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PROFESSION

Diagnostic errors are lead cause of medical liability payouts

■ More attention should be given to the complex patient safety problem of mistakes in diagnosis, experts say.

By KEVIN B. O'REILLY (HTTP://WWW.AMEDNEWS.COM/APPS/PBCS.DLL/PERSONALIA?ID=KOREILLY) amednews staff — Posted May 6, 2013

Errors in diagnosis are responsible for more deaths, disabilities and medical liability payments than any other kind of medical error, according to a review of more than 350,000 paid claims from 1986 to 2010 included in the National Practitioner Data Bank.

The findings echo earlier research and draw on the largest set of cases yet to be analyzed. More than 100,000 medical liability cases involved errors in diagnosis, nearly 30% of the total. That compares with 27% for treatment mistakes and 24% for surgical errors, said the study, published online April 22 in *BMJ Quality & Safety*.

"Diagnostic errors are consistently the most common, the most costly and the most deadly of medical errors," said David E. Newman-Toker, MD, PhD, senior author of the study and associate professor of neurology and otolaryngology at Johns Hopkins University School of Medicine in Baltimore. He also chairs the research committee for the Society to Improve Diagnosis in Medicine.

The average diagnostic-error payout, after adjusting for inflation, was $386,849, the third-highest average after $651,670 for obstetrics mistakes and $419,126 in anesthesia-related payouts. Of the total $110 million paid out during the 25-year period, 35% was paid in diagnostic-error cases.

Diagnostic mistakes were involved in 13,614 deaths during the period, 40% of all deaths tallied in the data bank and more than any other kind of mistake. Errors in diagnosis also were the No. 1 cause of serious disabilities, accounting for 11,544 such cases, or 34% of the total. Nearly 70% of the diagnostic errors occurred in outpatient care, though mistakes in the office setting were less likely to result in death than missed diagnoses in inpatient care.

The most common type of diagnostic mistake was failure to diagnose, accounting for 54% of such cases. Delayed diagnoses accounted for 20% of the errors, while wrong diagnosis made up another 10%. The remaining 16% were other kinds of diagnostic errors or not classified.

Another troubling finding is that while payouts have fluctuated over time, the rate of diagnostic mistakes resulting in medical liability claims has remained fairly constant, Dr. Newman-Toker said.

"This is the first time we've looked at this full data set over time, and the problem in diagnosis shows up consistently over time. It's not like people have gotten much better at diagnosis over the last five years," he said.

What causes diagnostic mistakes

Sounding the alarm on diagnostic errors is just the first step toward improvement, said Hardeep Singh, MD, MPH, associate professor of medicine at Baylor College of Medicine in Texas and co-chair of the 2013 Diagnostic Error in Medicine Conference set to take place in Chicago this September.

"I think we've got everybody's attention now," he said. "The whole thing now is what do we learn from here to take forward to prevent these mistakes?"

Dr. Singh added that medical liability claims are not representative of the national population and cannot be used to establish the frequency with which diagnostic mistakes occur. He was the lead author of a March 25 study in *JAMA Internal Medicine*, formerly the *Archives of Internal Medicine*, that found that diagnostic mistakes happen less than 1% of the time in primary care.

The principal contributors to missed or delayed diagnoses were shortcomings with diagnostic testing, medical history-taking or physical examinations, and failure to consult with or refer to an appropriate specialist. Time constraints in primary care likely exacerbate the problem, Dr. Singh and other experts said.

A systematic review in the June 4, 2003, issue of *The Journal of the American Medical Association* found that about 5% of U.S. autopsies find a diagnosis that, if it had been made while the patient was alive and treated appropriately, would have saved the patient's life. Replicating that research is difficult, because the rate of routine autopsies has fallen precipitously due to costs, experts said.

"Our knowledge base is grossly limited," said Kathryn McDonald, executive director of the Stanford University Center for Health Policy/Center for Primary Outcomes Research in California. She was the lead author of a systematic review published March 5 in *Annals of Internal Medicine* that examined 109 studies of interventions aimed at improving diagnosis. Only 14 of the studies were randomized trials, and none of the studies provided information on the cost of the interventions, potential harms or how they would be integrated into practice.

Some interventions have shown promise. For example, teaching patients how to better spot serious symptoms that warrant a physician's reconsidering the diagnosis can help. Also promising are technology-oriented fixes such as test-result alerts and computer-aided diagnostic tools, the *Annals* study said. But McDonald argued that research is scarce given the pressing need to prevent diagnostic errors.

"It's been this sad little stepchild in the patient safety world," she said.

BACK TO TOP

ADDITIONAL INFORMATION

Diagnostic errors head pack in payments

Errors in diagnosis are the leading source of medical liability claims and account for the greatest proportion of settlement dollars.

Area of allegation	Proportion of allegations	Average payment	Proportion of payments
Diagnosis	28.6%	$386,849	35.2%
Treatment	27.2%	$196,960	17.1%
Surgery	24.2%	$280,257	21.6%
Obstetrics	6.5%	$651,670	13.6%
Medication	5.3%	$257,333	4.4%
Anesthesia	3.0%	$419,126	4.0%
Monitoring	2.0%	$354,131	2.3%
Other/miscellaneous	2.0%	$176,781	1.1%
Equipment/product	0.5%	$128,204	0.2%
Intravenous and blood products	0.3%	$294,011	0.3%
Behavioral health	0.1%	$212,494	0.1%

Note: Percentages do not add up to 100 due to rounding.

Source: "25-Year summary of U.S. malpractice claims for diagnostic errors 1986-2010: an analysis from the National Practitioner Data Bank," *BMJ Quality & Safety*, published online April 22 (link)

BACK TO TOP

EXTERNAL LINKS

"Types and Origins of Diagnostic Errors in Primary Care Settings," *JAMA Internal Medicine*, formerly *Archives of Internal Medicine*, March 25 (**link: http://archinte.jamanetwork.com/article.aspx?doi=10.1001/jamainternmed.2013.2777**)

"Patient Safety Strategies Targeted at Diagnostic Errors: A Systematic Review," *Annals of Internal Medicine*, March 5 (**link: http://www.ncbi.nlm.nih.gov/pubmed/23460094**)

"Changes in Rates of Autopsy-Detected Diagnostic Errors Over Time: A Systematic Review," *The Journal of the American Medical Association*, June 4, 2003 (**link: http://jama.jamanetwork.com/article.aspx?doi=10.1001/jama.289.21.2849**)

"25-Year summary of U.S. malpractice claims for diagnostic errors 1986-2010: an analysis from the National Practitioner Data Bank," *BMJ Quality & Safety*, published online April 22 (**link: http://www.ncbi.nlm.nih.gov/pubmed/23610443**)

6th International Conference: Diagnostic Error in Medicine (**link: http://www.improvediagnosis.org/?page=DEM_2013**)

BACK TO TOP

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