

Geisinger Uses Medical Home Model to Trim Inpatient Costs

BY ALICIA AULT

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WASHINGTON — Geisinger Health System has used a medical home model to slash inpatient costs in a demonstration program that it is now expanding to more of its practice sites, Dr. Glenn Steele Jr., CEO, said at a press briefing.

The pilot was conducted at Geisinger's practice sites in Lewistown and Lewisburg, Pa. Dr. Steele said that the multicomponent medical home program reduced all-cause inpatient admissions by 20% at Lewistown and 14% at Lewisburg during the pilot period of January-October 2007.

Readmissions during the same period were reduced from 19% in the 9-month period before the program started to 16% after the medical home was implemented, Dr. Steele said. At Lewisburg, readmissions dropped from 15% to 8% (Health Affairs 2008;27:1235-45).

Dr. Steele acknowledged that the Geisinger program might be hard to replicate. Geisinger is an integrated delivery system serving 2.6 million people across 43 counties in central and northeastern Pennsylvania. It has 700 employed physicians in 55 practice sites, three acute-care hospitals, specialty hospitals, ambulatory surgery centers, home care, and a 215,000-member health plan.

The medical home program offers 24-hour access to primary care and, through the primary care physician, consultation with a specialist; a nurse-coordinator at each practice site; a personal care navigator to respond to patient inquiries about health and where to get care; home-based monitoring; and support ranging from virtual care management to

electronic health records for all participants.

Physicians were paid \$1,800 per month to participate. Each practice site received \$5,000 for every 1,000 Medicare members enrolled, as support for infrastructure changes, additional staff, and extra practice hours. Bonus payments were provided if physicians met targets for 10 quality indicators. Each practice received monthly performance reports.

Geisinger also has a coordinated program to manage patients with chronic disease such as diabetes, heart failure, chronic kidney disease, coronary artery disease, and hypertension. This has become somewhat of an extension of the medical home program, with a new focus on prevention.

And the health system continues to build on its ProvenCare program, which addresses hospitalizations as episodes of care guided by best practices and risk-based pricing.

Although it may not be possible to exactly replicate the Geisinger experience, there are implications to be considered by policy makers, physicians, and others interested in the medical home, Dr. Steele said. Geisinger can more easily align incentives for physicians and for all patients; it's not clear that Medicare or commercial payers could do that across their physician and patient populations. The use of an electronic health record system has enabled Geisinger to start leveraging its benefits, but that was after a long transformation period, according to Dr. Steele.

Geisinger, however, is not looking back. It has expanded the medical home to 32 of its 55 sites and expects to be publishing those results soon, Dr. Steele said. ■

Medical Error Reports Tend to Lowball Costs

BY JANE ANDERSON

Contributing Writer

Medical error studies that focus only on inpatient stays and do not take into account hospital readmissions and other patient care may underestimate costs by up to 30%, according to an analysis of millions of health insurance claims.

William E. Encinosa, Ph.D., and Fred J. Hellinger, Ph.D., researchers at the Agency for Healthcare Research and Quality, examined a database of 5.6 million insurance claims for 14 potentially preventable adverse medical errors defined by the agency's Patient Safety Indicators (PSIs).

PSIs included technical problems, infections, pulmonary and vascular problems, acute respiratory failure, metabolic problems, wound problems, and nursing-sensitive events such as postoperative hip fracture and decubitus ulcer.

"Many hospitals are struggling to survive financially," Dr. Encinosa said in a statement. "The point of our paper is that the cost savings from reducing medical errors are much larger than previously thought." ■

A total of 2.6% of the 161,004 claims for major surgery in an adult included at least one of the 14 potentially preventable adverse medical errors; almost 6% of those claims had more than one error (Health Services Research 2008 July 25 [doi:10.1111/j.1475-6773.2008.00882.x]).

Total 90-day cost for surgery claims with one or more errors was \$66,879 on average, compared with \$18,284 for surgery claims without an error. In addition, surgeries with one or more errors averaged 21.5 inpatient days, with 5.3 of those days occurring on readmission, the researchers found.

In contrast, surgeries without an error averaged 5.1 inpatient days, with just 1 day of readmission.

Errors associated with the postoperative acute respiratory failure PSI were the most expensive of the seven patient-safety event classes, costing an average of \$106,370 over the 90-day period, along with the highest 90-day death rate (12%), according to the researchers.

Readmission costs for the postoperative acute respiratory failure PSI averaged \$12,274. ■

LAW & MEDICINE

Penicillin Allergy, Negligence, and Standard of Care

Question: A 56-year-old man was admitted to the hospital with pneumonia. He had told the triage nurse on initial presentation he was allergic to penicillin, but the hospitalist subsequently administered ampicillin. Shortly after receiving the first dose, the patient developed progressive respiratory distress and required intubation.

At trial, the hospitalist testified that he had misread the triage note because of poor handwriting. Which of the following best describes this hypothetical case?

- A. The nurse is negligent; but for her handwriting, there would have been no injury.
- B. The hospitalist is negligent because he should have retaken the allergy history.
- C. Illegibility is an unimportant source of serious mistakes.
- D. This is a case of medical error, which is the same as medical negligence.
- E. The jury can assume the man's respiratory distress was likely antibiotic-induced because of the time sequence of events.

Answer: B. Illegible handwriting can lead to serious mistakes, and although the nurse's handwriting may have contributed to the injury, that does not get the hospitalist

off the hook. He should have rechecked the allergy history. The facts in this case raise the issue of medication error, which sometimes amounts to negligence. However, to win a malpractice lawsuit, the plaintiff has to prove causation—that is, that the antibiotic proximately caused respiratory distress—and cannot simply rely on an unsupported assumption.



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The defendant is likely to argue that the respiratory distress was the result of pneumonia rather than a reaction to the antibiotic.

A tort is a civil wrong that affects private citizens and is not based on a breach of contract. Negligence is a tort that deals with harmful conduct not ordinarily expected of a reasonably prudent person. It has nothing to do with

the good or bad intentions of the perpetrator. When professionals such as physicians, dentists, engineers, and lawyers commit negligence, it is called malpractice. Medical malpractice is conduct by a health care provider that breaches the standard of care, resulting in harm to the patient.

"Standard of care" can be defined as follows: "The formula under which this usually is put to the jury is that the doctor must have and use the knowledge, skill, and care

ordinarily possessed and employed by members of the profession in good standing" (Prosser W.L. et al., eds. "Prosser and Keeton on Torts," 5th ed. St. Paul, Minn.: West Publishing Co., 1984; pp. 186-7).

Medical malpractice or negligence is therefore an act or omission by a health care professional that departs from this defined health care standard. As articulated by the Supreme Court of Nebraska: "In a malpractice action involving professional negligence, the burden of proof is upon the plaintiff to demonstrate the generally recognized medical standard of care, that there was a deviation from that standard by the defendant, and that the deviation was a proximate cause of the plaintiff's alleged injuries" (*Hamilton v. Bares*, 678 N.W.2d 74, Neb. 2004, citing an earlier Nebraska case).

It is incorrect to say medical negligence means an adverse outcome, a wrong judgment, or even a medical error. Some define medical error to denote a preventable adverse event, which in turn is defined as an injury caused by medical management rather than by the underlying condition of the patient. The Institute of Medicine defines error as "the failure of a planned action to be completed as intended (error of execution) or the use of a wrong plan to achieve an aim (error of planning)" (Kohn L.T. et al., eds. "To Err Is Human: Building a Safer Health System." Washington:

National Academy Press, 2000; p. 54).

Although a medical error can lead to patient harm, it is not synonymous with negligence. If the error or misjudgment is one that a reasonably competent professional would not commit, the standard of care is breached and there is medical negligence. But if a reasonably skilled practitioner could commit such an error or misjudgment, it would not amount to medical negligence.

Nor is an adverse outcome necessarily the result of negligence. The Supreme Court of Virginia said: "The mere fact that the physician has failed to effect a cure or that the diagnosis and treatment have been detrimental to the patient's health does not raise a presumption of negligence" (*Bryan v. Burt*, 486 S.E.2d 536, Va. 1997). Some medical conditions end up with bad results that are independent of the doctor's actions—hence the commonly stated axiom that the doctor is neither an insurer nor a guarantor of the patient's health. ■

DR. TAN is professor of medicine and former adjunct professor of law at the University of Hawaii, Honolulu. This article is meant to be educational and does not constitute medical, ethical, or legal advice. It is adapted from the author's book, "Medical Malpractice: Understanding the Law, Managing the Risk" (2006).