

YOUNG LEADERS



The founder of Fostering Improvement in End-of-Life Decision Science (FIELDS), Scott Halpern, MD, PhD, MBE, discusses the issue of end-of-life care with colleagues at the Perelman School of Medicine at the University of Pennsylvania.

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Employing Behavioral Economics And Decision Science In Crucial Choices At End Of Life

A program created by physician Scott Halpern employs multidisciplinary teams to help patients and family members make end-of-life decisions that track with their goals.

When Scott Halpern was a resident at the University of Pennsylvania, he was struck by the many failures in health care—and by how little the sector had drawn on lessons from

other fields to correct them. Many patients “were not receiving known best practices”—such as having the heads of their beds elevated to reduce the risk of hospital-acquired infections, or having urinary catheters removed when they were no longer indicated.

Halpern knew that other fields had moved to reduce such human error through the use of checklists and other tools, or by making certain procedures automatic. He wondered why orders were not *automatically* placed for such processes of care, instead of requiring physicians to order the option that would best serve most patients.

These and other musings propelled Halpern to his current position as an assistant professor at the Perelman School of Medicine at the University of Pennsylvania—and to his status as a leader in the field of medicine, ethics, and decision science. An expert in behavioral economics, Halpern, 39, says he wants to use insights into the psychology of human decision making “to develop, test, and implement scalable interventions that improve the quality of the health decisions made by patients, family members, and providers.”

He has applied these approaches to choices about smoking cessation and organ donation. Now, he’s focusing on some of the most critical decisions humans can ever make: those connected with health care at the end of life.

To that end, Halpern formed the Fostering Improvement in End-of-Life Decision Science (FIELDS) program at Penn, which puts multidisciplinary teams to work improving the timing, content, and outcomes of the end-of-life decisions made by patients, family members, and providers. The program draws heavily on the behavioral economics concept of “choice architecture”—that is, the importance of the ways in which choices are presented and the environments in which decisions are made. Halpern and his colleagues believe that it’s possible to shape these influences on choice so that patients’ and family members’ decisions are more likely to match their own real goals.

Ezekiel Emanuel, Penn’s vice provost for global initiatives and chair of the Department of Medical Ethics and Health Policy, sums up Halpern’s work: “The key tension [he] explores is that as a society, we wish to support the authority and autonomy of patients.... How-

Curriculum Vitae

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ever, we also want patients to make decisions that promote their own interests—a task that they are often unable to achieve when left alone because they procrastinate or get tripped up by other natural foibles of human decision making. So...do we let patients make decisions that divert them from their own health goals, or do we intervene by actively directing patients toward choices that are most likely to promote their goals?"

Halpern opts for the latter. "In health care, as in many other facets of life, how decision options are presented influences the decisions people make," he says. One way to gently steer patients toward a particular choice is to make it the default. In other words, *not* choosing it requires an active decision.

A study Halpern and colleagues conducted about the impact of defaults on decisions could transform end-of-life care. Patients with incurable lung diseases were randomly assigned to one of three groups to complete advance directives. The advance directive for the first group defaulted to comfort-oriented care. The second defaulted to life-extending care. The third received a standard advance directive, encouraging decisions about treatment goals and interventions. Patients presented

with an advance directive that defaulted to palliative care were significantly more likely than patients in the other two groups to choose palliative care and forgo life-sustaining interventions.

"The important thing to remember about defaults is that they lead gently," says Halpern. "In no way, shape, or form do they eliminate options."

Using the insights gleaned from this study and others, Halpern and his colleagues are working with a large private insurer to find ways to encourage patients to complete advance directives. "Although more than 70 percent of people say they want to complete an advance directive," Halpern says, "only about 20 percent of them do." From the perspective of behavioral economics, he explains, these figures are not surprising. "Whenever there are high up-front costs"—such as thinking about one's own death—"and the benefits are distant, humans procrastinate."

At Penn, Halpern is also deputy director of the Center for Health Incentives and Behavioral Economics, a senior fellow at the Leonard Davis Institute for Health Economics, and senior scholar at the Center for Clinical Epidemiology and Biostatistics. He spends two months a year as an attending physician in an intensive care unit (ICU) in which one

of every five patients dies following decisions to forgo life support.

Halpern's scholarship is also prolific. He has authored seventy-five peer-reviewed papers, eight of which have appeared in the *New England Journal of Medicine* or the *Journal of the American Medical Association*, plus invited editorials and chapters.

Several have moved the health policy needle in important ways. For example, a 2005 article he published in the *Journal of the American Medical Association* made the case for changing patient consent to HIV testing from "opt in" to "opt out" so as to overcome psychological barriers to testing that delay appropriate care. After extensive consultations with Halpern, the Centers for Disease Control and Prevention recommended the opt-out approach in revised HIV testing guidelines it published in 2006.

Among other topics, Halpern has examined how scarce health care resources are allocated, such as ICU beds. One insight from health economics is that "capacity strain"—the stress faced by a maxed-out ICU—doesn't necessarily degrade care quality. On the contrary, "high strains seem to breed efficiency by reducing low-value extensions of ICU stays," Halpern notes. It's a conceptual paradigm shift that suggests a practical one: "Closing beds could cut costs without harming patients," he says.

Halpern has won more than a dozen honors, including the 2011 Alice S. Hersh New Investigator Award, given annually to the nation's most promising health services researcher. He is in high demand as a lecturer, a mentor, and a consultant to a lengthy roster of clients that includes the World Bank and the National Institutes of Health.

As wide-ranging as his work is, unifying it is a wish to improve the quality of care provided to patients with serious illnesses. "My hope," he says, "is that by understanding the range of inadvertent influences on how patients and providers make decisions, we can develop policies and practices that better achieve what most dying patients want: comfort and dignity at the end of life." ■

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