Characteristics of children in Medicaid Managed Care and Medicaid Fee for Service

Patricia C. Lloyd, Alan E. Simon, Jennifer D. Parker

National Conference on Health Statistics
August 26, 2015
Introduction

• Medicaid claims have been used to characterize health care utilization patterns of children enrolled in Medicaid.

• Claims data are only available for children in Medicaid Fee for Service (FFS) programs.

• As States increasingly adopt Medicaid Managed Care plans, analyses using claims data to describe children enrolled in Medicaid may mischaracterize their intended population.
Objectives

• Examine associations between sociodemographic, health, and geographic characteristics of children aged 0-17 years and enrollment in either Medicaid FFS or a comprehensive managed care (CMC) program

• Examine associations of age-specific health outcomes of children aged 6-17 years and enrollment in either Medicaid FFS or CMC program
Data Sources

• The 2003-2005 National Health Interview Survey (NHIS) linked to the 2003-2005 Medicaid Analytic eXtract (MAX) files
  – NHIS: a nationally representative, cross-sectional population health survey
  – MAX: extract of Medicaid eligibility and claims files submitted by each state to the Medicaid Statistical Information System (MSIS)

• Respondent-reported data provided by a knowledgeable adult family member
NHIS-MAX data linkage (1/3)

Survey Period

Administrative Period

Medicaid enrollment

2003

2004

Medicaid enrollment

2005
NHIS-MAX data linkage (2/3)

Survey Period


Administrative Period

Survey Period

2003

6/2003

2005

Administrative Period

2/2003

2/2004

2003

2005

Medicaid recipient during month of NHIS interview

Medicaid enrollment
Methods

• Total of 3,662 sample children (0-17 years) enrolled in Medicaid FFS (n=1,373) or CMC (n=2,289) programs as identified in the MAX file in month/year of NHIS interview

• 1,972 children 6-17 years were enrolled in Medicaid

• Sample weights were adjusted for linkage-eligibility

• Characteristics of those in FFS and CMC were compared using chi-square tests; 95% Confidence Intervals are created based on the logit transformation
Selection Criteria

- **n=19,077** Linkage-ineligible

- **n=18,131** 0-17 year old children NHIS 2003-2005
  - **n=12,962** Not enrolled in Medicaid at time of interview
  - **n=1,507** Other Managed Care
  - **n=5,169** Linkage-eligible and enrolled in Medicaid at time of interview
    - **n=1,373** Fee-for Service (N=735 6+ years)
    - **n=2,289** Comprehensive Managed Care (N=1,237 6+ years)
Results (1/5)

Percent distribution of sociodemographic characteristics of US children age 0-17 enrolled in Medicaid at interview, by type of Medicaid program (2003-2005 linked NHIS-MAX files)

*Chi-square p value < 0.05

Results (2/5)

Percent distribution of geographic residence of US children age 0-17 enrolled in Medicaid at interview, by type of Medicaid program (2003-2005 linked NHIS-MAX files)

*Chi-square p value < 0.05

Results (3/5)
Percent selected asthma diagnoses of US children age 0-17 enrolled in Medicaid at interview, by type of Medicaid program (2003-2005 linked NHIS-MAX files)

Results (4/5)

Percent with access to health care and utilizing services among US children age 0-17 enrolled in Medicaid at interview, by type of Medicaid program (2003-2005 linked NHIS-MAX files)

Results (5/5)

Percent distribution of selected diagnoses for US children age 6-17 enrolled in Medicaid at interview, by type of Medicaid program (2003-2005 linked NHIS-MAX files)

- *Chi-square p value < 0.05

Limitations

• Cross-sectional analyses do not allow us to infer causal associations between enrollment plan type and sociodemographic and health conditions or characteristics of Medicaid children.

• Data represent the population of children enrolled in Medicaid during 2003-2005, and may not reflect current data.
Conclusions

• We observed differences in the percent distribution for several characteristics and similarities for others

• Generalizability of study results to all children in Medicaid based on analyses of FFS claims may depend on the outcomes examined
More information about the NCHS data linkage program:

http://www.cdc.gov/nchs/data_access/data_linkage_activities.htm

Contact information:
plloyd@cdc.gov