Errors made by doctors, nurses and other medical caregivers cause 44,000 to 98,000 deaths a year. Hospital infections, many considered preventable, take another 100,000 lives. And mistakes involving medications injure 1.3 million patients annually in the U.S., according to the Food and Drug Administration.

Hospitals are taking what might seem like a surprising approach to confronting the problem: Not only are they trying to improve safety and reduce malpractice claims, they're also coming up with procedures for handling—and even consoling—staffers who make inadvertent mistakes.

The National Quality Forum, a government-advisory body that sets voluntary safety standards for hospitals, has developed a Care of the Caregiver standard, calling on hospitals to treat traumatized staffers involved in errors as patients requiring care, then involving them in the investigation of what went wrong if their behavior was not found to be reckless or intentional. Just Culture, a model developed by engineer David Marx, stresses finding a middle ground between a blame-free culture, which attributes all errors to system failure and says no individual is held accountable, and overly punitive culture, where individuals are blamed for all mistakes.

A new study published in the April edition of the Joint Commission Journal on Quality and Patient Safety, which examines one fatal medical mistake to analyze what went wrong, shows how assigning blame for errors can be a murky exercise.

Four years ago, nurse Julie Thao mistook a bag of epidural painkiller for penicillin and hooked it up to an IV line that pumped the painkiller—meant to be injected into the spine later—into the bloodstream of Jasmine Gant, a 16-year-old who was about to deliver a baby at St. Mary's Hospital in Madison, Wis. The teen's heart collapsed. Her baby was delivered successfully by emergency...
Caesarean section, but Ms. Gant didn't survive. Ms. Thao says she was fired from the hospital after the death, and she was later prosecuted by the state for criminal negligence. Ms. Thao's case has helped galvanize efforts to ensure that caregivers are treated fairly—without absolving them of responsibility for risky behavior.

The study, led by researchers at the non-profit Institute for Safe Medication Practices, concludes that while Ms. Thao consciously bypassed multiple safety procedures, there were also a host of system flaws that allowed and even encouraged her to do so, contributing to the fatal error.

Researchers found that Ms. Thao failed to put an identification bracelet on her patient or use the hospital's bar-coding system, designed to match the right medication to the right patient. But the bar-coding system had glitches, and nurses hadn't been adequately trained on it, so they often bypassed it.

Both medications—which looked alike—were brought into the patient's room before orders were given, a violation of policy. Fatigue increased Ms. Thao's likelihood of making a mistake, the study found. Ms Thao had worked two consecutive eight-hour shifts the day before and then slept in the hospital before coming on duty again the next morning, but there were no rules at the hospital to prevent her from being overworked.

In editorials accompanying the study, patient-safety experts, including Charles Denham, co-chairman of a National Quality Forum safe-practices committee, and Harvard University health-policy professor Lucian Leape are harshly critical of the way Ms. Thao was fired by the hospital and then left to fend for herself with no income and no financial resources to defend herself in charges later brought by the state. "We all believe that Julie should be held accountable for her behavior, but she didn't receive support from her organization or treatment that was just," says Dr. Denham. "It is clear that other nurses might have made the same error due to the social conditions and technical systems in the hospital.

Officials at St. Mary's, which paid $1.9 million to settle a malpractice suit brought by Ms. Gant's family, say they treated Ms. Thao properly. The hospital's president, Frank Byrne declines to discuss the specifics of Ms. Thao's dismissal, but says the hospital was supportive; when it learned the state planned to bring criminal charges, Dr. Byrne says he did everything he could to stop it and appeared at court proceedings to lend moral support. He included his own commentary in the patient-safety journal, describing safety steps taken after Ms. Gant's death, including limiting work hours for nurses. "We never attempted to shirk acknowledgment of our system issues," he says.

In Ms. Thao's case, under a plea agreement, felony charges were amended to two misdemeanor counts. Afterward, her nursing license was suspended and she was barred for several years from working for any hospital that accepts federal funding from Medicare.

Safety advocates and nursing groups also question the use of criminal charges brought against nurses and doctors who make unintentional mistakes, saying they set a chilling precedent. "Criminal accusations against health care providers who work in a system set up to fail are extreme," says Sue Sheridan, co-founder of Consumers Advancing Patient Safety. "By the same token, there has to be some accountability when families have suffered a tragic loss."

Dr. Denham took Ms. Thao on as a patient-safety fellow in his own medical-research concern, TMIT, for two years. He now retains her to do contract patient-safety research. Ms. Thao, who was briefly hospitalized for depression after the event, says she considered taking her own life. She says her patient-safety work has helped her to cope with her despair over her errors.

"Every hospital in America is wrestling with how to hold practitioners accountable for key safety behaviors," says Mr. Marx, whose company, Outcome Engineering, consults with hospitals, states and nursing boards on the Just Culture Model and helped train 20,000 employees at St. Mary's after the Thao case. It's designed to address risky behaviors before they lead to the...
death of a patient," he says, coaching those who make risky decisions, such as failing to wash hands before touching patients or skipping important checks in administering medications.

"We know just punishing human error does not improve safety," says St. Mary's Dr. Byrne. "But we have to separate unavoidable error from reckless behavior and unjustifiable risk."

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