

MYTHBUSTER

The Degree and Cost of Medical Malpractice Key Findings of the National Academy of Sciences Institute of Medicine

In 1999, the National Academy of Sciences Institute of Medicine released a powerful new study entitled *To Err is Human; Building a Safer Health System*, (Kohn, Corrigan, Donaldson, Editors; Institute of Medicine, National Academy Press, Washington, DC, 1999.) Among its most important findings are the following:.

- **DEATHS IN HOSPITALS DUE TO MEDICAL ERRORS.** The report's findings are based on two large studies, one conducted in Colorado and Utah, which recently corroborated an earlier study in New York.¹ When the findings of these studies are "extrapolated to the over 33.6 million admissions to U.S. hospitals in 1997, the results of the study in Colorado and Utah imply that at least 44,000 Americans die each year as a result of medical errors. The results of the New York study suggest the number may be as high as 98,000. Even when using the lower estimate, deaths due to medical errors exceed the number attributable to the 8th leading cause of death. More die in a given year as a result of medical errors than from motor vehicle accidents (43,458), breast cancer (42,297) or AIDS (16,516)." Pages 1, 22, 25-26.
- **COSTS OF PREVENTABLE MEDICAL ERRORS THAT RESULT IN INJURY.** "Total national costs (lost income, lost household production, disability and health care costs) of preventable adverse events ... are estimated to be between \$17 billion and \$29 billion, of which health care costs represent over one-half."² Page 1, 22, 34. "In 1992, the direct and indirect costs of adverse events were slightly higher than the direct and indirect costs of caring for people with HIV and AIDS." Pages 22-23, 35.

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¹ Brennan, Troyen A.; Leape, Lucian L.; Laird, Nan M.; et al, Incidence of adverse events and negligence in hospitalized patients. Results of the Harvard Medical Practice Study, *N Engl J Med* 324:370-376, 1991. Thomas, Eric J.; Studdert, David M.; Burstin, Helen R.; et al. Incidence and Types of Adverse Events and Negligent Care in Utah and Colorado. *Med Care* forthcoming Spring 2000.

² Thomas, Eric J.; Studdert, David M.; Newhouse, Joseph P.; et al. Costs of Medical Injuries in Utah and Colorado, *Inquiry* 36:255-264, 1999. See also, Johnson, W.G.; Brennan, Troyen A.; Newhouse, Joseph P.; et al. The Economic Consequence of Medical Injuries, *JAMA* 267:2487-2492, 1992.

- **UNDERESTIMATION OF FIGURES.** “These figures offer only a very modest estimate of the magnitude of the problem since hospital patients represent only a small percentage of the total population at risk, and direct hospital costs are only a fraction of the total costs.” Page 2, 26. (“More is known about errors that occur in hospitals than in other health care delivery systems.” Page 23.) Not included in these studies are medical errors resulting from care provided in ambulatory settings, outpatient surgical centers, physician offices and clinics, home care, retail pharmacies and nursing homes. Page 2.
- **MEDICATION ERRORS.** “Medication errors alone (accidental poisoning by drugs, medicaments and biologicals, occurring either in or out of the hospital), are estimated to account for over 7,000 deaths annually, compared with less than 3,000 people in 1983, almost a 3-fold increase.”³ Generalizing the results of a prior study,⁴ “the increased hospital costs alone of preventable adverse drug events affecting inpatients are about \$2 billion for the nation as a whole.” Page 1-2, 27-28. Moreover, these estimated are low because “many errors go undocumented and unreported.” Page 29. “It has been estimated that for every dollar spent on ambulatory medications, another dollar is spent to treat new health problems caused by medications.”⁵ And “for every dollar spent on drugs in nursing facilities, \$1.33 is consumed in the treatment of drug-related morbidity and mortality, amounting to \$7.6 billion for the nation as a whole, of which \$3.6 billion as been estimated to be avoidable.”⁶ Page 35.
- **TYPES OF ADVERSE EVENTS.** “Patient safety problems of many kinds occur during the course of providing health care. They include transfusion errors and adverse drug events; wrong-side surgery and surgical injuries; preventable suicides; restraint-related injuries or death; hospital-acquired or other treatment-related infections; and falls, burns, pressure ulcers, and mistaken identity.” Page 30.
- **INATTENTION TO SAFETY.** “Health care is a decade or more behind other high-risk industries [like aviation] in its attention to ensure basic safety.” Page 4. “The likelihood of dying per domestic jet flight is estimated to be one in eight million. Statistically, the average passenger would have to fly around the clock for more than 438 years before being involved in a fatal crash.⁷ ...Some believe that public concern about airline safety, in response to the impact of news stories, has played an important role in the dramatic improvement in safety in the airline industry.” By comparison, “Americans have a very limited understanding of health care safety issues.” Page 36.

³ Phillips, David P.; Christenfeld, Nicholas; and Glynn, Laura M; Increase in US Medication-Error Deaths between 1983 and 1993, *The Lancet*, 351:643-44, 1998.

⁴ Bates, David W.; Spell, Nathan; Cullen, David J.; et al., The Costs of Adverse Drug Events in Hospitalized Patients, *JAMA* 277:307-311, 1997.

⁵ Alliance for Aging Research, When Medicine Hurts Instead of Helps, Washington DC: The Alliance for Aging Research; 1998.

⁶ Bootman, J. Lyle; Harrison, LTC Donald L., and Cox, Emily, The Health Care Cost of Drug-Related Morbidity and Mortality in Nursing Facilities, *Arch Intern Med.* 157(18):2089-2096, 1997.

⁷ Federal Aviation Administration, Office of System Safety. Aviation Safety Reporting System (ASRS) Database [Web Page] 1999. Available at: http://nasdac.faa.gov/safety_data.