



DO NO HARM

Medical errors kill some 100,000 Americans every year. How we can reverse the trend.

BY CLAUDIA KAPLAN

FOR MORE THAN 20 YEARS, TRIAL LAWYER Rick Boothman defended doctors and hospitals in malpractice lawsuits. The job taught him plenty about the disconnect between the defensive behavior practiced by the medical establishment and the humane treatment patients want. So when the University of Michigan Health System needed a new in-house attorney in 2001, Boothman made an offer: hire me and revolutionize your approach. We'll be up front with patients when medical errors happen, and we'll pay quickly when a case warrants it, rather than dragging everybody into court. "It's the decent thing to do," says Boothman. A new study published in August found that since Michigan adopted Boothman's program of disclosure and compensation, lawsuits have declined and legal-defense costs have dropped by 61 percent. There's no proof that acknowledging mistakes led directly to savings, but it didn't cause a malpractice frenzy either. "The sky doesn't fall in

when you are open and honest," he says.

Boothman's approach is part of an expanding push nationwide to tackle one of medicine's most complicated and agonizing blights. In 1999 the Institute of Medicine's landmark report "To Err Is Human" found that as many as 98,000 Americans die every year from preventable medical errors—a number many experts now believe is conservative. Since then, incorrect diagnoses, needless infections, drug mix-ups, and surgical mishaps have piled up as doctors face an onslaught of patients, an abundance of imperfect information, and an ill-served tradition of shaming and blaming individual practitioners when things go wrong. Health care, says Dr. Lucian Leape, a pioneer in patient safety and chair of the Lucian Leape Institute at the National Patient Safety Foundation in Boston, "remains fundamentally unsafe."

The debate over health-care reform (the first significant provisions of the new law kicked in last week) spotlighted

major weaknesses in the U.S. medical system, including errors. Even before the law's passage, the Centers for Medicare and Medicaid Services—now headed by Dr. Donald Berwick, a stalwart in the patient-safety movement—announced it would no longer reimburse hospitals for the cost of preventable complications, such as bedsores and wrong-type blood transfusions. Twenty-eight states now require hospitals to report infection rates to the public. And the reform law mandates that hospitals with high infection rates will see their Medicare payments reduced by 1 percent starting in 2015.

What is clear is that the culture of medicine must change. Books recently published by Harvard's Dr. Atul Gawande (*The Checklist Manifesto*) and Johns Hopkins's Dr. Peter Pronovost (*Safe Patients, Smart Hospitals*) are calling on doctors and hospitals to institute checklists modeled on the aviation industry to improve safety. Patients are exposing harmful experiences and mobilizing on the Internet.

RICHARD ROSS—BETTY IMAGES

Some doctors are humanizing the problem by talking publicly about mistakes they committed, defying the pervasive fear of lawsuits and professional shame. And hospitals are creating educational programs for staff. Harvard's Institute for Professionalism and Ethical Practice developed an interactive workshop focused on the difficult conversations that arise after mistakes occur; more than 500 doctors, nurses, and other specialists have been trained so far, and the program is now being offered to other health systems nationwide. "Everybody is interested in learning how to do better," says Dr. Robert Truog, the institute's executive director. "We're still very much on the steep part of the learning curve."

Undoing a culture is hard, especially one steeped in hierarchy and intimidation, where doctors tend to reign supreme and nurses, pharmacists, and technicians fall into the ranks below. "What underlies it is arrogance," says Pronovost, an anesthesiologist and director of Hopkins's Quality and Safety Research Group. In his book he describes a run-in with a surgeon who refused to switch from latex to nitrile gloves during a hernia operation, despite Pronovost's concern that the patient was having a potentially fatal latex-allergy reaction. It was only after a nurse picked up the phone to call the hospital president that the surgeon relented. "This patient," Pronovost writes, "could have died from ignorance and arrogance—a lethal combination."

This is not a rare event. Even when there are clear directions for safety, doctors tend to continue completing tasks in the way they're used to. Take the insertion of central-line catheters, which deliver medications to sick patients. The Centers for Disease Control and Prevention developed guidelines for preventing infections triggered by the procedure, but compliance is spotty. Every year some 80,000 patients develop central-line infections and about 30,000 die, at a cost of more than \$2 billion. A major reason: fatalism. "For decades, harm has been viewed as inevitable rather than preventable," says Pronovost. "We've learned to tolerate it."

In 2001 Pronovost created a five-point

central-line checklist—boiled down from the CDC's lengthy guidelines—which includes washing hands and removing catheters when they're no longer needed. One year after it was instituted at Hopkins, infection rates had dropped to almost zero. A network of Michigan hospitals that adopted the checklist slashed infections by two thirds, saving more than 1,500 lives and \$200 million in the first 18 months. Still, a survey released this summer by the Association for Professionals in Infection Control and Epidemiology says the battle to reduce central-line infections continues because hospitals aren't dedicating the time and educational resources necessary, and health-care leaders aren't committed to solving the problem. When Pronovost asks nurses if they'd speak up

UNDOING A CULTURE IS HARD, ESPECIALLY ONE STEEPED IN HIERARCHY AND INTIMIDATION.

if a senior physician isn't complying with the checklist, "I am uniformly laughed at," he says. "They say, 'Are you nuts?'"

After he became CEO of Virginia Mason Medical College in Seattle, Dr. Gary Kaplan mandated a simple but critical reform to make his hospital a patient-driven, not physician-driven, institution. Based on techniques learned at Toyota's production-system plants in Japan, where factory workers pull a cord to stop a production-line error, Kaplan and his team instituted a "patient safety alert" system. All staff members, even medical students, are instructed to report concerns, whether they're major blunders or near misses. The most serious errors must be deemed "mistake-proofed"—steps have been taken to prevent them altogether—not just by medical professionals, but

by public board members, too. Shirley Sherman, who started as an ICU nurse at VMHC in 1983, remembers how problems used to be handled. "It was just between you and your manager," she says. "It felt very blame-like." Today, errors are considered a flaw in the system, not an individual weakness.

These are lessons that doctors must learn from the start. But med-school curricula are jammed full with the minutia of science and the latest technology; the cultivation of social and emotional sensitivity and teamwork is lacking. That's deemed to be "the soft stuff," says Denise Murphy, vice president for quality and patient safety at Main Line Health System in suburban Philadelphia. And yet, she says, a breakdown in communication and collaboration can lead to horrible events that result in harm or death. "We have to change our thinking," she says.

Earlier this year, Leape published a report saying med schools are failing to teach future physicians the most urgent lessons about why mistakes happen and how to prevent them. The report calls on schools to teach patient safety as a basic science, to train students to work in teams with nurses and pharmacists, and to have "zero tolerance" for disrespectful or abusive behavior, which can lead to mistakes. "On the surface, this seems pretty obvious, and yet this is a radical idea," says Leape. "It's a big cultural change."

It can be done. Five years ago, Dr. David Meyer, an anesthesiologist and associate dean for education at the University of Illinois College of Medicine, launched an annual roundtable meeting with safety leaders, policymakers, and patients to brainstorm better training. Students must now take workshops on risk reduction and simulate tasks in a hospitallike setting so that they can craft both their technical skills and their interaction with team members. A culture of openness makes sense to Mengyao Liang, a fourth-year student. "It's not a sign of weakness to say 'I made a mistake,'" he says. "I think our generation will say, 'Why are you not questioning me?' I think that's going to be a huge change." One that can't come soon enough. □