Visitors to Hospital Emergency Rooms: Who, Why, and How Much Do They Cost?

Cyril F. Chang, Ph.D.

Introduction

Hospital emergency departments (EDs) are a vital source of health care in the United States, providing over 136 million of total patient visits annually.¹ They are also a major source of inpatient admissions; 11.9 percent of total ED visits in 2011 resulted in a hospital admission according to the latest statistics available from the Centers for Disease Control and Prevention (CDC).² Today, most hospital EDs are in stress as they struggle to provide prompt and high-quality treatment for patients with urgent and emergent medical problems while at the same time coping with many formidable challenges, including overcrowding, long waiting times, and unreimbursed services.³–⁴

This Research Brief summarizes recent data on ED visits in the United States from a variety of sources, including Medical Expenditure Panel Survey data released by the federal Agency for Healthcare Research and Quality (AHRQ),⁵ National Hospital Ambulatory Medical Care Survey data analyzed by the Centers for Disease Control and Prevention (CDC),⁶ and data released by the National Center for Health Statistics.⁷ The Brief focuses on the characteristics of ED visitors, the reasons for their visits, and the costs of their care.

Who are most likely to visit hospital emergency departments (EDs)?

The use of hospital emergency departments is one of the topics frequently covered by various agencies under the U.S. Department of
Visitors of Hospital ED

Health and Human Services. According to national data summarized in a recent National Center for Health Statistics (NCHS) Data Brief, for example, analysts from the Centers for Disease Control and Prevention reported:8

- Older adults aged 75 and over, infants younger than one year, women, non-Hispanic black persons, low-income persons, and persons with Medicaid coverage were more likely to have had at least one ED visit in a 12-month period than were those in other age, gender, race, income, and insurance groups.

- Among the under-65 population, the uninsured were no more likely than the insured to have had at least one ED visit in a 12-month period.

- Furthermore, ED visits by the uninsured were no more likely to be triaged as “nonurgent” (defined as being “stable,” with no resources anticipated except oral or topical medications, or prescriptions)9 than visits by those with private insurance or Medicaid coverage.

- Persons with Medicaid coverage were more likely to have had multiple visits to the ED in a 12-month period than were those with private insurance and the uninsured.

- Persons with and without a usual source of medical care were equally likely to have had one or more ED visits in a 12-month period.

Why do people visit hospital EDs?

Patients seek care at EDs for a wide variety of illnesses and injuries that range in severity from life threatening to emergent to minor and nonurgent. Of the 136.3 million ED patient visits reported to the National Ambulatory Medical Care Survey in 2011, for example, 1.2 percent were triaged as needing immediate attention (Level 1 or the highest of five levels of triage status), 10.7 percent as emergent (Level 2), 42.3 percent as urgent (Level 3), 35.5 percent as semi-urgent (Level 4), and 8.0 percent as nonurgent (Level 5).10 Triage status was not reported in the remaining 2.2 percent.
What are the reasons for emergency room use? The results of a recent national survey of ED visitors by the CDC are informative for addressing this question. Based on data for January through June 2011 and adult ED visitors aged 18-64 whose last hospital visit in the past 12 months did not result in hospital admission, the CDC survey results showed:

- About 79.7 percent of surveyed adults chose the answer “lack of access to other providers” as one of the reasons for their last visits. In contrast, a significantly lower 66.0 percent of those surveyed chose the answer “seriousness of the medical problem” as a main reason.

- Other more common reasons for the last emergency room visit were: “only a hospital could help” (54.5%), “the doctor's office was not open” (48.0%), or “there was no other place to go” (46.3%).

- Adults with public-health-plan coverage were twice as likely as those with no health insurance to visit the emergency room because their doctor’s office was not open.

- Uninsured adults were more likely than those with private health insurance or a public health plan to visit the emergency room due to having no other place to go.

- Adults living outside a metropolitan statistical area (MSA) were more likely than those living in a MSA to visit the emergency room because their doctor’s office was not open.

- Adults with unmet medical needs were less likely than adults without unmet needs to visit the emergency room because their doctor’s office was not open, and more likely to visit because they had no other place to go.

**How much did ED care cost?**

According to the most recent statistics reported by the federal Agency for Healthcare Research and Quality (AHRQ), in 2012: 12
• About 13.0 percent of the total U.S. population had an expense for ED services, with an average amount of $1,390 per person and a median of $713.

• Total expenditures for ER services were $55,878,000, or 4.14 percent of total national health care expenditures of $1.351 trillion.

• Private insurance plans paid 47.1 percent of total expenditures for ED services, while Medicare and Medicaid paid 15.7 percent and 12.2 percent, respectively. Out-of-pocket payments represented 12.4 percent of total ED expenses in 2012.

• Those with no health insurance, while representing 12.7 percent of the total U.S. population in 2012, accounted for 9.4 percent of total reported ED expenses.

• The non-elderly under-65 population with public insurance coverage (mostly Medicaid patients), on the other hand, represented 16.2 percent of the total U.S. population and accounted for 16.0 percent of total ED expenses in 2012.

**Concluding Observations**

As originally envisioned, the ostensible purpose of hospital EDs is to be the provider of prompt, life-saving care for patients with urgent and emergent medical problems. But, the reality on the ground today is that hospital EDs must balance their basic mission against a host of other demands placed on them that range from providing urgent and after-hours care for all patients to serving as the safety-net providers for the uninsured and to meeting local public health needs, such as surveillance of seasonal and contagious diseases and disaster preparedness. It is a health system challenge and a vital health reform agenda both nationally and locally to improve the functioning of hospital EDs by increasing the quality of life-saving care while reducing overcrowding and long wait lines, preventable visits for non-urgent conditions, and the high costs of care.
References


8 Ibid.


10 Centers for Disease Control and Prevention (CDC). National Hospital Ambulatory Medical Care Survey: 2011 Emergency Department Summary Tables.


Author Information:

Dr. Cyril F. Chang is a Professor of Economics and the Director of the Methodist Le Bonheur Center for Healthcare Economics at the Fogelman College of Business and Economics, The University of Memphis. E-mail: cchang@memphis.edu.

Contact Information:

Dr. Cyril F. Chang  
Professor of Economics and Director  
Methodist Le Bonheur Center for Healthcare Economics  
Fogelman College of Business and Economics  
The University of Memphis  
Memphis, Tennessee 38152  

Phone: 901-678-3565  
Fax: 901-678-2685  
E-mail: cchang@memphis.edu  
http://healthecon.memphis.edu/