

EMBEDDING
PROFESSIONALISM
IN MEDICAL EDUCATION:
ASSESSMENT AS A TOOL FOR IMPLEMENTATION

Baltimore, Maryland
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Report from an Invitational Conference Cosponsored by the
Association of American Medical Colleges
and the
National Board of Medical Examiners®

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DOCUMENT PURPOSE

This report documents themes from the invitational conference cosponsored by the Association of American Medical Colleges (AAMC) and the National Board of Medical Examiners® (NBME®). The summary of expert discussions and recommendations is intended as a foundation for next steps in the instruction, assessment and promotion of medical professionalism. The document is not intended as an exhaustive compilation of the literature. Rather, it provides a pointer to publications and initiatives relevant to conference themes.

While these concepts focus on undergraduate education, many will generalize across the continuum of medical education. Therefore, this report will be of interest to, for example, medical school faculty involved in curricular design and the instruction and assessment of medical student professionalism; academic health centers seeking frameworks for promotion of professionalism; testing, certifying and accrediting agencies; as well as research and development units investing in technologies and methods to improve medical professionalism.

BACKGROUND

The AAMC and the NBME cosponsored an invitational conference in May 2002, convening 25 experts with diverse perspectives on professionalism. The leadership of the AAMC has been advocating for initiatives in professionalism throughout the last decade^{1,2} most recently emphasizing the vital importance of a shift in the culture of institutions and the profession itself to create and support a learning environment in which professional behaviors are manifest in daily work.³ The governance of the NBME has also prioritized investigation of its own potential role in the assessment of professionalism. This conference was intended to focus on the assessment of behaviors within this broader context of a cultural shift that must happen concurrently.

The initiatives of the AAMC and the NBME are part of a movement under way in the profession to fulfill its obligation to prepare medical students to act professionally. This obligation must be fulfilled not only because it is, by definition, required to satisfy adequately the implicit social contract between the physician and the patient and public, but also because threats to professionalism are perceived to be greater now than they have been in the recent past. These threats have been attributed to the clash between traditional professional values and imperatives of the market.^{4,5} They arise from, for example, direct-to-consumer marketing, increasing patient awareness and empowerment and changing expectation, increasing health care costs, and pressure on physicians to contain costs by increasing patient throughput.

The entire medical establishment has a role to play. The "Flexnerian changes" that elevated medical education were a combined effect of curricular and instructional innovations initiated within select medical schools in the 19th century,⁶ and other instruments including state licensing examinations. For changes that must now take place related to professionalism, academic health centers will bear the brunt of the burden. For example, improvement in the "culture of professionalism" in learning environments is impeded or eroded by the following:

- Faculty behavior that can be unprofessional, destructive, and lasting
- Lack of support for training and tools to understand, communicate about, and resolve lapses and conflicts in professionalism
- Lack of promotion of tenets and behavior related to professionalism
- A practice of managing institutional lapses (*cf.*, billing and human subjects issues) rather than rethinking systems for the reduction and prevention of lapses

Academic health centers must address these issues and changes in concert with other parts of the profession. The coordination of these initiatives and the consonance of their messages are imperative.

The profession has responded with thoughtful commentary^{7,8,9,10} and major activities by organizations linked to medical certification, licensing, and accreditation.^{11,12,13,14,15,16,17} These efforts have helped to define concepts and elements within professionalism, to promote explicitly or implicitly the need for awareness and action, and to pave the way for expanded thinking about approaches to the assessment of professionalism. Recent literature reviews, summarizing and adding to the work of others, offer a few basic recommendations for directions in assessment research that include^{18,19}:

- Continuing the deconstruction and translation of definitions, attitudes, concepts, and elements into specific behaviors
- Investigating the hypothesis that assessment should focus on "behaviors as expressions of value conflicts [and conflict resolution], and on the contextual nature of professionalism behavior"
- Using multiple methods and sources of information accumulated over time with multiple observations
- Developing critical incident approaches that also include less severe and significant lapses
- Attending to the crucial influence of the surrounding environment

Implicit in these recommendations is a call for a consensus catalog of detailed, specific, observable behaviors to serve as a basis for assessment; and a mandate to think beyond standardized, objective tests of knowledge that may be effective for assessing requisite foundations for or recognition of the principles of professionalism, but are ineffective for assessing actual behavior. Explicit in these recommendations is caution about inferences made from testing approaches which may or may not reflect reality, and in which students are aware that observation and assessment are taking place; the importance of a comprehensive system's approach to espousing professionalism for which assessment is but one vehicle; and particular attention to values (positive and negative) transmitted by faculty and institutional mores.

Invitational Conference

The aim of the AAMC and NBME cosponsorship of an invitational conference was to combine the complementary perspectives of two organizations invested in improving the instruction and assessment of professionalism, highlighting the criticality of the undergraduate learning environment in the promotion and perpetuation of professionalism.

The stated conference purpose was to convene a group of experts to document the state of the art in assessment of medical student professionalism and to propose next steps to improve assessment and promotion of professional behavior in medicine. The specific objectives were to address the following:

- The scope and components of professionalism (including lapses in professionalism and exemplary behaviors); and to define a vocabulary and criteria for assessing these behaviors
- The state of the art for existing instruments, methods, and systems for formative and summative assessment of professionalism; and to propose and prioritize an agenda for research and development
- Barriers to and opportunities for assessment of professionalism; and to outline next steps necessary for preparing institutional cultures (eg, training and preparing faculty and residents, promoting professionalism awareness, and developing tracking systems and instituting policies)

The first objective was intended to produce an initial list of professional behaviors that could lead to a useful behaviors catalog. The second and third objectives were intended also to expose issues central to the instruction, assessment, and promotion of professionalism. Other desired outcomes were to connect researchers and leaders with different perspectives, to stimulate coordinated and collaborative activities, and to launch new initiatives. As such, the output of this conference should be seen as a work in progress.

The conference was conducted in three sessions. Each session was introduced by a stimulus talk followed by a break-out session in which three subgroups worked in parallel. At the completion of the subgroup sessions, each subgroup presented to the full group, and the collective

output was synthesized. The product of those sessions, documented here, represents points of general agreement or emphasis on major themes that were discussed.

Organizing Principles for Behavioral Descriptors

To guide discussion of student performance, an organizing template was developed prior to the conference. It was refined by reviewing existing schema from other initiatives in professionalism,^{*} by reviewing literature related to definitions and framing,^{20,21} and by scanning relevant medical school publications^{22,23,24} and Web sites. Some qualifying and clarifying terms were added (see "Might Also Include" in Figure 1 below).

This template was intended only to guide discussion of student behaviors, not to stimulate debate about taxonomy. Explicit instructions were given to participants to "list specific, observable/measurable behaviors representing professionalism..." and "lapses in professionalism," and to avoid discussions of category definitions or whether a behavior should fall into one category or another.

As further explication of the categories, "communication" was listed under Category 3 (Caring and Compassion) but could be considered as its own discipline; it received limited attention in these proceedings. Categories 5 and 6 (Responsibility and Accountability) had significant overlap in the behaviors classified within the two categories. Knowledge and skills, believed necessary for demonstration of professionalism, were discussed. Conference attendees agreed that important agenda still exists in the assessment of knowledge and skills and in the interface between behaviors, knowledge, and skills. For example, knowledge about professionalism, ethics, and moral reasoning is essential and cannot be assumed. Elaboration, while necessary and relevant to these discussions, was deferred.

Figure 1. Professionalism Categories Template

<u>Category</u>	<u>Might Also Include</u>
1. Altruism	
2. Honor and Integrity	Honesty
3. Caring and Compassion	Sensitivity, tolerance, openness, communication
4. Respect	Respect for patient's dignity and autonomy, respect for other health care professionals and staff including teamwork, relationship building
5. Responsibility	Autonomy, self-evaluation, motivation, insight
6. Accountability	Commitment, dedication, duty, legal/policy compliance, self-regulation, service, timeliness, work ethic
7. Excellence and Scholarship	
8. Leadership	Management, mentoring

* Of particular influence was the American Board of Internal Medicine's Project Professionalism which began in 1990 "motivated by changes, inside and outside the educational environment, eroding professional standards." The project proposed categories for professionalism (altruism, accountability, excellence, duty, honor and integrity, and respect for others) and definitions for each. In addition, it defined seven issues (abuse of power, arrogance, greed, misrepresentation, impairment, lack of conscientiousness, and conflict of interest) that challenge or diminish the elements of professionalism.

SESSION I. BEHAVIORS REFLECTING PROFESSIONALISM

The purpose of this session was to generate a list of observable behaviors that would reflect professionalism. This list would be used in Session II to discuss contexts in which these behaviors could be best observed. Those discussions in turn would serve in Session III to prioritize a research and development agenda for instruments, methods, and systems for their assessment.

Conference participants divided into three groups. The resulting behaviors were compiled by category and were later organized based on the focus of the interaction/behavior: patient, patient family or health-consumer; peers and coworkers; nurses and allied health professionals; superiors; subordinates and trainees; and institutions (eg, the hospital, medical school, profession, community). About 100 behaviors were identified at the conference; some were specific and observable, while others were categories requiring additional discussion. Release of an expanded list is forthcoming.* A few examples from each category from that list follow; relative numbers of examples in each category do not imply relative importance.

Altruism

- Offers to help team members who are busy
- Contributes to the profession; active in local and national organizations such as the AAMC – Organization of Student Representatives
- Does not use altruism as an excuse to misprioritize or to rationalize certain behaviors ("I can't be with my family because my patients need me.")

Honor and Integrity

- Forthcoming with information; does not withhold and/or use information for power
- Admits errors
- Deals with confidential information discreetly and appropriately
- Does not misuse resources (eg, school computers and patient's food)

Caring and Compassion

- Treats the patient as an individual, taking into account lifestyle, beliefs, personal idiosyncrasies, support system
- Communicates bad news with sincerity and compassion
- Deals with sickness, death, and dying in a professional manner with patient and family members

- Supports a balance in personal and professional activities for peers and subordinates

Respect

- Respects institutional staff and representatives; respects faculty during teaching sessions
- Respects patient rights/dignity (privacy/confidentiality, consent); knocks on door, introduces self, drapes patients appropriately, and shows respect for patient privacy needs
- Demonstrates tolerance to a range of behaviors and beliefs
- Does not disturb small group sessions

Responsibility and Accountability

- Demonstrates awareness of own limitations, and identifies developmental needs and approaches for improvements
- Cares for self appropriately and presents self in a professional manner (ie, demeanor, dress, hygiene)
- Recognizes and reports errors/poor behavior in peers
- Informs others when not available to fulfill responsibilities and secures replacement
- Takes responsibility for appropriate share of team work
- Arrives on time
- Accountable for deadlines; completes assignments and responsibilities on time
- Answers letters, pages, e-mail, and phone calls in a timely manner

Excellence and Scholarship

- Masters techniques and technologies of learning
- Is self-critical and able to identify own areas for learning/practice improvement
- Has internal focus and direction, setting own goals
- Takes initiative in organizing, participating, and collaborating in peer study groups

Leadership

- Teaches others
- Helps build and maintain a culture that facilitates professionalism
- Does not provide disruptive leadership (eg, organizing pranks, inappropriately confronting authority figures)

* Clyman SG et al. [Materials](#) in preparation.

SESSION II. FROM BEHAVIORS TO ASSESSMENT

The second conference session built upon the first. With behaviors and behavioral domains in mind, participants were instructed to consider the setting, available tools, systems/methods, and persons for completing optimally the observation/assessment. Subgroups reviewed the behaviors from the previous session and selected several that they either perceived were of greatest importance, or those that were exemplars that would serve to broaden deliberation about potential assessment instruments. Thus, not all behaviors were discussed.

While this mapping proceeded, the more important session product was discussion of issues surrounding the introduction of existing, let alone new, methods. Strong assertions were made about the need to focus attention not only on specific behaviors and their instruction and assessment, but perhaps most importantly on a learning environment integrated with and reinforcing of educational objectives and student development. Major points from this session are summarized as follows:

...EMPHASIZING THE VITAL IMPORTANCE OF A SHIFT IN THE CULTURE OF INSTITUTIONS AND THE PROFESSION ITSELF TO CREATE AND SUPPORT A LEARNING ENVIRONMENT IN WHICH PROFESSIONAL BEHAVIORS ARE MANIFEST IN DAILY WORK.

The Purpose of Assessment

- A persistent theme throughout the conference was the purpose of assessment. The design of instruments and methods, and the supporting systems will vary substantively based on whether, for example, the purpose is to identify those at the bottom of the continuum as opposed to a continuous quality improvement model that provides feedback to everyone. Possible purposes include the following:
 - Raising institutional awareness
 - Improving patient care
 - Improving patient perceptions
 - Improving perceptions of students and faculty
 - Identifying role models
 - Rewarding good behavior
 - Providing a vocabulary for communicating about professionalism
 - Continuous quality improvement of individuals
 - Identifying offenders
 - Punishing unacceptable behavior

Environment

- An important end point of any professionalism activity must be to raise the awareness of faculty and students to issues of professionalism, and ultimately

build and maintain an environment that supports the tenets of professionalism. Lack of awareness will impede the detection of patterns of lapses in professionalism and thus will limit their remediation. Better behavior can only follow increased awareness, richer understanding, and reinforcement by the culture.

- Activities related to professionalism (assessment in particular) must be supported by an environment of trust. Assessment should not engender, for example, feelings of paranoia ("I'm always being watched.") or perceptions of risk (for reporting aberrant behavior). This environment of trust is crucial to many agendas, including the airing of medical errors (in self and others) in a safe, constructive, and supportive environment that can facilitate individual and systems improvement.

A transformation may be required in the environment from one of risk management to risk reduction. The former may tend to obscure or discourage discussion of suboptimal actions, behaviors and outcomes, whereas the latter might facilitate open and non-punitive discussion of systems and methods for their improvement.

- Assessment should focus not only on individuals but also on programs, departments, and systems. Additional professionalism learning activities can then be built around information gleaned from aggregated assessment data.

Schools' Additional Obligations

- Schools must provide students with opportunities to model and demonstrate positive and exemplary professionalism behaviors (eg, leadership and volunteering)
- Schools must develop and communicate policies that make their expectations and values explicit, and provide tools and resources for students to improve their own professionalism performance.

The Boundaries for Observation

- Professionalism tenets should apply outside the traditional classroom or clinical setting. For example, unseemly behavior associated with administrative

tasks (interactions with a school clerk responsible for loan documentation) is within the realm of professionalism to which schools should attend.

Conceptual Areas for Assessment

- Challenges to student professionalism may arise from emotionally charged situations, such as handling patients and families during death and dying experiences. Under these circumstances, behavior may generalize to other emotionally challenging situations; dealing with such situations effectively and reliably is a critical skill that must be learned in medical school. A developmental agenda might include building a scale of "emotional challenge" in interacting with patients (history taking at one end, dealing with a dying patient at the other) from which learning and assessment objectives could be derived.

Models for Feedback

- Use of assessment for formative feedback or continuous quality improvement should be encouraged, as should models for positive reinforcement (recognition and reward).

- The proper use of information derived from the assessment of professionalism requires additional deliberation. "Professionalism" is manifested in behaviors across a broad range of acceptability, and will vary for the same person across time and based on the environment and situation; extreme care should be taken to avoid labeling students. The point at which information is useful for punitive action rather than formative assessment is controversial and requires further debate.

Other Challenges in Implementation

- Implementing assessment systems requires caution to ensure that the systems do not create professionalism conflicts or other adverse unintended effects. For example, a potential conflict exists between the need for "institutions" to enforce "compliance" with professionalism tenets and the professional requirement for self-regulation without external intrusion.
- Challenges accompany different means for assessment and will require careful thought. For example, self-reporting of errors will result in vulnerability that requires a supportive culture.

SESSION III. APPROACHES OF PARTICULAR INTEREST

In the final session, subgroups brainstormed "blue-sky" ideas and those perceived to be of greatest immediate potential to further an assessment agenda. Many existing methods were discussed and considered, and not all are documented here. Again, while traditional standardized assessment was seen as valuable for assessing underlying knowledge of and recognition of professionalism, the focus on behaviors suggests a need to extend or rethink assessment paradigms. Specific ideas are listed here without explicitly defined research and development questions. This is left as a work in progress to provide a challenge for those who build upon these ideas.

During the discussion of these approaches, a number of common implementation characteristics were identified:

- Instruction and assessment related to professionalism should be continuous across medical school and closely planned and integrated.
- Methods should provide recurrent feedback and, in the least, be used for formative assessment.
- Many if not all methods will require multiple observations and observers.
- Because of the nature of professionalism and the inadequacy of any one tool, numerous approaches should be used to reinforce importance and to ensure that sufficient information is compiled for the intended uses.
- Multiple instructional interventions will be required with supportive feedback.
- Professional behavior and the internalization of values must apply to everyone, including faculty, and are required for the success of the individual and institution, and for the welfare of patients.

Specific ideas discussed at the conference are classified here in three categories: self-reflection and journals/portfolios, simulations, and real-life observations.

Self-reflection and Journals/Portfolios

The purpose of journals and portfolios is longitudinal, global or "holistic" assessment that involves students in active reflection. Ideally these activities are primarily used for formative assessment but could be required for graduation. Numerous instruments could serve as stimuli for the reflective task. These instruments could cover a range of behavior categories or subcategories. In contrast to the subject's own behaviors, the behaviors of others could provide a source for reflection but, ultimately, this task must also include the subject's actual behavior. Ideally, this journaling and reflective process would be a regular activity for students: recording experiences,

reflecting upon them, and having timely discussion with mentors to reinforce good behaviors and identify possible deficiencies.

Development of didactic materials could result from these processes, particularly based on summaries from student-teacher dialogs. Accumulated material could be culled and abstracted by mentors, and selected aspects used with other students.

Challenges exist in the development of these approaches. Mentors would have to be identified, trained, and perhaps even certified; pairing the same mentor with the same student throughout training might be beneficial. Students would have to be instructed to record information in a somewhat structured manner and describe "challenging" encounters. Methods would have to be devised to ensure that students don't fabricate data or game the system. Qualitative assessment techniques leading to reliable measures (depending on their use) will require attention. Standard setting will be nontrivial.

The portfolio concept, which might include self-generated materials or data from other sources, may be important for accumulating evidence of behaviors over long time periods and with different methods. Central to this concept, as with artists' portfolios, is that the student must take responsibility for reflecting on data from other sources and/or producing some products contained therein ("Here's my example of leadership, and here's why I think so..."). Medical schools would have to provide students with necessary tools. Schools might consider making portfolios a requirement for graduation with specific criteria (eg, 10 assessments per year across tutors, peers, and patients, including students' reactions to their evaluations).

Simulations

Clinical vignettes/standardized patients

Clinical vignettes and standardized patients could provide stimuli for needed research, self-reflective portfolios, and instruction; they could also be used independently for formative and summative assessment, and for group discussion and/or team building exercises.

For example, vignettes could depict behaviors exhibited by students and health care professionals. Questions based on the vignettes could be posed requiring written or oral responses, or used in discussion exploring different points of view. Ideally, students could learn from the discussion and model the appropriate behavior.

For preclinical years, cases depicting challenges to professionalism could be posed by standardized patients or through written or multimedia vignettes. Besides their value for instruction and assessment, these stimuli could be applied to investigate the framing of professionalism issues, rationales used for justifying behaviors, reasoning processes described or used, and approaches for negotiating values conflicts in different settings at various points in training.

As part of reflective exercises, students could consider professionalism lapses (in themselves or others) to understand why certain behaviors occurred and to begin to develop an understanding of their behaviors.

For formative or other assessment, "secret" standardized patients could present and observe performance in the face of professionalism conflicts.

Multiplayer/virtual games

Multiplayer "games" may provide useful data to inform feedback on student professionalism. These games or scenarios could be conducted virtually around defined topics. Players would be assigned roles and motives to achieve certain ends; the groups would also have goals that had to be met within a specified time period. Developing a simulation in which one person would interact with this complex environment (multiple, dynamic players with individual "hidden" goals and a shared team goal) is beyond current technology. The interactions of real people in this environment would be much more likely to lead to professionalism dilemmas either in the scripted scenario, or even in the behaviors manifested in game playing! Virtual interactions raise the concern that players could interact anonymously and, therefore, in a fashion different from the manner in which they would behave during a face-to-face interaction.

Real-life Observations

Surveys/ratings

Survey/rating instruments could be completed by students, peers, faculty or other staff and used for self-assessment. Additionally, ratings could be used for faculty assessment.* Peer assessment is of particular merit for prioritization. The instrument and remediation could be Web-based. Ideally, the same instrument would be used across clerkships and across medical schools allowing comparisons. This process could begin in the

third year of medical school and contribute to end-of-year assessment. If areas for improvement were identified during the year, remediation (Web-based, human or other) could be provided. This model might be shared with/applied to other professions to the extent that the professionalism behaviors generalized. If this system were widely adopted (across institutions and with other professionals interacting with physicians), it would provide an enormous and informative database for monitoring individual and group trends, identifying local and regional institutional differences, and gathering perspectives from various constituents within health care systems.

The infrastructure required for peer rating could be used for any interaction among students, faculty, other staff, or patients. Those rated would be provided with feedback on their ratings. Review of these ratings with mentors could be an important part of individualized feedback on professionalism. If ratings carried weight in student advancement, students would be motivated to demonstrate those behaviors. Raters themselves could be given feedback on their rating "fit"; studies of the consistency of ratings could prove informative for individuals and for institutions.

Maintaining rater involvement in this process will be a challenge. On one extreme, rater anonymity (or at least obscurity) could be sought. Conversely, the system could be made transparent (rater and their ratings known to ratee) to underscore the need for honesty in providing feedback and confronting issues. Another challenge will be focusing the purpose and use of the ratings: removing "bad apples" versus continuous quality improvement for everyone. Design and use of the instrument may be quite different depending on which model is adopted. If the "bad apples" model is adopted, how and when will low or unacceptable rating information be used for punitive action?

Peer assessment will also raise questions about the pragmatics of rating systems, and the value of information provided by peers as compared to that provided by faculty. Research in this area would inform efficient targeting and use of instruments by different groups. Also, feedback might need to be tailored to the student; expensive human intervention may be required where other interventions were deemed inadequate.

...WE'RE BEING ASKED TO BE PROFESSIONAL IN AN UNPROFESSIONAL ENVIRONMENT.

* Research, development, and implementation agendas vary with both the rater and subject. For example, faculty rating students presents different challenges as compared to students rating students. Inferences drawn from the former might not generalize to the latter.

Using "indicators" for further probing

Accumulated data in a portfolio or other places may form a gestalt of student professionalism. Other information (failure to return course evaluation forms, tardiness, lack of attention to detail, poor debt/loan compliance) may

prove equally informative; consideration must be given to confidentiality issues associated with centralized accumulation of these data. In response to concerns about indicator behaviors, a "secret shopper" program could be considered. This process would have to be announced as part of educational processes.

SUMMATION

Explicit and formal instruction and assessment of professionalism are essential to convey institutional values and prepare medical students for their societal contract. Yet, in a survey conducted only several years ago, a dozen schools had no formal instruction related to professionalism; almost half had no explicit methods for assessing professional behavior.²⁵

Moreover, much has been written about the influence of factors other than explicit instruction and assessment on the development of professionalism, including the informal or hidden curriculum and related issues of behavioral modeling.^{26,27,28} These issues were rife in conference deliberations. Stated more starkly by student and resident attendees (paraphrased here), "...We're being asked to be professional in an unprofessional environment. Faculty should be subject to the same criteria for assessment as students and residents." The message was clear in response that assessment and instruction tied to an explicit professionalism curriculum are necessary but not sufficient; they will be ineffective without an institutional commitment, beginning with its leadership, not only to encourage professional activity but to expect it. Indeed, models for institutional leadership exist wherein professionalism is actively promoted with, for example, highly visible recognition and reward systems.²⁹ Additional exemplars of leadership demonstrating professionalism at an institutional level are needed. A national consensus on best institutional practices might be of great benefit. Also, institu-

tional norms may need to be examined explicitly, perhaps through an institutional professionalism culture audit. Where appropriate, norms should be modified so that expected behaviors are supported by the culture. For example, a student's "asking for explanation or help when knowledge is inadequate" should not be perceived as a sign of weakness.

In closing, this conference convened individuals representing broad, varied, and sometimes divergent interests, expertise, and opinions in the assessment of medical student professionalism. Hopefully, it provides a framework for further detailing behaviors that can be the basis for assessment of professionalism, and ideas for expanding approaches to assessment. However, it is clear that other activities must accompany assessment for professionalism to be embedded in the medical environment. Faculty will require training, not only in explication of tenets of professionalism, assessing students, and providing feedback, but also in how to improve their own behaviors. Moreover, expectations for student professionalism will have to apply to faculty as well. An uncompromising expectation for professionalism must come directly from institutional leaders, and be encouraged, rewarded, and enforced throughout. Finally, these activities will require not only the continued dedication of researchers and medical school leaders, but also the coordinated multi-institutional efforts and the synchronous push of a broad array of national organizations.

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Embedding Professionalism in Medical Education: Assessment as a Tool for Implementation

Baltimore, Maryland

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