When doctors get it wrong: Misdiagnoses are getting a closer look

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Doctors and safety advocates have targeted many causes of patient harm - such as bungled prescriptions, excessive imaging scans and wrong-site surgeries - but have given little attention to an equally common cause: making the wrong diagnosis.

The same doubts and insecurities that complicate everyday life also push doctors to overlook key symptoms, assume that the common answer is the correct one or endorse colleagues' mistakes.

While as many as 5 percent to 15 percent of doctors' diagnoses are wrong, patient safety experts have struggled to tackle the problem because it isn't as quantifiable as, say, sponges left in a patient after surgery, said Dr. Andrew Olson, who has developed training on diagnostic reasoning at the University of Minnesota Medical Center.

"Say somebody gets a wrong dose of medicine," Olson said. "It's not easy, but you can figure out why it happened. You can trace the steps and line up the holes in the Swiss cheese. That's harder to do in diagnostic error because so much of it happens in our own brains."

Olson and others believe a U.S. Institute of Medicine report on misdiagnosis scheduled for this month will finally give the problem its due. Misdiagnosis was conspicuously absent in 1999 from IOM's landmark "To Err is Human" report, which estimated that 98,000 people died annually from medical errors.

The IOM's findings will also be featured at a national medical conference, where Olson will discuss the approach he developed two years ago to train U of M medical residents on how to identify causes of misdiagnosis and learn from it.

Part of his curriculum is a case study of the real-life tragedy of 15-year-old Julia Berg. Each year, pediatric residents review the errors and assumptions that contributed to Julia's death in August 2005. The Bergs have occasionally appeared to discuss the case.

"The narrative voice of someone who has experienced medical error is powerful," said Julia's father, Dan Berg, a philanthropic adviser to the Minneapolis Foundation.

Julia was initially diagnosed with a bacterial kidney infection and placed on antibiotics after suffering a large nosebleed and other symptoms. In actuality a massive infection from the Epstein-Barr virus caused a condition that eroded the platelets responsible for clotting and healing and left her at risk for severe bleeding.

One test for the virus was negative, but Berg said it should have been reverified given that the test has a high rate of false results.

Doctors later suspected a gallbladder problem and scheduled to have the organ removed. Lab tests continued to confound doctors, though, and one on the eve of surgery questioned whether surgery was safe. The procedure took place, and Julia died in recovery from internal bleeding.

"Everyone was giving someone else the benefit of the doubt," Berg said. "There is a culture of deference in medicine."

Often, a misdiagnosis goes undetected and causes no harm, because the treatment for the incorrect diagnosis worked for the actual one, Olson

said. But mistakes that harm often prompt malpractice lawsuits.

MMIC Group, a medical liability insurance company in Minneapolis, reviewed 2,000 claims from 2010 through 2013 and found 313 caused primarily by diagnostic error. It was the third most common reason for claims, and the second most expensive, resulting in $47.2 million in investigative costs and payouts.

"That's a big number," said Dr. Laurie Drill-Mellum, MMIC's chief medical officer, "and it demands attention."

Many mistakes trace back to "systems" problems in hospitals and clinics. Faulty imaging scanners could lead to errant judgments on patients' health. Poor communication or record-keeping could result in errors because diagnosing doctors don't have the most up-to-date test results.

But many cases are cognitive, meaning they are due to doubts or biases of which doctors might not be aware, said Dr. Mark Graber, who founded the Society to Improve Diagnosis in Medicine.

Cognitive causes include "anchoring," which refers to locking into an initial diagnosis and ignoring changes that suggest other problems, and "confirmation bias," which occurs when doctors look for symptoms to confirm hunches rather than rule them out.

Doctors should be confident but able to challenge their own assumptions, Graber said. "They need to ask, 'What else could this be? Are there things that maybe I haven't thought about?'"

The problem of rushing to a common diagnosis gained national prominence last fall, when doctors in Dallas sent a Liberian man home with antibiotics, only to have him brought back by ambulance because he was stricken with Ebola. The botched diagnosis enabled the man to

potentially expose others to the virus.

Graber acknowledged that a solution to misdiagnosis could be running more tests, which could increase medical costs.

"In our view, it is a much smaller problem than underdiagnosis," he said.

Overtesting every possibility isn't the answer, said Drill-Mellum, a former ER doctor who handled complaints at Ridgeview Medical Center in Waconia. "If you get people who have tests and they are negative, do you know what they think? They think, 'I didn't need it.' And if they're cynical, they might think you ordered that test so you could make money on them."

Patients also can play a role, though. Helen Haskell, president of the Mothers Against Medical Error advocacy group, whose child also died from internal bleeding, said patients must find the balance between being cooperative and challenging their doctors over diagnoses.

"Otherwise," she said, "you and your doctor may be going hand in hand, together, down the wrong path."

The Berg family has spent a decade mourning and re-examining Julia's death. She had struggled with depression but had started to find her passion through an internship with the Sierra Club. The family was planning a trip to Yellowstone until her sickness emerged.

"You could just see the activist emerging during that summer," her father said.

Her parents are grateful at how officials at the hospital where Julia died responded with changes to improve safety and make questioning diagnoses part of the culture. The Bergs also sponsor a memorial lecture

in their daughter's name to try to prevent similar deaths.

"You couldn't point the finger at one person or incident," Berg said. "There was a combination of missed judgments."