Medical educators have long recognized the need to instruct medical students and residents in a code of appropriate conduct. Many academic and professional organizations have recently endorsed professionalism as the cornerstone of medical education. Despite this consensus, there remains significant controversy regarding the concept. The Accreditation Council for Graduate Medical Education (ACGME), National Board of Medical Examiners (NBME), and American Board of Internal Medicine (ABIM) all provide different definitions, making the concept of professionalism appear arbitrary.

Some authors have sought to measure professionalism using checklists that note whether, for example, trainees shake hands and make eye contact with patients. Although this behavioral approach seems straightforward, it has been criticized for encouraging trainees simply to appear professional instead of developing their character. Critics of these definitions and approaches have turned to virtue theory for a richer normative account of professionalism. To date, however, no such account has drawn upon any specific theory of virtue or operationalized a particular set of virtues for use in medical education. This paper will draw upon Alasdair Maclntyre's concept of a "practice" to present such a virtue-based approach to ethical instruction. We do not argue that this concept itself provides sufficient normative content to the virtues. Rather, we will argue that medical students require the virtues Maclntyre identifies and will suggest how instruction in these virtues (with additional content derived from both the moral traditions of the profession and the originating moral traditions of the students) could bring clarity and substance to education for medical professionalism.

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MacIntyre on the Virtues
Following Aristotle, MacIntyre understands the virtues as habitual predispositions of character that issue in right action. Humans must acquire these predispositions through a process of ethical instruction. The student first emulates the ethical conduct of a more experienced teacher, who in turn reinforces the behavior until the student begins to exhibit it freely. In time, the successful student acquires a deeply ingrained habit of virtuous behavior and acts rightly even in unforeseeable and stressful circumstances. MacIntyre argues that human beings often first learn to exercise the virtues through participation in various social practices, where “practice” is understood as any “coherent and complex form of socially established cooperative human activity” in which certain goods are realized.17 p.191

Internal and External Goods
Practitioners of such activities can achieve two different types of goods: those external to a practice and those internal to it. External goods such as money, power, and prestige attach only by social circumstance to practices. By contrast, “internal goods” are inherent to practices and cannot be described without knowledge of and reference to the practice and its goals. For this reason, only those participating in a practice can identify its internal goods and determine when their peers achieve these goods.

With this conceptual framework in place, MacIntyre defines a virtue as an “acquired human quality” that “[enables] us to achieve those goods which are internal to practices.”57 p.191

Justice, Courage, and Truthfulness
According to MacIntyre, initiation into any practice requires three important virtues for success: justice, courage, and truthfulness. As an inexperienced participant in a practice, “[one has] to learn to recognize what is due to whom; [one has] to be prepared to take whatever self-endangering risks are demanded along the way; and [one has] to listen carefully to what [one is] told about [one’s] own inadequacies and to reply with the same carefulness for the facts.”17 p.191 The virtues of justice, courage, and truthfulness are thus necessary for any novice participant to learn to achieve a practice’s internal goods and to resist the potential temptations of external goods.

Medicine as a MacIntyrean Practice
The ways in which the virtues promote the achievement of internal goods clarify a person’s role in the particular practice of medicine. Medical practitioners collaborate to achieve a set of internal goods, which include, among others, the restoration of health and the relief of the suffering occasioned by illness and injury. Medicine remains a coherent practice because throughout its history its participants have pursued these same ends. Physicians rightly revere those who, like Virchow and Osler, have made outstanding contributions to the pursuit of these internal goods. As the heirs of this tradition, physicians themselves are most capable of determining what makes a good physician. Indeed, this assertion justifies physicians’ claim to expertise and autonomy in this domain. If medicine is a practice, then the three virtues MacIntyre identifies should be crucial to its success in the training of novice participants such as medical students and residents. And since medicine requires lifelong learning, these virtues remain of abiding importance throughout each physician’s career.

Justice and Medical Training
Consider the virtue of justice, which denotes excellence in determining what is due to whom. According to the Hippocratic Oath, physicians must demonstrate gratitude for their education by respecting their teachers, repaying this debt, and passing on their knowledge to the next generation.18 The Oath can also be read as requiring physicians to act in their patients’ best medical interests, even when it requires that they do nothing, or refer the patient elsewhere. In return for their patients’ trust and honesty, they must keep patient information strictly confidential. The Oath thus enjoins physicians to act justly toward their peers and patients by discerning what they owe to whom.

Justice is no less relevant to contemporary medical students. Medical students and residents today must learn to respect and obey their teachers, albeit without obsequious deference. As they progress in their training, they must encourage excellence in the less experienced trainees that they, in turn, will teach. In their first clinical encounters, students and residents come to understand what services they should provide to each patient, regardless of ability to pay, and to order only those tests that are necessary. They must commit themselves to protecting their patients’ confidentiality. They also begin to discern how to respond to claims that various entities in the increasingly complex health care system (such as credentialing organizations, government bodies, and pharmaceutical companies) make upon their allegiance. In each of these endeavors, the trainee must recognize what he or she owes to another, demanding the virtue of justice for success.

Courage and Medical Training
Medical trainees also require courage to develop into good physicians. According to MacIntyre, a person unwilling to risk harm on behalf of “some individual, community, or cause” thus “puts in question the genuineness of [one’s] care and concern.”17 p.192 Courage therefore spurs novice participants to devote themselves to one another and to the achievement of the internal goods of a practice. Medical students and residents will expose themselves to a range of communicable diseases. Many students assume the burdens of heavy financial debt. They take
part in the difficult medical decisions confronting physicians and patients, wherein the wrong choice could result in disability or death or perhaps a claim of malpractice. In response to such hazards, students and residents might be tempted to avoid physical risks or to distance themselves from patients in order to reduce emotional risks. The best physicians, however, cultivate authentic relationships with patients. They admit when they make mistakes or are unsure what to do. Such perseverance in the face of danger takes courage.

Physicians in training also require courage to resist the negative aspects of the “hidden curriculum” that medical educators have recognized.11 Students and residents on the wards face tremendous pressure not only to demonstrate their competence but also to “fit in.” In attempting to conform with the culture of the wards, they may imitate and internalize some of the unethical attitudes and behaviors of their peers and instructors.19,20 Yet the pursuit of medicine’s internal goods requires courageous trainees to risk disapproval by challenging the vices of their peers and supervisors. In cases of fraud or corruption, they must even be willing to report their peers to appropriate authorities.

Truthfulness and Medical Training
Medical trainees require a commitment to truthfulness that goes far beyond compliance with policies against cheating and plagiarism. Students and residents are often the first to see new patients and present information to the team. They might consider concealing deficiencies in their histories and examinations by fabricating data, potentially harming patients. Students and residents must also learn to discuss diagnosis, treatment, and prognosis candidly with patients and to take responsibility for mistakes they have made. Many trainees also participate in research, and they must present their data honestly, even when they contradict a hypothesis.

Yet truthfulness requires even more than such truth telling. Honest self-knowledge is also critical for trainees. Truthful students and residents evaluate their own performances accurately, admit what they do not know, accept appropriate criticism, and commit themselves to expansion of their knowledge. To the best of their abilities, they will reject misleading sources of information that obfuscate the truth, such as poor-quality research. They will document honestly, even when false claims might benefit themselves or their patients. Students and residents who do not acquire this virtue may develop habits of deception that become difficult to shed.

Teaching the Virtues
This analysis of the role of virtues in medicine could provide the basis for a form of moral instruction in which medical schools encourage students to practice the virtues. Instructors could explain the necessity of the virtues for success as students of medicine and as lifelong learners, and they could exhort their students to expect these virtues in their teachers and peers. The three virtues described above are certainly necessary, but they are not sufficient for becoming a good physician. Other virtues specific to the practice of medicine, such as compassion, should also be taught.21

Virtues cannot be taught solely in the classroom, however. Trainees learn virtues through active participation in practices, for virtues are not abstract concepts but rather predispositions of character that eventuate in good behavior. Furthermore, trainees cannot acquire and practice the virtues apart from a community devoted to these virtues. Therefore, students will not learn the virtues unless faculty and staff exemplify them, and academic medical centers must foster a culture in which the virtues are rewarded and their corresponding vices punished. Outstanding faculty members could be paired with small groups of trainees to provide role-modeling in the virtues, in an apprenticeship model.4,6,7,11 Such faculty could also provide a space for reflection, as research indicates that a narrative medicine curriculum taught in such small groups promotes student and resident development.22,23 Leaders at academic medical centers would need to support, potentially at some financial loss to the institution, the time away from other duties required for faculty to teach the virtues effectively. This approach to ethical instruction therefore makes demands of students and of all those who work at academic medical centers.24

A potential advantage of this focus on the virtues is that it delivers some ethical content that the concept of professionalism has lacked. The professionalism movement has attempted to respond to the many contemporary threats to ethical practice by deriving a code of conduct from medicine’s status as a profession. While well-intentioned, such efforts do little to inform medical educators about specific, observable behaviors that can be evaluated. Likewise, consensus statements on professionalism promulgated by experts may seem moralizing to medical trainees and appear less important than the clinical knowledge that will appear on their exams. A virtue-based approach, by contrast, provides a list of praiseworthy qualities that instructors can use to assess their trainees.25 Students and residents may also find virtues more immediately relevant, as the virtues derive from the learning process itself.

Can Virtue Be Taught?
Some object that moral formation takes place so early in life that the adults arriving at medical schools cannot learn the virtues.9 Aristotle and MacIntyre agree that a child’s earliest caregivers take primary responsibility for disciplining actions such that the virtues begin to emerge. Medical education can only build upon this foundation, making the identification of prospective students who already exhibit at least rudimentary virtues a crucial task.
Can Virtue Be Assessed?
Another objection is that virtues cannot be assessed, leaving no way to gauge students’ progress. Some argue that education in professionalism requires outcome measures, preferably unbiased and quantifiable behavioral checklists. Recent work in the social sciences suggests that virtues may be more amenable to measurement than such critics suppose. However, if MacIntyre’s account is correct, instruction in the virtues will simply not have a fully reproducible method with easily quantifiable outcomes. Other subjects in medical education such as pathology and pharmacology can be taught and measured by anyone with the requisite conceptual knowledge. The virtues, however, are not concepts but rather habits of character. They must be modeled in concrete situations, and only those educators who demonstrate the virtues in their own practice can teach and assess them. The requisite educational model resembles the way in which a master musician teaches a student. The novice musician surely needs music theory and history, but the most important part of his or her education depends upon an intimate relationship with a teacher capable of recognizing and cultivating excellent performance. A music teacher can supply a grade, and that grade is objective in that it depends on the real attitudes, words, and acts of the student, not merely on the whims of the teacher. Yet the grading of musician-ship cannot be reduced to a checklist of specific behaviors such as “always hits C#m when this note appears on the score.” As the aphorism goes, not everything that counts can be counted, and not everything that can be counted counts. Much like excellence in music, the virtues are difficult to quantify and measure, but an experienced master can recognize them where they exist. A virtue ethics curriculum would need to rely upon experienced clinicians to determine when their trainees’ behavior demonstrates the virtues. Yet these evaluations would not be subjective or arbitrary but based on correct assessments of observable behaviors (see Table 1). Indeed, the most recent version of the “milestones” for education in family medicine already ask medical educators to assess virtues such as “honesty” and “compassion” in their trainees. Our model suggests a way in which educators might evaluate for these and other virtues.

Why Virtues and Not Rules?
Others object that educators should teach their students moral rules instead of virtues, because it may not matter that a physician has bad character, as long as he or she follows the rules. Such a system would be easier to teach and enforce, and it might protect patients better than a system that relies on virtue. Virtues and rules, however, are not mutually exclusive. Aristotle and MacIntyre argue that fidelity to good rules is, in fact, one of the virtues. Enforcement of such rules is also part of teaching virtue. For example, a trainee might initially follow the rules protecting patient privacy strictly to avoid punishment but might eventually internalize these rules as a set of behaviors freely chosen, as a matter of justice. As Shakespeare wrote, “Use almost can change the stamp of nature.”

While necessary, however, moral rules require supplementation with the virtues. First, a system that enforces adherence to rules, ignoring trainees’ moral formation, risks producing physicians who only want to avoid getting caught. Physicians must be worthy of trust to do the right thing even when no one is looking. Second, institutions sometimes make bad rules, and a physician trained only to follow the rules may lack the virtues, such as courage, necessary to recognize and oppose such rules. Third, even the most comprehensive set of rules cannot possibly provide decisive resolution to every ethical dilemma that clinicians confront. Pellegrino has argued for the importance of the virtues in sustaining the physician-patient relationship that informs interpretation of moral rules. Fourth, because virtues become habitual, the physician of good character will tend to act rightly when fatigue, stress, long hours, and clinical volume conspire to make reasoning based on moral rules impossible.

Which Virtues?
A final objection is that the virtues are themselves subject to philosophical debate. Although this essay has focused on three particular virtues, we acknowledge that other virtues are indispensable for medical practice. MacIntyre also argues that practices and their attendant virtues must be embedded in a tradition of inquiry about the good life. A tradition enriches and specifies the virtues such that they become normative for all those within the tradition. The existence of many divergent moral traditions in the contemporary world explains why, in difficult cases, practitioners might interpret the medical virtues differently. According to MacIntyre, only within a tradition can one make a conclusive rational argument about the rightness or wrongness of such controversial practices as abortion, sale of organs for transplant, and euthanasia.

To develop the virtues, then, students and physicians must draw upon not only the traditions of medicine dating back to Hippocrates but also the cultural and religious traditions of their own moral formation. Such “open pluralism” might
enrich the debate about the virtues the good physician requires. Although it would not end all controversy, education in the virtues could provide new direction and energy to the debate about the moral formation of physicians, as it would allow educators and students to engage with traditions of virtue ethics using a common language.

Conclusions
This paper has drawn upon MacIntyre’s virtue theory to sketch an approach to ethics education in medical schools and residency programs. Further inquiry could begin to describe a detailed curriculum, recognizing that curricula will necessarily vary between institutions depending on available resources. Current educational research may also inform such efforts at implementation. If adopted, this method could give substance to professionalism education. Whereas the diversity of opinions on professionalism portends either confusion or ambiguity, the recovery of the language of virtue might provide focus by directing attention to the justice, courage, and truthfulness necessary to become a good physician.

Table 1: The MacIntyrean Virtues of Novice Practitioners as Applied to Medicine

<table>
<thead>
<tr>
<th>Virtue</th>
<th>Description</th>
<th>Examples of Associated Behaviors and Attitudes</th>
</tr>
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<tbody>
<tr>
<td>Justice</td>
<td>Excellence in determining what is due to whom</td>
<td>• Shows gratitude and respect toward teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Teaches more inexperienced learners</td>
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<tr>
<td></td>
<td></td>
<td>• Keeps patient confidentiality</td>
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<tr>
<td></td>
<td></td>
<td>• Strives to give patients what is their due regardless of ability to pay</td>
</tr>
<tr>
<td>Courage</td>
<td>Willingness to risk harm on behalf of a cause</td>
<td>• While taking appropriate precautions, does not avoid exposure to pathogens when necessary for patient care</td>
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<tr>
<td></td>
<td></td>
<td>• Exhibits appropriate emotional and interpersonal engagement with patients</td>
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<tr>
<td></td>
<td></td>
<td>• Resists the hidden curriculum</td>
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<tr>
<td></td>
<td></td>
<td>• Is not afraid to speak out on behalf of patients</td>
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<tr>
<td>Truthfulness</td>
<td>Honest expression and a high regard for the truth</td>
<td>• Presents patient and research data honestly</td>
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<td></td>
<td></td>
<td>• Is willing to say “I don’t know”</td>
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<td></td>
<td></td>
<td>• Accepts and responds well to appropriate criticism</td>
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<tr>
<td></td>
<td></td>
<td>• Seeks reliable sources of medical information</td>
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<tr>
<td></td>
<td></td>
<td>• Capable of self-criticism and self-directed learning</td>
</tr>
</tbody>
</table>

References


35. William Shakespeare, Hamlet, 3.4.168.

36. Plato, The Republic, 2.359a-360d.