Monitoring Pediatric Emergency Room Use with the National Health Interview Survey

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Outline

- Pediatric emergency room (ER) use and the Affordable Care Act (ACA)
- Determinants of pediatric ER use
- Using NHIS to examine associations with pediatric ER use
- Summary and next steps
Affordable Care Act and Pediatric ER Use

Medicaid expansion:
- Planning: Predicting access needs

Current concerns:
- Cost control
- Denial of payment for “unnecessary” ER use

Understanding reasons for ER visits
Emergency Room Use Among Adults Aged 18–64: Early Release of Estimates From the National Health Interview Survey, January–June 2011

by Renee M. Gindi, Ph.D.; Robin A. Cohen, Ph.D.; and Whitney K. Kirzinger, M.P.H.,
Division of Health Interview Statistics, National Center for Health Statistics

Highlights

From January through June 2011, among adults aged 18–64 whose last hospital visit in the past 12 months did not result in hospital admission:

Introduction

Rising health care costs make it important to understand the reasons that people seek emergency room care rather than less expensive outpatient or office-based care (1). Surveys in 2007 and 2010 showed that about 20% of U.S. adults had used the emergency room in the past 12 months, with usage most common for those with public health insurance and living outside a metropolitan area.
Correlates of Pediatric ER Use

- **PREDISPOSING**
  - Sociodemographic and neighborhood factors (age, single parent, poverty, lack of parental education, urbanicity)

- **ENABLING**
  - Health insurance
  - Usual source of care
  - Preventive care
  - Timely access to and satisfaction with provider

- **NEED**
  - Unmet medical needs
  - Poor health
Methods: Study Population

2011 NHIS Sample:
- 40,300 families
- 102,000 persons
- 33,00 sample adults
- 12,850 sample children
Methods: Questionnaire Content

Emergency room use:
- Number of ER visits for the child in the past 12 months

If at least one visit...
- Hospital admission for last ER visit
- *If not admitted, reason for last ER visit*
  - Eight reasons
  - Can select more than one
Methods: Questionnaire Content

- Age
- Poverty
- Urbanicity
- Insurance coverage status
- Usual place of care in past 12 months
- Preventive care visit in past 12 months
- Problems with accessing provider
- Unmet medical needs
- Health status
- Seriousness of medical problem
- Hospital admission
Percentage of children visiting the ER one or more times in the past 12 months, by age group: U.S., 2009-2011

- **0-4 years**: 27.8% in Q3 2010, 22.8% in Q4 2011
- **5-7 years**: Variations throughout the years
- **12-17 years**: Variations throughout the years
Percentage of children aged 0-17 using the ER, by poverty and urbanization: U.S., 2011

- **Poverty**
  - Poor: 25.6%
  - Near poor: 20.0%
  - Not poor: 15.4%

- **Urbanization**
  - Within MSA: 17.9%
  - Outside of MSA: 21.9%
Percentage of children aged 0-17 using the ER, by insurance coverage status: U.S., 2011

Insurance Coverage Status:
- Private: 14.9%
- Medicaid/CHIP: 24.4%
- Uninsured: 13.8%
Percentage of children aged 0-17 using the ER, by usual place of care and receipt of preventive care: U.S., 2011

- Usual Place of Care
  - Yes: 18.6%
  - No: 16.8%

- Preventive Visit
  - Yes: 19.4%
  - No: 15.1%
Percentage of children aged 0-17 using the ER, by unmet medical needs and health status: U.S., 2011

- **Yes, unmet medical needs:** 22.3%
- **No, unmet medical needs:** 18.4%
- **Excellent/Very Good health status:** 16.9%
- **Good health status:** 24.3%
- **Fair/Poor health status:** 39.7%
Correlates of hospital admission after ER visit in past 12 months among children aged 0-17: U.S., 2011

<table>
<thead>
<tr>
<th>Increased likelihood of admission</th>
<th>No difference in admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Within MSA (vs. outside MSA)</td>
<td>- Usual place for health care</td>
</tr>
<tr>
<td>- Poor/near poor (vs. not poor)</td>
<td>- Unmet medical need</td>
</tr>
<tr>
<td>- Medicaid/CHIP or Uninsured (vs. Privately insured)</td>
<td>- Receipt of preventive care</td>
</tr>
<tr>
<td>- Fair/poor health status (vs. excellent/very good)</td>
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</tbody>
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Percentage with reason for last ER visit, among children aged 0-17 whose last visit in past 12 months did not result in hospital admission: U.S., 2011

- Seriousness of medical problem: 62.9%
- Only hospital could help: 48.3%
- Problem too serious for doctor's office: 37.2%
- Health provider said to go: 23.5%
- Arrived by ambulance: 5.7%
- Lack of access to other providers: 81.2%
- Doctor's office not open: 64.4%
- No other place to go: 46.1%
- Emergency room is closest provider: 37.7%
- Most care is at emergency room: 6.6%
Percentages of children aged 0-17 with specific type of reason for ER visit, by insurance coverage type: U.S., 2011

**Medicaid/CHIP**
- Access and Seriousness
- Access only
- Seriousness only
- Neither

**Private**
- Access and Seriousness
- Access only
- Seriousness only
- Neither
Summary

- Age, poverty, urbanicity as expected

- Medicaid/CHIP
  - Associated with more ER use
  - Associated with more admissions
  - Associated with lack of access reasons

- Usual place / Preventive care not as expected

- Health status as expected
- Unmet need not as expected
Next Steps

- Stratified / adjusted statistical analyses
- Expanded universe for “reason for visit” questions
- State-based analyses
- Trend analyses
For more information please contact National Center for Health Statistics

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<table>
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<th>Reason for Last ER Visit</th>
<th>Percentage</th>
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<tr>
<td>Seriousness of medical problem</td>
<td>66.0%</td>
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<tr>
<td>Only hospital could help</td>
<td>54.5%</td>
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<tr>
<td>Problem too serious for doctor's office</td>
<td>42.5%</td>
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<td>Health provider said to go</td>
<td>20.1%</td>
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<td>Arrived by ambulance</td>
<td>8.9%</td>
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<td>Lack of access to other providers</td>
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<td>No other place to go</td>
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<td>Emergency room is closest provider</td>
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<td>Most care is at emergency room</td>
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ER visits for children under 18 years, by age group: United States, 2008-2010

- 0-4 years: 28.7, 26.8, 28.1, 24.8
- 5-11 years: 18.2, 18.8, 20.3, 15.3
- 12-17 years: 17.3, 17.9, 19.0, 16.9

ER visits for children under 18 years, by age group: United States, 2010