

## REVIEW

# Incorporating Professionalism into Medical Education: The Mayo Clinic Experience

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### Abstract

Professionalism is a core competency of physicians. In this article, the statements of professional societies (e.g., the Charter on Medical Professionalism), the expectations of patients and society regarding professionalism, and a framework for defining medical professionalism are described. The framework's foundation consists of clinical competence, communication skills, and a sound understanding of the ethical and legal aspects of medicine. Rising from this foundation are attributes of professionalism: accountability, altruism, excellence, and humanism. The capstone of the framework is professionalism, or the complete physician. Reasons for teaching professionalism to and assessing professionalism among medical students, physicians in training, and physicians in practice are also described. These reasons include patient expectations; the association between professionalism and improved clinical outcomes (and the association between unprofessional behavior and adverse outcomes); accreditation organization requirements; and observations that professionalism can be taught, learned, and assessed. In addition, methods for teaching professionalism are described (e.g., didactic lectures, discussion groups, simulation, and role-modeling). To ensure that medical students, physicians in training, and physicians in practice are competent in professionalism, they should be assessed for professionalism. Thus, approaches to assessing professionalism are also described (e.g., multiple tools and observers). Professionalism assessments can be used for formative and summative feedback, evaluation of professionalism education programs, and generating hypotheses for professionalism research. Finally, the rich history and culture of clinical excellence and professionalism and specific programs for teaching and assessing professionalism at Mayo Clinic are described throughout this article. Indeed, the Mayo Clinic experience validates professionalism as a core physician competency. (Keio J Med 58 (3) : 133–143, September 2009)

**Keywords:** professionalism, medical professionalism, ethics, medical education, assessment

### Introduction

Medicine has been regarded as a “profession” for centuries. Indeed, over millennia and a wide variety of cultures and locales, oaths and codes of ethics have described physicians’ professional and ethical values and duties. Until recently, it was assumed trainees in medicine would assimilate and physicians in practice would maintain these values and duties. In recent decades, how-

ever, the medical profession has been criticized for perceived and real breaches of professionalism and ethics (e.g., promoting self-interests rather than the interests of patients). In response to this criticism, interest in preserving, promoting, teaching, assessing and researching medical professionalism has increased.

The objectives of this article are to: (a) define “professionalism”; (b) describe the rationale for teaching and assessing professionalism in medical students, physi-

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**Table 1** The Physician Charter on medical professionalism<sup>5</sup>

Fundamental Principles	
1.	Principle of primacy of patient welfare
2.	Principle of patient autonomy
3.	Principle of social justice
Professional Responsibilities	
1.	Commitment to professional competence
2.	Commitment to honesty with patients
3.	Commitment to patient confidentiality
4.	Commitment to maintaining appropriate relations with patients
5.	Commitment to improving quality of care
6.	Commitment to improving access to care
7.	Commitment to a just distribution of finite resources
8.	Commitment to scientific knowledge
9.	Commitment to maintaining trust by managing conflicts of interests
10.	Commitment to professional responsibilities

cians in training (e.g., residents and fellows), and physicians in practice; (c) describe methods for teaching and assessing professionalism in the healthcare setting; and (d) describe professionalism education programs at Mayo Clinic (Rochester, Minnesota, U.S.A.). Notably, the ethics and professionalism principles and practices described in this article derive largely from a Western perspective. In addition, this article will focus on medical students, physicians in training, and physicians in practice.

### What is “Professionalism”?

The word “professionalism” is derived from the Latin *professio*, or public declaration.<sup>1</sup> One definition of profession is “a calling requiring specialized knowledge and often long and intensive preparation including instruction in skills and methods as well as in the scientific, historical, or scholarly principles underlying such skills and methods, maintaining by force of organization or concerted opinion high standards of achievement and conduct, and committing its members to continued study and a kind of work which has for its prime purpose the rendering of a public service”.<sup>1</sup> The goals, behaviors, and attributes that characterize a profession constitute “professionalism”.

Nevertheless, professionalism is an abstract concept. When asked, “What is professionalism?” individuals are likely to respond, “I know it when I see it” or list attributes of professionalism rather than recite a specific definition. Notably, professional societies have used similar approaches to defining professionalism (i.e., these definitions typically include lists of attributes of professionalism). For example, the Association of American Medical Colleges (AAMC), in its “Learning Objectives for Medical Student Education,”<sup>2</sup> states that physicians must

be altruistic, knowledgeable, skillful and dutiful—attributes of professionalism. The Accreditation Council for Graduate Medical Education (ACGME)<sup>3</sup> lists 6 general competencies that physicians-in-training must possess before graduating from residency and fellowship training programs, one of which is “professionalism.” In defining professionalism, the ACGME lists attributes of professionalism including respect, compassion, integrity, responsiveness, altruism, accountability, commitment to excellence, sound ethics, and sensitivity to diversity.<sup>4</sup> The American Board of Internal Medicine (ABIM), the American College of Physicians, and the European Federation of Internal Medicine, in the “Physician Charter,”<sup>5</sup> describe professionalism as “a foundation of the social contract for medicine” and lists 3 ethics principles and 10 “commitments,” or attributes of professionalism (Table 1). Other groups have taken similar approaches and one approach is not necessarily superior to another. Rather, what is remarkable is that the various approaches generally list similar sets of attributes of professionalism.<sup>6</sup>

### Articulating Professionalism at Mayo Clinic

In a speech given at the 1910 Rush Medical College commencement, Dr. William Mayo stated, “As we grow in learning, we more justly appreciate our dependence upon each other...The best interest of the patient is the only interest to be considered, and in order that the sick may benefit of advancing knowledge, union of forces is necessary.”<sup>7</sup> Attributes of professionalism can be found in Dr. Mayo’s statement including the primacy of patient welfare, altruism, competence, and teamwork. Indeed, from this quote are derived Mayo Clinic’s primary value, “The needs of the patient come first” and Mayo Clinic’s mission, “Mayo will provide the best care to every patient every day through integrated clinical practice, education, and research.”<sup>8</sup> Reflecting the institution’s history, primary value, and mission, Mayo Clinic leaders developed the Mayo Clinic Model of Care,<sup>9</sup> which is defined by high quality and compassionate care delivered in an integrated multispecialty academic setting. The primary value, “The needs of the patient come first” is achieved by embracing 7 patient care- and 7 practice environment-related attributes of professionalism (Table 2).

### The Relationships between Patients, Society and the Medical Profession

In order to be a member in good standing of the medical profession (i.e., licensed), a physician must manifest professionalism. Using the Physician Charter as a guide, a physician should acknowledge specific ethics principles and commitments (e.g., competence) (Table 1).<sup>5</sup> These principles and commitments highlight physicians’ “fiduciary” duties to patients. Fiduciary duties recognize

**Table 2** The Mayo Clinic Model of Care<sup>9</sup>

Patient Care
1. Collegial, cooperative, staff teamwork with multispecialty integration. A team of specialists is available and appropriately used.
2. An unhurried examination with time to listen to the patient.
3. A physician takes personal responsibility for directing patient care over time in a partnership with the local physician.
4. Highest quality patient care provided with compassion and trust.
5. Respect for the patient, family, and the patient's local physician.
6. Comprehensive evaluation with timely and efficient assessment and treatment.
7. Availability of the most advanced, innovative diagnostic and therapeutic technology and techniques.
The Mayo Clinic Environment
1. Highest quality staff, mentored in the culture of Mayo and valued for their contributions.
2. Valued professional allied health staff with a strong work ethic, special expertise, and devotion to Mayo.
3. A scholarly environment of research and education.
4. Physician leadership.
5. Integrated medical record with common support services for all outpatients and inpatients.
6. Professional compensation that allows a focus on quality, not quantity.
7. Unique professional dress, decorum, and facilities.

the power differential between physicians and patients. Physician-patient interactions are not akin to transactions between buyers and sellers of goods. While the seller is expected to represent his or her product fairly, the buyer is expected to be knowledgeable of the product before buying it. In contrast, physicians possess specialized and highly complex knowledge and skills, prescribing rights, and other powers that patients do not have. Patients who are ill or injured (and, hence, vulnerable) must therefore trust that the physician is acting on the patient's behalf.

With the attributes of professionalism and physicians' fiduciary duties in mind, society's expectations of the medical profession can be listed: competence, the services of the healer, altruism, integrity, transparency, and accountability, and promotion of the public good. One can also list the profession's expectations of society: autonomy (i.e., to train, admit, monitor, discipline, and expel its members), a functioning healthcare system, and sufficient resources to meet its responsibilities.<sup>5,10,11</sup> The relationship between society and the medical profession is formally established and reinforced through licensure. These expectations necessarily require that medical students, physicians in training, and physicians in practice be taught and assessed for professionalism.

### A Framework for Defining Medical Professionalism

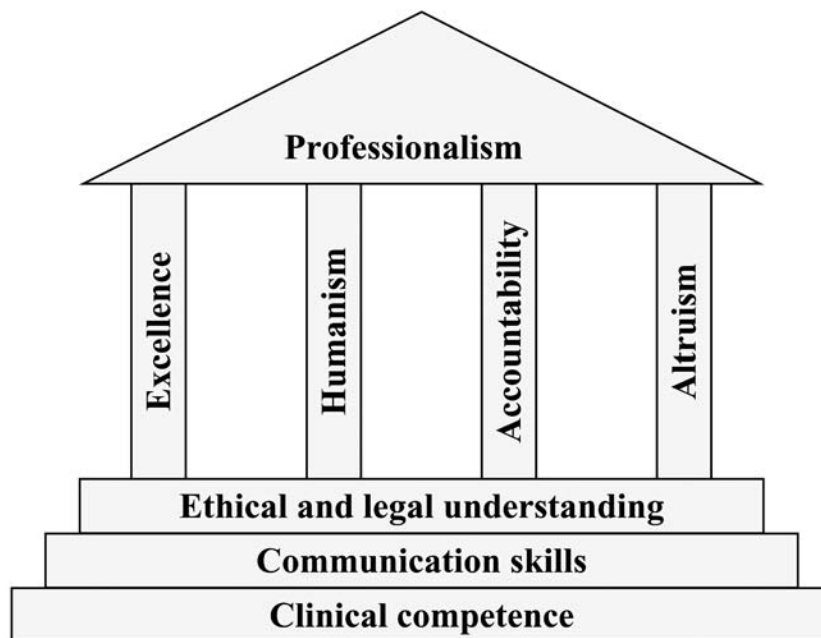
Using the statements and positions of professional societies, and patient and societal expectations, a robust framework for defining professionalism emerges; Arnold and Stern<sup>12</sup> propose such a framework that in turn can be used to develop curricula for teaching and tools for assessing professionalism (**Fig. 1**). This framework can also be used to conduct research related to professionalism. The foundation of this framework is comprised of

clinical competence, communication skills, and sound understanding of the ethical and legal aspects of medicine. Rising from this foundation are accountability (individual physicians and the profession taking responsibility for physician behaviors), altruism (the interests of patients guide physician behavior), excellence (commitments to competence, life-long learning, continuous improvement, and the advancement of knowledge), and humanism (respect, compassion, empathy, honor, and integrity). The capstone of the framework is professionalism, or the complete physician.

### Why Teach and Assess Professionalism?

*Teaching and assessing professionalism does not occur by chance alone*

There are multiple reasons for teaching professionalism to and assessing it in medical students, physicians in training, and practicing physicians (**Table 3**). One reason is that teaching and assessing professionalism does not occur by chance alone. In order for medical students and physicians in training to become professionals and physicians in practice to remain professionals, the elements of the framework of professionalism — clinical knowledge and skills, communication skills, ethics, accountability, altruism, excellence, and humanism — should be intentionally taught. This intentionality requires formal curricula and authentic fostering of a culture of professionalism in learning environments. Likewise, professionalism should be intentionally assessed. Clear expectations and rich experiences alone will not guarantee that professionalism is learned. Assessment motivates individuals to learn what is important (i.e., professionalism) and helps determine whether competency in profession-



**Fig. 1** A framework for defining medical professionalism.<sup>32</sup>

alism has been achieved.<sup>13</sup>

#### *Patients expect physicians to be professional*

A compelling reason to teach and assess professionalism is that patients expect physicians to be professional. In one study,<sup>14</sup> 192 patients were asked to describe ideal physician behaviors. Seven behaviors were identified: being confident, empathetic (“understands my feelings”), humane (compassionate and kind), personal (i.e., viewing the patient as a person rather than a disease), forthright (“tells me what I need to know”), respectful, and thorough. Indeed, in another study,<sup>15</sup> compassionate care was the factor that most predicted patient willingness to return for or recommend (to others) care in the outpatient setting, whereas delivery of care (especially that which encouraged patients to ask questions) and compassionate care were the factors that most predicted willingness to return for or recommend care in the inpatient setting. Notably, internal surveys conducted at Mayo Clinic (the author’s institution) have had similar results: high patient satisfaction and rating of quality of care are associated with physician caring, efficiency, listening, adequate explanations, thoroughness and staff courtesy and teamwork.

#### *Medical professional societies expect professionalism to be taught and assessed*

Another reason to teach and assess professionalism is that medical professional societies expect or require it.

As members of a profession, physicians have specialized competencies (including professionalism), duties and responsibilities, and the autonomy to train, monitor, and discipline its members. As noted previously, the AAMC states that physicians must be altruistic, knowledgeable, skillful and dutiful.<sup>2</sup> Among the 6 general competencies listed by the ACGME are “interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals” and “professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.”<sup>3</sup> Requiring competence in these domains not only requires that training programs teach professionalism, but also that they assess learner professionalism. Notably, within 15 months after its release, the Physician Charter<sup>5</sup> was endorsed by 90 specialty societies.<sup>16</sup> Furthermore, the ABIM certification program has content related to ethics and professionalism.<sup>17</sup> These efforts underscore the importance of teaching and assessing professionalism.

#### *Professionalism is associated with improved medical outcomes*

An important reason for teaching and assessing professionalism is that professionalism is associated with improved medical outcomes including increased patient satisfaction and trust, increased patient adherence with treatments, increased likelihood patients will stay with a physician, fewer patient complaints, and less patient liti-



**Table 3** Reasons for teaching and assessing professionalism

1.	Teaching and assessing professionalism does not occur by chance alone.
2.	Patients expect physicians to be professional.
3.	Medical professional societies expect professionalism to be taught and assessed.
4.	Professionalism is associated with improved medical outcomes.
5.	Unprofessional behavior is associated with adverse medical outcomes.
6.	Accreditation organizations require that professionalism be taught and assessed.
7.	Professionalism can be taught and learned.
8.	Professionalism can be assessed.

gation. In addition, professionalism is associated with overall physician excellence including medical knowledge, skills and conscientious behaviors.<sup>4,18</sup>

#### *Unprofessional behavior is associated with adverse medical outcomes*

The results of several studies highlight concerns about professionalism among physicians and therefore reinforce the need for teaching and assessing professionalism. In a survey<sup>19</sup> of 1,627 physician executives, more than 95% reported that they regularly encountered unprofessional physician behaviors including disrespect, yelling, insults, abuse, and refusal to complete duties. These behaviors involved nurses, other physicians, administrators, and patients. Other surveys<sup>20–23</sup> have revealed that a majority of nurses and many physicians have witnessed or experienced unprofessional physician behaviors. Furthermore, physician abuse of pharmacists and trainees is not uncommon.<sup>24,25</sup> Respondents to one survey<sup>23</sup> believed disruptive physician behaviors were linked to adverse events (e.g., medical errors).

What are the consequences of unprofessional physician behaviors? Evidence suggests that unprofessional behaviors result in reduced employee morale and productivity, high employee turnover, reduced nurse satisfaction, reduced communication, teamwork and efficiency, higher costs and decreased learner satisfaction, burnout, and depression. Notably, if unprofessional behaviors are not addressed, learners may come to regard such behaviors as acceptable and incorporate the behaviors themselves.<sup>26,27</sup>

Evidence also suggests that unprofessional behavior among practicing physicians can be predicted during medical school. One study<sup>28</sup> found that physicians disciplined by the California state medical board had significantly higher odds of having manifested unprofessional behavior (e.g., poor reliability and responsibility, lack of self-improvement and adaptability, and poor initiative and motivation) during medical school than non-disciplined physicians. A larger study<sup>29</sup> involving 40 U.S.

state medical boards had similar findings. These findings suggest a need to monitor closely for and address unprofessional behavior during medical training and make efforts to remediate such behavior and expel the learner if necessary; doing so fulfills the profession's responsibility of self-regulation.

#### *Accreditation organizations require that professionalism be taught and assessed*

The Joint Commission, an independent, non-profit organization that accredits and certifies healthcare organizations in the United States, has issued new and revised standards that address unprofessional healthcare worker behavior.<sup>30</sup> These standards require healthcare institutions to have codes of conduct defining acceptable behavior and create and implement processes for managing unprofessional behavior. Failure to meet these standards risks accreditation and certification. In addition, The Joint Commission recommends that institutions teach and assess professionalism (e.g., teaching etiquette, holding healthcare team members accountable for role-modeling professionalism, developing a system for surveillance and reporting, etc.). Needless to say, these accreditation standards require that healthcare institutions teach and assess professionalism.

#### *Professionalism can be taught and learned*

Another reason for teaching and assessing professionalism is that professionalism can be taught and learned. Formal and informal curricula influence learner attitudes and beliefs regarding professionalism, moral and ethical reasoning, and behaviors. Evidence also suggests that trainees learn most about professionalism from role models.<sup>4</sup> Role models can greatly influence attitudes and behaviors. The “hidden curriculum,” the teaching and learning that occurs outside of the formal curriculum — in clinic and hospital hallways, call rooms, and especially in patient rooms — is a powerful influence on learners and is largely delivered by role models.<sup>11,13,31</sup>

#### *Professionalism can be assessed*

A growing body of evidence indicates that professionalism can be assessed.<sup>4,32,33</sup> As with any clinical topic, the main reason for assessing professionalism is to determine if trainees learn and physicians in practice meet this core competency. Furthermore, assessing professionalism conveys the message that professionalism is important and valued. Learners will attempt to master a clinical topic's content if they know they must undergo an assessment of their competence related to the topic. Likewise, medical students and physicians will respond similarly to efforts at teaching and assessing professionalism: “They don't respect what you expect; they respect

what you inspect.”<sup>34</sup>

Professionalism assessments can be used for formative feedback (i.e., to improve a learner’s competence) or summative feedback (e.g., a “grade”). Overall, assessments should be used to enhance professionalism in all learners and practicing physicians, reward exemplars, identify those with lapses in professionalism, and dismiss those who cannot achieve this core competency.<sup>13</sup> In addition, professionalism assessments should be done in order to evaluate professionalism education programs and generate hypothesis for research related to medical professionalism. Finally, teaching professionalism without assessing it sends a conflicting message to learners, practicing physicians, and patients.

### How Does One Teach Professionalism?

How does one teach professionalism? One can start by teaching the foundational elements of professionalism: clinical competence, communication skills, and an understanding of the legal and ethical aspects of medicine (**Fig. 1**). Being a professional requires specific knowledge and skills and generally all training programs strive for clinical competence in their learners. Training programs should also teach communication skills (e.g., physician-patient, physician-allied healthcare staff, physician-physician, and so on) and ethics. Teaching communication skills and ethics makes sense for a number of reasons. First, in order to assess patients properly, physicians must be able to communicate adequately and effectively with patients and, when appropriate, their surrogates (e.g., to discern patients’ healthcare goals and preferences, etc.). Indeed, the medical interview is one of the most common “procedures” performed by physicians. Thus, being an effective communicator is essential for being an effective physician. Second, physicians typically work in multi-disciplinary teams comprised of not only other physicians and learners, but also nurses, pharmacists, therapists, social workers and others. Effective communication with these colleagues ensures proper patient care. Third, effective communication with patients is associated with improved patient outcomes including satisfaction, emotional health, symptom resolution and control, physiologic measures (e.g., blood pressure), and adherence with management plans.<sup>35</sup> Fourth, physicians invariably encounter clinical situations that raise ethical dilemmas (e.g., withholding life-sustaining treatments from patients who do not want them, etc.). Physicians should be familiar with the ethical and legal aspects of these dilemmas and approaches for resolving them. Fifth, ethics curricula can improve the moral reasoning of physicians.<sup>4</sup> Indeed, for these reasons, many U.S. academic healthcare centers have communication curricula and most have ethics curricula.<sup>36</sup>

In addition to teaching foundational elements of professionalism, the attributes of professionalism — excel-

lence, humanism, accountability and altruism — should also be taught in order to foster the development of the complete and professional physician (**Fig. 1**). Yet, how does one teach abstract concepts such as these? Fortunately, a variety of methods can be employed (**Table 4**). Didactic lectures and web-based learning modules are convenient and popular methods of teaching. Using audio and video examples of professional and unprofessional behaviors during didactic lectures or embedding them into web-based modules can be effective teaching tools. Notably, although the didactic lecture can be an efficient means of summarizing large amounts of information and improve knowledge and attitudes, didactic lectures do not necessarily improve patient outcomes. However, using interactive teaching methods such as case discussions and hands-on practice sessions can improve learner performance and patient outcomes.<sup>37,38</sup> Therefore, teaching and learning professionalism may be better achieved by using interactive methods such as discussion groups (e.g., the “challenging case”), role play, simulation using actor-patients, and team learning. Finally, professionalism is perhaps best taught by role-modeling.<sup>4</sup> Learners observe and adopt the attitudes and behaviors of their role models. Medical teachers should use interactions with patients, colleagues, other members of the healthcare team as opportunities to role model and therefore teach professionalism, especially excellence, humanism, accountability and altruism. Yet, role modeling alone is insufficient for teaching professionalism; it should be coupled with discussion and reflection. For example, a teacher who demonstrates to learners how to deliver bad, sad, or unexpected news to a patient should follow-up the role-modeled behavior by discussing and reflecting on the behavior.<sup>13</sup>

A number of strategies exist that enhance teaching professionalism.<sup>39</sup> First, a culture of humanism should be established; doing so conveys a message that the desire to teach professionalism is authentic. Second, the curriculum should be practical and relevant; learners will be most engaged in learning professionalism when it is taught in the context of their field of study (e.g., surgery trainees should learn about professionalism issues related to surgical practice). Third, learners should be engaged in tasks that challenge and grow communication skills (e.g., breaking bad, sad, or unexpected news to patients). Professionalism lapses, communication failures, and similar events should be recognized and used for formative feedback and teaching. As noted previously, role-modeling is essential. Fourth, self-reflection should be encouraged (e.g., journal writing, discussion groups, etc.). Indeed, “critical incident reports,” short narratives written by medical students and physicians that describe meaningful moments in clinical practice, can be an effective tool for teaching professionalism, especially if coupled with group discussion and reflection.<sup>40</sup> Fifth, the “hidden curriculum” should be intentionally addressed,

**Table 4** Methods of teaching and approached to assessing professionalism

Methods of teaching professionalism
1. Didactic lectures.
2. Web-based curriculum.
3. Discussion groups.
4. Role-play.
5. Simulation using patient-actors.
6. Team learning.
7. Role-modeling with discussion and reflection.
Approaches to assessing professionalism
1. Commence at the start, and continue throughout, the learner's career.
2. All levels of the hierarchy (i.e., medical students, physicians in training and physicians in practice) should be assessed.
3. Individuals should know they are being assessed.
4. Use multiple assessment tools and observers. <ol style="list-style-type: none"> <li>Tests of knowledge, skills (e.g., communication skills), and reasoning (e.g., ethical dilemmas).</li> <li>360-degree reviews by faculty attendings, peers, allied healthcare staff (e.g., nurses), and others.</li> <li>Objective structured clinical examination.</li> <li>Patient assessments.</li> <li>Critical incident reports.</li> </ol>
5. Use for formative and summative feedback; professionalism "portfolio."
6. Use for assessing professionalism education programs and conducting professionalism research.

particularly if it is at odds with the formal curriculum related to professionalism.<sup>11</sup> Not addressing the "hidden curriculum" conveys the message that what is taught is not necessarily what is practiced (i.e., the professionalism curriculum is inauthentic). Finally, negative role-models and "disruptive" physician educators (e.g., those who abuse learners) should be identified, provided feedback regarding their behaviors, offered remediation, and, if necessary, dismissed from teaching.<sup>4,27</sup>

### How Does One Assess Professionalism?

How does one assess professionalism? Not only "how," but also "what?", "when?", "where?", and "by whom?" Using Arnold and Stern's model (**Fig. 1**), foundational elements of professionalism — knowledge and skills in a given content area or specialty, learners knowledge in ethics, moral reasoning and communication skills — should be assessed. In addition, attributes of professionalism — excellence, humanism, accountability and altruism — should also be assessed. Assessing these attributes involves cognitive, behavioral and affective outcomes. The observations should be relevant to, and based on the expectations of, the specialty setting and the learner's developmental level.<sup>4</sup>

Multiple approaches to assessing professionalism should be employed (**Table 4**). Professionalism assessments should commence at the start of, and periodically throughout, a physician's career. Learners should know that they are being assessed and, ideally, all levels of the hierarchy — from medical students to faculty physicians — should be assessed for professionalism. However, no

universal tool for assessing professionalism exists.<sup>33</sup> Instead, multiple tools should be used including tests of knowledge and skills, 360-degree reviews (e.g., by faculty attendings, peers, allied healthcare staff, patients, and others), objective structured clinical examination (OSCE), review of patient complaints, and other methods can be used to assess professionalism.<sup>4,13,18,33</sup> "Critical incident reports" can also be used for assessment of professionalism, especially for learners at the extremes of performance.<sup>41</sup> Using multiple reliable tools ensures that professionalism assessments are valid.

Notably, physicians typically have few opportunities for observing learner and colleague professionalism. "Most practicing physicians observe each others' behaviors only in the hallways and conference rooms — rarely with patients."<sup>32</sup> In addition, faculty physicians may only infrequently observe learners when learner professionalism is most challenged: during difficult clinical situations. In these situations, the best observers may be peers (e.g., fellow students, residents and fellows), allied healthcare staff (e.g., nurses), patients, and patients' loved ones. One can increase the number and variety of observers by involving these individuals in the assessment process. In addition, a variety of realistic settings (e.g., inpatient unit, outpatient clinic, research laboratory, etc.) should be used for observations. Using multiple observers in a variety of settings ensures the observations are valid.<sup>4,32</sup>

What do you do with the professionalism assessments? First, the information should be gathered and collated as part of a "professionalism portfolio" from which a clearer picture of learner professionalism is derived.<sup>42</sup> Sec-

ond, the assessment data can be used for formative feedback. Third, it can be used for summative feedback. Fourth, it can be used to reward exemplars and discipline those with unacceptable lapses in professionalism.<sup>4,32</sup> Finally, the data can be used to evaluate and improve professionalism education programs and generate hypotheses for research on professionalism.<sup>4,33</sup>

### Teaching and Assessing Professionalism at Mayo Clinic

The most widely used means of teaching and fostering professionalism at Mayo Clinic is its culture. This culture has been promoted since the Clinic's founding and throughout its history and is encapsulated in Dr. William Mayo's 1910 statement, "The best interest of the patient is the only interest to be considered"<sup>7</sup> and more recently in the Mayo Model of Care (**Table 2**).<sup>9</sup> Essential elements of the Mayo Clinic culture are its unsurpassed expertise in all aspects of clinical medicine and its commitment to excellence. Patient care is efficient and cost-effective. Continuous professional development, quality, teamwork, service, patient safety, and respect for diversity are viewed as professional obligations. Education and research efforts are similarly pursued. Decision-making is typically multi-disciplinary and by consensus. Professional dress, decorum, and etiquette are expected. Recognizing that many patients and their loved ones visit the Clinic under stressful circumstances, Mayo Clinic facilities are beautiful and well-appointed; rest areas, cafes, meditation rooms, chapels, libraries, artwork, and plant life are abundant. Regardless of their faith tradition, patients have access to spiritual care 24 hours a day. Indeed, in 1930, Dr. William Mayo stated, "The maintenance of the present spiritual status of the Mayo Clinic is of the greatest importance. We must not permit the material side to encroach upon our ideals...I believe the heart of the Clinic has been more responsible for its extraordinary usefulness to the people and the confidence that the people have in it than any other factor."<sup>43</sup> Likewise, ethics consultation is available 24 hours a day. All new Mayo Clinic employees and physicians learn about the Clinic's rich culture and history of professionalism at their orientations and, more importantly, from their colleagues and mentors throughout their careers. Furthermore, this rich culture is codified in Mayo Clinic policies and procedures. Notably, external reviewers have confirmed the presence of the rich, vibrant, and living culture of professionalism at Mayo Clinic.<sup>44</sup>

In order to preserve and promote further this culture, professionalism teaching and assessment programs have been implemented at Mayo Clinic. These programs involve learners at all levels (including faculty physicians). Mayo Medical School has multiple required professionalism and ethics elements for students including two 1-week-long intensive bioethics courses (one on the first year and one in the third year) and a leadership and pro-

fessionalism curriculum in the first year gross anatomy course.<sup>45</sup> During the second year, students participate in the "Advance Doctoring" professionalism reflective writing program, which is similar to "critical incident reports" narrative writing programs described elsewhere.<sup>40</sup> In the third year, students participate in the "Safe Harbor" professionalism program, which involves facilitated small group discussions of clinical cases, personal reflections, and material drawn from the literature and arts. Faculty, residents and fellows, and peers complete electronic professionalism assessments of medical students during their clinical rotations.<sup>18</sup> Finally, professionalism and ethics teaching is woven into courses and clinical rotations throughout the four-year curriculum. For example, during the pre-clinical nephrology block, students learn about a variety of professionalism and ethics issues faced by patients with kidney failure and nephrologists (e.g., just allocation of organs for transplantation, the ethical aspects of withholding hemodialysis from dying patients, and talking to patients about death and dying). Taking this approach not only makes professionalism and ethics relevant for medical students, it also enriches the discussions that occur and brings to life daunting psycho-social and spiritual issues that clinicians face every day while caring for patients.

In addition, Mayo Medical School offers elective experiences in professionalism and ethics. This past year, a group of Mayo medical students established an ethics journal club sponsored by the Mayo Clinic Program in Professionalism and Bioethics. At the journal club's monthly meetings, journal articles on ethics-related topics (e.g., physicians' duty to care for patients during a pandemic) are discussed. Medical students also have the opportunity to devote 1 month of their elective time to a bioethics "selective," in which they, along with a faculty mentor, design a curriculum related to bioethics that also complements the student's career interest. Activities during the "selective" might include a literature review, attending a bioethics conference, engaging in clinical ethics activities (e.g., ethics consultation), and conducting an ethics-related project such as writing a paper or participating in empirical research. The result of these efforts at Mayo Medical School is a "professionalism portfolio," a summary of which is incorporated into the student's Dean's letter which is sent to the residency programs to which the student has applied for additional training.

The Mayo School of Graduate Medical Education (MSGME) also has multiple required professionalism elements for its learners (i.e., resident physicians and fellows). As noted previously, the ACGME identifies 6 core competencies that all graduates of residency and fellowship programs must possess; one of these competencies is professionalism.<sup>3</sup> As a result, each training program is required to deliver curricula and demonstrate learner competence in professionalism. To meet this goal, all



new residents and fellows at Mayo Clinic must attend a professionalism module during their orientation. The content of this course includes respect for patient confidentiality, mutual respect, and so on. In addition, the MSGME is developing web-based professionalism and ethics modules for the numerous residency and fellowship programs at Mayo Clinic. These modules will be completed by learners at their convenience during their training programs. A goal of the web-based curriculum is to create modules that are specialty-specific (e.g., surgery-oriented professionalism and ethics modules for surgery residents).

Notably, the internal medicine residency training program at Mayo Clinic Rochester takes a multi-faceted approach to teaching professionalism to internal medicine residents. First, professionalism and ethics sessions (e.g., commonly-encountered clinical ethical dilemmas, accepting gifts from pharmaceutical company representatives, etc.) are part of the “core curriculum.” Second, professionalism and ethics issues are discussed frequently at the weekly morbidity and mortality conference (e.g., medical errors, medical futility, withdrawing treatments in dying patients, etc.). Third, all internal medicine residents at Mayo Clinic Rochester are required to complete professionalism OSCEs including modules on breaking bad news, medical errors, confidentiality, and advance directives. Patient-actors are used. While the OSCEs are used for formative assessment, much learning occurs during these sessions as the learners assess themselves and receive feedback for faculty observers and the patient-actors.

The Mayo Clinic Rochester internal medicine residency training program also takes a multi-faceted approach to assessing professionalism among internal medicine residents. The professionalism OSCEs were previously mentioned. For formative feedback, faculty advisors review patient complaints and professionalism lapses with their assigned trainees. A typical question during these sessions might be, “How might have this situation gone better?” In addition, education leaders at our institution recently developed a novel method of assessing professionalism among internal medicine residents: electronic 360-degree assessments by peers, senior residents, faculty, and others. Notably, residents rated “highly professional” by faculty, peers, medical students, and allied healthcare staff scored significantly higher on tests of knowledge (in-training examination), mini-clinical evaluation exercise, and conscientious behaviors (completing rotation evaluations).<sup>18</sup>

Mayo Clinic also has required professionalism elements for its faculty physicians. All new staff physicians at Mayo Clinic are required to attend and successfully complete a series of professionalism, physician-patient communication, self-awareness, and diversity modules.<sup>8,46</sup> The professionalism module covers the following topics: reflective listening, listing the attributes of

professionalism, reviewing the data linking professionalism to favorable patient and learner outcomes, and recognizing and responding to professional and unprofessional behavior. Notably, attendees have rated this module highly. Periodically, all faculty physicians are required to complete web-based, interactive and other forms of professionalism and ethics training modules in order to maintain staff privileges. Finally, elective professionalism and ethics learning opportunities are available to Mayo Clinic faculty physicians. For example, medical grand rounds sessions and continuing education courses and symposia related to professionalism and ethics are commonly offered.

All Mayo Clinic faculty physicians undergo 360-degree reviews that include assessments of professionalism by faculty peers, allied healthcare staff, and trainees. Feedback from these assessments is used for formative feedback during the physicians’ annual reviews. Lapses in professionalism are not tolerated and are addressed using a formal process; describing this process is beyond the scope of this article. Notably, this process is in alignment with The Joint Commission standards regarding disruptive and inappropriate behaviors among healthcare providers.<sup>30</sup>

Several years ago, the PLEASE CARE professionalism program for non-physician allied healthcare staff was implemented at Mayo Clinic. PLEASE CARE (an acronym for present, listen, empathize, action, summarize, excite, confidentiality, attitude, respect, and emotional intelligence) encapsulates Mayo’s primary value (“the needs of the patient come first”), describes how one ensures ideal patient visits to Mayo and supports Mayo’s service philosophy. Since its inception, nearly 3000 Department of Medicine allied healthcare staff (e.g., nurses, assistants, etc.) have completed the program, which consists of didactic lectures, video vignettes, and role plays. More than 95% of attendees thought the program was beneficial and in every medical specialty division in which the program was implemented, patient satisfaction increased significantly.<sup>47</sup>

## Conclusion

Professionalism is a core competency of physicians. Using the statements and positions of professional societies, and patient and societal expectations, a framework for defining professionalism emerges: a foundation of clinical competence, communication skills, and sound understanding of the ethical and legal aspects of medicine. Arising from this foundation are attributes of professionalism: accountability, altruism, excellence, and humanism. The capstone of the framework is professionalism, or the complete physician. Indeed, professionalism is associated with superior clinical outcomes. Hence, medical students, physicians in training, and physicians in practice should be taught and assessed for profession-

alism. Numerous methods can be employed to teach and assess professionalism. Professionalism assessments, in turn, can be used for formative and summative feedback and professionalism “portfolios.” The Mayo Clinic experience validates the importance of teaching and assessing professionalism among learners and physicians in practice and regarding it as a core physician competency.

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### References

- Gove PB, Merriam-Webster Editorial Staff: Webster's Third New International Dictionary of the English Language, Unabridged. Springfield MA, G & C Merriam Company 1961
- Medical School Objectives Project Writing Group: Learning objectives for medical student education—guidelines for medical school: report I of the medical school objectives project. *Acad Med* 1999; **74**: 13–18
- ACGME Outcome Project: General competencies. Chicago IL, Accreditation Council for Graduate Medical Education. Available at: <http://www.acgme.org/outcome/comp/compMin.asp> (Accessed December 3, 2008)
- ACGME Outcome Project: Advancing education in medical professionalism. Chicago IL, Accreditation Council for Graduate Medical Education, 2004. Available at: [http://www.acgme.org/outcome/implement/Profm\\_resource.pdf](http://www.acgme.org/outcome/implement/Profm_resource.pdf) (Accessed December 3, 2008)
- ABIM Foundation, ACP-ASIM Foundation, European Federation of Internal Medicine: Medical professionalism in the new millennium: a physician charter. *Ann Intern Med* 2002; **136**: 243–246
- Inui TS: A Flag in the Wind: Educating for Professionalism in Medicine. Washington DC, Association of American Medical Colleges, 2003
- Mayo WJ: The necessity of cooperation in medicine. *Mayo Clin Proc* 2000; **75**: 553–556
- Viggiano TR, Pawlina W, Lindor KD, Olsen KD, Cortese DA: Putting the needs of the patient first: Mayo Clinic's core value, institutional culture, and professionalism covenant. *Acad Med* 2007; **82**: 1089–1093
- Olsen KD, Brown ME: Preserving the core of quality care as the practice evolves: the Mayo Clinic Model of Care. *Group Pract J* 2001; **50**: 11–19
- Cruess SR, Cruess RL: Professionalism and medicine's social contract with society. *Virtual Mentor* 2004; **6**: 4
- Hafferty FW: Professionalism—the next wave. *N Engl J Med* 2006; **355**: 2151–2152
- Arnold L, Stern DT: What is medical professionalism? In Stern DT, ed. *Measuring Professionalism*. New York NY, Oxford University Press Inc, 2006; 15–37
- Stern DT, Papadakis M: The developing physician—becoming a professional. *N Engl J Med* 2006; **355**: 1794–1799
- Bendapudi NM, Berry LL, Frey KA, Parish JT, Rayburn WL: Patients' perspectives on ideal physician behaviors. *Mayo Clin Proc* 2006; **81**: 338–344
- Burroughs TE, Davies AR, Cira JC, Dunagan WC: Understanding patient willingness to recommend and return: a strategy for prioritizing improvement opportunities. *Jt Comm J Qual Improv* 1999; **25**: 271–287
- Blank L, Kimball H, McDonald W, Merino J, ABIM Foundation, ACP Foundation, European Federation of Internal Medicine: Medical professionalism in the new millennium: a physician charter 15 months later. *Ann Intern Med* 2003; **138**: 839–841
- American Board of Internal Medicine: Become certified by ABIM. Available at: <http://www.abim.org/default.aspx> (Accessed December 3, 2008)
- Reed DA, West CP, Mueller PS, Ficalora RD, Engstler GJ, Beckman TJ: Behaviors of highly professional resident physicians. *JAMA* 2008; **300**: 1326–1333
- Weber DO: Poll results: doctors' disruptive behavior disturbs physician leaders. *Physician Exec* 2004; **30**: 6–14
- Rosenstein AH, O'Daniel M: Disruptive behavior and clinical outcomes: perceptions of nurses and physicians. *Am J Nurs* 2005; **105**: 54–64
- Manderino MA, Berkey N: Verbal abuse of staff nurses by physicians. *J Prof Nurs* 1997; **13**: 48–55
- Cook JK, Green M, Topp RV: Exploring the impact of physician verbal abuse on perioperative nurses. *AORN J* 2001; **74**: 317–320, 322–327, 329–331
- Rosenstein AH, O'Daniel M: A survey of the impact of disruptive behaviors and communication defects on patient safety. *Jt Comm J Qual Patient Saf* 2008; **34**: 464–471
- Weber DO: For safety's sake disruptive behavior must be tamed. *Physician Exec* 2004; **30**: 16–17
- Nagata-Kobayashi S, Sekimoto M, Koyama H, Yamamoto W, Goto E, Fukushima O, Ino T, Shimada T, Shimbo T, Asai A, Koizumi S, Fukui T: Medical student abuse during clinical clerkships in Japan. *J Gen Intern Med* 2006; **21**: 212–218
- Mueller PS, Snyder L: Dealing with the “disruptive” physician colleague. Available at: [http://www.acponline.org/running\\_practice/ethics/](http://www.acponline.org/running_practice/ethics/) (Accessed December 3, 2008)
- Mareiniss DP: Decreasing GME training stress to foster residents' professionalism. *Acad Med* 2004; **79**: 825–831
- Teherani A, Hodgson CS, Banach M, Papadakis MA: Domains of unprofessional behavior during medical school associated with future disciplinary action by a state medical board. *Acad Med* 2005; **80**: S17–S20
- Papadakis MA, Teherani A, Banach MA, Knettlar TR, Rattner SL, Stern DT, Veloski JJ, Hodgson CS: Disciplinary action by medical boards and prior behavior in medical school. *N Engl J Med* 2005; **353**: 2673–2682
- The Joint Commission: Behaviors that undermine a culture of safety. *Sentinal Event Alert* 2008; Issue 40 (July 9, 2008)
- Hafferty FW: Beyond curriculum reform: confronting medicine's hidden curriculum. *Acad Med* 1998; **73**: 403–407
- Stern DT: A framework for measuring professionalism. In Stern DT, ed. *Measuring Professionalism*. New York NY, Oxford University Press Inc, 2006; 3–13
- Arnold L: Assessing professional behavior: yesterday, today, and tomorrow. *Acad Med* 2002; **77**: 502–515
- Cohen J. Forward: In Stern DT, ed. *Measuring Professionalism*. New York NY, Oxford University Press Inc, 2006; v–viii
- Barrier PA, Li JT, Jensen NM: Two words to improve physician-patient communication: what else? *Mayo Clin Proc* 2003; **78**: 211–214
- Lehmann LS, Kasoff WS, Koch P, Federman DD: A survey of medical ethics education at U.S. and Canadian medical schools. *Acad Med* 2004; **79**: 682–689
- Mazmanian PE, Davis DA: Continuing medical education and the physician as learner: a guide to the evidence. *JAMA* 2002; **288**: 1057–1060
- Thomson O'Brien MA, Freemantle N, Oxman AD, Wolf F, Davis DA, Herrin J: Continuing education and workshops. *Cochrane Database Syst Rev* 2006; 1
- Branch WT Jr, Kern D, Haidet P, Weissmann P, Gracey CF, Mitchell G, Inui T: The patient-physician relationship: teaching the hu-

- man dimensions of care in clinical settings. *JAMA* 2001; **286**: 1067–1074
40. Branch WT: Use of critical incident reports in medical education: a perspective. *J Gen Intern Med* 2005; **20**: 1063–1067
  41. Papadakis M, Loeser H: Using critical incident reports and longitudinal observations to assess professionalism. In: Stern DT, ed. *Measuring Professionalism*. New York NY, Oxford University Press Inc, 2006; 159–173
  42. Fryer-Edwards K, Pinsky LE, Robins L: The use of portfolios to assess professionalism. In: Stern DT, ed. *Measuring Professionalism*. New York NY, Oxford University Press Inc, 2006; 213–233
  43. Beck CS: Mayo's spiritual heritage. *Mayo Clin Proc* 2000; **75**: 1111–1112
  44. Berry LL, Seltman KD: *Management Lessons from Mayo Clinic*. New York NY: McGraw Hill; 2008
  45. Pawlina W, Hromanik MJ, Milanese TR, Dierkhising R, Viggiano TR, Carmichael SW: Leadership and professionalism curriculum in the gross anatomy course. *Ann Acad Med Singapore* 2006; **35**: 609–614
  46. Mueller PS, Barrier PA, Call TG, Duncan AK, Hurley DL, Multari A, Rabatin JT, Li JT: Views of new internal medicine faculty of their preparedness and competence in physician-patient communication. *BMC Medical Education* 2006; **6**: 30
  47. Locke GR, Berndt M, Woychick N, Gilles K, Schryver M, Brennan M: Professionalism among allied health staff: the PLEASE CARE program. *Minnesota Medicine* 2007; **90**: 47–49