Emergency Department Utilization and Capacity

Derek DeLia, Ph.D.
Joel Cantor, Sc.D.
Rutgers Center for State Health Policy

July, 2009

Synthesis Report and Brief Available at *www.policysynthesis.org*

Why is this issue important?

- ED visits are growing
- The number of ED's has declined
- Institute of Medicine: Emergency care in the U.S. has reached "a breaking point"

- ED is bellwether of performance in other parts of the health sector
  - Primary care
  - Mental health services

- ED is part of first response to public health emergencies
  - Bioterrorism
  - Natural disasters
  - Epidemics

Topics addressed by the Synthesis:

1. Factors affecting ED utilization
2. Non-urgent & preventable ED use
3. Patient cost-sharing in the ED
4. Impact of ED on hospital finances
5. Causes and consequences of ED overcrowding
6. Cost implications of ED utilization

Characteristics of patients

- Frequent ED users have substantial physical & mental health problems, have low-income, and are mostly covered by Medicare or Medicaid (i.e., not uninsured)
- Uninsured ED use is higher than privately insured but not after adjustment for health, income, & other factors
- Recent growth in volume of ED visits is driven primarily by privately insured, higher-income individuals
- Non-U.S. citizens use the ED at a rate that is below the national average

Characteristics of local health systems

- Greater use of the ED associated with:
  - More limited supply of primary care physicians
  - Greater supply of ED capacity

- Evidence on how characteristics of local health systems affect ED use remains underdeveloped

Non-urgent/preventable ED use

- ED visits in 2006 (Pitts et al., 2008)
  - 12% non-urgent
  - 5% immediate attention needed
  - 70% intermediate triage levels
  - 13% unknown/unclassified
- ≈ 50% of non-admitted ED visits are “ambulatory care sensitive”
- Measurement of urgency & ambulatory care sensitivity is very imprecise
  - Point of controversy

Factors related to non-urgent/preventable ED use

- Common factors
  - Medicaid
  - Uninsured
  - Young children (age ≤ 5)
  - No regular doctor
  - Patient preference (no appointment, hospital reputation)
- Privately insured & Medicare patients account for large share of total volume of non-urgent/preventable ED care
- Perception of urgency
  - Patients & clinicians differ
  - Clinical assessments subject to error

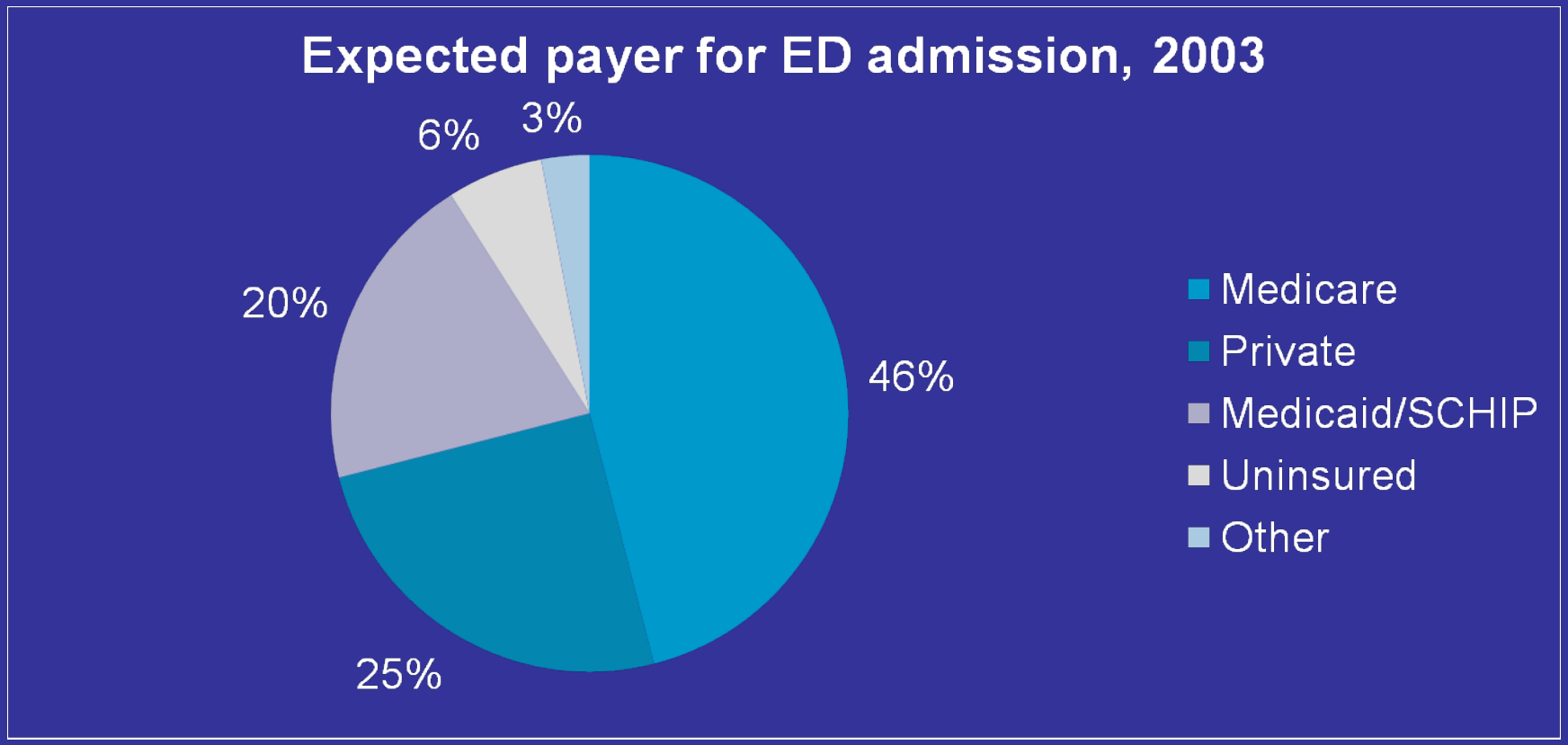
ED cost sharing

- Cost-sharing reduces ED use
  - Fewer repeat visits
  - Larger reductions in low-acuity visits
- No studies have found adverse health consequences associated with ED cost-sharing
- Research includes many limitations
  - Most studies based on privately insured in integrated delivery systems
  - Little/no information about poor or publicly insured
  - Most data from 1990's or earlier

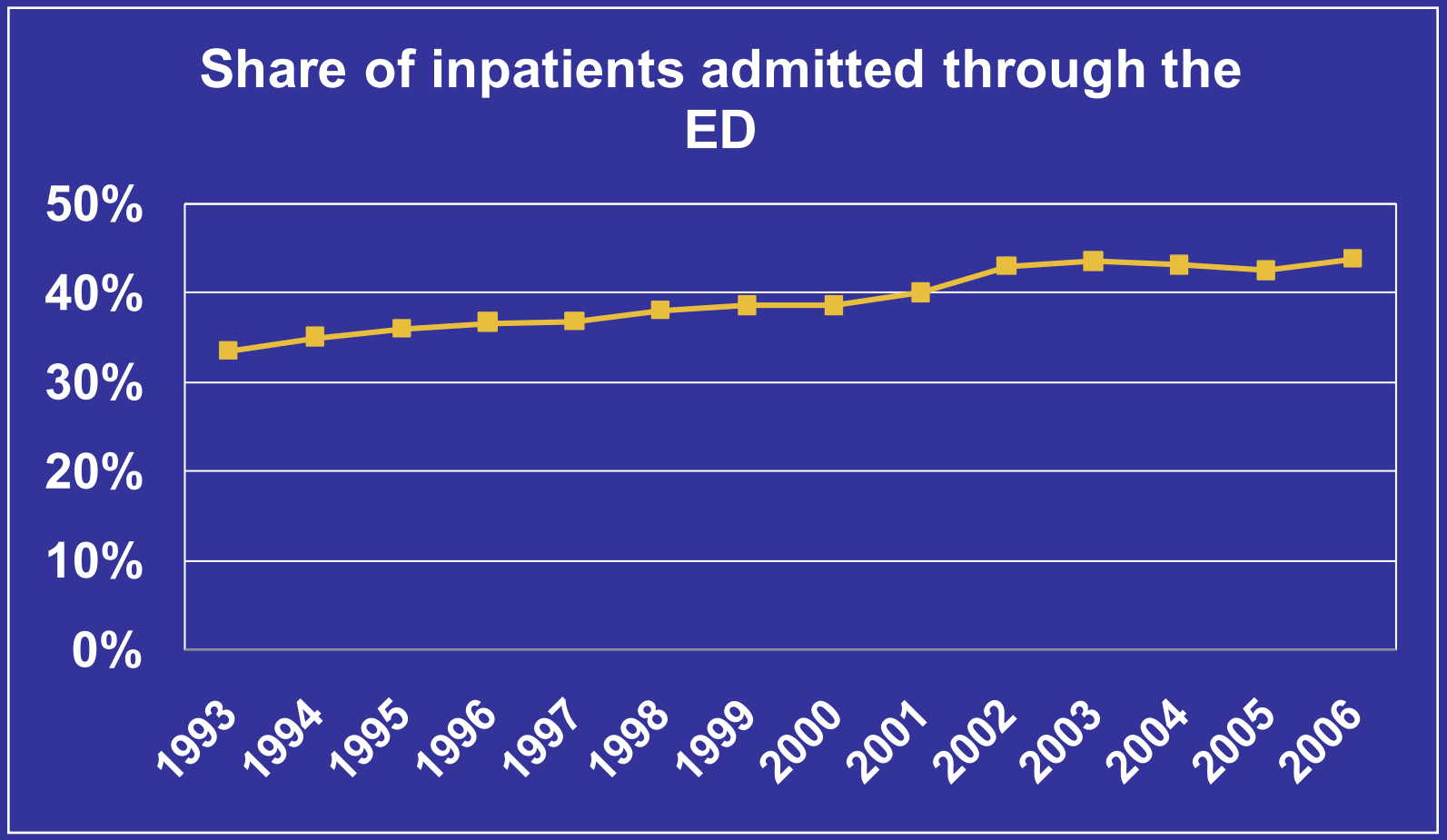
The ED and hospital finances (1)

- Emergency Medical Treatment and Active Labor Act (EMTALA)
  - Screen & stabilize all patients
  - Regardless of ability to pay
  - Some states add stronger mandate
  - No studies directly evaluate impact on hospital finances
- ED is entry point for uninsured hospital care
- Percentage of inpatient admissions via ED, 2003
  - Uninsured 60%
  - Medicaid 39%
  - Privately insured 32%
  - Overall 44%

Most patients admitted through the ED are insured



The ED is a growing source of admissions



The ED and hospital finances (2)

- Some evidence shows the ED is an important source of revenue & profits
- Factors increasing ED profitability:
  - High percentage of well-insured patients
  - Limited trauma services
  - High ratio of admitted to non-admitted ED patients
  - Access to subsidies
- Public subsidies covered 82% of hospital uncompensated care in 2008 (Hadley et al., 2008)
  - Targeting of subsidies inefficient
  - Little/no subsidies for uncompensated physician care

Causes of ED overcrowding

- Bottlenecks within hospitals & across entire health system
  - Lack of beds leads to patient "boarding" in the ED
  - Inefficient management of patient flow
- Lack of clinical staff
  - Specialists less willing to serve on-call in the ED
- ED staff challenged by growing mental health volume
- Uninsured patients & use of ED for non-urgent care are NOT drivers of ED overcrowding

Consequences of ED overcrowding

- Reduced access
  - Longer waiting times
  - Leave ED without being seen
  - Ambulance diversion/disruption
- Reduced quality and safety
  - Increased patient mortality
  - Antibiotics & analgesics delayed or not administered
  - More adverse events/medical errors
- Much evidence on quality/safety is international
  - Confirmatory studies in U.S. would be useful

Costs of ED utilization

- Costs of ED care are not well documented
- Very few studies exist
  - Conflicting evidence
  - Methodological challenges
- Charges are high to recover fixed costs
- Marginal costs may be low (especially for “easy” cases)
- Unanswered questions
  - Can health system costs be reduced by keeping people out of the ED?
  - Do ED’s provide more intensive service to non-urgent patients?

Policy implications (1)

- ED problems cannot be fixed in the ED alone
  - Hospital-wide: Patient flow
  - System-wide: Capacity, primary care, mental health, reimbursement
- More oversight needed to address effects of hospital closure/relocation on remaining ED capacity
- Dedicated funding for emergency care may be needed when the ED is a financial drain on the hospital
  - Coordinate w/other hospital subsidies

Policy implications (2)

- Coverage expansion by itself will not reduce, and may increase, ED overcrowding

- Primary care in the ED is widespread and persistent
  - Long term: Expand access to community-based care
  - Short term: Make ED's more amenable to primary care delivery
  - ED may be cost-effective or preferred in some cases

- Limited access to mental health services appears to place additional stress on ED's
  - Quantitative importance is not assessed in the literature

Project Information

Web site: www.policysynthesis.org
E-mail: synthesisproject@rwjf.org

Contacts
RWJF: Brian Quinn
Synthesis Project: Sarah Goodell