Hidden Curricula, Ethics, and Professionalism: Optimizing Clinical Learning Environments in Becoming and Being a Physician: A Position Paper of the American College of Physicians

Lisa Soleymani Lehmann, MD, PhD; Lois Snyder Sulmasy, JD; and Sanjay Desai, MD; for the ACP Ethics, Professionalism and Human Rights Committee*

Much of what is formally taught in medicine is about the knowledge, skills, and behaviors required of a physician, including how to express compassion and respect for patients at the bedside. What is learned, however, includes not only admirable qualities but also behaviors and qualities that are inconsistent with ethics and professionalism. Positive role models may reinforce the character and values the profession seeks to cultivate; negative ones directly contradict classroom lessons and expectations of patients, society, and medical educators. These positive and negative lessons, which are embedded in organizational structure and culture, are the hidden curricula conveyed in medical schools, residency programs, hospitals, and clinics. This po-

sition paper from the American College of Physicians focuses on ethics, professionalism, and the hidden curriculum. It provides strategies for revealing what is hidden to foster the development of reflective and resilient lifelong learners who embody professionalism and clinicians who are, and are perceived as, positive role models. Making the hidden visible and the implicit explicit helps to create a culture reflecting medicine's core values.

Ann Intern Med. 2018;168:506-508. doi:10.7326/M17-2058 Annals.org
For author affiliations, see end of text.
This article was published at Annals.org on 27 February 2018.

idden curricula are lessons learned that are embedded in culture and are not explicitly intended. Medicine's hidden curriculum powerfully influences student and resident norms and values. More than half of 2016 medical school graduates said that they experienced "disconnects between what [they were] taught about professional behaviors/attitudes and what [they saw] being demonstrated by faculty" (1). Learners receive conflicting messages about ethics and professionalism when the actions or words of role models are not consistent with the values espoused by the profession. Uncovering inconsistent messages and revealing and reinforcing inspiring examples of doctoring is challenging.

The concept of a hidden curriculum is neither new nor limited to medical education. It was identified by Philip Jackson, who described elementary education as a socialization process (2)—the method by which the values, skills, and attitudes of a group being joined are adopted. In medicine, it is distinct from the "formal curriculum" of coursework and classroom lessons sanctioned by the institution, the "informal curriculum" of ad hoc instruction (such as bedside rounds), and the "null curriculum" of what is not taught (see the Table for definitions). Awareness of all of these curricula adds important perspectives for assessing learning environments, but this article's focus is the hidden curriculum.

In medicine, the hidden curriculum is transmitted in the clinic, the hospital, the operating room, the team room, and the cafeteria. The "culture" of medicine is

passed down through examples, stories, rituals, symbols, and defined hierarchies (4, 5). A primary care physician visiting her hospital patient in the evening after clinic is a positive example of the hidden curriculum; making disparaging comments about frequently admitted patients is a negative example. Disrespect can also occur between clinicians, such as disparaging comments about nonacademic physicians by academic physicians or about a specialty.

The hidden curriculum has large-scale effects. For example, systemic bias against primary care contributes to the U.S. health care system being unprepared to meet the needs of an aging population (6, 7). Negative comments from leadership and greater financial rewards for subspecialists can discourage students from choosing primary care despite societal need, intellectual rigor, and the importance of longitudinal healing relationships. System structure and culture reflect what society values.

The intensity of medical training is a cultural immersion in which values are often communicated and adopted without adequate reflection and critique. The professionalization of future physicians is affected, but

See also:	
Editorial comment	

^{*} This paper, written by Lisa Soleymani Lehmann, MD, PhD; Lois Snyder Sulmasy, JD; and Sanjay Desai, MD, was developed for the American College of Physicians Ethics, Professionalism and Human Rights Committee. Members of the 2016–2017 ACP Ethics, Professionalism and Human Rights Committee at the time of the paper's approval were Carrie A. Horwitch, MD, MPH† (Chair); Omar T. Atiq, MD† (Vice Chair); John R. Ball, MD, JD†; Nitin S. Damle, MD, MS†; Pooja Jaleel†; Daniel B. Kimball Jr., MD†; Lisa Soleymani Lehmann, MD, PhD‡; Ana María López, MD, MPH†; Paul S. Mueller, MD†; Alexandra Norcott, MD†; Sima Suhas Pendharkar, MD, MPH†; Julie R. Rosenbaum, MD†; Molly B. Southworth, MD, MPH†; and Thomas G. Tape, MD†. Approved by the ACP Board of Regents on 16 February 2017. † Nonauthor contributor.

[‡] Author.

Classification	Definition	Example	Method of Transmission
Formal	The intended, official curriculum sanctioned by the institution	Course objectives Course content Competencies	Structured Intentional
Informal†	Idiosyncratic, sporadic learning that occurs outside the classroom	Ward rounds Bedside rounds	Ad hoc Variable Intentional
Hidden†	That which the school or residency program teaches, generally without being aware that it is being taught; lessons that are embedded in the organizational structure and culture and are not explicitly intended	Empathic role models Behaviors that convey respect for patients and all colleagues Negative attitudes toward patients with substance use disorder or obesity Conflating a patient's disease with who they are as a person	Ad hoc Variable Unintentional
Null	What is not taught, which by its absence conveys the message that it is not important to becoming an excellent physician	Social justice Patient advocacy	Ad hoc

^{*} Adapted from Hafferty and O'Donnell (3).

the effects go beyond learners to practicing clinicians and patients.

This American College of Physicians (ACP) position paper on the relationship among hidden curricula, ethics, and professionalism identifies challenges, opportunities, and strategies for optimizing learning environments. Ethical principles should apply to all health care environments. Strategies to identify and address discrepancies between our values and actions are proposed to help align positive hidden curricula with formal curricula. This executive summary is a synopsis of position statements of the ACP. The rationales for the position statements are presented in the Appendix (available at Annals.org).

METHODS

This position paper was developed on behalf of the ACP Ethics, Professionalism and Human Rights Committee (EPHRC). Committee members abide by the ACP's conflict-of-interest policy and procedures (www .acponline.org/about-acp/who-we-are/acp-conflict-of -interest-policy-and-procedures), and appointment to and procedures of the EPHRC are governed by the ACP's bylaws (www.acponline.org/about-acp/who-we -are/acp-bylaws). After an environmental assessment to determine the scope of issues and literature reviews, the EPHRC evaluated and discussed several drafts of the paper. The paper was then reviewed by members of the ACP Board of Governors, Board of Regents, Council of Resident/Fellow Members, Council of Student Members, and other committees and experts. The paper was revised on the basis of comments from these groups and individuals. The ACP Board of Regents reviewed and approved the paper on 16 February 2017.

ACP Positions and Recommendations

1. The hidden curriculum must become a positive curriculum that aligns with the formal curriculum. Faculty and senior clinicians should model empathy, en-

courage reflection and discussion of positive and negative behaviors in the training environment, and promote clinician wellness. What is taught in the classroom must be reinforced and enhanced by what is practiced at the bedside.

- 2. The learning environment should foster respect, inquiry, and honesty and empower every individual, including learners, to raise concerns about ethics, professionalism, and care delivery. Teamwork and respect for colleagues must be both taught and demonstrated.
- 3. Leaders should create and sustain a strong ethical culture by encouraging discussion of ethical concerns, making values in everyday decision making explicit, and embodying expectations of professionalism in which patient well-being is a core value.

CONCLUSION

The educational and social milieu of medical learning environments is a complex system of influences. Role models across peer relationships and the hierarchy of medicine contribute to the formation of professional identity, behaviors, and attitudes of future physicians. The best solutions to the influence of the hidden curriculum will uncover it, integrate its positive aspects into the formal curriculum, and lead to development of approaches to understand and mitigate its negative aspects by educators and practicing clinicians. The hidden curriculum in medicine presents challenges but also opportunities to help reshape not only education but also the culture of medicine.

From Veterans Health Administration, Washington, DC, and Harvard Medical School and Harvard T.H. Chan School of Public Health, Boston, Massachusetts; American College of Physicians, Philadelphia, Pennsylvania; and Johns Hopkins University, Baltimore, Maryland.

Acknowledgment: The authors and the ACP Ethics, Professionalism and Human Rights Committee thank peer reviewers Mark A. Levine, MD; John M. Spandorfer, MD; and Colin P.

[†] May be consistent or inconsistent with the formal curriculum.

West, MD, PhD, and the many leadership and journal reviewers of the paper for helpful comments on drafts, along with Daniel Kim for research assistance and Kathy Wynkoop for editorial assistance.

Financial Support: Financial support for the development of this paper comes exclusively from the ACP operating budget.

Disclosures: Disclosures can be viewed at www.acponline.org /authors/icmje/ConflictOfInterestForms.do?msNum=M17-2058.

Requests for Single Reprints: Lois Snyder Sulmasy, JD, Director, ACP Center for Ethics and Professionalism, American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106; e-mail, Isnyder@acponline.org.

Current author addresses and author contributions are available at Annals.org.

References

- 1. Association of American Medical Colleges. Medical School Graduation Questionnaire: 2016 All Schools Summary Report. July 2016. Accessed at www.aamc.org/download/464412/data/2016gqallschoolssummaryreport.pdf on 9 January 2017.
- 2. Jackson PW. Life in Classrooms. New York: Holt, Rinehart & Winston; 1968.
- 3. Hafferty FW, O'Donnell JF, eds. The Hidden Curriculum in Health Professional Education. Hanover, NH: Dartmouth Coll Pr; 2014.
- 4. Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. Acad Med. 1994;69:861-71. [PMID: 7945681]
- 5. Mossop L, Dennick R, Hammond R, Robbé I. Analysing the hidden curriculum: use of a cultural web. Med Educ. 2013;47:134-43. [PMID: 23323652] doi:10.1111/medu.12072
- 6. Dupras DM, West CP. Training for careers in primary care: time for attention to culture [Editorial]. J Gen Intern Med. 2015;30:1243-4. [PMID: 26173533] doi:10.1007/s11606-015-3416-1
- 7. **Kernan WN, Elnicki DM, Hauer KE.** The selling of primary care 2015. J Gen Intern Med. 2015;30:1376-80. [PMID: 26173527] doi:10.1007/s11606-015-3364-9

ANNALS AWARDS

Personae Photography Prize: Annals awards a \$500 prize for the best photograph submitted each year. Personae photographs are pictures that catch people in the context of their lives and that capture personality. Visit www.annals.org/aim/pages/personae-photography for more information.

Ad Libitum Poetry Prize: All poems published within 1 calender year are automatically entered into our Poetry Prize Contest. The winning poem is selected by a panel led by Dr. Michael LaCombe and 2 or 3 external judges. The prize for the winning poem is \$500. Visit www.annals.org/aim/pages/poetry-prize for more information.

Junior Investigator Awards: Annals and the American College of Physicians recognize excellence among internal medicine trainees and junior investigators with annual awards for original research and scholarly review articles published in *Annals*. Visit www.annals.org/aim/pages/junior -investigator-awards for more information.

Current Author Addresses: Dr. Lehmann: 27 Trinity Terrace, Newton, MA 02459.

Ms. Snyder Sulmasy: Director, ACP Center for Ethics and Professionalism, American College of Physicians, 190 N. Independence Mall West, Philadelphia, PA 19106.

Dr. Desai: Johns Hopkins University, 1830 East Monument Street, Room 9029, Baltimore, MD 21287.

Author Contributions: Conception and design: L.S. Lehmann, S. Desai.

Analysis and interpretation of the data: L.S. Lehmann, L. Snyder Sulmasy.

Drafting of the article: L.S. Lehmann, L. Snyder Sulmasy, S. Desai.

Critical revision of the article for important intellectual content: L.S. Lehmann, L. Snyder Sulmasy, S. Desai.

Final approval of the article: L.S. Lehmann, L. Snyder Sulmasy, S. Desai.

Administrative, technical, or logistic support: L. Snyder Sulmasv.

Collection and assembly of data: L.S. Lehmann, L. Snyder Sulmasy.

APPENDIX: EXPANDED RATIONALE FOR HIDDEN CURRICULA, ETHICS, AND PROFESSIONALISM: OPTIMIZING CLINICAL LEARNING ENVIRONMENTS IN BECOMING AND BEING A PHYSICIAN: A POSITION PAPER OF THE AMERICAN COLLEGE OF PHYSICIANS Position 1

The hidden curriculum must become a positive curriculum that aligns with the formal curriculum. Faculty and senior clinicians should model empathy, encourage reflection and discussion of positive and negative behaviors in the training environment, and promote clinician wellness. What is taught in the classroom must be reinforced and enhanced by what is practiced at the bedside.

Experienced Clinicians as Role Models

The learning environment and supervisors influence students (8). The science of medicine can be taught via lecture, interactive learning, and textbooks, but the art of medicine is transmitted through physician and team member example (see vignette 1 in Appendix Table 1).

Clerkship students, interns, and residents are apprentices learning how to speak with patients and family members, dress, interact with colleagues, and examine and care for patients. If they participate in a culture of compassion, curiosity, respect, and empathy, they are more likely to adopt these virtues, especially when they are identified as explicit values and expectations. This is a positive hidden curriculum. If role models are disrespectful or cynical, however, those traits are perceived as acceptable, with lasting effects. It can be as simple—and harmful—as referring to a patient as "the

gallbladder in room 301." Comments by senior physicians who objectify or are judgmental of patients who, for example, struggle with obesity or substance use disorder affect learners and others (9-11).

In a society that tends to medicalize problems, physicians should get back to basics to model strong patient-physician relationships and demonstrate "humility about the limits of our knowledge" (12). This takes time-for communication, listening, and empathy-and a commitment to ethics and professionalism. Renewing medicine starts with education that highlights medicine as a profession and as a community of committed and compassionate colleagues and teachers.

Empathy and Wellness

Patients want empathic physicians (13), and cultivation of empathy is a primary objective of medical education (14). However, empathy declines during medical school and residency, and this may be associated with compromised professionalism (15). Physician empathy is associated with positive clinical outcomes, but realizing these benefits requires developing ways of maintaining and strengthening empathy (16).

Clinician distress secondary to burnout, low sense of well-being, or depression can be associated with a decline in empathy (17, 18). The hidden curriculum may contribute to learner distress (19). An environment in which students are humiliated by colleagues, lack social support, and experience intense workload can contribute to diminished empathy. Ongoing changes in work content and "work compression" contribute to high levels of physician burnout (20) and deprofessionalization. Faculty are often reluctant to discuss their own challenges, which can reinforce a hidden curriculum that marginalizes wellness.

Medical schools and residency programs should foster professionalism, physician well-being, and resilience (the ability to adapt to stressors). More than one quarter of medical students have depressive symptoms (21), and the American Psychiatric Association has voiced alarm over rates of resident suicide (22). The Accreditation Council for Graduate Medical Education has included new requirements for residencies and institutions to promote physician well-being (23). We must uncover and upend the practices, policies, and expectations that undermine wellness.

Best Practice Suggestions to Promote Positive Role Models, Medicine as a Profession, Empathy, and Clinician Wellness

Modeling empathy and respect for patients and learners reaffirms core values of medicine as a profession. These behaviors have the power to influence the continuum of experiences from training through practice and foster lifelong reflection on ethics in the practice of the art and science of medicine. Experienced clinicians should be encouraged to share their emotionally challenging experiences.

Strategies for revealing and realigning the hidden curriculum include dedicated time for trainees to debrief emotionally challenging situations, such as the death of a patient, and for reflection on positive and negative experiences and the implicit messages that contribute to formation of professional identity (Appendix Tables 2 and 3). Professional formation should become an explicit curricular objective (24).

Wellness committees may help clinicians address stress and send a message to staff and trainees about the value of attending to one's own health. Support must be meaningful, confidential, longitudinal, and tailored to individuals. Examples include advising, coaching, confidential peer support groups, and hospital-wide memorial services for deceased patients.

Clinical Skills Development: In the Service of the Patient ... or the iPatient?

The master clinician-educator William Osler said that learning at the bedside was the most important part of medical education and wanted his headstone to read only, "He brought medical students into the wards for bedside teaching" (25). The physician who shares the joy of doctoring by demonstrating simple but powerful bedside skills is part of the great lineage of teachers who have passed down such knowledge and compassion and who know the reward of awakening a sense of wonder in a student. Demonstrating something as basic as bedside maneuvers to accentuate a cardiac murmur and correlating it with the patient's history conveys the power of physical diagnosis and important lessons, including that excellent clinical skills help to avoid unnecessary imaging studies.

Bedside teaching can be threatened by a culture that prioritizes efficiency. Educators spend less than 25% of teaching time at the bedside (26), but that is where students learn the most about therapeutic relationships, empathy, professionalism, and clinical and communications skills that are foundational to patient-centered care.

Students are formally taught to value patient encounters and the patient-physician relationship by learning to take detailed histories and perform careful physical examinations. Nevertheless, during clerkship, students frequently encounter physicians who spend more time with computers than with patients (27). This is often driven by the omnipresent electronic health record (28, 29) but is also promoted by regulations (such as duty hour limits), easy access to technologies, and the increasing burden of administrative tasks (30) on physicians. Innovations can enhance the quality of pa-

tient care but should not supplant interactions with patients. When learners "experience bedside teaching, they tend to prefer such rounds for future instruction, commenting that bedside rounds provide them their only opportunity to see teachers interact with patients, learn physical diagnosis, and reinforce the perspective that patients are not abstract diseases or hosts but instead unique persons" (26).

Internal medicine residents spend 9% to 12% of their time in direct contact with patients (31-34) and 40% of their time on computer chart review, order entry, and documentation away from patients (35). Students notice the retreat to the workroom or "snug bunker," where the "iPatient" is treated on the basis of the electronic health record, laboratory and imaging results, and other tests (36). The team huddles around the screen without the most important team member: the actual patient.

Technology advances medical care, but unintended consequences for patients, teaching, and professionalism can be underappreciated. Fundamental history-taking and physical examination skills are taught early in medical school but can atrophy by residency (37). There is also growing concern about the diminishing number of clinicians who are capable of teaching and modeling these skills. Finding the time to teach and act as a role model is challenging in the current health care environment, but teaching can contribute to the meaningfulness and joy of practice. A waning sense of medicine as a vocation or a calling not only affects the views of clinicians about the current state of practice but also is communicated to trainees.

Focusing on interacting with the patient reminds us and learners of the humanity and uncertainty inherent in the practice of medicine. Touch and eye contact bring nothing, physically or emotionally, to the iPatient, but real patients value them greatly (36). The absence of comfort and healing connections can also have lasting effects on trust and the ability to form therapeutic relationships and on how excellent care will be viewed and practiced by future generations. Technology need not hamper the sacred space of the patient-physician relationship.

Modeling what can be gleaned from examining a patient with a sudden change in condition helps all team members refocus on the patient and refine clinical reasoning skills (see vignette 2 in Appendix Table 1). Reflecting on the reasons for going to the bedside before the computer helps emphasize the importance of patient-guided assessment.

Teaching is a fundamental value in medicine. The word *doctor*, from the Latin *docere* ("to teach"), affirms the duty of physicians to share knowledge with colleagues and learners, formally and as role models (38). Institutions must affirm their commitment to teaching

and provide appropriate resources, time, and recognition for it.

Best Practice Suggestions to Promote Bedside Teaching and Clinical Skill Development

Presence at the bedside must be modeled by experienced clinicians. Observing learners and sharing individualized feedback is perhaps the most effective method to teach clinical skills and convey the importance of bedside medicine. In a "hi-tech, lo-think" medical environment, the development of ways to integrate technology, such as digital stethoscopes, portable ultrasound machines, simulation, and video atlases, without sacrificing clinical skills and patient-physician relationships is urgently needed (36).

Innovative training models and structured bedside medicine curricula that bring trainees back to the bedside cultivate physical diagnosis, clinical reasoning, communication skills, and patient-centered care. Examples include Stanford 25 (39), the 4-year integrated curriculum at the University of Washington School of Medicine (40), the Johns Hopkins Bayview Aliki Initiative (41), and the Johns Hopkins Hospital Bedside Medicine Curriculum (42), all of which structure clinical workflow around bedside presence.

Position 2

The learning environment should foster respect, inquiry, and honesty and empower every individual, including learners, to raise concerns about ethics, professionalism, and care delivery. Teamwork and respect for colleagues must be both taught and demonstrated.

$A\ Culture\ of\ Speaking\ Up\ to\ Advance\ Safety,\ Quality, \\ and\ Ethics$

Creating a strong ethical culture requires that team members feel free to voice concerns (for example, about low-quality care or disruptive or impaired colleagues). Martinez and colleagues found that exposure to role models predicted trainee attitudes and behavior with regard to disclosure of harmful medical errors (43). Greater exposure to negative role models was independently associated with more negative attitudes and increased likelihood of unprofessional behavior related to disclosure. Students and residents who see senior clinicians evade responsibility to and transparency with patients and families about errors or who experience a culture of fear speak up less when observing or making a mistake.

Although the importance of patient safety initiatives is taught in the classroom, the most compelling lessons are taught in clinical environments (44, 45). Observing handwashing before and after each patient encounter, as in vignette 3 in Appendix Table 1, is likely

to have a greater effect on student behavior than handwashing campaigns or infection control lectures.

Hierarchy

Establishing an environment and culture of inquiry, scholarship, and continuous improvement that fosters the raising of ethical issues and sources of moral distress by learners (38) requires explicit reminders from the top of the hierarchy of the importance of contributions from all team members. Gaufberg and colleagues found that half of medical students reflecting on the hidden curriculum reported feeling intense pressure to "know their place" in the medical hierarchy. Students also perceived that patients felt pressured to accept physician authority (46).

In vignette 3 (Appendix Table 1), the student may have said something had the attending physician previously expressed openness to input. Teaching students to convey concerns focused on the best interests of patients empowers students even when senior team members do not invite feedback.

The hierarchical structure of roles, experience, and evaluation in clinical environments risks silencing valuable insights and carries the potential for moral distress and abuses of power. Almost half of 2016 medical school graduates experienced public embarrassment by faculty, and almost one quarter experienced public humiliation (1). Graduates highlighted bullying, sexist or racist remarks, unwanted sexual advances, denial of opportunities for training or rewards based on gender, and physical harm, most commonly in clinical settings. It is alarming to note that 36% of graduates indicated that they did not report these behaviors because they believed nothing would be done, and 27% did not report them because they feared reprisal (1).

Best Practice Suggestions to Promote Patient Safety and Flatten Hierarchy

Faculty and residents should actively encourage speaking up in a culture of accountability. Hierarchy of knowledge will always exist, and in many ways having team members with varying degrees and knowledge helps ensure effective care and education. Openness can be nurtured through faculty development and interventions in the learning environment to monitor for mistreatment.

Teaching communication skills in a manner that conveys and addresses concerns related to patient safety may be less likely to jeopardize team relationships. Raising concerns in the form of a question may be effective in a hierarchical setting, and teaching such techniques may bolster moral courage (47). Institutions should encourage reporting, which is often best accom-

plished using anonymous mechanisms or an ombudsperson not directly involved with care or supervision.

Teamwork and Interprofessional Relationships

Teamwork performed with honesty and respect is a hallmark of high-quality patient care (38). Hierarchy among physicians, nurses, residents, and medical students can inhibit teamwork (48).

Health care delivery is becoming increasingly complex. The typical Medicare patient sees 2 primary care physicians and 5 subspecialists annually (49). Discord between consultants or disciplines hinders high-quality, team-based care (48). Successful teams are characterized by respect, trust, collegiality, open communication, and mutual support. Choice of words, tone of interactions, and comfort level with raising issues drive the ability to work together effectively.

In vignette 4 (Appendix Table 1), although being interrupted by the nurse during teaching rounds may have been frustrating, patient needs come first. An opportunity to model humility and gather relevant clinical information from all sources was missed. Collegiality and grateful acknowledgment of the nurse's observations would have been a more appropriate response. A structure that invites nursing participation in daily rounds can foster teamwork and overcome disciplinary silos. Subtle and not-so-subtle messages contributing to a culture of disrespect or lack of appreciation are passed to the next generation.

Best Practice Suggestions to Promote Better Teamwork and Interprofessional Relationships

Medical schools and training programs are developing models for interprofessional education to build relationships and level power. Although interdisciplinary rounds are logistically challenging to implement, there is increasing recognition of their value on the wards. Hospitals are reorganizing wards into accountable care units so that they are more effective clinical microsystems. Accountable care units include unit-based teams, structured interdisciplinary bedside rounds, unit-level performance reporting, and unit-level nurse and physician co-leadership (50). Interdisciplinary rounds may include physicians, nurses, pharmacists, social workers, case managers, physical therapists, and home care specialists, creating in-person, synchronous communication.

Position 3

Leaders should create and sustain a strong ethical culture by encouraging discussion of ethical concerns, making values in everyday decision making explicit, and embodying expectations of professionalism in which patient well-being is a core value.

A Culture of Ethics and Professionalism

Clinicians and learners report insufficient time as a major challenge, with much time spent on forms, process metrics, and reimbursement. Systemic and organizational forces have profoundly affected practice and the learning environment. Block and colleagues found that residents spent only 12% of their day in direct patient care, with less than 8 minutes on the care of any one patient per day. These times were reduced compared with observations made between 1989 and 2000 (31).

A stress on time for direct patient care is the 2011 duty hour restrictions. In most hospitals, the clinical workload and number of clinicians remained the same. Residents have to complete the same amount of work in less time and are experiencing work compression, forcing difficult choices. Because patient care should always be the priority, many residents choose to complete notes and place orders in limited time and miss attending bedside instruction, family meetings, or discussions with consultants. When this occurs, medicine becomes more focused on completing tasks and less focused on the patient and seizing unique educational opportunities.

Residents encounter conflicts with professionalism (51, 52) (see vignette 5 in Appendix Table 1). Program directors and faculty often feel compelled to enforce adherence to duty hours to maintain accreditation status, whereas trainees believe that professionalism dictates that patient needs and education should be prioritized over strict adherence to duty hours. Trainees may rightly feel that participating in a family meeting to discuss a critically ill patient's care goals is more important than obeying a rule limiting the number of hours they can stay in the hospital. Senior residents and faculty can become the "duty hour police" instead of role models for the values that clinicians should embody. Faculty may find it challenging to convey the message that professionalism means owning the patient's care when doing so conflicts with duty hours. A misalignment of practice and policy undermines ethics and professionalism and is confusing and unfair to trainees and faculty. Encouraging conversations that allow trainees to resolve conflicts will help them develop as professionals.

Best Practice Suggestions to Promote a Culture of Ethics and Professionalism

Institutional policies and structures should nurture and promote core professional values. Scheduling policies should promote the strengths and mitigate the weaknesses of each unique clinical environment. Expectations should be sufficiently clear so that trainees do not feel caught between wanting to be present to care for patients and respecting regulations intended to promote trainee wellness and patient safety. Pro-

gram leaders should minimize conflicts by creating schedules that enable adherence.

Conclusion

The hidden curriculum shapes the ethical development of physicians and affects the delivery of care. Its subtle and complex power to affect professional values must be uncovered to leverage its positive aspects and develop practical solutions to mitigate its negative influence. Changes in the organization and environment of health care, increasing time pressures, and unintended consequences of technology can further allow negative dimensions of the hidden curriculum to erode empathy; respectful, patient-centered care; and ethics and professionalism. Making the hidden visible and the implicit explicit—and positive—can help create a culture reflecting medicine's core values.

Web-Only References

- 8. Chi J, Verghese A. Clinical education and the electronic health record: the flipped patient. JAMA. 2014;312:2331-2. [PMID: 25490318] doi:10.1001/jama.2014.12820
- 9. Anonymous. Our family secrets [Editorial]. Ann Intern Med. 2015; 163:321. [PMID: 26280420] doi:10.7326/M14-2168
- 10. LaCombe MA. Forbidden topics [Editorial]. Ann Intern Med. 2017;166:754. [PMID: 28505653] doi:10.7326/M16-2137
- 11. Cassandra. This is why. Ann Intern Med. 2017;166:755-6. [PMID: 28505652] doi:10.7326/M16-1745
- 12. **Nussbaum AM.** A piece of my mind. Interpreters or teachers? JAMA. 2013;310:265-6. [PMID: 23860983] doi:10.1001/jama.2013
- 13. Coulter A. Patients' views of the good doctor [Editorial]. BMJ. 2002;325:668-9. [PMID: 12351342]
- 14. Learning objectives for medical student education—guidelines for medical schools: report I of the Medical School Objectives Project. Acad Med. 1999;74:13-8. [PMID: 9934288]
- 15. Neumann M, Edelhäuser F, Tauschel D, Fischer MR, Wirtz M, Woopen C, et al. Empathy decline and its reasons: a systematic review of studies with medical students and residents. Acad Med. 2011;86:996-1009. [PMID: 21670661] doi:10.1097/ACM.0b013e 318221e615
- 16. Hojat M, Louis DZ, Markham FW, Wender R, Rabinowitz C, Gonnella JS. Physicians' empathy and clinical outcomes for diabetic patients. Acad Med. 2011;86:359-64. [PMID: 21248604] doi:10.1097/ACM.0b013e3182086fe1
- 17. **Gleichgerrcht E, Decety J.** Empathy in clinical practice: how individual dispositions, gender, and experience moderate empathic concern, burnout, and emotional distress in physicians. PLoS One. 2013; 8:e61526. [PMID: 23620760] doi:10.1371/journal.pone.0061526
- 18. Paro HB, Silveira PS, Perotta B, Gannam S, Enns SC, Giaxa RR, et al. Empathy among medical students: is there a relation with quality of life and burnout? PLoS One. 2014;9:e94133. [PMID: 24705887] doi:10.1371/journal.pone.0094133
- 19. West CP, Shanafelt TD. The influence of personal and environmental factors on professionalism in medical education. BMC Med Educ. 2007;7:29. [PMID: 17760986]
- 20. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Arch Intern Med. 2012; 172:1377-85. [PMID: 22911330]
- 21. Rotenstein LS, Ramos MA, Torre M, Segal JB, Peluso MJ, Guille C, et al. Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: a systematic review and meta-analysis. JAMA. 2016;316:2214-36. [PMID: 27923088] doi:10.1001/jama.2016.17324

- 22. Bernstein C. Suicides of young physicians raise alarm about burnout among trainees. Psychiatric News. 14 September 2017. Accessed at https://psychnews.psychiatryonline.org/doi/full/10.1176/appi.pn.2017.9b4 on 22 November 2017.
- 23. Nasca TJ. Memo: ACGME Common Program Requirements. 10 March 2017. Accessed at www.acgme.org/What-We-Do/Accreditation /Common-Program-Requirements on 22 November 2017.
- 24. Monrouxe LV, Rees CE, Hu W. Differences in medical students' explicit discourses of professionalism: acting, representing, becoming. Med Educ. 2011;45:585-602. [PMID: 21564198] doi:10.1111/j.1365-2923.2010.03878.x
- 25. Johns Hopkins Medicine. The Four Founding Physicians. Accessed at www.hopkinsmedicine.org/about/history/history5.html on 9 January 2017.
- 26. McGee S. A piece of my mind. Bedside teaching rounds reconsidered. JAMA. 2014;311:1971-2. [PMID: 24846031] doi:10.1001/jama.2013.286201
- 27. Sinsky C, Colligan L, Li L, Prgomet M, Reynolds S, Goeders L, et al. Allocation of physician time in ambulatory practice: a time and motion study in 4 specialties. Ann Intern Med. 2016;165:753-60. [PMID: 27595430] doi:10.7326/M16-0961
- 28. Sulmasy LS, López AM, Horwitch CA; American College of Physicians Ethics, Professionalism and Human Rights Committee. Ethical implications of the electronic health record: in the service of the patient. J Gen Intern Med. 2017;32:935-9. [PMID: 28321550] doi:10.1007/s11606-017-4030-1
- 29. **Hingle S.** Electronic health records: an unfulfilled promise and a call to action. Ann Intern Med. 2016;165:818-9. [PMID: 27595501] doi:10.7326/M16-1757
- 30. Erickson SM, Rockwern B, Koltov M, McLean RM; Medical Practice and Quality Committee of the American College of Physicians. Putting patients first by reducing administrative tasks in health care: a position paper of the American College of Physicians. Ann Intern Med. 2017;166:659-61. [PMID: 28346948] doi:10.7326/M16-2697
- 31. Block L, Habicht R, Wu AW, Desai SV, Wang K, Silva KN, et al. In the wake of the 2003 and 2011 duty hours regulations, how do internal medicine interns spend their time? J Gen Intern Med. 2013; 28:1042-7. [PMID: 23595927] doi:10.1007/s11606-013-2376-6
- 32. Fletcher KE, Visotcky AM, Slagle JM, Tarima S, Weinger MB, Schapira MM. The composition of intern work while on call. J Gen Intern Med. 2012;27:1432-7. [PMID: 22865015] doi:10.1007/s11606-012-2120-7
- 33. Mamykina L, Vawdrey DK, Hripcsak G. How do residents spend their shift time? A time and motion study with a particular focus on the use of computers. Acad Med. 2016;91:827-32. [PMID: 27028026] doi:10.1097/ACM.000000000001148
- 34. Wenger N, Méan M, Castioni J, Marques-Vidal P, Waeber G, Garnier A. Allocation of internal medicine resident time in a Swiss hospital: a time and motion study of day and evening shifts. Ann Intern Med. 2017;166:579-86. [PMID: 28135724] doi:10.7326/M16-2238
- 35. Chi J, Kugler J, Chu IM, Loftus PD, Evans KH, Oskotsky T, et al. Medical students and the electronic health record: 'an epic use of time.' Am J Med. 2014;127:891-5. [PMID: 24907594] doi:10.1016/j.amjmed.2014.05.027
- 36. **Verghese A**. Culture shock–patient as icon, icon as patient. N Engl J Med. 2008;359:2748-51. [PMID: 19109572] doi:10.1056/NEJMp0807461
- 37. Elder A, Chi J, Ozdalga E, Kugler J, Verghese A. A piece of my mind. The road back to the bedside. JAMA. 2013;310:799-800. [PMID: 23982364] doi:10.1001/jama.2013.227195
- 38. Snyder L; American College of Physicians Ethics, Professionalism, and Human Rights Committee. American College of Physicians Ethics Manual: sixth edition. Ann Intern Med. 2012;156:73-104. [PMID: 22213573] doi:10.7326/0003-4819-156-1-201201031-00001 39. Stanford Medicine. Stanford Medicine 25: Promoting the Culture of Bedside Medicine. 2017. Accessed at http://stanfordmedicine25.stanford.edu on 22 November 2017.

- 40. **University of Washington Medicine**. The Colleges. 2017. Accessed at www.uwmedicine.org/education/md-program/current -students/the-college on 22 November 2017.
- 41. Johns Hopkins Medicine Center for Innovative Medicine. Aliki Initiative. 2017. Accessed at www.hopkinscim.org/initiatives/aliki -initiative on 22 November 2017.
- 42. Garibaldi BT, Niessen T, Gelber AC, Clark B, Lee Y, Madrazo JA, et al. A novel bedside cardiopulmonary physical diagnosis curriculum for internal medicine postgraduate training. BMC Med Educ. 2017;17:182. [PMID: 28985729] doi:10.1186/s12909-017-1020-2
- 43. Martinez W, Hickson GB, Miller BM, Doukas DJ, Buckley JD, Song J, et al. Role-modeling and medical error disclosure: a national survey of trainees. Acad Med. 2014;89:482-9. [PMID: 24448052] doi: 10.1097/ACM.0000000000000156
- 44. Lucey C, Souba W. Perspective: the problem with the problem of professionalism. Acad Med. 2010;85:1018-24. [PMID: 20505405] doi: 10.1097/ACM.0b013e3181dbe51f
- 45. **Brainard AH, Brislen HC.** Viewpoint: learning professionalism: a view from the trenches [Editorial]. Acad Med. 2007;82:1010-4. [PMID: 17971682]
- 46. Gaufberg EH, Batalden M, Sands R, Bell SK. The hidden curriculum: what can we learn from third-year medical student narrative

- reflections? Acad Med. 2010;85:1709-16. [PMID: 20881818] doi:10 .1097/ACM.0b013e3181f57899
- 47. **Thompson MP.** The skills of inquiry and advocacy. Management Commune Q. 1993;7:95-106.
- 48. **Rafelson W, Brown T.** A piece of my mind. The half-wall. JAMA. 2014;312:2501-2. [PMID: 25514299] doi:10.1001/jama.2014.12937
- 49. **Bodenheimer T.** Coordinating care—a perilous journey through the health care system. N Engl J Med. 2008;358:1064-71. [PMID: 18322289] doi:10.1056/NEJMhpr0706165
- 50. Stein J, Payne C, Methvin A, Bonsall JM, Chadwick L, Clark D, et al. Reorganizing a hospital ward as an accountable care unit. J Hosp Med. 2015;10:36-40. [PMID: 25399928] doi:10.1002/jhm.2284
- 51. Katz AE, Mathes M. Resident duty hours: to hand over or gloss over? An ethics case study. American College of Physicians Ethics Case Studies Series. Medscape. Accessed at www.medscape.org /viewarticle/823662 on 9 January 2017.
- 52. **Desai SV, Zaas A, Katz JT.** Professionalism in graduate medical education [Letter]. JAMA. 2013;309:1110-1. [PMID: 23512051] doi: 10.1001/jama.2013.1672

Appendix Table 1. Vignettes

- While rounding, Dr. Hernandez models behavior by washing her hands before each patient encounter, knocking on the patient's door before entering the room, introducing herself and the group, and asking the patient how she wants to be addressed and whether she may sit on the edge of the bed while they talk. After rounds, she also notes to the team why she does this with each patient.
- Mr. Green is transferred to the service from the intensive care unit after being admitted for a submassive pulmonary embolism. He is recovering well on anticoagulation until the intern reports a sudden decline in his breathing. On hearing about Mr. Green's acute change, the resident excuses himself from rounds; walks past Mr. Green's room; and orders electrocardiography, chest radiography, and a troponin test without examining the patient, to the surprise and dismay of the attending physician.
- A medical student standing outside a patient's room notices that her team's attending physician examines a patient with Clostridium difficile infection and leaves the room without washing his hands. Fearful of how she might be perceived and possible effects on her clerkship evaluation, the student does not say anything to the attending physician about the patient's infection status and what she observed.
- During rounds in the stepdown unit, the team discusses the evidence for a particular antihypertensive agent for a patient. As the senior resident explains the methods of a landmark trial, the nurse interrupts to ask what the team is doing for the patient's pain. An intern starts to respond when the attending physician asks the nurse to return after they finish teaching. The nurse says, "This patient needs a pain consult today," and walks away feeling frustrated and dismissed. She believes that the attending physician is not prioritizing the patient's immediate clinical needs.
- A resident admits a patient with decompensated liver failure, stays with the family all night, and bonds with the patient. Despite resuscitation, the patient declines, developing multiorgan failure. The family meets with the team to discuss goals of care, but the resident has left the hospital because her duty hours have been completed. The ICU attending physician subsequently asks why the resident was not at the meeting, because it was a unique learning opportunity and she was that patient's physician. The resident feels caught between conflicting messages, worrying that some attending physicians may unfairly judge her as not eager to learn when she is simply trying to follow duty hour rules.

Appendix Table 2. Strategies for Revealing the Hidden Curriculum

Strategy	Example
Dedicate time for guided reflection	Organize rounds to reflect on experiences with patients who have died Encourage reflective writing Foster group engagement with literature and poetry
Encourage explicit conversations about problems, uncomfortable situations, and emotionally challenging experiences	Encourage role models to share vulnerabilities Provide more opportunities for group discussion of concerns about ethics, professionalism, and quality of care
Use challenges as a way to continuously improve our systems and culture	Leverage existing morbidity and mortality conferences to include a discussion of structural and cultural factors that may have affected care outcomes

Appendix Table 3. Strategies for Mitigating the Risks of the Hidden Curriculum

Strategy	Example
Foster resilience	Teach self-efficacy Teach mechanisms for coping with failure Encourage faculty to share vulnerabilities
Offer wellness programs	Teach work-life balance skills Teach organizational skills Encourage healthy diet and exercise Offer movement therapy Offer mindfulness meditation
Create a strong ethical culture	Encourage ethical leadership Invite discussion of ethical concerns Create psychologically safe environments
Cultivate ethical competence	Develop a formal ethics curriculum Integrate ethics case discussions Develop ethical analysis skills as a basis for moral action
Cultivate moral courage	Teach communication skills
Encourage peer support	Provide student and resident mentoring programs
Institute faculty student mentoring programs	Project HEART at Virginia Commonwealth University (www.medschool.vcu.edu /studentaffairs/project-heart) The Colleges at University of Washington (www.uwmedicine.org/education/md -program/the-college)

HEART = Healing with Empathy, Acceptance, Respect and Integrity.