

Do health system errors cause medical malpractice claims?

by David B. Troxel, MD

The focus of the patient safety movement is on system failure as a prime cause of patient injury—as opposed to the traditional risk management focus on human error.

Many organizations leading the national patient safety movement (such as the Institute of Medicine, the Agency for Healthcare Research and Quality, the Institute for Healthcare Improvement, The Joint Commission, and the Leapfrog Group) share similar patient safety goals. If these goals are achieved and the health system environment becomes safer, it is reasonable to ask if this will result in a reduction in the frequency and severity of medical malpractice claims.

The potential for system improvements to reduce malpractice claims can be indirectly assessed by reviewing claims to see how frequently system errors either contributed to or caused the claim.

Because The Doctors Company is the largest national insurer of physician and surgeon medical liability and insures more than 44,000 physicians who practice in every specialty and in every state, an analysis by The Doctors Company of the errors leading to these claims may be representative of errors occurring throughout our health care system.

The Doctors Company reviewed 363 consecutive closed claims from January 2004 through January 2006 that settled with indemnity payments between \$100,000 and \$500,000. For each claim, it was determined whether professional negligence, system error, both, or neither contributed to or caused the claim. The analysis is based on a proximate cause—not a root cause—analysis,

reflecting the fact that the evaluation and resolution of a malpractice claim are focused on the proximate causes of patient injury. The system errors identified were then classified using the following modification of the 2006 national patient safety goals shared by the organizations leading this movement:

- Medication-related error
- Communication error
- Health care–associated infection
- Medical record error
- Identification error (wrong-site surgery)

Of these 363 claims, 63 percent showed provider error only, which is not surprising, because these are settled claims and settlement generally occurs only when all parties agree that there is some caregiver responsibility for the adverse event that caused the patient injury. Among the claims, 29 percent involved both provider and system error. Only 1 percent of claims involved only system error. Thus, system errors seldom occurred as isolated events and were almost always associated with provider error. However, a root cause analysis would probably reveal unrecognized system errors underlying some of the provider errors identified as proximate causes of these claims.

Since settlement requires concurrence of the patient and his or her attorney and the physician and his or her insurance company, one might expect that all settled claims would contain medical and/or system errors. Thus, it was a surprise that 7 percent of claims showed neither professional negligence nor system error, as shown in the following breakdown of error types.

Type of error

Provider error only	63.0%
Provider and system error	29.0
System error only	1.0
Neither provider nor system error	7.0

Total system errors

Medication-related error	32.0%
Communication error	27.0
Health care–associated infection	18.0
Medical record error	13.0
Identification error (wrong-site surgery)	5.5
Medical device failure	3.0
Surgical fires	1.5

Medication-related errors, communication errors, health care–associated infections, and medical record errors together account for 90 percent of the total system errors. Four claims involving both provider and system error resulted from the failure of medical devices. Two claims involving both provider and system error resulted from surgical fires.

Medication-related errors

Monitoring errors	43.0%
Dosage errors	26.0
Inappropriate medication errors	9.5
Medication side effects	9.5
Medication reconciliation errors	7.1
Medication allergic reactions	4.8

Together, medication monitoring and dosage errors accounted for 69 percent of medication-related errors. Of the medication monitoring errors, one-third involved failure to properly monitor Coumadin. Internal medicine, family practice, and psychiatry together account for nearly one-half of medication-related errors. Reconciling patient medications across the continuum of care is a 2006 patient safety goal of The Joint Commission and the Institute for Healthcare Improvement’s “100,000 Lives Campaign.” Only three medication-related errors (1 percent) involved medication reconciliation.

Health care–associated infections

Surgical site infections	67.0%
Injection site infections	8.3
Central line infection	4.2
Miscellaneous infection sites	20.8

Surgical site infections account for two-thirds of the health care–associated infections. One claim involved a central line infection, and none involved ventilator-associated pneumonia.

Medical record errors

Among errors involving the medical record, 35 percent resulted from absence of a written informed consent. An additional 35 percent of errors were associated with medication-related errors (four dosage errors and two medication reconciliation errors). Four errors involved physician failure to review charted abnormal laboratory results.

Discussion

Appropriate prophylaxis to prevent venous thromboembolism is a patient safety goal of the Agency for Healthcare Research and Quality and the Surgical Care Improvement Project. In this analysis, 3 percent of the settled claims were for deep venous thrombosis and pulmonary embolism.

System errors contributed to or caused 30 percent of the 363 claims. The goals for reducing system error and promoting patient safety shared by the organizations leading the patient safety movement include eliminating medication-related errors, communication errors, health care–associated infections, medical record errors, and identification errors. Together, these five shared patient safety goals address 95 percent of the system errors uncovered in this proximate cause analysis of malpractice claims. These findings provide empirical support to the premise that our national patient safety goals address system failures accounting for a significant number of adverse outcomes.

Although this claims analysis shows that system errors alone seldom result in malpractice claims against physicians and other caregivers (1 percent), system errors in association with professional negligence account for a significant number of settled claims (29 percent). This suggests that the patient safety movement should continue to focus its strategies for improving patient safety on the complex interactions between health care professionals and the systems within which they provide care. Ω

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