

FIXING A MALPRACTICE SYSTEM BUILT ON BLAME AND REVENGE WILL REQUIRE BOLD WAYS OF ANALYZING MISTAKES AND A RADICAL EMBRACE OF OPENNESS. BY DR. DARSHAK SANGHAVI ILLUSTRATION BY BRIAN STAUFFER ANIELLE BELLEROSE went

through hell for two years trying to conceive, undergoing nine rounds of fertility treatments before she finally got pregnant with twins in late 2003. Shortly thereafter, the then 28-year-old nurse and Massachusetts native developed a complication that required months of bed rest at home. Suddenly, on a June night nearly three months before her due date, Danielle's uterus began bleeding profusely. At 4:56 a.m. she had an emergency caesarean section at Beth Israel Deaconess Medical Center. Her daughters, Katherine and Alexis, entered the world weighing only about 3 pounds each.

Everything seemed to go well until the end of the first week. When Danielle and her husband, John, visited the unit, Alexis looked fine, but Katherine appeared mottled and pale. Panicked, Danielle found a nurse, and testing confirmed that Katherine was in profound shock due to necrotizing enterocolitis, a devastating intestinal complication that affects premature babies. The infant's blood had turned acidic. An X-ray indicated a tear in her bowel. Just after midnight, Katherine was taken by ambulance to Children's Hospital Boston.

Extremely premature infants such as Katherine and Alexis are entirely unprepared to live outside their mother's womb. After only 30 weeks of gestation, the newborn heart isn't fully developed, and the intestines can't easily digest breast milk or formula. At that age, a baby's brain often doesn't remember to breathe. In 1963, when President John F. Kennedy's son, Patrick, was born prematurely, the only thing to do was "monitor the infant's blood chemistry," as a newspaper of the day put it. Patrick Kennedy died after two days. By the time Katherine Bellerose was being cared for in the same hospital, however, new treatments had increased survival rates in very low birth weight infants to 96 percent.

Still, at Children's Hospital, Katherine struggled to survive. Surgeons made a last-ditch effort to save her life by removing her colon, in the hope that this would halt further damage. She failed to improve. Multiple rounds of CPR were performed.



At 5:22 a.m. on June 21, 2004, 8-day-old Katherine Bellerose was declared dead.

In the days and weeks ahead, Danielle tried to get someone to explain why no one had diagnosed Katherine's condition sooner. She made three requests to meet with the caregivers from Beth Israel. Promises were made, she says, yet no meeting materialized. Later, when Danielle contacted the hospital to get Katherine's medical records, she recalls a clerk saying no such patient had ever been treated (a problem later ascribed to a paperwork error). Danielle began to think the hospital was hiding something.

In time, Danielle got in touch with Lubin & Meyer, a Boston law firm perhaps best known for winning \$40 mil-

lion in a 2005 birth-injury case, the largest malpractice award in Massachusetts history.

Danielle's attorneys, William Thompson and Elizabeth Cranford, obtained Katherine's medical records, then asked a doctor and professional expert witness to review them. As is customary, the expert never spoke with the infant's physicians, nor did she see a need to interview the Bellerose family while preparing her report. The 10-page document, issued two years after Katherine's death, is not nuanced, even though the early warning signs of enterocolitis-such as a slight increase in the size of the abdomen and higher breathing rate-are often nonspecific and present in babies who go on to do fine. It claimed Katherine suffered a "premature and preventable death" from necrotizing enterocolitis that occurred as a "direct result" of "deviations from the accepted standards of care." Reading the report steeled Danielle Bellerose against the Beth Israel doctors and solidified her suspicion that their negligence had killed her daughter. In 2006, her attorneys filed a lawsuit against six of the doctors and nurses who had treated Katherine.

The paradox of modern medicine is that the increasing specialization that has revolutionized care has also depersonalized it. When a mistake is suspected, it may be unclear who from a team must step in to take responsibility. For patients seeking information, the only obvious recourse is to call a malpractice lawyer, whose livelihood depends on replacing a patient's desire for comfort and understanding with a need for vengeance. "In the beginning, all I wanted were answers," Danielle says. "If someone had just talked to me, none of this ever would have happened."

The longer the silence from the doctors and nurses stretched on, the more upset Danielle felt. By the 2011 trial, her disgust was so complete that, when they were testifying, she often had to leave court "to throw up."

In the end, the jury decided one doctor and one nurse practitioner were negligent—the other four defendants were determined not to be at fault—and awarded the Bellerose family \$7.05 million (nearly \$11.5 million with interest). It was the largest malpractice award in

the state that year.

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But the march to the courtroom was not inevitable. There is reason for hope that things can be done differently, even among doctors like myself who are conditioned to be suspicious of malpractice claims. Massachusetts recently enacted a law that, among other things, usually allows doctors to speak more openly to patients and families who were harmed, even apologize to them, without worry that their words will later be used against them in court. The law addresses only a small part of the problem, but it-together with data-driven efforts to find patterns of error in similar cases-is a step toward getting doctors and insurers to admit that malpractice claims often are sparked by both real failures of communication and failures in clinical care.

OMETHING DAWNED on attorney Richard Boothman when he defended his first client, a Detroit surgeon, against a malpractice claim in 1981: Sometimes patients just want to be heard. The plaintiff, a woman who'd suffered a major infection after abdominal surgery, hadn't spoken with her doctor in the six years between the surgery and the trial. While listening to her doctors' testimony in court, however, the woman realized he'd done his best. She won the case, but as the jury filed out, she turned to the surgeon and said, "If I'd known everything I know now, I would never have sued you."

Later, at the University of Michigan Health System, where he is now executive director for clinical safety, Boothman put what he had learned in that courtroom to work. After a lawsuit was filed by a patient left partially blind, Boothman proposed having the patient's family and surgeon meet to discuss what had happened. The first meeting didn't go well; the patient's spouse was so upset that she immediately turned around and walked out. Boothman rescheduled and she again exited. On the third try, both sides finally started talking, and the doctor expressed his sympathies. "A transformational moment occurred," Boothman recalls. The patient later withdrew the lawsuit and then underwent a procedure that restored some of his lost sight.

The experience gave Boothman confidence in his efforts to remake the hospital network's medical liability program. In the past, all malpractice claims had been immediately outsourced to defense attorneys, who tended to fight them indiscriminately. Boothman proposed that claims first should be reviewed by impartial medical providers. If the review found a real mistake causing harm, providers were encouraged to apologize face to face, and the hospital quickly offered reasonable cash settlements.

Boothman's "disclosure with early offer" program worked well. Consider the case of Jennifer Wagner, a schoolteacher and mother of two young boys, who saw a University of Michigan doctor in 2003 for a suspicious lump in her breast. Without conducting any testing, the provider concluded it was benign. (Later the doctor said, "I guess I put the onus on the patient to monitor for changes.") Reassured, Wagner didn't mention the lump at her physical the next year. But another year later, the lump became painful, and a biopsy found advanced breast cancer. Wagner required a complete mastectomy, chemotherapy, and radiation.

Wagner's attorney, Thomas Blaske, sent a notice of intent to sue, alleging the missed cancer caused lost wages, shorter life expectancy, and psychological stress. Boothman's insurance analysis suggested an exposure to the hospital network of at least \$3 million, and he suspected Wagner's attorneys would claim her prognosis was dire. That might reinforce and further inflame the worst fears of a young mother already plagued by anxiety.

In the old malpractice system—one that doctors and lawyers call "deny and defend"—parties on both sides of the case would have then begun girding themselves for an ugly courtroom battle. In Boothman's new system, however, five impartial doctors reviewed Wagner's case files and concluded her physician had indeed made a mistake. Within three months, Wagner and doctors sat down for an earnest two-hour meeting, where they explained she almost certainly was now cured. Wagner's lawyer, who said his role during the process changed from "warrior to counselor," remembers that as they left the meeting, Wagner turned to him and said, "I feel so good after that meeting that I don't care if I get a dime." (She eventually received \$400,000 to start college funds for her sons.) Wagner's fatigue improved and she returned to teaching. "I felt like I had finally been heard," she later said. "I can't even describe how euphoric I felt when I left that meeting."

The outcome for Wagner was more humane than a prolonged malpractice trial, and also much cheaper for the insurer and hospital network. In a 2006 commentary for the *New England Journal of Medicine*, a pair of US senators pointed out that the number of pending lawsuits against the University of Michigan fell by more than half with Boothman's system, and the average time to claim resolution dropped from 21 months to 10. Despite their apparent success, however, disclosure-andoffer programs still only exist in a small number of areas. And when those two senators, Barack Obama and Hillary Rodham Clinton, proposed a new federal office to promote the programs, their bill failed.

ALK FOR A WHILE to physicians and they'll bemoan how they're often victims of frivolous lawsuits, which are costly to both their personal reputations and the US health care system. Many of my colleagues at UMass Medical School and elsewhere were outraged by the \$11 million judgment in the Bellerose case. The death was undeniably tragic, but did the jurors really understand anything beyond their own sympathy for the parents' suffering? The deck seemed stacked against the baby's doctors and nurses, whose complicated statements on the stand were no match for a grieving mother's sorrow.

To some extent, suspicion on the part of medical professionals is warranted. Danielle Bellerose may have filed a lawsuit as a last resort, but her attorney makes no bones about the role he needs to play in the adversarial court system. "I don't go into court to make an objective search for the truth," Thompson tells me in his office. "You know the rules: You want to win the game."

Such attitudes lead many doctors to see themselves as the real victims in malpractice cases. By the time they reach 65, data show, the vast majority of general surgeons and internists will face a malpractice claim of some type. (In my 15-year



medical career, I've so far been one of the lucky ones.) Though many of these lawsuits go nowhere, the process can be intensely traumatic. Physicians tend to view malpractice cases as attacks that demand retaliation, not appeasement.

Still, there is a yawning chasm between physicians' perception of malpractice costs and the reality of them. Insurance premiums are expensive, but perhaps not as outrageous as some might guess. According to a 2012 survey by *Medical Liability Monitor*, an independent industry newsletter, base rates for OB-GYN doctors in this state are roughly \$97,000 a year at one major insurer, but that is a particularly high-risk specialty. By comparison, general surgeons pay about \$45,000 and internists about \$15,000. UMass pays roughly \$12,000 a year for my coverage.

In addition, those annual bills for doctors haven't been rising the way, say, the average person's health insurance premiums have. On the contrary, a recent analysis showed that inflationadjusted malpractice premiums actually fell from 1975 to 2005 for 96 percent of all Massachusetts physicians. (That didn't stop the American Medical Association from declaring this a "crisis state.")

The specter of a lawsuit is also said to drive an increase in unnecessary medical testing and care. As the mantra goes, no doctor gets sued for doing too much. In a 2008 Massachusetts survey, doctors claimed "defensive reasons" motivated them to order roughly one-quarter of all MRI and CT scans, one-quarter of all referrals to specialists, and 13 percent of hospitalizations.

But studies show that doctors order a lot of questionable testing and treatment even when malpractice risks are very low. On top of that, Harvard researchers recently estimated that all medical liability costs add only 2.4 percent to national health care spending anyway (though, to be fair, that percentage still represented more than \$55 billion in 2008).

Contrary to many doctors' beliefs, there is no epidemic of frivolous lawsuits. In 2006, the *New England Journal of Medicine* published an analysis of 1,452 randomly selected malpractice cases from around the country. It came as a surprise to most readers that 97 percent involved a medical injury, while almost two-thirds in-

volved a mistake on the part of health care professionals. Looking at case outcomes, the researchers concluded that although the malpractice system is not perfect, it "performs reasonably well." In fact, when doctors make an actual mistake, the system is slightly biased in their favor.

The misleading image of the doctor besieged by bogus lawsuits dangerously obscures an important fact: The vast majority of major medical errors never see the light of day. A classic 1991 study found that only about 2 percent of patients harmed by medical negligence filed a claim. According to a spreadsheet I was given, Harvardaffiliated hospitals were the target of only 90 malpractice claims relating to children between 2006 and 2010, a period when doctors racked up millions of patient encounters. The vast majority of the medical care at these hospitals is superb, to be sure, but it strains credibility to think that any major academic center makes a harmful mistake so rarely (especially when a 2010 study showed that 15 percent of all hospitalizations result in preventable harms).

The remarkable thing, therefore, isn't that Americans file too many malpractice lawsuits, it's that they file so few. Some physicians courageously fess up and communicate with compassion after an error and defuse a patient's anger. At the same time, some appear to sweep errors under the rug. For example, I became aware that a serious misread of an ultrasound led to a patient's death at a large medical center. When I reported the

THE KEY WAS THAT DOCTORS DIDN'T SEE LAWSUITS AS NUISANCES TO BE STAMPED OUT, BUT AS "THE TIP OF THE ICEBERG" OF SUBSTAN-DARD MEDICAL CARE. matter to a senior administrator there, I was asked not to engage the matter further.

Like many physicians, I know about dozens of such cases. While I worked a stint at a health center for underserved patients, a provider evaluated a young woman with intermittent abdominal pain and discharged her, missing the fact she was giving birth. Later in the day, the patient-who didn't know she was pregnant-delivered her baby alone in her bedroom, panicked, and shut the baby into a suitcase. The baby died, the mother was propelled into the criminal justice system, and the provider faced no major consequences.

Last August, Massachusetts enacted reforms that

usually make doctors' apologies inadmissible in court, require claimants to file "letters of intent" before suing, and impose a six-month waiting period to allow doctors and patients to work out the matter. The law might pave the way for earlier, more amicable settlements.

But the bitter fact is that there is no appetite in the medical community to come clean preemptively about every medical error. The list of them is just too long. No major reforms, including those just passed here, are truly proactive, since they all still require patients or families to call a lawyer before anything happens.

And so we have our peculiar, perverse system. Injured patients are often left in the dark unless they decide to act. Most never do. But a few call an attorney, the medical system springs to respond, and the battle eventually ends with much collateral damage and expense. Progressive proposals seek to take a case like that over the death of Katherine Bellerose, de-escalate it, and resolve it out of court. That's a good thing for patients and doctors, and such programs deserve wide adoption. The problem is, they would still not be enough.

> HOSE ON the cutting edge of malpractice reform focus on studying the 2 percent of mistakes that enter the court system, in hopes of applying what they find to the 98

percent of errors that quietly send tens of thousands of Americans to the grave each year. These innovators parse thousands of claims and, mostly hidden from view, mine the data to find ways of stopping errors from occurring in the first place.

At a conference room in Cambridge overlooking the Charles River, Dr. Luke Sato and a colleague project a spreadsheet on the wall. Sato oversees a team that studies data in malpractice claims at CRICO, or the Controlled Risk Insurance Company, a not-for-profit consortium that insures all claims from Harvard-affiliated hospitals. Over the past 30 years, the team has created a taxonomy of medical errors, with hundreds of codes for everything from "failure to identify provider coordinating care" (CS1001) to "policy/protocol not followed" (AD1026).

This spreadsheet is an analysis of the records from a deceased young girl, whose parents sued doctors for allegedly failing to diagnose and treat her heart defect. For every claim such as this one, an impartial medical expert reviews the patient's chart for mistakes. (Interestingly, the only way for a patient to obtain such a case review is by having a lawyer file a malpractice claim.) In the girl's case, the review found six specific contributing factors. Each was coded, recorded, and added to the data on similar cases.

This concept was employed in the 1980s by the American Society of Anesthesiologists, whose specialty was being buffeted by massive jumps in malpractice premiums and waves of bad publicity. Anesthesiologists created a national database of closed malpractice claims and fed them into a computer at the University of Washington. Surprisingly, it turned out that many patients were dying of the same mistake: incorrectly inserted breathing tubes. A simple technological fix—monitoring the patient's oxygen level with a sensor—was made a standard of care in 1986. Lawsuits against anesthesiologists dropped dramatically.

The key, says retired CRICO president John Mc Carthy, was that the doctors didn't see lawsuits as nuisances to be stamped out, but as "the tip of the iceberg" of substandard medical care. Mc Carthy immediately saw promise for his hospitals in this data-driven approach. In the 1990s, when many doctors were sued for missing breast cancer, CRICO analyzed claims and discovered that doctors had no uniform approach to monitoring lumps. Mc Carthy's team developed a standard breast care algorithm for Harvard hospitals and offered doctors who learned the procedure discounts on their malpractice insurance premiums. As a result of the changes, he says, there was "almost complete resolution" of related litigation in the Boston area.

CRICO has replicated its results in other medical situations. When its data showed doctors get-



Mark Reynolds's CRICO,<br/>a private insurer based in<br/>Cambridge, detects error<br/>patterns in malpractice<br/>records and uses them to<br/>design safer protocols.base it has creat<br/>ing System —it<br/>malpractice da<br/>tase it has creat<br/>ing System —it<br/>malpractice da<br/>the system of of<br/>current preside<br/>data mining la<br/>are lower than<br/>didn't want to appear weak by contacting senior<br/>physicians for help. In response, a "trigger card"<br/>automatically notified senior physicians of cer-<br/>tain alarming developments, relieving trainees of<br/>the responsibility. The list of improvements goes

Since 1990, CRICO has been analyzing claims from 520 health systems around the country that employ more than 75,000 physicians. The database it has created—the Comparative Benchmarking System—is the most detailed repository of malpractice data in the world. "This can transform the system of care," says Mark Reynolds, CRICO's current president. "If I had to be bold, I'd say our data mining largely explains why our claims rates are lower than other regions."

Thinking of Katherine Bellerose, I asked CRICO to examine necrotizing enterocolitis claims in the repository from the past decade, a data set it turns out no one had previously asked for. Two weeks later, a member of the team e-mailed me a detailed spreadsheet containing more than two dozen cases (none included information that would identify patients).

The CRICO team tagged 137 errors that could be grouped into 35 categories. There were several patterns among the cases. In more than half, there was a delay in ordering X-rays or other tests. In a third, the team overlooked the possibility of enterocolitis in spite of clinical signs. In a quarter, there were communication problems among doctors, often related to shift changes. There were instances of "failure to question" an incorrect medical order and others where staff "failed to respond" to repeated concerns from patients.

Twenty to 30 percent of very low birth weight infants who develop necrotizing enterocolitis die from it — that mortality rate hasn't budged in more than a decade, despite advances in medical technology. The claims data won't be a miracle fix, but they do make a constructive suggestion for improvement: Standardize care. Neonatal doctors need to agree on the early signs of the condition and on when to use antibiotics and order tests. Then they need to improve how they interact with each other and with families. The data might not tell us exactly how to fix problems, but they do show how the care of preemies with necrotizing enterocolitis repeatedly goes wrong.

> N LATE 2011, Danielle Bellerose sat with me on a bench in front of her modest Colonial home north of Boston.

In the time after her daughter's death, she told me, all she wanted was to meet with her baby's doctors and be reassured that they had done everything they could. But they never spoke again.

For her, seeking legal redress was "not a therapeutic process," and the stress led to years of depression and therapy. Awaiting trial, she lacked any sense of closure—she could never even bring herself to put a headstone at Katherine's grave. In the meantime, her anger at the doctors and nurses festered.

In medical training, doctors are taught the importance of listening to patients and their families, but the lessons are often too easy to forget. If Danielle Bellerose felt her daughter's doctors and nurses responded better to her questions, they might have avoided a major malpractice suit. I also told Danielle about the CRICO analysis—like most, she was unaware such processes existed—and she seemed pleased to know that some improvement in future care might come from her daughter's death.

So it's not too late: Katherine Bellerose and other patients are still telling their stories, just in a different way. We have another chance to listen. ■

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