appropriately hesitant. He also tried to weigh the family's desire for the patient to consent to receiving a VAD but recognized that this was the patient's decision to make. Given the patient's priorities and preferences in light of the intervention's risks, the cardiologist ultimately recommended against a VAD, explaining how he had reached this conclusion. He suggested that everyone involved consider the decision for a few days before finalizing it and that the VAD and palliative care teams be consulted for additional perspectives and alternatives.

Both consulting teams reviewed the clinical evidence and reevaluated the patient's and family's understanding of the clinical situation with and without VAD insertion. The patient clearly understood the alternatives and what he was giving up, and his decision seemed consistent with long-held values. He hoped he could live longer with standard heart-failure treatment, but he clearly didn't want VAD surgery. He was

psychologically and spiritually prepared to die if that was what happened, and his family came to accept that the decision was his to make. The patient was discharged to home hospice. He continued taking all his heart-failure treatments, aiming to live as well and as long as he could without further invasive treatments or hospitalizations.

In the fifth step, evaluating our performance, we came to see this case as a good example of providing recommendations and allowing patient choice.[3] The clinicians made sure the patient understood the treatment options and implications, but their recommendation gave considerable weight to his values and preferences. Because this was a high-stakes decision and forgoing a VAD was an unusual path for the heart-failure team, they requested opinions from the VAD and palliative care teams to ensure that the patient understood his decision's consequences and implications. Ultimately, giving pa-

tients and families authority over medical decisions after engaging them extensively with our knowledge and recommendations will allow patients to get the most out of medical interventions.

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BECOMING A PHYSICIAN

Freedom from the Tyranny of Choice — Teaching the End-of-Life Conversation

Daniela Lamas, M.D., and Lisa Rosenbaum, M.D.

Thirty years ago, an intern had a conversation with a patient that he regrets to this day. The patient, a young man with widely metastatic lymphoma, unresponsive to chemotherapy, now had progressive dyspnea. The intern knew that even with intubation, his patient would soon die. Although the norm at that time was for physicians, including house staff, to make end-of-life decisions without involving the patient, the medical team, struck

by the patient's youth, asked the intern to elicit his wishes. Uncertain and frightened, the patient said, "I want everything." Intubation followed, and then multiorgan system failure; the patient died on the ventilator weeks later, never getting an opportunity to say goodbye to those he loved.

More recently, another resident made a decision he feared he would regret. A woman in her 30s with widely metastatic breast cancer presented with shortness of

breath resulting from bilateral malignant effusions. The resident's job was to triage the patient to the appropriate level of care. Although her cancer had been diagnosed a decade earlier, no physician had discussed her end-of-life wishes. In the middle of the night, the patient was in respiratory extremis; intubation was imminent if her life was to be prolonged. The resident decided to make it clear to the patient that she was dying. Comfort mea-

sures were initiated. The resident feared he'd overstepped his bounds and that the patient's oncologist would be angry. Instead, when the patient died peacefully 3 days later, the oncologist and the family all expressed their gratitude.

In the three decades between these two experiences, the typical approach to discussing resuscitation status has evolved from a paternalistic one to one in which patients and their families are often asked to choose from a bewildering array of medical possibilities. To rectify a perceived violation of patients' autonomy, health care institutions now require physicians to involve patients and families in these decisions. But in our experience, this shift has come without the requisite education to prepare trainees to lead such conversations confidently and effectively.

Data confirm what we have observed during our training. The few studies that have assessed residents' ability to lead end-of-life conversations indicate that they're not being taught this critical skill. In one recent survey, internal medicine residents said they were frequently asked to lead such conversations, but only a third felt comfortable doing so. Very few recalled ever having a faculty member observe them leading an end-of-life discussion.[1] Another study found that nearly a quarter of the time, patients and physicians who had engaged in an end-of-life discussion had different interpretations of the agreed-on conclusions regarding the direction of care. Such miscommunication was manifest, for instance, in the absence of do-not-resuscitate orders for patients who had opted against resuscitation. In other cases, patients didn't re-

call ever having had such a conversation.[2]

In our own experience, conversations tend to focus on specific interventions rather than overarching goals of care. We have observed house officers asking patients, "Do you want me to pound on your chest or put a big IV in your neck if you need it?" Even when patients choose to decline further invasive measures, they or their families are often asked such specific questions as "Do you want an insulin drip?" "If we turn off the insulin drip, are you OK if we don't check the sugar?" and "Do you still want antibiotics even if we're not drawing labs?" Though this approach caters to the dogma of informed choice, it ignores the fact that most patients have no basis on which to make such decisions, and it undoubtedly leaves patients and families shouldering the responsibility for deaths that couldn't have been prevented regardless of what they decided.

This impulse to offer patients a menu of options also reflects a fundamental insecurity about our ability to prognosticate. Who are we to know when a patient — especially one we've just met — will die? Yet prognostication is a learnable skill, like any other; there are even algorithms that incorporate clinical data to help physicians arrive at more accurate prognoses. Our hesitation to prognosticate, however, also stems from reluctance to interfere with patients' relationships with their outpatient physicians, many of whom have not initiated these conversations. Indeed, according to a survey of nearly 2500 patients with metastatic cancer, only 20% of the patients' oncologists had documented their code sta-

tus.[3] Although the situation is far from ideal, the reality is that trainees are frequently the first to initiate these conversations — often during a hospitalization for worsening disease.

Although we learn guidelines for using antibiotics and managing acute coronary syndromes, in our experience, we do not learn similar guidelines for end-of-life conversations. Although experts suggest that these conversations should clarify prognosis and end with the physician's recommendation regarding CPR, this approach is not widely disseminated to trainees. Indeed, including these key components in the conversation may even be rare among attendings. One study reviewed audio recordings of 19 code-status conversations. In only one case was prognosis discussed, and none of the attending hospitalists offered a recommendation about CPR.[4] Although there are published models for these conversations, such as the step-by-step SPIKES approach (entailing "setting up," "perception," "invitation," "knowledge," "emotions," "strategy and summary"), they are not widely used.

Despite the current push toward "patient-centered" care, data suggest that when it comes to the end of life, some patients prefer a more physician-driven decision-making process. In a cohort study of seriously ill hospitalized patients, only 16% wanted to make the treatment decision alone.[5] As Susan Block, a palliative care physician and psycho-oncologist at Brigham and Women's Hospital in Boston, notes, shifting the burden of responsibility from doctor to patient or family is not patient-centered at all.

Block argues that leading end-

of-life conversations should be treated like any other competency, such as placing a central line or choosing appropriate antibiotics for pneumonia. An attending physician should model the skill, then watch trainees and offer feedback. Prognostication should similarly become a required skill. For instance, every initial admission of a seriously ill patient should include an assessment of prognosis alongside the plan for each organ system. Assessments should be discussed on rounds, and residents should be required to follow up to determine their accuracy.

Of course, leading these conversations requires some skills that are difficult to teach, such as intuiting the responses of patients and families. Nevertheless, Kenneth Prager, director of clinical ethics at Columbia University Medical Center, says education remains imperative. He categorizes trainees into three groups: naturally good communicators, inherently poor communicators, and a middle group who simply need proper instruction and role models.

Some attendings model these conversations for their teams and offer tangible advice. For instance, recognizing our tendency

to shy away from death, Aaron Waxman, an intensivist at Brigham and Women's Hospital, insists that each conversation include the words "death," "dying," and "die." Rather than try to dissuade patients from choosing resuscitative measures by stressing their potential brutality, Waxman chooses to focus on ways the physician can help to promote comfort. Through his example, he teaches residents that patient autonomy is not synonymous with endless choice.

These conversations won't get any easier. The population is aging. Hospitalists have assumed the care of patients who would once have been followed by their long-time physicians. Work-hour reform increasingly erodes residents' relationships with inpatients. And with medical advances such as extracorporeal membrane oxygenation, ventricular assist devices, and transplantation, there's almost always something else we could offer.

Franz Ingelfinger, a former editor of the *Journal* who died of esophageal cancer, wrote an essay that the *Journal* published posthumously, in 1980, about what he sought from his own physi-

cians at the end of life. He wrote, "A physician who merely spreads an array of vendibles in front of the patient and then says, 'Go ahead and choose, it's your life,' . . . does not warrant the somewhat tarnished but still distinguished title of doctor."

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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BECOMING A PHYSICIAN

Lecture Halls without Lectures — A Proposal for Medical Education

Charles G. Prober, M.D., and Chip Heath, Ph.D.

The last substantive reform in medical student education followed the Flexner Report, which was written in 1910. In the ensuing 100 years, the volume of medical knowledge has exploded, the complexity of the health care system has grown, pedagogical

methods have evolved, and unprecedented opportunities for technological support of learners have become available. Yet students are being taught roughly the same way they were taught when the Wright brothers were tinkering at Kitty Hawk.

It's time to change the way we educate doctors. Since the hours available in a day have not increased to accommodate the expanded medical canon, we have only one realistic alternative: make better use of our students' time. We believe that medical education