Associations Between Practice-Reported Medical Homeness and Health Care Utilization Among Publicly Insured Children

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Background

- Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Grant Program
  - $100 million to improve health care for children
  - 10 awardees (18 states), 5-year grants starting in 2010
  - 52 total projects
  - National evaluation overseen by the Agency for Healthcare Research and Quality (AHRQ)

- 12 states with patient-centered medical home (PCMH) projects

Background & Research Question

- Relationship between "medical homeness" and children's health care utilization
  - Results vary by study, outcome (preventive care, ED visits, hospitalizations), and population (general population vs children with chronic conditions)
  - Most studies assess *parent-reported* medical homeness
  - Two studies of *practice-reported* medical homeness show mixed results (Cooley 2009, Paustian 2013)

Methods

- Cross-sectional baseline analysis
  - 3 states: IL, NC, SC
  - 64 practices (IL = 32, NC = 18, SC = 14)
- Children (birth–18 y) in Medicaid
  - Fee-for-service or primary care case management
  -

Methods: Measures

- Practice-reported "medical homeness"
  - National Committee for Quality Assurance (NCQA) 2011 medical home self-assessment: IL
  - Medical Home Index (MHI): NC
  - Medical Home Index-Revised Short Form (MHI-RSF): SC
  - Tertiles: low, medium, high

- Utilization (prior 12 mo.)
  - WCV: 75% of recommended # of well-child visits
  - EDV: any non-urgent, potentially avoidable emergency department visit (NYU algorithm; Ben-Isaac 2010)

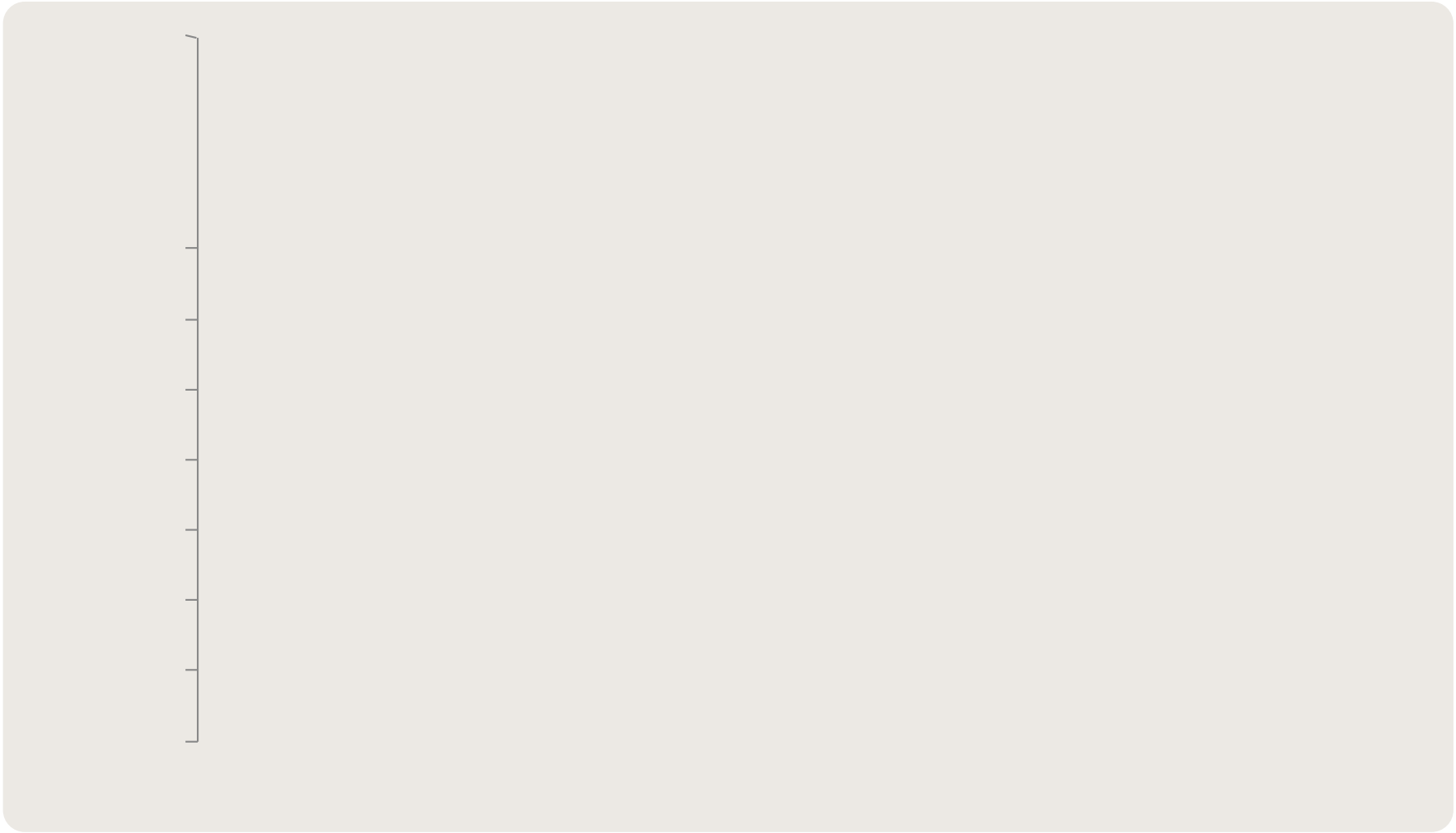
Methods: Analysis

- Multi-level logistic regression
  - Separate models for IL and NC/SC
- Covariates
  - Child-level: age, race/ethnicity, chronic condition/disability
    - Pediatric Medical Complexity Algorithm (Simon, et.al. 2014)
    - Medicaid eligibility based on disability
  - Practice-level (NC/SC only): urban/rural, # of providers
- Sensitivity tests
  - Re-estimated models with medical homeness as
    - Continuous variable
    - Categorical variable with cut points at 25th and 75th percentile
  - Inferences did not change

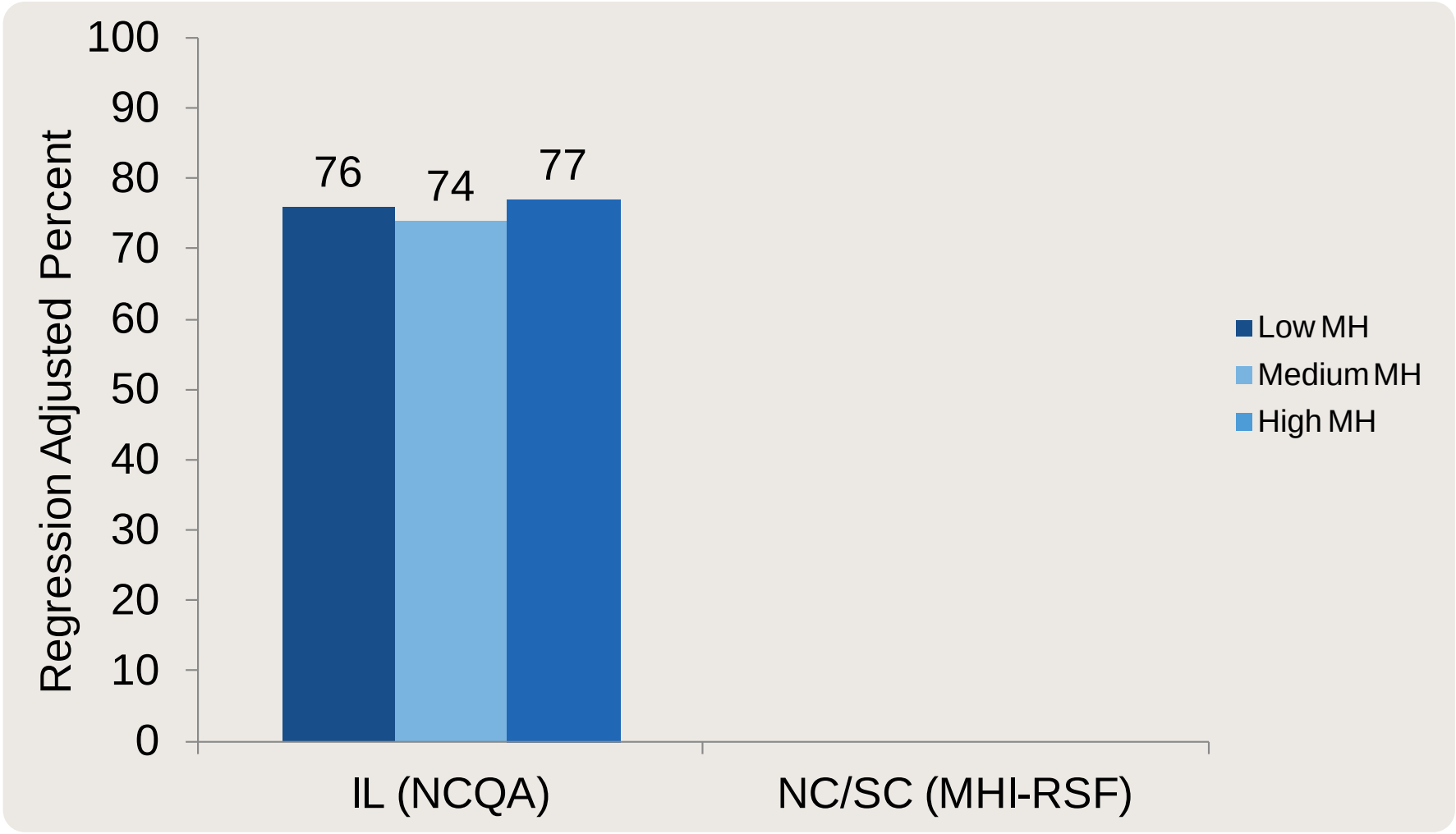
Child Characteristics

	IL (n = 33,895)	NC/SC (n = 57,553)
Age group, %		
0 to 5 years	53	57
6 to 12 years	31	30
13 to 18 years	16	14
Race/ethnicity, %		
black	45	33
white	31	45
other	24	22
Chronic condition or disability, %	31	34

Results: Medical Homeness & Well -Child Visits



Results: Medical Homeness & Well -Child Visits



Conclusions

- Medical homeness was not associated with well-child visits
- Higher medical homeness was associated with fewer non-urgent ED visits, but only in IL where NCQA medical home self-assessment measure was used
- Limitations
  - Cross-sectional
  - May not be representative of Medicaid managed care
  - Could only attribute children with some service use
  - Different measures vs. different states

For More Information

- National Evaluation of the CHIPRA Quality Demonstration Grant Program

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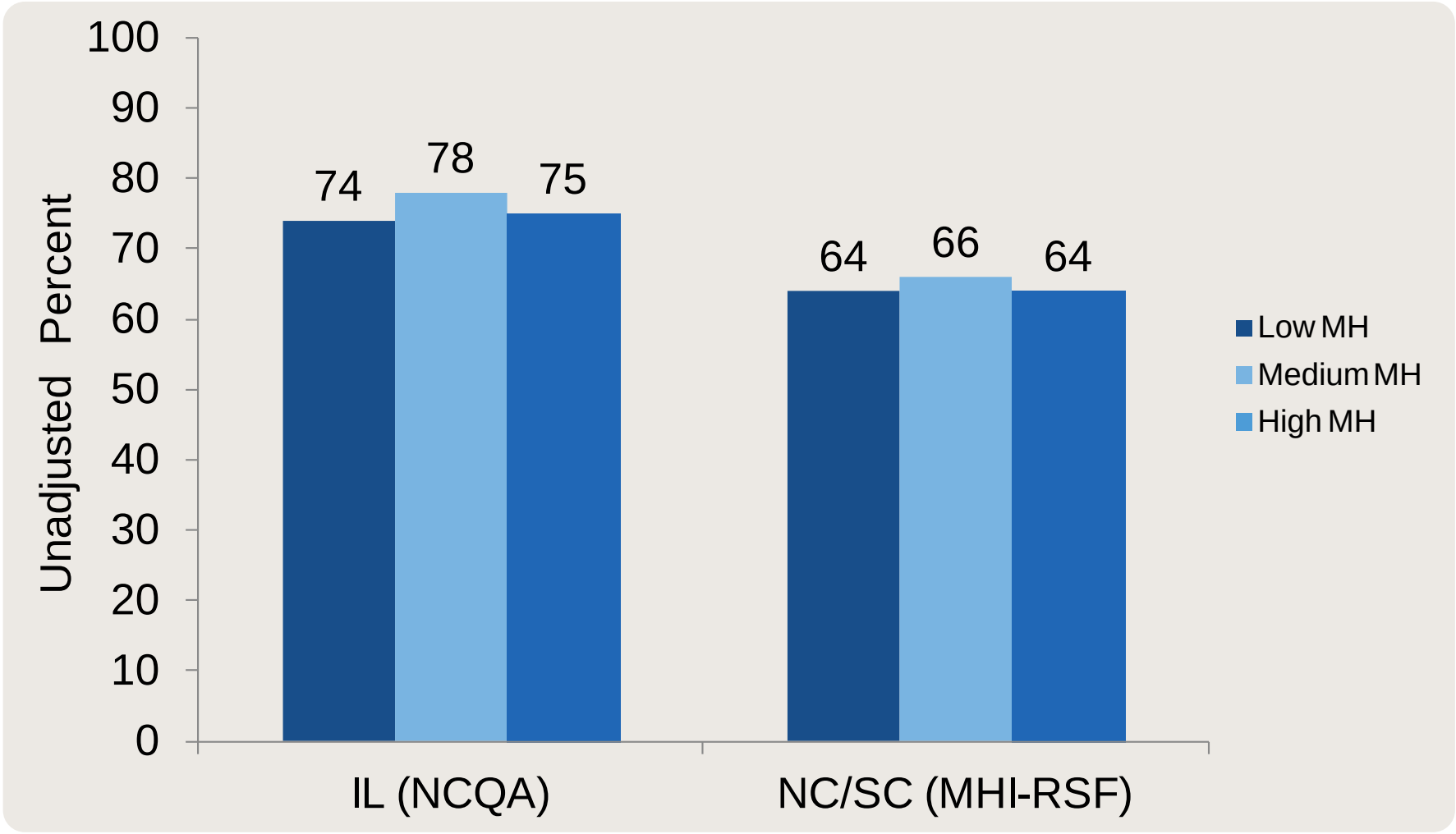
Results: Medical Homeness & Well -Child Visits



Medical Homeness & Non- Urgent ED Visits