

# Learning Professionalism: Perspectives of Preclinical Medical Students

Amy Baernstein, MD, Anne-Marie E. Amies Oelschlager, MD, Tina A. Chang, MD, and Marjorie D. Wenrich, MPH

## Abstract

### Purpose

To identify and examine how students respond to and engage with formal professionalism teaching strategies, and what factors outside the formal curriculum may influence professional development.

### Method

Individual semistructured interviews were conducted with 56 students completing the preclinical curriculum at the University of Washington School of Medicine in 2004 and 2005. Interviews were recorded, transcribed, and analyzed using qualitative methods.

### Results

Students identified role modeling as an important modality for learning professionalism, even during their preclinical years. Role models included classroom faculty and peers, in addition to physicians in clinical settings. Small-group discussions and lectures helped some students identify and analyze the professional behaviors they observed, but they elicited negative responses from others. Students believed their professionalism derived from values, upbringing, and experiences prior to medical school. Some students reflected on their evolving professionalism while working directly with patients.

### Conclusions

Medical schools should ensure that students are exposed to excellent role models—ideally, faculty who can articulate the ideals of professionalism and work with students longitudinally in clinical settings. Lectures about professionalism may alienate rather than inspire students. Students' premedical experiences and values influencing professionalism should be acknowledged and appreciated. Bedside teaching and reflection on students' inner experience as they begin to work directly with patients deserve further exploration as opportunities to teach professionalism.

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In recent years, medical education organizations and accrediting bodies have focused increasingly on professionalism in medical training.<sup>1–4</sup> Professionalism is now a required competency across the continuum of undergraduate,<sup>5</sup> graduate,<sup>6</sup> and continuing medical education.<sup>7</sup> As professionalism has been incorporated across these curricula, consistent themes regarding how professionalism should be

taught have emerged: (1) role models are the primary influence on students' professional development,<sup>8–10</sup> (2) activities in which trainees are explicitly taught principles of professionalism are an important adjunct to relying exclusively on role modeling,<sup>11–13</sup> (3) observing negative role models in patient care is inevitable, but having faculty available to students to debrief these events may mitigate deleterious effects,<sup>14–16</sup> and (4) to truly promote professionalism in our trainees, medical schools must hold the entire faculty to the highest professional standards.<sup>2,9,11</sup>

Although many schools have reported on strategies for explicitly teaching professionalism,<sup>17–25</sup> how students respond to, learn from, and engage with these strategies has rarely been studied in depth.<sup>26</sup> It is important to identify the most relevant and successful strategies from the learners' perspective because learner buy-in is essential to engaging students in a topic that may be perceived as abstract or extraneous to the scientific curriculum. Examining students' perceptions of how they learned professionalism may also identify potentially rich sources of

professionalism education untapped by educators.

The objective of the qualitative analyses described here was to explore students' perceptions about how they had learned professionalism by the end of their preclinical curriculum. Our results offer educators insight into how and whether formal and informal curricula engage students.

### Professionalism in the Preclinical Curriculum

At the University of Washington School of Medicine, our approach to teaching professionalism in the preclinical curriculum combines formal and informal elements. The formal professionalism curriculum includes lectures, panels, small-group discussions, written reflections, and ceremonies (Table 1). Students receive an explicit set of behavioral expectations called *professionalism benchmarks*. All second-year students must complete and pass a six-station objective structured clinical examination (OSCE) before progressing to clerkships. One OSCE station specifically addresses a professionalism issue.

The informal professionalism curriculum emerges through student contact with

**Dr. Baernstein** is associate professor, Department of Medicine, University of Washington School of Medicine, Seattle, Washington, and a member of the college faculty.

**Dr. Amies Oelschlager** is assistant professor, Department of Obstetrics and Gynecology, University of Washington School of Medicine, Seattle, Washington, and a member of the college faculty.

**Dr. Chang** is assistant professor, Department of Medicine, University of Washington School of Medicine in Seattle, Washington, and a member of the college faculty.

**Ms. Wenrich** is affiliate instructor, Department of Medical Education and Biomedical Informatics, and director of special projects and advisor to the dean, University of Washington School of Medicine, Seattle, Washington.

Correspondence should be addressed to Dr. Baernstein, Harborview Medical Center, 325 Ninth Avenue, Box 359702, Seattle, WA 98104; telephone: (206) 744-3263; fax: (206) 744-3563; e-mail: (abaer@u.washington.edu).

**Table 1**  
**The Formal Curriculum in Professionalism for Preclinical Students, University of Washington School of Medicine, 2003–2004 and 2004–2005**

Preclinical year	Lectures/panels*	Small-group discussions†	Written reflections‡	Ceremony	Evaluation
First year	<ul style="list-style-type: none"> <li>• Adjustment to demands and privileges of being a medical student</li> <li>• Confidentiality</li> <li>• Conflict between professional responsibilities and personal values</li> <li>• Meaning of the doctor–patient relationship</li> <li>• Narrative medicine</li> <li>• Physicians in film and literature</li> <li>• Sensitivity and caring</li> <li>• Sexuality/sexual minorities</li> <li>• Substance abuse</li> </ul>	<ul style="list-style-type: none"> <li>• Delivering bad news</li> <li>• Empathy</li> <li>• Hopes and fears of a career in medicine</li> <li>• Sexuality/sexual minorities</li> <li>• Substance abuse</li> <li>• Peer advising: first-through fourth-year students who share a college mentor meet for one hour on a quarterly basis to share information and advice</li> </ul>	<ul style="list-style-type: none"> <li>• Continuity of care</li> </ul>	<ul style="list-style-type: none"> <li>• Stethoscope presentation at orientation</li> <li>• White coat ceremony (some regional sites only)</li> </ul>	<ul style="list-style-type: none"> <li>• Review of videotaped interview (once)</li> <li>• Written evaluation by small-group leader (quarterly)</li> </ul>
Second year	<ul style="list-style-type: none"> <li>• Caring for patients with life-threatening and terminal illness</li> <li>• Culture and medicine</li> <li>• Medicine and the law</li> <li>• Motivational interviewing</li> <li>• Physician impairment</li> <li>• Uncertainty and mistakes in medicine</li> </ul>	<ul style="list-style-type: none"> <li>• Conflict between professional responsibilities and personal values</li> <li>• Racial disparities in medical care</li> <li>• Peer advising: described above</li> </ul>	<ul style="list-style-type: none"> <li>• Caring for patients with life-threatening and terminal illness</li> <li>• Sexuality/sexual minorities</li> <li>• Substance abuse/Alcoholics Anonymous or Narcotics Anonymous visit</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical transition ceremony at end of year</li> </ul>	<ul style="list-style-type: none"> <li>• Objective structured clinical exam</li> <li>• Written evaluation and in-person individual feedback by college mentor (quarterly)</li> </ul>

\* These large-group sessions vary in length from one to three hours.

† Listed topics are those with scheduled small-group discussions. Small groups are also encouraged to discuss all topics from lectures and panels and to address professional issues that arise while working with patients.

‡ Second-year small groups are facilitated by college mentors. Most discussions are scheduled for one hour. Written reflections are one to two pages in length. They are responses to open-ended questions. There is no formal scoring system. They are reviewed by the student's college mentor, who makes written comments shared privately with the student.

faculty, physicians, or peers, often in clinical contexts. In our undergraduate setting, patient contact occurs in individual interviews during the first year. Each first-year student interviews seven patients, focusing on patients' social history and experience of illness. Additional patient contact often occurs in the summer between the first and second years, when more than half of students work with community physicians for four weeks. Patient contact also occurs during preceptorships, in which students work with a physician for at least one quarter. Preceptorships are offered during the first and second years; all preclinical students are required to work with at least one preceptor.

During the second year, patient contact occurs in the context of the colleges program, in which students receive instruction in clinical skills (interviewing, physical exam, clinical reasoning, oral and written presentations) and professionalism from 1 of 30 college mentors. These faculty, selected in a competitive process, are given release time for their teaching and mentoring activities, and they mentor a consistent group of students in each class from enrollment to graduation.<sup>27,28</sup> Each mentor meets weekly with his or her group of six second-year students in an inpatient setting. Two students each week interview and examine hospitalized patients under their mentor's supervision. These students then present their patients at the bedside to the mentor and the other five students. By the end of the year, each student has interviewed, examined, and given a bedside presentation on six hospitalized patients and has observed and discussed an additional 30 patients.

College mentors explore professionalism issues that arise at the bedside and in group dynamics with their students. These mentors, who participated in development of the professionalism benchmarks described above, are encouraged to refer to and reinforce these benchmarks in discussions of professionalism with their students. For example, a patient may express hostility toward a student of a different race, allowing the mentor to explore the principle of respect for all patients despite differences in values and to examine the value of self-reflection in managing physicians' own emotional responses. Similarly, if a student is consistently late,

the mentor has an opportunity to discuss the principle of responsibility and how one team member's actions affect others. Mentors receive explicit faculty development on identifying and addressing professionalism issues in small-group and patient-related settings.

We were interested in students' perceptions of the formal and informal preclinical professionalism curricula. In 2004 and 2005, students were being interviewed as part of an ongoing curriculum improvement process at the University of Washington School of Medicine.<sup>27</sup> Part of each interview focused specifically on our professionalism curriculum, which shares many components with curricula elsewhere.<sup>17–22,24,25</sup> Because most institutions continually modify or develop new curricula and may look to the literature for guidance,<sup>29</sup> our students' reactions to various strategies for teaching professionalism may be relevant to other schools. We present the results of our analyses of students' interview responses about our professionalism curriculum to assist educators seeking to refine strategies for teaching professionalism to preclinical students.

## Method

### Participants

A convenience sample of second-year students completed interviews in 2004 and 2005 as part of the school of medicine's internal curricular improvement process. All second-year medical students were invited via e-mail to participate near the end of the 2003–2004 and 2004–2005 academic years, with the goal of identifying 30 students for interviews and completing interviews with at least 25 students per year in 2004 and 2005. Students were informed that the purpose of the interview was to learn how the curriculum performs in order to make future improvements. Students were assured that their responses would be deidentified and were, therefore, confidential. Each student received \$50 for participating. Our use of these data for this study was approved by the University of Washington institutional review board.

### Instrument

Interview questions were developed by a core team of medical education faculty with expertise in qualitative research and

evaluation. Questions assessed multiple domains of the curriculum, including the teaching of professionalism. Every participant was asked six questions specifically addressing professionalism. These questions included the student's definition of professionalism, self-perceived influences on professionalism, the college faculty and college group's influence on professionalism, and professional and unprofessional behaviors observed.

### Data collection, analysis, and interpretation

In-depth, face-to-face, semistructured interviews were conducted by nonclinical medical education faculty with no supervisory relationship to students. Interviews, conducted in confidential settings and approximately 45 minutes in length, were audiotaped. Students were not identified by name in the interview.

Students' responses were later transcribed, and all potential identifiers were removed. For the purpose of our analyses, we used portions of the transcripts relevant to professionalism.

All members of our research team initially reviewed a common set of 12 interviews and, from this common review, developed preliminary domains and categories within domains. Then, two researchers (A.B. and either A.A.O., T.A.C., or M.D.W.) independently coded each of the 56 transcripts using these common domains and categories. New domains and categories that emerged were discussed and added during the coding process. Coding discrepancies were reconciled by discussion and consensus. Analysis oversight was provided by an experienced qualitative researcher without direct clinical exposure to the students (M.D.W.).

In coding pairs we also identified, reviewed, and discussed representative quotations. Quotations best exemplifying domains or categories within domains were edited for length and flow, but the text's meaning was preserved. Numeric counts of domains and categories are presented in some cases to demonstrate how frequently these topics were raised by students. We calculated interrater reliability using all transcripts.

Table 2

**Characteristics of Curriculum Interview Participants and Entire Second-Year Class, University of Washington School of Medicine, Academic Years 2003–2004 and 2004–2005**

Year of interview	Number of students	
	Participants (% male)	Entire class (% male)
2004	27 (56)	188 (45)
2005	29 (55)	187 (45)

## Results

Fifty-six second-year students participated in the interviews: 27 students in 2004 and 29 students in 2005. Comparison of these students with the whole class is shown in Table 2.

We identified four domains as most salient for students: “observing what is professional” (role models), “being told what is professional” (formal curriculum), “what I bring to medical school” (prior life experience or background), and “learning on the job” (experiential learning). Mean interrater agreement on domains and categories within domains was 94% (range 89%–100%, SD 3.66), and mean kappa value was 0.84 (range 0.73–1.0, SD 0.09), indicating excellent reliability.

### “Observing what is professional”: Role models

Participants identified observing role models as a powerful source of professionalism education. Role models fell into three categories: physicians in patient-care settings, physician and nonphysician faculty in the classroom, and peers. Forty-four of the 56 students (79%) identified their college mentor as a positive role model.

### Physician role models in patient care.

Most students expressed that role modeling was their primary mode of learning professionalism. For example,

There’s no way sitting in a lecture hall and being told what professionalism is, is going to make me care. Seeing a doctor that you’re close with, that’s how my sense of self and how I will become a doctor is going to get formed.

What’s most important with teaching professionalism is modeling professionalism. You can give lectures on being professional, but if there’s not an

atmosphere of professionalism, it doesn’t really matter.

In describing positive role models for professionalism, most students described physicians they observed in clinical work. Students often described a physician’s compassion and relational skills with patients:

Watching their bedside manner is almost like watching a reverend speak on the pulpit.

[The interns] did a fine job [with patients]. They were nice, they were professional. And then I’d pop in with Dr. X, when he went in to see the same patients. And it was starkly different. Dr. X would go in and somebody would be in pain and he’d sit down on their bedside and he’d hold their hand.

Students also described negative physician role models. Although many examples were not egregious, they made a strong impression:

[Two doctors] were down the hall from each other, and there were people around. One said to the other, “Did you hear about Mr. X?” And the other doctor said no, and he made a face like a dead face . . . sticking his tongue out, crossing his eyes, and tilting his head to the side. If anybody had noticed they wouldn’t have been too happy with it.

We went in to speak to the patient and the mother and basically what we had been learning all year about professionalism and respect and things like that were not followed at all. It was quite embarrassing. The mother was tired, and we spent an hour in there, even half an hour after she had made it very clear that she wanted us to leave.

### Faculty role models in the classroom.

Twenty-two of the 56 students (39%) identified faculty conduct during classroom instruction as professional or unprofessional. For example,

[A certain lecturer] was incredibly professional. He was always very respectful speaking to students, teaching, and conversing with colleagues.

Unprofessional behaviors noted in lecturers included being unprepared for the lecture, telling vulgar jokes, making disrespectful comments about patients, belittling students, and not taking students’ concerns seriously. For example,

There are instances of lecturers saying [comments like], “Obviously she would

have this disorder because she’s fat.” It did not feel as though respect was being maintained.

**Peer role models.** Second-year students in our setting routinely observe one another interviewing patients and presenting cases at the bedside, and they provide feedback to peers on their performance. Students cited opportunities to learn from peers’ strengths. For example, a male student observed,

[The patient] stood up and shook my hand and ignored the two [female students]. I would find that very offensive if I were female. But my female colleague who was doing the interview was very cordial. I think she did a very good job of maintaining professionalism and even developing a student/patient relationship.

More than half of the students criticized peers for unprofessional behaviors, such as tardiness, cheating, and speaking disrespectfully of patients, teachers, and peers. Students grasped that peers’ actions reflect on the whole profession. For example, one student described a situation in which the patient’s care team rounded while he was interviewing the patient:

The patient kept asking, “Am I going to die? Am I going die?” The team didn’t answer and as they left, the third-year [student] turned around and said, “We’re all going to die someday.” That was cripplingly embarrassing to me. We are all part of this medical community.

Students expected their mentor to intervene when students demonstrated unprofessional behavior. For example,

All six of us were listening to a fellow student present at the bedside, with the patient there. She said, “I couldn’t palpate the thyroid because he had a fat neck,” and she was giggling. The problem that I had is that our mentor did not stop it and that it continued to go on.

In summary, students found positive and negative role models in patient-care and classroom settings, in faculty and in peers. Many students stated explicitly and emphatically that role models were much more influential than the formal curriculum.

### “Being told what is professional”: Formal curriculum

**Lectures and panels.** Fifteen of the 56 students (27%) stated that lectures and

panels focused on professionalism had a positive impact. Effects included “broadening my viewpoints” and learning “political pearls,” such as specific behaviors that improve interprofessional relationships. Some students were very enthusiastic about lectures:

We had one guy talk on professionalism. And I thought he was amazing! It just really made me proud to enter the profession that I am. I thought, “Oh, this is great. This is teaching me how to better myself and be a better doctor to my patients.”

Another student articulated that although she learned professionalism from watching role models, explicit discussions about professionalism were important to interpret what she saw. When prompted about whether role modeling or lectures were more important, she replied,

I think it’s a combination. I noticed my mentor’s professionalism because I had been learning about it in lecture. I might not have picked up on it, always, just with him.

Several students believed lectures were important for other students, although not necessarily for them. Exploring professionalism in lectures had a “preaching to the choir” element, with interest only from those who believe they already embrace professionalism:

People see that professionalism is coming up on the schedule and skip class. It really disturbs me that they aren’t coming. I think the people who probably need to learn the most are the ones that aren’t there.

An equal number of students<sup>15</sup> had negative reactions to lectures and panels about professionalism. Comments included

I learn things by being in situations and experiencing or having things demonstrated for me. A lot of the class is just going to tune out and play games on their computer, during that [professionalism] lecture.

Several students felt that lectures and panels “turned them off” to professionalism:

What professionalism meant to me before coming to medical school was exactly what they say to us. What it means to me now is just a lecture: “We’re going to tell you how to act, before you ever mess up.”

I just can’t stand it. It makes me want to run away.

Some students commented that being lectured on concrete topics such as appropriate dress was insulting. Yet, students specifically identified inappropriate dress as an unprofessional behavior they observed in peers. Several students explicitly contrasted what peers should know with how some behave.

**Small-group discussions.** Students frequently cited formally organized small-group discussions as positive learning experiences:

First and second year, you’re more worried about passing courses and learning all the basic sciences material. But when you talk to [clerkship] students who can relate some specific situation they were in, and the decisions people made, or how they interacted with others, you get a much better sense of, “Okay, this is what is meant by professionalism.”

Of 44 students who identified their college mentor as a positive role model, nearly half described discussions their mentor led as important in learning professionalism, as distinct from observation alone. For example,

We would bring things up, and [our mentor] would say, “Well, this happened to one of my students and this is how they handled it, and maybe I would do something different.” It makes a big difference to talk about a situation before it arises. After we discussed it, everybody felt more comfortable. I don’t know if they were necessarily eager to discuss it, but they felt more prepared, after they had.

#### **Other formal parts of the curriculum.**

No student specifically mentioned the written reflections required in our formal curriculum, but five students reported that they learned professionalism from self-reflection or informal discussions with family and friends. No student mentioned ceremonies, although when students discussed “lectures,” this may have referred to speeches at these events. Three students reacted to the professionalism OSCE, commenting that it was educational or spurred useful discussions, whereas two others commented that the station was unfair or inappropriately reduced professionalism to “the one right answer.”

#### **“What I bring to medical school”: Noncurricular elements**

Fifteen students (27%) mentioned their upbringing or personal values they brought to medical school as important influences on their emerging professionalism. Six additional students identified physician relatives as influences. Students’ comments about the influence of upbringing are represented by a few typical recurring statements: “I think professionalism is a really hard thing to teach,” “It’s intuitive,” and “It’s how you were raised.”

Ten students noted that work experience prior to medical school influenced their professionalism, and two others identified formative undergraduate experiences. Some students asserted that professionalism was established by the admission process, which weeded out unprofessional students:

If you select a student body for a medical school, you’re looking for certain characteristics. And the chance that any one of those individuals is going to go into a patient’s room and act unprofessionally is slim to none.

#### **“Learning on the job”: Experiential learning**

Seven students (13%) described working directly with patients as influencing their developing professionalism. One student said, “You can have as many lectures as you want, but there’s a big difference between hearing about it and actually doing it and applying it for yourself.”

Other students described how seeing patients at their preclinical stage felt like play-acting but was valuable for learning professional behavior:

Just putting on a suit and going and acting like a doctor, eventually that reinforces the inner change and you start understanding little bits, [like] “Oops, that didn’t feel very appropriate, that didn’t feel right. I shouldn’t have said that” or “That felt good.” Just training as you go.

I still feel when I put a stethoscope around my neck, like I’m playing dress up. Every time I go into clinic or the hospital, I am always acutely sensitive to, “How am I supposed to behave?”

#### **Discussion**

In this qualitative research study, we examined in depth how students

responded to diverse strategies, both formal and informal, for imparting professionalism in a preclinical curriculum. By asking students broad questions about how they learned professionalism, we provided opportunities for students to describe sources outside our stated curriculum, elucidating influences beyond curricular control.

Students' responses to some strategies may not be as positive as published descriptions of curricula suggest. One anecdotal account of how students perceive professionalism teaching states, "The current structure of professionalism education does more to harm students' virtue, confidence, and ethics than is generally acknowledged" and that "we students feel more victimized by the professionalism curricula than enhanced."<sup>30</sup> Our qualitative methods brought forth similar negative sentiments that students may usually express only privately. Both positive and negative comments by our participants provide insight into what motivates and what disengages preclinical students from learning professionalism.

Students had mixed reactions to formal lectures on professionalism. Some found lectures inspirational and helpful for elucidating observed professional behaviors. Comparable numbers criticized lectures as "common sense," "obvious," "nebulous," or "ambiguous." Our findings provide empiric evidence for the perception that formal education about professionalism may be seen as insulting.<sup>31,32</sup> If lectures remain a component of the formal curriculum in professionalism, educators should pinpoint and avoid those elements of lectures that evoke negative reactions. Students' specific suggestions to make lectures more meaningful included articulating an explicit and consistent definition of professionalism, focusing on tangible skills, making lectures evidence based, and avoiding repetition.

Students perceived role models, a part of the informal curriculum, as the most important influence in their professional development. This concurs with expert opinion.<sup>8-10</sup> However, the students identified classroom faculty, in addition to clinical faculty, as positive and negative role models, a finding that, to our knowledge, has not been previously

explored in the literature. This emphasizes the need for basic science faculty to work in concert with clinical faculty and medical school administration to ensure that consistent standards of professionalism are demonstrated for and explicitly promoted to students throughout their education.

Students perceived that they learned professionalism from their peers, a source of learning also not previously explored in the literature. Preclinical peers were seen as a nonthreatening source of constructive feedback, particularly in settings with patient interaction; students in the clinical years were viewed as reliable sources of professionalism "pearls." Students found it helpful to have faculty observe student-patient interactions and critique these in group settings so that students could learn from one another's strengths and weaknesses. Students were disappointed when faculty did not correct peers who behaved unprofessionally. Although literature supports the teaching value of bedside rounds in the context of patient care,<sup>33,34</sup> our findings suggest that bedside teaching may promote professionalism during the preclinical years as well. Dedicated faculty may be more likely to observe and interact closely with students during bedside teaching, increasing opportunities for role modeling and for faculty to observe and correct students' behaviors, than in clerkship settings in which faculty divide their attention between patient care and teaching.

Whereas residents widely identify one-on-one patient interactions as important components of their professionalism training,<sup>35,36</sup> few students explicitly identified solo interactions with patients as formative to professional development. This is to be expected for preclinical students with only six to seven compulsory patient contacts per year and no patient-care responsibility. However, students who described experiences with patients gave vivid descriptions revealing awareness of their own "conscious incompetence,"<sup>37</sup> and they recognized their transition from student to physician. Exploring these inner experiences may be an effective strategy for engaging students in reflection on professional behaviors.

A disconnect we found between our curriculum and students' perceptions of

how they learned professionalism hinges on the importance that students place on experiences prior to medical school. This finding has been described elsewhere but only in brief.<sup>32,38</sup> Many students said they learned or inherited professionalism from their upbringing, prior employment, or undergraduate education. To some students, a formal professionalism curriculum implied that faculty believed they lacked professionalism, engendering resistance to the curriculum. To bridge this gap and overcome resistance, it is important to explicitly acknowledge and appreciate what students bring to medical school. Lectures and small-group discussions should analyze situations unique to the medical setting and make it clear that medical school professionalism education is intended to build on, not replace, existing values and life experiences. In addition, presenting professionalism as a quality improvement concern, as relevant to and necessary for practicing physicians as for medical students, may help students better contextualize discussions.<sup>39</sup>

This study has several limitations. First, it is a post hoc analysis of data gathered for curriculum evaluation. Second, students were not asked about each specific element of our professionalism curriculum, so reactions to a particular curricular component may not reflect the views of the entire cohort. In addition, students were specifically asked about positive and negative role models and examples of professional and unprofessional behaviors, so they were prompted to some extent to address role models. Third, students were responding to our unique professionalism curriculum, so responses may not be generalizable to other schools. Finally, this qualitative study is based on a relatively small cohort of 56 students across two years. Although numbers of responses in some domains and categories within domains are provided, these are not intended to be the bases for statistical or quantitative comparisons but, rather, as indications of general trends and directions. The qualitative nature of our study is designed to elucidate themes, and it may open the door to future quantitative studies.

By analyzing transcribed interviews, we gained deeper, more nuanced insight into the success and failures of our curriculum than if we had relied on written course-

evaluation surveys or faculty impressions. In addition, we asked about a curriculum that started two years before the interviews, so students had longitudinal perspectives on how various activities did or did not help them develop as professionals. Finally, the open-ended nature of questions permitted students to describe aspects of the curriculum that were most salient to them personally.

## Conclusions

The results of this study can be extended to suggest a better curriculum in professionalism for preclinical students. In regard to role models and the informal curriculum, all clinicians and lecturers should be held to high standards of professionalism. Each student should work with faculty members who can demonstrate and articulate the ideals of professionalism and who will help interpret or debrief negative clinical interactions that the student may observe. Ideally, students would have a long-term relationship with a faculty member to facilitate trust and awareness of the student's developmental process. Peers are also an important and underemphasized source of learning; therefore, professionalism should be a focus at admissions and in clinical evaluations, and peer-group discussions and bedside rounds should be used for teaching. In regard to the formal curriculum, talking about professionalism seems most likely to be effective when tied to the student's own experiences and observations, both prior to medical school and from the student's earliest patient contacts. New strategies for presenting formal, explicit curricula in professionalism that will effectively engage students are needed.

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## Correction

The April commentary by Harold Alan Pincus, MD, omitted some of the text because of a production error. The complete commentary may be accessed at (<http://links.lww.com/A1181>)

## Reference

1. Pincus HA. Commentary: Challenges and pathways for clinical and translational research: Why is this research different from all other research? *Acad Med.* 2009;84:411-412.