the LCME won't come again for 8 years."	<u>Confirmation:</u> Dean to Faculty: "Anyone accused of mistreating a student will no longer be allowed to teach students or residents. If this keeps up, you'll be fired."
Low	SUP	PORT High

In addition, the school introduces an ombudsman program with two clinical faculty to serve in this role for students, residents, and faculty. Student ombudsmen are later added (fourth year student leaders).

A professionalism committee is established, and institutes an annual role model award for faculty and students to recognize positive examples within the community.

The impact of these interventions is striking. Within a few years of introducing these interventions, reports of mistreatment on the AAMC GQ drop dramatically—well below the national averages reported at all medical schools, and a greater than 50 percent decrease from prior years.

Case Study 5: Underrepresented in Medicine

Some years ago, turnover among faculty and staff leaders led to an inefficient collaboration between the offices of admissions and multicultural affairs, and undermined their shared goals in recruiting, admitting, and matriculating students who are underrepresented in medicine. The school experienced a stagnation in the percentage of the matriculating class who are underrepresented in medicine, and recognized that other schools are achieving the goal of diversity far more effectively. Students and applicants began to raise concerns about the medical school's commitment to this component of diversity.

Daloz Model Case Study 5 – Underrepresented in Medicine, One School's Experience

How should the medical school increase both diversity and inclusiveness in the medical school environment?

High	Retreat: "There aren't enough qualified students in the pipeline and we can't lower our standards."	Growth: "We need to grow the pipeline nationally, work harder to attract URM students, but make sure that the learning environment supports everyone's success."
СНА	<u>Stasis:</u> "We're doing as well as everybody else. This is a historical problem."	<u>Confirmation:</u> "It must be so hard to have to be sole representative of your race. We're rooting for you — we know you can handle it."
Low	SUPF	PORT High

How should the medical school increase the number of students who are underrepresented in medicine while providing a learning environment which fosters their success and inclusion?

The school expanded the size and the number of summer pipeline programs for underrepresented students. It also increased and enhanced its recruitment efforts at undergraduate institutions with far more diverse student bodies.

In seeking new leadership in the admissions and multicultural affairs offices, candidates were told that working effectively to achieve this goal is a key component of their positions, thereby setting clear expectations. The dean for multicultural affairs is placed in key roles in the admissions process, and the school seeks additional faculty to participate to enhance the diversity of the Admissions Committee.

The impact is immediate and striking. The percentage of underrepresented students grows to more than 20 percent of the class.

In addition to all these action steps, the school implements a qualitative research study on factors that support or inhibit success in the viewpoint of underrepresented students, and utilizes their feedback to guide additional programs and policies. This qualitative research study explores potential strategies through which medical schools might support the success of underrepresented minority students. Through in-depth interviews with current students and recent graduates, the school gleans key lessons about what students feel is important in the learning environment. Participants identify five facets of their medical school experiences that either facilitate or hinder their academic success.



Facilitators of Support	Collaborative Learning Environment (pass/fail grading)	"Students in the class would email out notes or com- mentsto the whole room, so you really felt like it was an open non-competitive communityThat made me feel welcome and made me feel like it was an environment that would promote my professional growth because everyone was working together"
	Required Health Care Disparities Course	"We began our education with the health care disparities courseObviously during the course, we were able to speak about different minori- ties across AmericaTo me that was important, being myself an underrepresented minority. I realized that this school is open to everybody."
	Student body diversity	"I love the fact that there are so many of us here— minorities. I feel really comfortable being myself."
Inhibitors of Support	Insufficiently diverse faculty	"In a system where most of the faculty is different from youit's hard for you to try to connect with them and try to seek them as your mentors or as your advisors."
	Expectations (from self and others to fulfill additional responsibilities)	"I don't know that I ever really felt like I was ever really up to parIt's hard because people already don't think that you are smart, so then, when they don't think you're smart, it helps to be excellent—it helps to be superior in your skills. Sometimes you can feel like you're a little bit sort of inferior to people. I think it becomes a self-fulfilling prophecy."
		"You don't want to be that one person who can't handle it, so you kind of just keep things to yourself."

Student Comments from Interviews

Lessons Learned

Taking lessons from the student's perspective, the Pritzker School of Medicine has worked hard to enhance collaborative learning across all components of the curriculum by expanding the content of the health care disparities course to include training in intersectional practice and patient care for the LGBTQI community; implementing implicit bias training; and increasing the number of underrepresented students. To address the lack of diversity among the faculty, the dean of the biological sciences division appointed a new associate dean whose role is to launch an institutionwide initiative to enhance diversity and inclusion at all levels, from faculty to residents and fellows, to graduate and medical students, to staff.

The school has enhanced the level of support for all students, by launching a new Wellness Committee which provides programming for the entire school. The school also convened an Identity and Inclusion Steering Committee composed of faculty, students, and staff who are charged with providing ongoing direction for programs and/or curricula that support an inclusive learning environment, and promote respectful and effective communication with diverse patients and colleagues around issues of identity.

Conclusion

As we welcome a new generation of learners into the profession, and watch our learning and clinical environments evolve in response to new pressures and standards, medical educators must consider the appropriate response to support the highest standards of professional behavior in students, and the characteristics of a learning environment that supports rather than erodes these standards. We must preserve the core values of medicine, and act directly on behalf of the patients and families whose care will be entrusted to the next generation of physicians.

References

1. Sox HC. Medical Professionalism in the New Millennium: A Physician Charter. Ann Intern Med. 2002; 136: 243–6.

2. United States Census Bureau. American Community Survey, 2009–2013 and decennial census 1980, 1990, 2000. Young Adults, Then and Now. https:// www.census.gov/content/dam/Census/newsroom/c-span/2015/20150130_cspan_ youngadults.pdf.

3. Association of American Medical Colleges. Matriculating Student Questionnaire 2016. https://www.aamc.org/data/msq/.

4. Grutter v. Bollinger, 539 U.S. 305; 2003.

5. Association of American Medical Colleges. Holistic Review. https://www.aamc. org/initiatives/holisticreview.

6. Witzburg RA, Sondheimer HM. Holistic Review—Shaping the Medical Profession One Applicant at a Time. NEJM. 2013; 368(17): 1565–7.

7. Roshetsky LM, Coltri A, Flores A, Vekhter B, Humphrey HJ, Meltzer DO, Arora VA. No time for teaching? Inpatient attending physicians' workload and teaching

before and after the implementation of the 2003 duty hour regulations. Acad Med. 2013; 88(9): 1293–8.

8. Hunt D, Migdal M, Eaglen R, Barzansky B. The unintended consequences of clarity: reviewing the actions of the LCME before and after the reformatting of accreditation standards. Acad Med. 2012; 87: 560–6.

9. Liaison Committee on Medical Education. LCME Functions and Structures of a Medical School, 2016-2017. LCME Standards, Publications, & Notification Forms. http://lcme.org/publications/.

10. Association of American Medical Colleges. Core Entrustable Professional Activities for Entering Residency. https://www.aamc.org/initiatives/coreepas/.

11. Accreditation Council for Graduate Medical Education. ACGME Institutional Standards. http://www.acgme.org/Portals/o/PDFs/FAQ/ InstitutionalRequirements_07012015.pdf.

12. Bagian JP, Weiss KB. The overarching themes from the CLER National Report of Findings 2016. J Grad Med Educ. v.8(2 Suppl 1); 2016 May.

13. Daloz L. Mentor: Guiding the Journey of Adult Learners. San Francisco: Jossey-Bass; 1999.

14. Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. Acad. Med. 1994; 69(11): 861–71.

15. MedSchoolRock. Scrubin' Class of 2010. May 9, 2007. https://www.youtube. com/watch?v=8y8G4s1yxio.

16. Farnan JM, Paro JA, Higa J, Edelson J, Arora VM. The YouTube generation: Implications for medical professionalism. Persp Biol Med. 2008; 51(4): 517–24.

17. Farnan JM, Paro JA, Higa J, Reddy ST, Humphrey HJ, Arora VM. Commentary: The relationship status of digital media and professionalism: It's complicated. Acad Med. 2009; 84(11): 1479–81.

18. Farnan JM, Sulmasy LS, Worster BK, Chaudhry HJ, Rhyne JA, Arora VM. Online Medical Professionalism: Patient and Public Relationships: Policy Statement from the American College of Physicians and the Federation of State Medical Boards. Ann Intrn Med. 2013; 158(8): 620–7.

19. Beanie Meadow. I Don't Know—Med School Parody of "Let It Go" from Frozen (University of Chicago Pritzker SOM). May 29, 2014. https://www.youtube.com/watch?v=EtAG3e3JLNI.

20. Rosenstein AH, O'Daniel M. A survey of the impact of disruptive behavior and communication defects on patient safety. Jt Comm J Qual Safet. 2008; 34(8): 464–71.

21. Reddy S, Ogden P, Arora VM, Elnicki M, Boddapati V, Fagan M, Jennings M, Harrell H, Ledford C, Mechaber A. Is it mistreatment? Mistreatment education for medical students entering clinical training. MedEdPORTAL Publications. 2013; 9: 9569.

22. Dickins K, Levinson D, Smith SG, Humphrey HJ. The minority student voice at one medical school: Lessons for All? Acad Med. 2013; 88(1): 73–9.

Chapter 10 Professionalism in the 21st Century: Challenges and Opportunities

Eve J. Higginbotham, SM, MD

Inclusion is a core competence for professionalism in the 21st century.¹ Developing interprofessional teams of providers to care for increasingly diverse populations, and conducting interdisciplinary research in a competitive global environment are essential to achieving high quality, culturally-mindful care with enhanced innovation.

Actively engaging as inclusive professionals is never more evident as when students engage with us in the clinical setting. In 2016, I received a phone call from a medical student who attends a school on the East Coast about her experiences in clinical medicine. She shared her experience with one of her attendings and a patient. As the attending looked on in silence, the patient referred to the student as "that colored girl" three times, making the student feel less than the budding professional she had worked so hard to become since her matriculation.

Whether the attending should have said something in the presence of the patient, or when there was a chance to speak one-on-one with the student outside the room, can be debated. However, nothing was said, and this teachable moment passed for this attending and student. In an article the student wrote, she encourages readers to act daily to truly "foster a true spirit of inclusion" otherwise we risk "undermining the true spirit of medical professionalism."²

This student's story is a springboard for considering how context impacts medical professionalism. Professionalism in the 21st century must consider societal issues in addition to the core values that bind medical professionals across generations. The importance of the individual, group, and institutional intervention is imperative for a culturally mindful practice of professionalism.

The Tenets of Professionalism

The interface with the patient and the implied social contract with society uniquely shape the professional connections that bind the healing professions. Key attributes of professionalism defined by United States Supreme Court Justice Louis Brandeis include work that is intellectual in nature rather than merely related to skill; effort that is expended on behalf of others; and the persistence of motivators other than financial return.³ Missing from this list are the connectors to the human condition, as noted by Scribonius in 47 AD—a commitment to "compassion, benevolence, and clemency in the relief of human suffering."⁴

Sir William Osler captured the depth of the emotional roots of medical professionalism when he noted that medicine is an art, and a calling that cultivates feelings of self-sacrifice, devotion, and love for one's fellow man.⁵ These are compelling words that underscore the vital focus on the patient, the sick, the vulnerable, and the unmet health needs of society.

To make these ideals more tangible, it is helpful to examine the principles advanced by organizations such as the American Board of Internal Medicine Foundation (ABIM) and the Alpha Omega Alpha Honor Medical Society (A Ω A). In collaboration with members and key stakeholders from the ABIM, the American College of Physicians, and the European Federation of Internal Medicine, the Physician Charter on Professionalism was crafted and distributed in 2002.⁶ The charter demarcates medical professionalism as "the basis of medicine's contract with society." It establishes three fundamental principles:

- 1. The primacy of patient welfare;
- 2. Patient autonomy; and
- 3. Social justice.

The charter advises physicians to be mindful of limited resources, not to be wasteful, and not to discriminate. It should be noted that not everyone believes in the inclusion of social justice as a principle of medical professionalism. Huddle argues that social justice is a fundamental characteristic of civic responsibility, not medical professionalism.⁷ However, when considering the contribution of social and economic contributors to health, separating these contributors from the healing forces of medical professionalism weakens the profession's social contract with society.

A Ω A sets the bar even higher for medical professionals to strive "to be worthy to serve the suffering."⁸ While some may judge this goal to be idealistic, unattainable, and too close to a religious mission, it clearly captures the sentiment of Scribonius⁴ and Osler.⁵

Medical professionalism and the social and economic landscape of society are inexorably intertwined. If the healing arts intend to fulfill the goal of addressing the health of patients and the communities in which patients reside, then the ills that impact vulnerable communities must be taken into consideration, including the rising cost of health care. Unless these issues are addressed, i.e., social justice, efforts to enhance the quality of care as a nation will not be successful.

The Context of Professional Practice

The medical student's experience recalled at the beginning of this manuscript is both surprising and disappointing. It is surprising considering



Figure 1

The U.S. per capita cost of health care is higher compared to other industrialized countries. (Permission to publish – granted.) Note: PPP = Purchasing power parity. Source: OECD Health Statistics 2016, Health Status; http://http://www.oecd.org/els/health-systems/health-data.htm.

that the American landscape has been shaped by social activism for more than 50 years, thus exposing current generations of physicians to the issues that an increasingly diverse population faces daily. It is disappointing because there is now a deeper understanding of root contributors to disparities in care, and the art of communication between provider and patient. Recognizing the context of the practice of medical professionalism is a first step in reinforcing one's role as an effective healer. The social and political environment in which providers practice impacts the effectiveness of the provider-patient relationship, the quality of care that communities may access, and economic health of the nation. Since the passage of the Civil Rights Act in 1964, social justice has moved to the center of political discussions in the U.S. The activism spurred by the controversy of the Vietnam War brought a broader swath of the population into the social movement. The emergence of leaders such as Martin Luther King, Jr., and Malcolm X, a growing diverse middle class fueled by greater educational opportunities, and a burgeoning manufacturing industry, created an aggressive timeline for social change.

By the time of the Heckler Report in 1985 documenting the existence of disparities in care, there was a recognition that health reflected the injustices that existed in housing and education, placing pockets of the U.S. at risk for shorter life expectancy and diminished quality of life.⁹

Today, the economic trends continue to deepen. The top 10 percent of wage earners average nine times the income of the remaining 90 percent of the work force.¹⁰ The per capita expenditure on health care is the highest compared to other industrialized countries, however care is not available for the entire U.S. population, and the quality of care is less than in other industrialized countries.¹¹ This unhealthy dynamic between cost and quality is unsustainable.

Underrepresented Minorities in Medicine

Given the growing diversity of the U.S. population, the delivery of culturally appropriate care is critically important. However, the capacity to recruit and retain a provider pool that reflects the U.S. population has never been achieved during the last 50 years.¹² Moreover, more underrepresented minority (URM) students—African-Americans, Hispanics, Native Americans, and Pacific Islanders—enter primary care fields.¹³

Following the assassination of Dr. King in 1968, there was an increase in URM matriculants that lasted into the early 1970s. At that time, medical schools proactively addressed the barriers preventing the admission of URM students. However, after reaching a peak of eight percent, the number of URM students in medicine plateaued.

Efforts such as the Project 3000 by 2000 Health Professions Partnerships, which aimed to accept 3,000 URM students by the year 2000 resulted in an additional surge in the 1990s. African-American students in medical schools peaked at nine percent, and Hispanic medical students reached 7.2 percent in the mid-1990s.¹⁴

Over time, the percentage of URM students has decreased. The proportion of minority medical school students in 2016–2017 was seven percent for African-Americans, and six percent for Hispanics.¹⁴ Barriers to a continual increase are multifactorial, including decreased federal funding for pipeline programs, and challenges to affirmative action in the legal system.¹³

The increase in the number of women in the workplace has been



Figure 2

The gap in the diversity of the population and medical school matriculants noted over a 50-year period. (Permission to publish – granted.) Cohen G, Terrell. The case for diversity in the healthcare workforce. Health Affairs. 2002; 21(5): 90–102.

another significant trend since the 1990s. The Glass Ceiling Commission underscored the value proposition for advancing women to the highest levels of management, and membership on boards. Increased profitability has been touted as one notable advantage when there is gender diversity on boards.¹⁵

Unconscious bias has been raised as an important factor in contributing to the paucity of women and underrepresented minorities at the highest levels of organizations. Unconscious bias been shown to contribute to disparities in health care delivery, promotion of faculty, salary inequity, and leadership.¹⁶

When the socioeconomic environment influences the health of patients and the effectiveness of treatment, the ability to care for patients is negatively impacted.¹⁷ The Institute of Medicine (IOM, now known as the National Academy of Medicine) report, *Unequal Treatment, Confronting Racial and Ethnic Disparities in Health Care,* documented significant disparities in care such as coronary artery bypass surgery, peritoneal dialysis, and kidney transplantation.^{18–24}

The emergence of Black Lives Matter,²⁵ and White Coats for Black Lives²⁶ introduced a resurgence of advocacy for the underserved into the classrooms of schools of medicine. Now, with the repeal of the Affordable Care Act threatening the coverage of 20 million newly insured individuals, we have a perfect storm that cannot be ignored.

Mitigating Bias

Culturally-prepared providers must practice professionalism in an increasingly diverse society impacted by complex socioeconomic issues.

There is an increased recognition of implicit bias and its impact on professionalism and personal lives. In medicine, these biases can impact medical school admissions, delivery of care, and federal policy. Evidence-based tools are available to assist individuals and institutions in interventions to mitigate bias.

In a recent article in *The Pharos*, Richard L. Byyny, MD, states:

Unconscious or implicit bias refers to biases in judgment or behavior resulting from subtle cognitive processes that we are unaware of, and which happen outside of our regular thought process and control.²⁷

Bias is influenced by life experiences, and can reinforce preconceived perceptions about individuals, practice, and policy in ways that we may not realize. The Nobel Prize winning economist Daniel Kahneman provides context for considering the influence of bias on decision-making. He puts forth the concept of System 1 and System 2 thinking defined as:

System 1—heuristic thinking that constitutes reflexive responses to the environment based on historical patterns and experiences; and **System 2**—a thoughtful approach to the world, carefully considering multiple perspectives and evidence.²⁸

To build a more inclusive culture, it is important to recognize our own biases and develop strategies to mitigate them. The Implicit Association Test—available online—can be useful in learning about influences on decision-making and social interactions. Self-awareness is an important building block for developing effective bridges to understanding the perspectives of others, and being better able to form an inclusive culture.

Preparing Future Physicians

Delese Wear, PhD, and colleagues present two strategies regarding medical education for social justice:

 Develop a curriculum that explicitly addresses care of patients who experience socioeconomic challenges and discrimination; and
 Cultivate an understanding about how trends such as income inequality and discrimination in housing contribute to the vitality of vulnerable communities.²⁹

Cultivating an understanding has been associated with the term "structural competency," which calls for a new approach to the relationships among race, class, and symptom expression.³⁰ Structural competency



Figure 3

A Framework for Educating Health Professionals to Address the Social Determinants of Health. Institute of Medicine Report, March 2016. (Permission to publish – granted.)

requires a deeper understanding of the social determinants of health (SDH). The National Academy of Medicine has developed an educational framework for SDH, recognizing the importance of contributors from education, the organization, and the community. This approach is an effective tool for the professional development of students, trainees, and faculty.

Understanding one's own biases, expanding the undergraduate and continuing medical education curricula to include social justice topics, and becoming better educated about SDH are requisite for professional development in the 21st century. However, these must be accompanied with fair processes for selecting students and new providers, and demonstrated outcomes measuring the progress of achieving goals related to health equity and inclusive cultures.

Holistic Admissions

Diversity in medicine has not kept pace with the progressive diversification of the American population. There are appreciable advantages to a more diverse pool of medical school applicants, such as:

• Minority providers are more likely to practice in underserved communities;

• Appropriate cultural awareness can increase effective patientprovider relationships especially when language barriers are reduced or eliminated; and

 \bullet Ethnic concordance enhances the relationship between patient and provider. 31

Employing a holistic admissions process is considered an effective strategy to identify matriculants who can enrich the educational experience of colleagues. Key elements of the holistic admissions process include:

1. Broad-based selection criteria;

2. Consideration of the experiences and academic metrics of applicants;

3. Potential contributions to the learning environment; and

4. Ethnicity, particularly when considering student experiences and institutional mission. $^{\rm 32}$

Implicit bias was assessed in the medical school admissions process at one institution. It was noted that following the delivery of the Implicit Association Test, 48 percent of test-takers expressed greater awareness of their own biases. Using the test as a component of the selection process, the subsequent class was more diverse than previous classes.³³

A recent 10-year review of the impact of holistic admissions across a cohort of multidisciplinary medical schools found that schools that incorporated most of the elements of the holistic admissions process were more diverse.³⁴ Additional measures of student success included enhanced engagement with the community, improved cooperation and teamwork, and greater openness to new ideas—all important attributes to shape an inclusive community.

Addressing Bias in the Care of Patients

The National Academy of Medicine report, "Unequal Treatment, Confronting Racial and Ethnic Disparities in Health Care,"²⁷ on unequal treatment offered recommendations to address disparities in patient care. The interventions suggested for health care systems include:

• Promote the consistency and equity of care using evidence-based guidelines.

• Structure payment systems to ensure an adequate supply of services to minority patients, and limit provider incentives that may promote disparities.

• Enhance patient-provider communication and trust by providing

financial incentives for practices that reduce barriers and encourage evidence-based practice.

• Support the use of interpretation services where community need exists.

• Support the use of community health workers.

As medical professionals, it is important to consider these recommendations, support them institutionally, and recognize our biases in every patient interaction.

Building an Inclusive Work Environment

The way we work in public health is, we make the best recommendations and decisions based on the best available data.³⁶

-Tom Frieden, MD

This public health principle can also be applied to measuring the inclusiveness of a culture. The Association of American Medical Colleges in collaboration with the University of Massachusetts piloted a survey that measures diversity and inclusion. It quantifies elements critical to shaping an inclusive culture. Between 2011 and 2012, 14 schools participated in the survey. The survey found that respondents who were African-American, Hispanic/Latino, female, and LGBTQ were less engaged.³⁷

Measuring inclusiveness in the workplace is an important starting point so that interventions can be informed based on data. By addressing attitudes about diversity and inclusion, practices and health systems will be better equipped to deliver culturally-minded, patient-centered, unbiased care.

Conclusion

Medical professionalism cannot be viewed in isolation given the significant contributions of the socioeconomic factors to the health and well-being of patients. As providers, it is our responsibility to acknowledge these external factors, and to openly discuss the challenges that may be impacting patients. We also have a responsibility to each other, being mindful of our own biases and how they may impact our professional interactions.

It is the responsibility of educators, residents, faculty, and leadership to model strategies for medical students to use when faced with personally uncomfortable situations. By saying nothing, there is a missed opportunity to learn more, and there is the implied assumption of agreement with the ill-informed sentiment or bias. Saying nothing also represents a missed opportunity for all involved to grow personally and professionally.

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References

1. Higginbotham E. Inclusion as a core competence of professionalism in the twenty-first century. Pharos Alpha Omega Alpha Honor Med Soc. 2015 Autumn; 78(4): 6–9.

2. Okwerekwu JA. The patient called me "colored girl." The senior doctor training me said nothing. Stat News, April 11, 2016. https://www.statnews.com/2016/04/11/ racism-medical-education/.

3. Brandeis LD. Business—A Profession. Boston: Small, Maynard; 1914.

4. Hamilton JS. Scribonius Largus on the medical profession. Bull Hist Med. 1986; 60: 209–16.

5. Osler W. The reserves of life. St. Mary's Hospital Gazette. 1907; 13: 95–8.

6. Husser W. Medical Professionalism in the New Millennium: A Physician Charter. J Amer Col Surg. 2003; 196(1): 115–8.

7. Huddle TS. The Limits of Social Justice as an Aspect of Medical Professionalism. J Med Philos. 2013; 38: 369–87.

8. Alpha Omega Alpha Honor Medical Society Constitution. http://www. alphaomegaalpha.org/constitution.html/.

9. Heckler M. Report of the Secretary's Task Force on Black and Minority Health. U.S. Dept. of Health and Human Services. 1985–1986.

10 Institute of Policy Studies. Income Inequality. http://inequality.org/income-inequality/.

11. Squires D, Anderson C. U.S. Health Care from a Global Perspective: Spending, Use of Services, Prices, and Health in 13 Countries. The Commonwealth Fund. Issues in International Health Policy; 2015.

12. Cohen JJ, Gabriel BA, Terrell C. The case for diversity in the health care workforce. Health Aff (Millwood). 2002; 21(5): 90–102.

13. Council on Graduate Medical Education Twentieth Report: Advancing Primary Care; 2010.

14. Association of American Medical Colleges Table B-5: Total Enrollment by U.S. Medical School and Race/Ethnicity; 2016–2017. https://www.aamc.org/download/321540/data/factstableb5.pdf.

15. A Solid Investment: Making Full Use of the Nation's Human Capital: Recommendations of the Federal Glass Ceiling Commission. 1995.

16. Rhee KS, Sigler TH. Untangling the relationship between gender and leadership. Gender Mgmt. 2015; 30(2): 109–34.

17. Smedly B, Stith A, Nels A. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. The National Academies Press. 2003.

18. Ayanian HZ, Udvarhelyi IS, Gatsonis CA, Pashos CL, Epstein AM. Racial

differences in the use of revascularization procedures after coronary angiography. JAMA. 1993 May 26; 269(20): 2642–6.

19. Hannan EL, van Ryn M, Burke J, Stone D, Kumar D, Arani D, Pierce W, Rafii S, Sanborn TA, Sharma S, Slater J, DeBuono BA. Access to coronary artery bypass surgery by race/ethnicity and gender among patients who are appropriate for surgery. Med Care. 1999 Jan; 37(1): 68–77.

20. Johnson, P, Lee T, Cook F, Rouan G, Goldman L. Effect of Race on the Presentation and Management of Patients With Acute Chest Pain. Ann Int Med. 1993; 118(8): 593–601.

21. Rumsfeld JS, Plomondon ME, Peterson ED, Shlipak MG, Maynard C, Grunwald GK, Grover FL, Shroyer AL. The impact of ethnicity on outcomes following coronary artery bypass graft surgery in the Veterans Health Administration. J Am Coll Cardiol. 2002 Nov 20; 40(10): 1786–93.

22. Epstein AM, Ayanian JZ, Keogh JH, Noonan SJ, Armistead N, Cleary PD, Weissman JS, David-Kasdan JA, Carlson D, Fuller J, Marsh D, Conti RM. Racial disparities in access to renal transplantation—clinically appropriate or due to underuse or overuse? N Engl J Med. 2000 Nov 23; 343(21): 1537–44.

23. Barker-Cummings C, McClellan W, Soucie JM, Krisher J. Ethnic differences in the use of peritoneal dialysis as initial treatment for end-stage renal disease. JAMA. 1995 Dec 20; 274(23): 1858–62.

24. Gaylin DS, Held PJ, Port FK, Hunsicker LG, Wolfe RA, Kahan BD, Jones CA, Agodoa LY. The impact of comorbid and sociodemographic factors on access to renal transplantation. JAMA. 1993 Feb 3; 269(5): 603–8.

25. Black Lives Matter. http://www.blacklivesmatter.com.

26. White Coats 4 Black Lives. http://www.whitecoats4blacklives.org.

27. Byyny R. Cognitive bias: Recognizing and managing our unconscious biases. Pharos Alpha Omega Alpha Honor Med Soc. 2017 Winter; 80(1): 2–6.

28. Kahneman D. Thinking, Fast and Slow. New York: Farrar, Strauss and Giroux; 2013.

29. Wear D, Zarconi J, Aultman J, Chyatte M, Kumagai A. Remembering Freddie Gray: Medical Education for Social Justice. Acad Med. 2017 Mar; 92(3): 312–7.

30. Metzl JM, Hansen H. Structural competency: Theorizing a new medical engagement with stigma and inequality. Soc Sci Med. 2014; 103: 126–33.

31. National Academies of Sciences, Engineering, and Medicine. A framework for educating health professionals to address the social determinants of health. Washington, DC: The National Academies Press; 2016.

32. Edwards JC, Maldonado FG Jr, Engelgau GR. Beyond affirmative action: one school's experiences with a race-neutral admission process. Acad Med. 2000 Aug; 75(8): 806–15.

33. Conrad SS, Addams AN, Young GH. Holistic Review in Medical School Admissions and Selection: A Strategic, Mission-Driven Response to Shifting Societal Needs. Acad Med. 2016 Nov; 91(11): 1472–4.

34. Capers Q, Clinchot D, McDougle L, Greenwald AG. Implicit Racial Bias in Medical School Admissions. Acad Med. 2017 Mar; 92(3): 365–9.

35. Urban Universities for HEALTH. Holistic Admissions in the Health Professions. Findings from a National Survey; 2014.

36. Tom Frieden Quotes. https://www.brainyquote.com/quotes/quotes/t/ tomfrieden763141.html.

37. Person SD, Jordan CG, Allison JJ, Fink Ogawa LM, Castillo-Page L, Conrad S, Nivet MA, Plummer DL. Measuring Diversity and Inclusion in Academic Medicine: The Diversity Engagement Survey. Acad Med. 2015 Dec; 90(12): 1675–83.

Reflections on Best Practices for Medical Professionalism in the Modern Era

Richard L. Byyny, MD, FACP

Ipha Omega Alpha Honor Medical Society (A Ω A) was founded in 1902 by William Root, a medical student at the College of Physicians and Surgeons of Chicago. At that time, medical education was often poorly structured, and medical students were illprepared academically. Medical faculties were frequently unqualified and unequipped to teach a scientifically-oriented curriculum. Many doctors questioned the value of science and research in medicine. Standards were virtually nonexistent, and some physicians found running a small independent medical school could be a profitable pursuit.

Root was galled by the lack of interest in academic achievement and professional values shown by most faculty and students, as well as their immaturity, poor conduct, and dishonesty. His answer to all of this was to form A Ω A with membership based on scholarly achievement and professional conduct. Twenty-eight students joined Root to ratify a constitution, and induct the society's first members. They created A Ω A's mission:

Dedicated to the belief that in the profession of medicine we will improve care for all patients by:

- Recognizing high educational achievement;
- Honoring gifted teaching;

• Encouraging the development of leaders in academia and the community;

- · Supporting the ideals of humanism; and
- Promoting service to others.

They also established $A\Omega A$'s motto, "Be Worthy to Serve the Suffering." The original charter specifically stated that race, color, creed, gender, and social standing should never be barriers to membership. $A\Omega A$ has stayed true to its founding principles for the last 116 years.

A Ω A Chapters in medical schools grew rapidly. Today, there are 132 Chapters, with a faculty member Councilor leading each. Since its beginning, there have been more than 180,000 A Ω A members elected based on academic achievement, leadership, professionalism, service, teaching, and research.

A Ω A is funded by member dues, and provides more than \$1.75 million dollars each year for fellowships, grants, and awards, including distinguished
teachers; visiting professors; medical student research; medical student service leadership projects; medical professionalism; volunteer faculty awards; and prizes in literature and poetry. A Ω A also publishes a multidisciplinary, peer-reviewed, medical humanities journal, *The Pharos*.

 $A\Omega A$ has an active and distinguished Board of Directors, and 57 Nobel Prize winners in physiology, medicine, and chemistry who are $A\Omega A$ members. In addition, about 75 percent of medical school deans are members.

Professionalism—A Core Principle

A founding and core principle of A Ω A is professionalism, which remains a criterion for membership. A few decades ago, medical professionalism became an important issue in medicine and medical education. Observations and studies have revealed that the profound and rapid advances in medical knowledge, technology, and specialized skills and expertise have inadvertently resulted in a loss of professional core values. Social changes have altered the relationship between the doctor and patient, and the profession's contract with society.

Physicians, academicians, and professional organizations have proposed a renewed commitment to restore professionalism to medicine. Professional organizations and leaders in medicine have defined the fundamental principles of medical professionalism and have developed a set of professional responsibilities. For its part, A Ω A created the Edward D. Harris Professionalism Award to promote professionalism in medicine, and is on the forefront of effecting change and promoting professionalism through a biennial think tank conference focused on the best practices of professionalism in medicine.

In July 2011, A Ω A sponsored its first-ever professionalism think tank to focus on interventions and remediation strategies. The outcome was the publication *Perspective: The Education Community Must Develop Best Practices Informed by Evidence-based Research to Remediate Lapses of Professionalism.*¹

Participants recommended that the education community focus on:

1. Performing studies about improving medical professionalism when lapses occur;

2. Identifying best evidence-based remediation practices;

3. Widely disseminating those practices; and

4. Moving over time from a best-practices approach to remediation to a best-evidence model.

A second think-tank conference was held in 2013, and with the support of a 335,000 Josiah Macy Jr. Foundation President's Grant, the first AQA

monograph, *Medical Professionalism Best Practices*,² was published and disseminated for free to nearly 10,000 medical professionals around the world.

In 2015, A Ω A received a second \$35,000 Josiah Macy Jr. Foundation President's Grant to produce and disseminate the organization's second monograph on professionalism, *Medical Professionalism Best Practices: Professionalism in the Modern Era*, which was the product of the A Ω A Professionalism Conference held in September 2016, in Chicago.

The past three A Ω A/Josiah Macy Jr. Foundation professionalism conferences have brought together a community of practitioners, educators, and leaders in medical professionalism to develop best practices for professionalism in the modern era. The groups convened to learn, debate, and develop learning methods for current and future physicians to recognize, appreciate, and practice caring for patients as a unique form of professional human activity.

There was consensus among the groups that medicine in the 21st century will need to be based on the moral foundations of professionalization and professionalism in the care of the sick. This will require trust in a physician's competence, and the provision of care in the patient's interests—not the physician's, or their organization's.

The responsibility of medical educators is to teach the next generation, and ensure that the primacy of the welfare of patients is foremost, and will be preserved based on moral status and integrity. Medicine must continue as a moral and responsible profession.

Best Practices

At the conclusion of the 2016 three-day conference, the group of distinguished physicians and educators developed a forward-thinking list of best practices to share for the betterment of the medical profession.

They reflected on the fundamental principles of the Physician Charter the primacy of patient welfare, patient autonomy, social justice, and the professional commitments of physicians and health care professionals in the modern era.³

There was discussion on medicine's professional responsibilities around:

- Professional competence;
- Honesty with patients;
- Patient confidentiality;
- Maintaining appropriate relations with patients;
- Improving quality of care;
- Improving access to care;
- Just distribution of finite resources;
- Scientific knowledge;

- Maintaining trust by managing conflicts of interest; and
- Professional responsibility.

The Hidden Curriculum

Although most schools have curricula related to professional values, what students learn and retain can often be from what is called the "hidden curriculum"—the day-to-day experiences of students working in the clinical environment while watching, listening, and emulating resident and physician behaviors. Fortunately, many schools and teaching hospitals have implemented curricula to improve medical professionalism, and some have attempted to develop methods of evaluating aspects of professionalism. The most effective programs lead by changing the entire culture and environment to respect and reward professional behavior, and to diminish the negative impact of the hidden curriculum.

However, we shouldn't presume that professional core values in medicine are intuitively apparent. There is ongoing debate about the importance and value of a physician's oath or solemn promise. There must be clear professional expectations that are explicit for all physicians, and a commitment for physicians to respect and uphold a code of professional values and behaviors. These include the commitment to:

- Adhere to high ethical and moral standards—do right, avoid wrong, and do no harm.
- Subordinate personal interests to those of the patient.
- Avoid business, financial, and organizational conflicts of interest.
- Honor the social contract with patients and communities.

• Understand the non-biologic determinants of poor health, and the economic, psychological, social, and cultural factors that contribute to health and illness—the social determinants of health.

• Care for all patients regardless of their ability to pay, and advocate for the medically underserved.

- Be accountable, both ethically and financially.
- Be thoughtful, compassionate, and collegial.
- Continue to learn, and strive for excellence.

• Work to advance the field of medicine, and share knowledge for the benefit of others.

• Reflect dispassionately on personal actions, behaviors, and decisions to improve knowledge, skills, judgment, decision-making, accountability, and professionalism.

Efforts in medical professionalism continue to be a work in progress.

As physicians, we are continually learning about medical professionalism, and how to maintain and improve a standard of behavior. We need to remember that we call our work "the practice of medicine" because we are always practicing our profession in order to learn and improve. Our goal is not perfection, but continuous learning, improvement, and focusing on what is best for the patient.

Constructs of Professionalism

Professionalism, as a construct, has changed dramatically over the past 40 years. Initially, professionalism was associated with personal character, virtues, ethics, and humanism. Later, professionalism became a competency with behaviors to be demonstrated and assessed.

More recently, professionalism has come to be viewed as a matter of professional identity formation.

Three Models of Professionalism

The centuries old model of professionalism is associated with virtues and ethics. A good physician is a person of character who is able to apply ethical principles, curb self-interest, demonstrate the virtues of compassion and respect, and be humanistic, trustworthy, and caring.

In the 1990s, a model arose around behaviors and competencies. The behavioral model emerged in response to the perceived failure of the virtues model to translate ethical instruction into ethical action. The good physician, according to behaviorists at the time, was a person who manifested a defined set of behaviors, and demonstrated professionalism competencies.

In the past decade, a new model appeared: professional identity formation. This approach developed in reaction to concerns about the reductionist behavioral model, and described the progressive incorporation of the values and aspirations of the profession into the identity of the person.

The good physician takes on the identity of a community of practice, and is socialized into the values, aspirations, and behaviors of the field.

Each of the three models has strengths and limitations, and each adds to the greater whole. Professionalism can be viewed as a matter of character, humanism, and ethical reasoning, which is inspiring to learners and practitioners.

Professionalism can also be seen as adoption of appropriate behaviors, and demonstration of an area of competence, which tightly aligns instruction and assessment. Professionalism can be viewed as a process of being and becoming—of taking on the identity of a professional, which is also inspiring, and encourages self-reflection. **Best Practices:**

– Professionalism describes the process by which students, residents, faculty, and leadership psychologically develop through social processes of instruction, coaching, feedback, reflection, and identity formation.

- Professionalism lapses should be dealt with differently depending on whether it is considered to be an inability to apply ethical principles, an instance of inappropriate behavior, or a lack of insight into one's own professional identity.

– At the level of individual learner and practitioner, opportunities exist to move from talking about ideals and aspirations of professionalism to helping students and faculty to negotiate value conflicts, and balance tensions in moments of stress.

– With the changing demographics of today's learners, the values of professionalism must be made explicit and taught directly. Students must be taught how to negotiate situations where unprofessional actions are being observed.

- Schools and hospitals need to teach professional standards and practices, ensuring that learners understand why the standards exist, and explaining the consequences of not meeting the standards.

– Patients are harmed by failure to disclose errors and mistakes. The ability to report and apologize requires peer support, coaching on disclosing errors to patients, and a complementary system that values transparency and humility.

Professional Identity Formation

The emphasis on professional identity formation resulted from the recognition by medical educators that an individual's identity begins to emerge at birth, and proceeds in stages throughout life. The process of professional education in medicine is superimposed on this normal development, and has a profound impact on the identities that emerge.

Individuals, at a particularly formative stage of their lives, enter medical school with preexisting identities that have been shaped by both nature and nurture. During the long period of undergraduate and postgraduate education, each learner must come to terms with the norms of the community of practice that they are entering. These norms are outlined in the definition of profession and professionalism, as well as its list of characteristics or attributes. Each learner must cope with these norms.

The major factors impacting identity formation in medicine are role models and mentors, and both clinical and nonclinical experiences.

One way to achieve this essential objective is to specifically design educational programs that support individuals as they develop the professional identity necessary for the practice of medicine, so that each practitioner has come to think, act, and feel like a physician.

Best Practices:

– Professional identity formation—the development of professional values, actions, and aspirations—is the backbone of medical education.

– Medical students acquire the identity of a physician during the course of their educational experiences. They aspire to join in a community of practice—the practice of medicine—with a shared competence they acquire from role models, mentors, and experiences. Physician identity is that of a healer, and a medical professional.

- The ultimate objective of medical education is to ensure that individuals are professional in their behavior because of who they have become. To achieve this, medical schools must design specific education programs that support individuals as they develop the professional identity necessary for the practice of medicine—to think, act, and feel like a physician.

– The central issue with learning is becoming a practitioner, not learning about practice.

Generational Differences

Whether the situation involves work hours, social media, or digital devices, a shared understanding of professional comportment is essential. Generational differences can lead to different interpretations of professionalism, and communication is the key to avoiding misunderstanding.

Professionalism disconnects can arise from different personal and generational viewpoints. Professionalism can be contextual and situationally nuanced. Establishing safe spaces for direct communication, and educating faculty and learners about the ways to communicate and navigate professionalism differences will help reduce the generational angst.

Best Practices:

– Generational differences can lead to different interpretations of professionalism. Communication is the key to avoiding misunderstanding.

- Define appropriate and inappropriate behaviors. Review expectations, encourage and respond to questions, and establish a shared understanding of rules and consequences.

– Model professional behavior. Be aware of inadvertent lapses in professionalism, and acknowledge them when they occur.

– Communicate directly. Timely communication in an appropriate environment is key. Articulate concerns in an objective manner, seek to understand other's perspective, and clearly state expectations.

Caring

Medical professionalism should be seen as a tiered construct divided into basic professionalism (doing the right thing well), and higher professionalism (service that transcends self-interest). Both require a physicianwho cares.

In 1902, Osler told members of a medical society, "The times have changed, conditions of practice have altered and are altering rapidly, but... we find that the ideals which inspired [our predecessors] are ours today ideals which are ever old, yet always fresh and new, and we can truly say in Kipling's words:

And the men bulk big on the old trail, our own trail, the out trail,

And life runs large on the Long Trail—the trail that is always new.

The trail for the men and women of the new millennium presents steep climbs, especially if they are to be more than technicians who care. However, if they can achieve a level of caring in which service transcends self-interests; if they can care not just for individual patients but also for the greater good; if they can care about caring as a subject deserving their continued attention, then their capacity for good knows no limits.

Best Practices:

– A physician professional is a technician who cares.

- By achieving a level of caring in which service transcends self-interest, physicians can care for individual patients, and also for the greater good.

– When caring is a subject deserving of continual attention, then an individual's capacity for good knows no limits.

Retraining Professionals

Is professionalism all about following the rules? If so, whose rules? Were these rules generated by the profession? The organization? Some hard-to-untangle mash-up of the two? How do formal framings, the bureaucratic scaffold of the educational enterprise, and the financial undercurrents of delivering health care, cause medical schools to function as little more than farms in the production of a certain sheep-like product?

Are we, as faculty, internalizing a sheep farming approach to professional preparation? How do the forces of unconscious bias, group preservation, and the homophilic desire to select and train future generations of physicians to be just like us push a follow-the-rules, role-model-reverence, and etiquette-based approach to professionalism?

What might happen if we deliberately reimagine medical schools not as sites of cultural reproduction (a.k.a. factories), but rather as sites of cultural resistance? Resistance could be operationalized as skill sets designed to:

1. Problematize the application of routine solutions to non-routine problems; and

2. Recognize where and how market incentives and bureaucratic structures leak streams of tacit messages into the learning environment contrary to core professionalism principles.

There is considerable conflict between what students aspire to, and what they are being educated/programed/socialized to do. The overall picture is one of medical schools as sites of cultural reproduction rather than sites of cultural resistance.

Medical education and medical educators must step back and ask themselves the teleologic question, "to what end?" What is the function of medical education? What are the challenges to which we seek to train professionals for the modern era? What are the practice environments of the future, and how should our future practitioners—as professionals—fit (and not fit)?

We need to subject educational practices to a more extensive array of theatrical, conceptual, and occupational lenses. It is not altogether clear whether the norms that currently guide medicine's professionalism movement remain its own, and are sufficiently distinct from a rules-based/ command and control/professionalism-police framing of what it means to be a good doctor. There is concern about how medicine's professionalism movement is sufficiently generated internally, and renewed, as opposed to being set by external interests. If the agenda is internally set, medicine might be perverting its own core principles by promulgating a just-followthe-rules framing of professionalism, thus becoming a version of the famous Pogo dictum, "we have met the enemy and he is us."

Medical educators must think long and hard about the structural and cultural context of their training environments. This means moving beyond a preoccupation with content. Learning is never context free. There is no such thing as an informationally indifferent, or message-balanced learning environment. There are no revenue neutral, or neutral-to-revenue, learning environments.

Learning environments are awash with messaging, much of which functions to shape the identity of physicians as professionals. The impact of industry and markets on the learning environments of medical trainees is both real and appreciable. So too are the bureaucratic messages of order and social control. All exert pressures on how work is carried out and valued, including the technical aspects of that work.

If being a good doctor is learned within a dynamic interplay of

professional, bureaucratic, and market messaging, where do we encounter a framing of professionalism? Or, as normative aspirational chants that ask practitioners to rise above, or temporarily hold in abeyance, any such antiprofessional pressures? Where do we find within the formal curriculum a view of professionalism where bureaucracy and markets are identified as countervailing forces that require resisting for the sake of medicine's soul?

Bureaucratic and market forces will continue to battle for the hearts and minds of 21st century professionals essentially unopposed by the ethos, ethics, and practice of professionalism. In the end, none of this is about saving the world for professionals, rather it is about saving health care for patients and the public in a world where mission increasingly is defined in terms of margins, and where standardization will deliver inappropriate care to both ends of any illness distribution.

Best Practices:

– Apply an extensive array of theatrical, conceptual, and occupational lenses to educational practices.

– Move beyond content—learning environments are inundated with messaging to shape the identity of physicians as professionals.

 Resist stasis by constructing learning environments that will cultivate curiosity and attentiveness.

Building an Infrastructure to Support Professionalism

Medical educators and leaders of health systems have enormous opportunities to shape the professional development of learners. The determining factor is whether they try to do so with a balanced approach.

To support and sustain learners' development, it is crucial to identify and build sustainable models to ensure that learners are exposed to positive role models, and introduced to how professionals self-regulate. Curricula and experiential learning approaches are unlikely to have a lasting impact if organizations fail to put in place the right people, processes, and technology to address unprofessional behaviors among senior team members, as well as learners. Unless there is a balanced approach, professionalism education will not have a sustained and lasting impact on learners and delivery of care that is safe, effective, and patient-centered. Organizations need to have the right people, processes, and technology in place to appropriately address "disturbances in the force" in a timely manner, and reduce the probability of pattern development in role models, and ultimately, in learners.

As demonstrated at Vanderbilt University Medical Center, supporting the educational development and professional identity formation of learners through careful attention to life-long learning principles, self-directed learning, and reflection are important foundations of professionalism education. However, without an organized approach to support professional accountability with the right people, processes, and technology to address negative role models and sustain the effort, we are likely to see an unending cycle of unprofessional behaviors, moral distress, and cynicism.

Drexel University College of Medicine developed a comprehensive, longitudinal professionalism curriculum with elements across courses and clerkships in multiple institutions, and teaching hospitals that promote understanding of professionalism and professional formation of trainees. The curriculum includes clinical ethics; humanism; personal awareness and reflective practice; empathic communication skills and compassion responsiveness; commitment and accountability to the professional community; and cultivation of physician virtues.

Appreciative debriefing and inquiry also promote a positive culture of social support among students. A multi-faceted assessment system identifies at-risk students who may benefit from additional faculty support or remediation strategies.

Best Practices:

– Medical educators and leaders of health systems can, and should, shape the professional development of learners through a balanced approach, supporting educational development and professional identity formation using life-long learning principles, self-directed learning, and reflection.

– Health care systems must have an organized approach to support professional accountability with the right people, processes, and technology.

- A comprehensive, longitudinal professionalism curriculum, with elements across courses and clerkships that promotes understanding of professionalism and professional identity formation, is needed.

– Clinical ethics, humanism, personal awareness, reflective practice, empathetic communication skills, compassionate responsiveness, commitment to accountability, and cultivation of physician virtues are core to the medical school curriculum.

The Learning Environment

United States Census data shows that the profile of young Americans age 18–34 years has changed dramatically. The proportion of young adults who are racial and ethnic minorities has doubled in the last 30 years; one in four of this cohort speak a language other than English at home; and far fewer of this group were born in the U.S. compared to their peer group in 1980. This change in the profile of medical school matriculants corresponds with, and may even be due to, an evolution in the way in which individual medical schools are assessing and evaluating applicants.

Medical Professionalism Best Practices: Professionalism in the Modern Era

In response, the Association of American Medical Colleges began working with individual medical schools to implement a holistic review of medical education to incorporate key aspects of behavior, character, and performance that have direct impact on the practice of medicine, and which are not easily assessed by academic performance or standardized test scores. Through national presentations, on-site training at medical schools, and broad dissemination of resources, the practice of holistic review in medical school admissions has become widespread over the last 10 years. Holistic review allows medical schools to consider the qualities of an outstanding physician, and look for experiences and attributes in the applicant which may presage the future attainment of such traits.

The circumstances that characterize the learning environment are resulting in multiple new challenges. Overburdened faculty are now addressing concerns such as duty hour limits; managing an ever-increasing set of responsibilities related to paper-work; demands for increasing productivity in a challenging fiscal environment; increased regulation by oversight agencies; and a larger number of student learners, all of which combine to reduce time for teaching. Add to this, advances in pedagogic technology, including the use of simulation and standardized patients, as a replacement for direct patient contact due to safety concerns.

Medical educators must now navigate a new generation of learners, and a learning environment, contending with multiple new challenges and strict guidelines focused on teaching and evaluating professionalism.

Taking lessons from the student's perspective, the Pritzker School of Medicine has worked hard to enhance collaborative learning across all components of the curriculum by expanding the content of the health care disparities course to include training in intersectional practice and patient care for the LGBTQI community; implementing implicit bias training; and increasing the number of underrepresented students. To address the lack of diversity among the faculty, the dean of the biological sciences division appointed a new associate dean whose role is to launch an institutionwide initiative to enhance diversity and inclusion at all levels, from faculty to residents and fellows, to graduate and medical students, to staff.

The school has enhanced the level of support for all students, by launching a new Wellness Committee, which provides programming for the entire school. The school also convened an Identity and Inclusion Steering Committee composed of faculty, students, and staff who are charged with providing ongoing direction for programs and/or curricula that support an inclusive learning environment, and promote respectful and effective communication with diverse patients and colleagues around issues of identity.

We must preserve the core values of medicine, and act directly on

behalf of the patients and families whose care will be entrusted to the next generation of physicians.

Best Practices:

– Enhance collaborative learning across all components of the curriculum to include training in intersectional practice and patient care for vulnerable and underserved populations.

– Implement implicit bias training for students, faculty, and leadership.

- Medical educators must consider the appropriate response to support the highest standards of professional behavior in students, and the characteristics of a learning environment that supports these standards.

Inclusiveness

Inclusion is a core competence for professionalism in the 21st century.

Developing interprofessional teams of providers to care for increasingly diverse populations, and conducting interdisciplinary research in a competitive global environment are essential to achieving high quality, culturally-mindful care with enhanced innovation.

Given the growing diversity of the U.S. population, the delivery of culturally appropriate care is critically important. Culturally-prepared providers must practice professionalism in an increasingly diverse society impacted by complex socioeconomic issues.

Medical professionalism and the social and economic landscape of society are inexorably intertwined. If the healing arts intend to fulfill the goal of addressing the health of patients and the communities in which patients reside, then the ills that impact vulnerable communities must be taken into consideration, including the rising cost of health care. Unless these issues are addressed, i.e., social justice, efforts to enhance the quality of care as will not be successful. When the socioeconomic environment influences the health of patients and the effectiveness of treatment, the ability to care for patients is negatively impacted.

There is an increased recognition of implicit bias and its impact on professionalism and personal lives. In medicine, these biases can impact medical school admissions, delivery of care, and federal policy. Evidencebased tools are available to assist individuals and institutions in interventions to mitigate bias.

To build a more inclusive culture it is important to recognize our own biases and develop strategies to mitigate them.

The interventions suggested for health care systems include:

• Promote the consistency and equity of care using evidence-based guidelines.

• Structure payment systems to ensure an adequate supply of services

to minority patients, and limit provider incentives that may promote disparities.

• Enhance patient-provider communication and trust by providing financial incentives for practices that reduce barriers and encourage evidence-based practice.

• Support the use of interpretation services where community need exists.

• Support the use of community health workers.

As medical professionals, it is important to consider these recommendations, support them institutionally, and recognize our biases in every patient interaction.

Medical professionalism cannot be viewed in isolation given the significant contributions of the socioeconomic factors to the health and well-being of patients. As providers, it is our responsibility to acknowledge these external factors, and to openly discuss the challenges that may be impacting patients. We also have a responsibility to each other, being mindful of our own biases and how they may impact our professional interactions.

The development of interprofessional teams, and conducting interdisciplinary research are essential to achieving high quality, culturallymindful care with enriched innovation.

Best Practices:

– Acknowledge the socioeconomic factors and social determinants of health, and openly discuss the challenges that may be impacting patients and the delivery of care.

– It is the responsibility of educators, residents, faculty, and leadership to develop strategies for use in personally uncomfortable situations.

– Be mindful of biases and how they impact professional interactions and patient care.

 $A\Omega A$ will continue its commitment to medical professionalism. It is our hope that this monograph will be used to educate on, and promote, best practices in medical professionalism in the modern era.

"Be worthy to serve the suffering."

References

1. Papadakis MA, Paauw DS, Hafferty FW, Shapiro J, Byyny RL. Perspective: The Education Community Must Develop Best Practices Informed by Evidence-based Research to Remediate Lapses of Professionalism. Acad Med. December 2012; 87(12): 1694–8.

2. Alpha Omega Alpha Honor Medical Society. Medical Professionalism Best Practices. http://alphaomegaalpha.org/medprof2015.html.

3. American Board of Internal Medicine. Project Professionalism. Philadelphia, PA; 1995.

4. Seeley Brown J, Duguid P. Organizational learning and communities of practice: toward a unified view of working, learning, and innovation. Organization Sci. 1991;
2: 40–57.

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