Non-Emergent Emergency Department Use among Adults with Disabilities

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Introduction

- Disparities in health care among individuals with disabilities
  - Disproportionately represented in ED use
  - More likely to belong to a minority group
  - More likely to have lower socioeconomic status
- Many ED visits could be prevented with appropriate primary care
Objective

- Using data from the Medical Expenditure Panel Survey (MEPS), we examined the relationship between disability and:
  - Likelihood of ED use
  - Frequency of ED use
  - Non-emergent ED use

- MEPS is a healthcare survey of community dwelling Americans
METHODS
Data

- MEPS Household Component (MEPS-HC)
  - Pooled data from 2001 to 2007
  - Sample of 8,846 adults with disabilities (out of 39,934 total individuals)

- Applied the publicly available algorithm developed by researchers at NYU Center for Health and Public Service to classify ED visits by urgency
NYU Classification

1. Non-Emergent
   - Immediate care was not required within 12 hours
   - E.g. Eye redness

2. Emergent/Primary Care Treatable
   - Treatment was required within 12 hours but could have been provided in a primary care setting
   - Example:
     - Chronic bronchitis
     - Heartburn

1http://wagner.nyu.edu/faculty/billings/nyued-background
NYU Classification (continued)

3. Emergent but Preventable/Avoidable
- ED care was required but was avoidable with appropriate ambulatory care
  - Example:
    - Exacerbation of diabetes or asthma

4. Emergent and Not Preventable/Avoidable
- ED care was required and ambulatory care could not have prevented the condition
  - E.g. Acute respiratory failure
Emergent Classification$^2$

ER Visit: ICD-9 Code

- Emergent
- Non-Emergent $P_{NE}$
- Injury
  - Mental Health
  - Alcohol or Drug Related
  - Unclassified
- ED Care Needed
- Primary Care Treatable $P_{PCT}$
- Preventable $P_{EPA}$
- Non-Preventable $P_{ENPA}$

$P_{NE} + P_{PCT} + P_{EPA} + P_{ENPA} = 100$

Variables

- Disabilities:
  - Sensory, physical, cognitive, functional, and mental health

- Demographic controls:
  - Age, race/ethnicity, marital status, education, income, insurance status, having a usual source of care, self-reported health status, and region (MSA)
Models Estimated

- Logistic Regression
  - Any ED visit
  - 5 or more ED visits
  - Potentially non-emergent ED visits
RESULTS
Any ED Use

- Individuals with a disability had 1.6 times the odds of reporting any ED use

- Higher odds of ED use are also associated with:
  - Blacks
  - Women
  - Those with public insurance
  - Those who reported a person as a primary or usual source of care

- As self-reported health declined, odds of ED use increased
Five or More ED Visits

- Adults with disabilities had 2.65 times the odds of frequent ED use.
- Higher odds are also associated with:
  - Women
  - Those with public insurance
- As self-reported health status declined, odds of frequent use increased.
- Hispanics and those of another race had lower odds of frequent ED use.
- Having usual source of care was not associated with frequent ED use.
Non-Emergent ED Use

- Individuals with disabilities did not have significantly different odds of non-emergent ED use

- Demographic and Socioeconomic Effects:
  - Blacks had higher odds
  - Women had higher odds
  - Insurance and self-reported health status were not significantly related
  - Individuals who reported a person as a regular or usual source of care had lower odds
Conclusions

- Individuals with disabilities were more likely to be:
  - Non-Hispanic Black
  - Of lower socioeconomic status
  - Publicly insured
  - In poorer health

- Controlling for these factors, we found that adults with disabilities:
  - had higher odds of any ED use and frequent ED use
  - No statistical difference in odds of non-emergent ED use
Conclusions (continued)

- Primary care is of added importance to individuals with disabilities

- Adults with disabilities are more likely to have a usual source of care. However, primary care providers may not address all the needs of individuals with disabilities.

- The ACA includes provisions to support management of chronic conditions and integrated delivery systems that may improve healthcare for individuals with disabilities

- Continued efforts to improve access to care and develop effective, culturally competent models of chronic disease management are warranted
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