

and fellowships (see "Gains for Graduate Students," page 58). President Faust promised more action in the "near future," reflecting the increasing importance of graduate and professional education and

the resulting "enormous debt" many students assume.

"What we're trying to do," Faust said, "is reconfigure...what affordable access means," from the time students decide

where to apply to college to their years as undergraduates. The size and reach of the new aid program, she stressed, demonstrate that "We're reframing the whole approach."

## The Talking Cure

FOR DECADES, insurers and risk-management departments have told doctors that if they make a mistake, the *last* thing they should do is admit it to the patient. But in the new millennium, national medical organizations have begun signing on to a simple but revolutionary idea: doctors should be allowed, and encouraged, to talk openly to patients even when harm occurs in the course of medical care. In 2001, the national accrediting body for hospitals began requiring written policies on disclosing such "adverse events" to patients. This gratifies Lucian L. Leape, an adjunct professor of health policy at Harvard School of Public

Health (HSPH) and former pediatric surgeon who has spent nearly two decades trying to bring about a culture change in the way the medical community views mistakes by clinicians.

Leape is one of the authors of "When Things Go Wrong," a 2006 paper that recommends ways for dealing with adverse events. (He prefers that term to "medical errors" because patients may suffer harm from factors beyond a doctor's control—for example, a previously undetected medication allergy—and such episodes can be just as traumatic as incidents in which the doctor was at fault.) Among the suggestions: that doctors talk to patients or their families within 24 hours of an event's occurrence, if possible, and follow up later;

that they accept responsibility and express regret; that the communication come from the doctor most involved in the patient's care, not from an administrator; and that the hospital waive the patient's bills and provide reimbursement for other expenses. To help hospitals flesh out their often terse written policies, the paper also suggests words for such difficult doctor-patient conversations: "We failed you." "This shouldn't have happened." "We're going to find out what happened and do everything we can to see to it that it doesn't happen again." The Harvard teaching hospitals

endorsed the document unanimously; their malpractice insurer, as well as several of the hospitals, each sent a representative to the working group that wrote the paper.

IT IS HARD to overestimate how ingrained the old way of doing things is in doctors' psyches. "This is shameful to say, but in many circumstances, the advice was 'Do not talk to the family at all'—period," says Robert Truog, professor of medical ethics in the department of social medicine at Harvard Medical School (HMS). "You can imagine a physician or a nurse, who is feeling horrible about what's just happened, being told by their attorneys not to have any communication. You can imagine, from the family's side, how horrible it is to have had a relationship with the doctor or nurse, and to suddenly have that completely cut off. And yet that was standard practice until recently."

Last year, Truog, who also directs the Institute for Professionalism and Ethical Practice (IPEP) at Children's Hospital Boston, helped design a program that trains doctors to have conversations of the kind Leape advocates. Employees of Beth Israel Deaconess Medical Center and Brigham and Women's Hospital have gone through the training; Massachusetts General Hospital (MGH) employees will attend this spring. Truog and David Browning, an HMS lecturer on anaesthesia and senior scholar at IPEP, used a coaching model: at Beth Israel, for example, just 10 people were trained, but the nurse on duty as administrative clinical supervisor always knows how to reach them, and can select the one with expertise best suited to each situation. If it's a surgery case, the hospital's vice chair of surgery is one of the coaches; for nursing cases, the group also includes the nurse director of professional practice development.

The curriculum grew out of "Difficult Conversations," a more all-encompassing program on doctor-patient communication that Truog and Browning had devel-



Lucian L. Leape

Photograph by Stu Rosner

## A Century of Commerce

**Harvard Business School (HBS)** is throwing a year-long centennial celebration. The anniversary itself falls on April 8, the date in 1908 when the Harvard Corporation approved the new entity. On campus that day, alongside birthday hoopla, faculty members and students will join in HBS-style case-method discussions of the school, based on a new case study being prepared by MBA Class of 1949 professor of business administration Richard S. Tedlow as part of a larger history he is writing.

The events culminate in a “Global Business Summit” scheduled for October 12-14 on the campus and at the Boston Convention and Exhibition Center. Keynote speakers include Bill Gates '77, LL.D. '07, chairman of Microsoft Corporation and co-chair of the Bill & Melinda Gates Foundation; Ziegler professor of business administration and Tisch professor of history Niall Ferguson; President Drew Faust; and Eliot University Professor Lawrence H. Summers, Ph.D. '82, LL.D. '07, past president and former U.S. Secretary of the Treasury.

Between the major addresses, there will be dozens of panel discussions and interactive classroom sessions, involving faculty members and alumni from around the world, on topics ranging from agribusiness and energy to asset management, entrepreneurship, and public service. Many of these sessions are based on private conversations and colloquiums that HBS professors have conducted with business leaders in recent months, gathering

insights on current practice and theory. Some exercises involve the leaders of other business schools, and are meant to strengthen HBS's management and leadership education. Although public access to much



Above, Radcliffe women registering for classes at Baker Library, 1960; right, the first eight women admitted to the full M.B.A. program, 1963; below, 1965 study group



of this work is limited, the centennial website ([www.hbs.edu/centennial](http://www.hbs.edu/centennial)) has interactive faculty-led discussions on

topics of current interest (for example, innovation), and details on the summit schedule and participants.

Decidedly public is the series of exhibitions mounted by Baker Library from its vast historical collections. The current installment, *A “Daring Experiment”: Harvard and Business Education for Women, 1937-1970*—a sample of which appears here—is on display through May 16. Internet visitors can tour the materials for this and other shows in the series ([www.library.hbs.edu/hc/exhibits/index.html](http://www.library.hbs.edu/hc/exhibits/index.html)), and, probing deeper, explore digital research links, finding aids to the underlying collections, on-line research materials, and even related bibliographies—a vivid demonstration of the school's educational technology.

In welcoming alumni to participate in the centennial, dean Jay O. Light emphasized that the planning for all the events “is grounded in the work of our faculty, rooted in the spirit of our classroom—whether in person or virtual—and based on our commitment to ideas with power in practice.”



oped. Typically, young physicians and nurses learn how to deal with patients and families through trial and error, Truog says. “The damage that can be done there is just as real as the damage that can be done by not being adequately skilled at a procedure.”

Fittingly, the program extends simulation, a method used to teach doctors technical skills, to the interpersonal. In practicing a new surgical technique, doctors can operate on a computerized mannequin that evaluates their performance.

In practicing conversations, they talk with actors who tell the doctors what they might have done better—and how the conversation felt from the patient's side. After an adverse event, responders have a continuum of possible ways to explain what happened, notes Kenneth Sands, Beth Israel's senior vice president for healthcare quality. “The communication could be ‘Your medication gave you a seizure,’ or ‘You were given the wrong medication; therefore, you had a seizure,’ or ‘You were given the wrong medication

because the resident did not write the order clearly, and that's what gave you a seizure.”

It's not enough to tell a patient, “There was a miscommunication,” Browning echoes; unless the doctor explains what kind of miscommunication, and between which parties, patients and families will feel the doctor is hiding something or underestimating their capacity to understand what's going on. Truog says families who revisit the ICU years later typically don't remember many medical aspects of



the care, but have “vivid memories of what somebody said to them. Those memories could be very positive—exactly the right word when they needed to hear it—or searingly negative, creating anger that never goes away.”

Beyond merely tolerating such straightforward conversations, the Harvard hospitals’ medical malpractice insurer is funding

the training program. Controlled Risk Insurance Company/Risk Management Foundation (CRICO/RMF), the self-insurance vehicle for the University’s teaching hospitals, has also produced a documentary, directed by Koplow-Tullis professor of general medicine and primary care Thomas L. Delbanco, that features interviews with victims of medical injuries and their fami-

lies. Many of the sentiments expressed aren’t pleasant—“One doctor told me I had a 50 percent chance of living...and then he walked away,” one woman recalls—but the insurer uses it because “sometimes it’s hard to hear the voice,” says Robert Hanscom, the foundation’s vice president for loss prevention and safety. “You can only spend 10 minutes with this patient—gotta move on

## Inevitable Mistakes, Avoidable Harm

**The culture of medicine** has long tried to keep doctors from making mistakes by indoctrinating them to believe that they *shouldn’t* make mistakes. “It’s the way we’re trained as physicians,” says Tejal Gandhi, executive director of quality and safety at the Harvard-affiliated Brigham and Women’s Hospital. “Unfortunately, a lot of times, people feel like they need to be perfect.”

But doctors are human and therefore prone to error, so many in the healthcare industry are urging a culture shift: assume that mistakes will happen and focus on catching them before they harm a patient, by building double- and triple-checks and balances into systems. This way, mistakes become breakdowns in the system, rather than personal failings. “It isn’t a case of an individual failing a patient,” says Gregg Meyer, senior vice president for quality and safety at Massachusetts General Hospital. “It’s a case of the system failing both the patient and the provider.”

The old culture of perfection may actually hold hospitals back. Amy C. Edmondson, Novartis professor of leadership and management at Harvard Business School, has shown that the way hospitals handle mistakes, and employees who make them, is integral to improving patient safety (see “Secret Errors Kill,” March-April 2001, page 11). Consistent reporting of errors is crucial, but employees won’t report mistakes—colleagues’ or their own—unless the hospital has cultivated an environment of what Edmondson calls “psychological safety.” Nurses and other clinicians whose status is relatively low hesitate to speak up, even if they see a doctor making a mistake that could hurt a patient, if they feel the doctor will respond harshly to criticism or questioning. That dynamic exists in many workplaces, but in an operating room, the consequences can be grave. “We need surgeons to be unbelievably confident,” says Edmondson. “But they also need to be confident enough to embrace someone else bringing up something they might have missed, like the fact that the x-ray is on the light box backwards.”

Some Harvard teaching hospitals have tried to create the receptive environment Edmondson describes. Brigham and Women’s now responds to each report of a mistake or a near miss, telling the person who filed the report what action was taken so staffers know their comments aren’t being ignored. At Beth Israel Deaconess Medical Center, the obstetrics unit reduced adverse events by 25 percent by borrowing practices from another high-stakes environment: the airline industry. The approach, known as “crew resource management,” strictly defines rules for communication and requires increased aware-

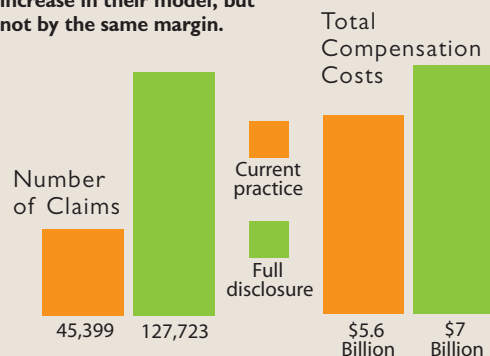
ness of the distribution of patients within the unit. Before, says Kenneth Sands, the hospital’s senior vice president for healthcare quality, one of two obstetricians on duty might be taking a break in the lounge, waiting out a slow delivery, unaware that the other is handling three difficult births simultaneously. Today, Sands says, frequent huddles keep the staff abreast of everyone’s workload.

These new approaches to reporting mistakes, and to communication in general, are part of what the industry calls “quality improvement”: diagnosing ailments promptly and accurately; making sure patients get the right medication in the right dose; taking precautions to keep patients safe from hospital-acquired infections; and setting up systems that make serious errors—such as wrong-site surgery and mixed-up patient charts—all but impossible. The Institute for Healthcare Improvement (IHI), a Cambridge nonprofit, estimates that 15 million medically induced injuries occur each year, and recently launched a nationwide campaign aimed at preventing five million medical injuries in two years. Hospitals volunteer to participate by implementing changes that include taking steps to prevent adverse drug interactions, bedsores, surgical-site infections, central-line infections, and ventilator-associated pneumonia. “Historically, there have always been byproducts of care that have been considered inevitable,” says IHI vice president Joseph McCannon ’99. “We want to say today’s unpreventable, unavoidable form of harm might be tomorrow’s avoidable form of harm.”

In January, Beth Israel’s board took a step that aligns closely with the IHI initiative: it called for the hospital to eliminate all preventable harm by 2012. Sands says this effort requires evaluating skills and practices that range across everything the hospital does: “Supervision, communication, training, culture—if you go after these, you’ll fix several different types of adverse events at once.” That decision followed a Massachusetts Hospital Association announcement that member hospitals would no longer charge patients for costs associated with nine types of so-called “never events”—complications such as bedsores, injuries caused by falls, leaving a surgical instrument inside a patient, or giving a patient a transfusion with the wrong blood type.

For hospitals that don’t go for the carrot, there’s also a stick: Medicare recently announced that it will no longer pay bills for care in the wake of “never events.” Says Lucian L. Leape, an adjunct professor of health policy and a leader in the patient-safety movement: “There is clearly a rising acceptance...that there are certain things that shouldn’t happen, and therefore patients and insurance companies shouldn’t pay for them.”

In a recent journal article, Harvard faculty estimated the impact if hospitals nationwide adopted a full-disclosure policy. They projected the number of claims would nearly triple; money spent to compensate patients would also increase in their model, but not by the same margin.



to the next one. Sometimes it's hard to hear the patient say, 'I need someone to talk to about this. This is a terrible outcome for me and my family.'

Brigham and Women's has instituted a Web-based reporting system for adverse events and near misses. Beth Israel now has mandatory reporting forms for adverse events, and recently added a section for recording details of the subsequent conversation. And MGH has added disclosure to the topics covered during the internal discussion that routinely follows each adverse event. Gregg Meyer, MGH's senior vice president for quality and safety, says giving disclosure such official status tells employees, "Not only is disclosure something that's permitted, it's something we expect."

Some proponents of open disclosure believe it will save money: if people find out what happened up front, the argument goes, they are less likely to sue. In one instance, five years after the University of Michigan hospital system adopted an open-disclosure policy, in 2001, the number of malpractice claims filed against the hospital system annually had declined more than 50 percent, and litigation costs decreased accordingly. But whether those results will hold true elsewhere is unclear. In a controversial paper published in *Health Affairs* last year, professors from HMS and HSPH, led by David Studdert, adjunct professor of law and public health, modeled what would happen if hospitals nationwide began practicing full disclosure. Even assuming the average amount paid out after a medical injury fell by 40 percent, they projected that the total spent on compensating patients would rise by about a quarter, from \$5.6 billion to \$7 billion a year, because the number of claims filed would nearly triple as more patients found out that they had been harmed.

That study's conclusions sparked a firestorm, but the people implementing the new policies at Harvard's teaching hospitals say questions of cost are beside the point. "This may save us money—I don't know. It's hard to say," says Hanscom. "We did it because we recognized that we really had to

support the physicians in their ability to do the right thing in their care of patients. We'll see how the money plays out."

As a self-insurance vehicle for teaching hospitals, rather than a commercial insurer, CRICO/RMF is uniquely situated to carry out such an idealistic reform. And the hospitals' teaching status means they, too, are uniquely situated to try something untested. "You have a lot of turnover among trainees, and so you can quickly inculcate a new philosophy," says Ken Sands

of Beth Israel. HMS itself has incorporated adverse-event disclosure into its curriculum: first-year students view Delbanco's documentary, and Leape's papers on error prevention and disclosure are required reading for third-year students.

Leape and others are pushing for even more complete integration. After all, frank conversations aren't just good for patients, they're good for doctors, too: hospitals, including Brigham and Women's, are creating peer-support programs to help staff members cope with stressful experiences. Leape has first-hand knowledge of adverse events' psychic toll. Thirty years ago, when he was a practicing surgeon, an 18-month-old child died while in his care. She had a bleeding ulcer, and Leape says he waited too long to operate. He apologized to the child's parents, but the incident left "an indelible impression." When something like that happens, he says, "you remember it forever."

## Doctoral Director

ALLAN M. BRANDT became dean of the Graduate School of Arts and Sciences (GSAS), within the Faculty of Arts and Sciences (FAS), on January 1. A historian of science, Brandt holds a joint appointment as Kass professor of the history of medicine at Harvard Medical School (HMS). The appointment was announced on December 12 (see [www.news.harvard.edu/gazette/2007/12.13/99-gsas.html](http://www.news.harvard.edu/gazette/2007/12.13/99-gsas.html)).

Brandt will succeed Theda Skocpol, Thomas professor of government and sociology, who became dean in 2005 but announced her intention to step down last spring. She made her final report to the faculty at an FAS meeting on December 11; in it she highlighted forthcoming increases in financial aid for doctoral students in the social sciences and humanities, and new funds that will allow more graduate students in the sciences and engineering to be admitted across the University. (For details, see "Gains for Graduate Students," page 58, on the financial initiatives, and "Focusing on the Ph.D.," page 64, on Skocpol's tenure.)

Brandt chaired the history of science department during the 2000-2001 through 2005-2006 academic years. That adminis-

trative experience, his dual appointments in FAS and HMS, and the nature of his academic work should serve him well in his new responsibilities. As Skocpol noted, the GSAS deanship is neither organizationally powerful nor equipped with the financial resources available to the deans of Harvard's separate faculties. But it affords access to exciting research, faculty members, and graduate students across the University, because GSAS is the steward of all of Harvard's Ph.D. programs, many crossing disciplinary and even school boundaries (see [www.gsas.harvard.edu/programs\\_of\\_study/programs\\_of\\_study.php](http://www.gsas.harvard.edu/programs_of_study/programs_of_study.php) for a complete list).

Of immediate relevance, during the fall term, Brandt (although on leave) began participating in the Graduate Policy Committee, which Skocpol established to review GSAS programs, resources, and directions. In that capacity, he worked directly with deans and faculty members in FAS, HMS, and the School of Engineering and Applied Sciences, and with GSAS administrative staff.

A Brandeis graduate who earned a Ph.D. in American history from Columbia in 1983, Brandt taught at Harvard from 1982 to 1990, and then returned in 1992. He has offered a popular undergraduate