

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

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Anna L. Christensen, PhD • Joseph S. Zickafoose, MD, MS •
Brenda Natzke, MPP • Stacey McMorrow, PhD •
Henry T. Ireys, PhD

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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 homes” 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 homes
 - Two studies of *practice-reported* medical homes show mixed results (Cooley 2009, Paustian 2013)
- Is the “medical homes” of primary care practices associated with health care utilization by publicly insured children?

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
 - Exclusions: >1-month gap in coverage, partial benefits, waiver program, other insurance, institutionalization
- Attribution of children to practices
 - Majority of well-child visits
 - If no majority of well-child visits, majority of other visits

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: $\geq 75\%$ of recommended # of well-child visits
 - EDV: any non-urgent, potentially avoidable emergency department visit (NYU algorithm; Ben-Isaac 2010)

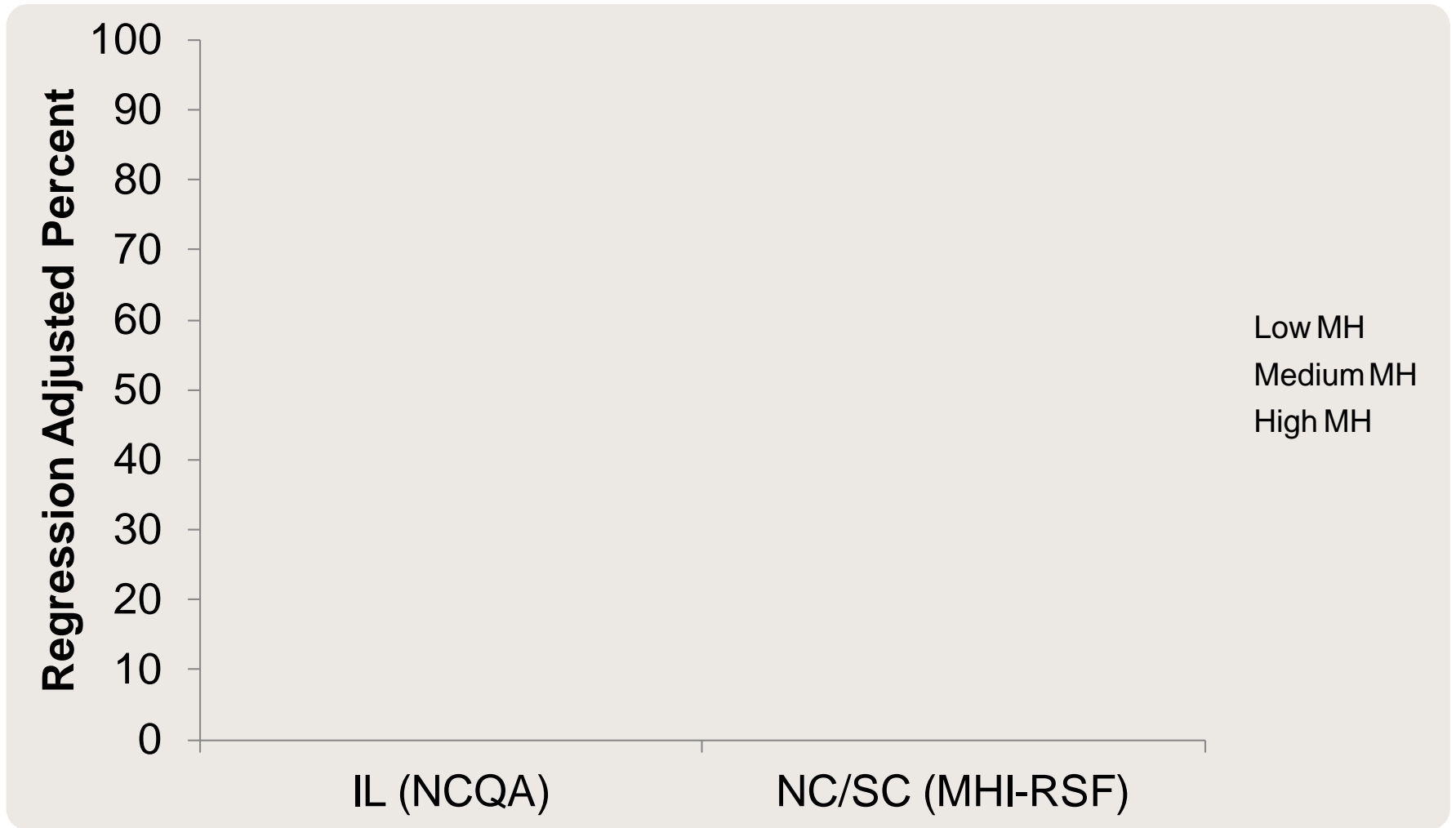
Methods: Analysis

- 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

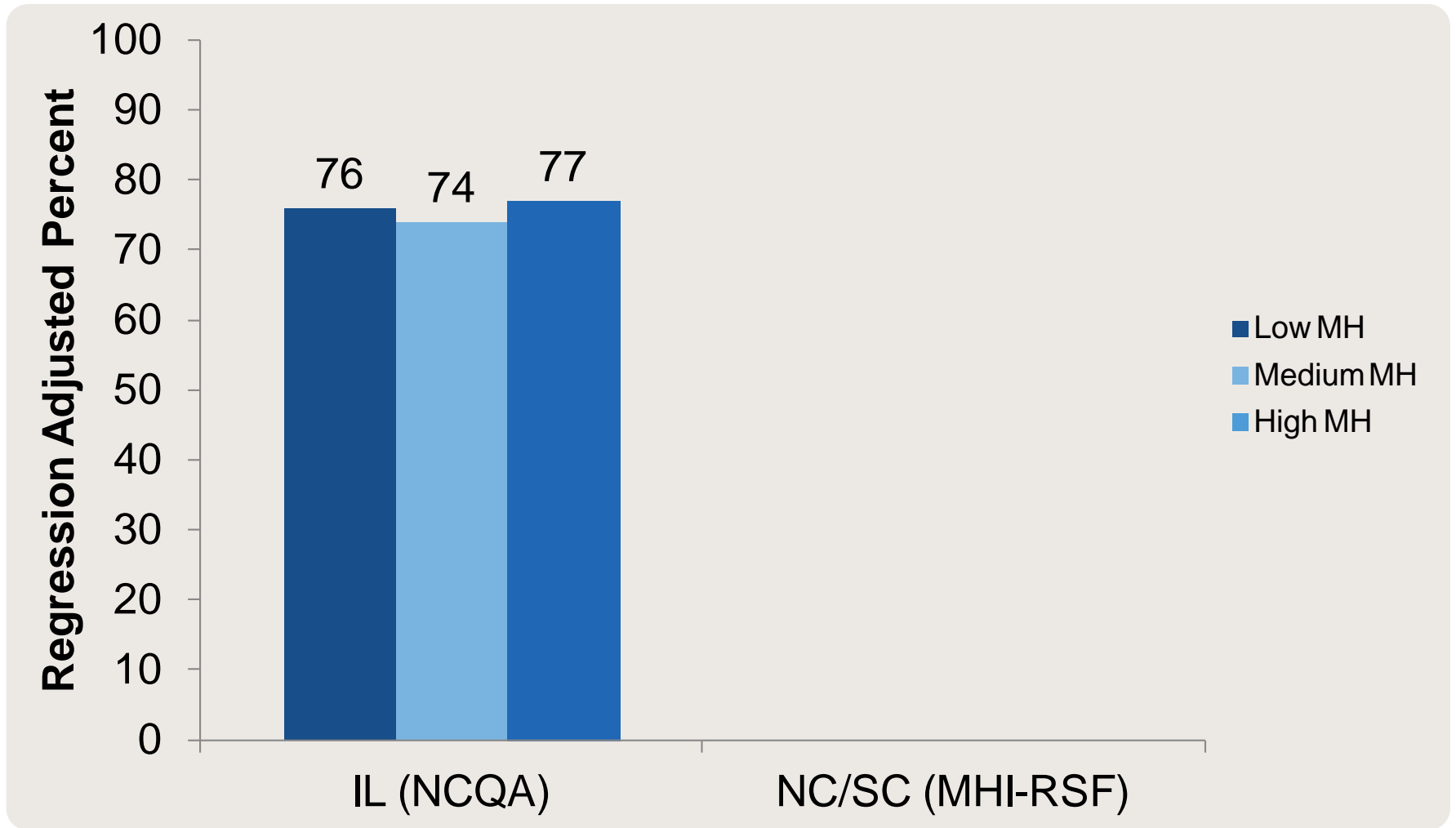
Child Characteristics

	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

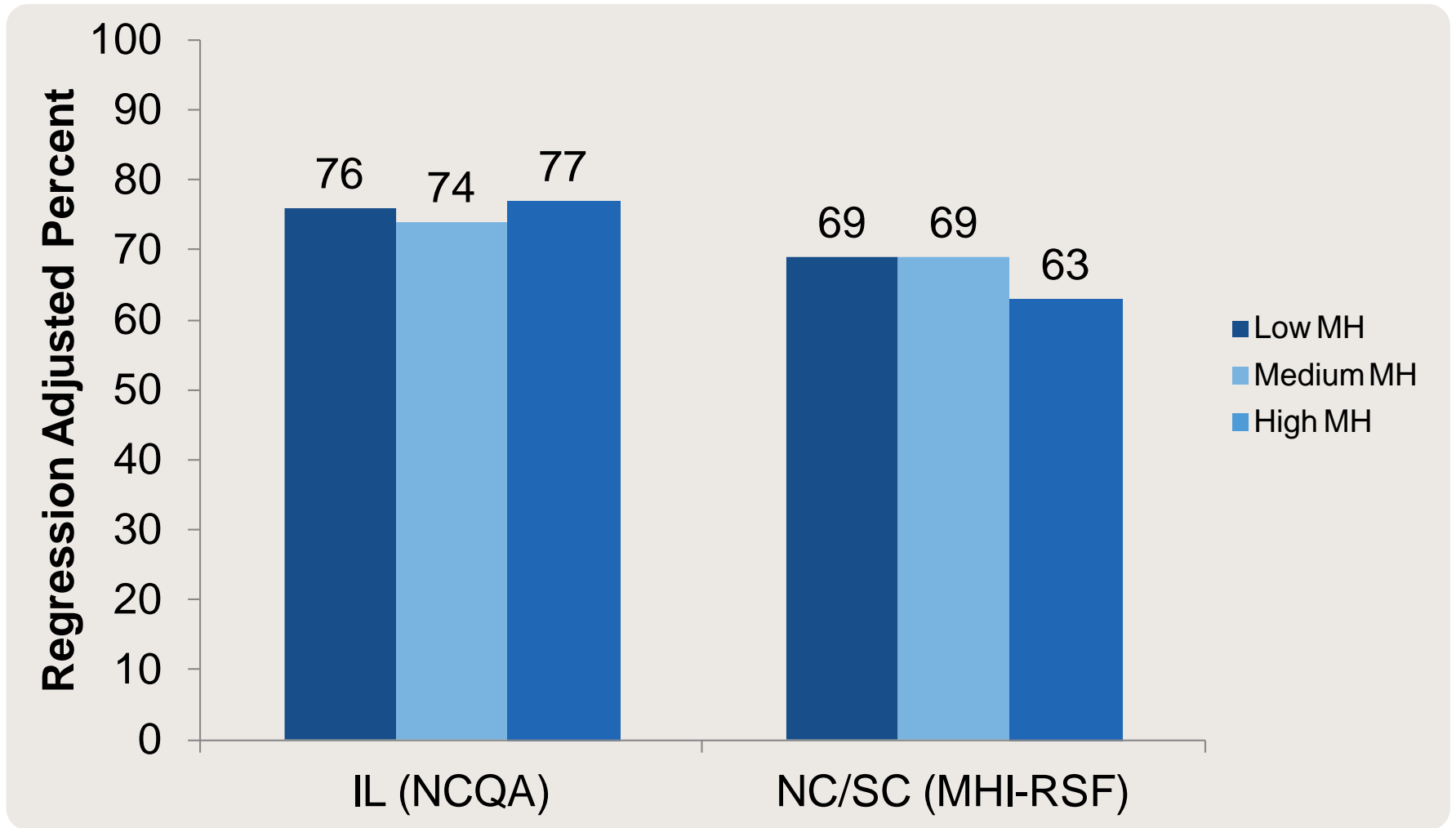
Results: Medical Homeness & Well-Child Visits



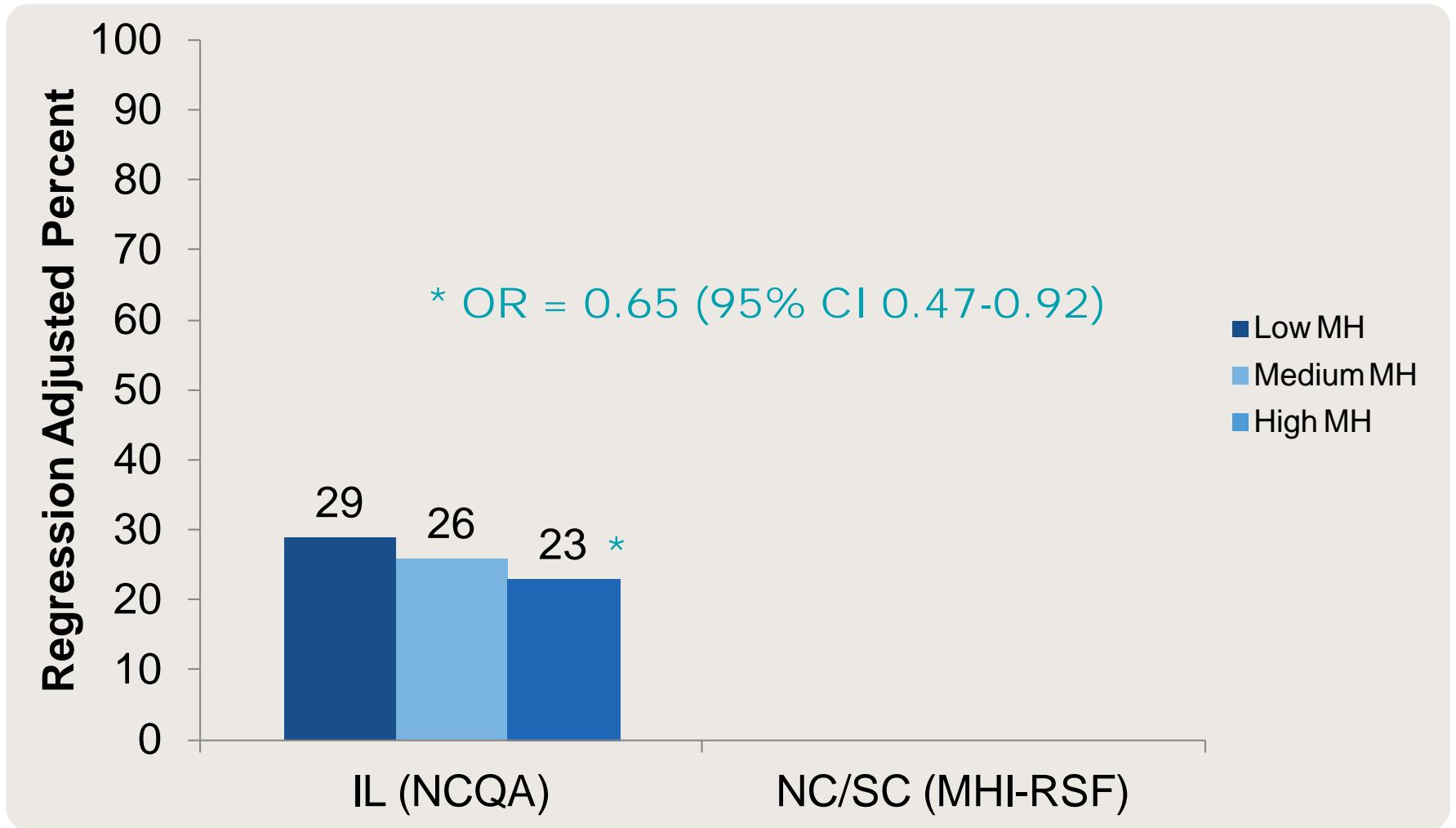
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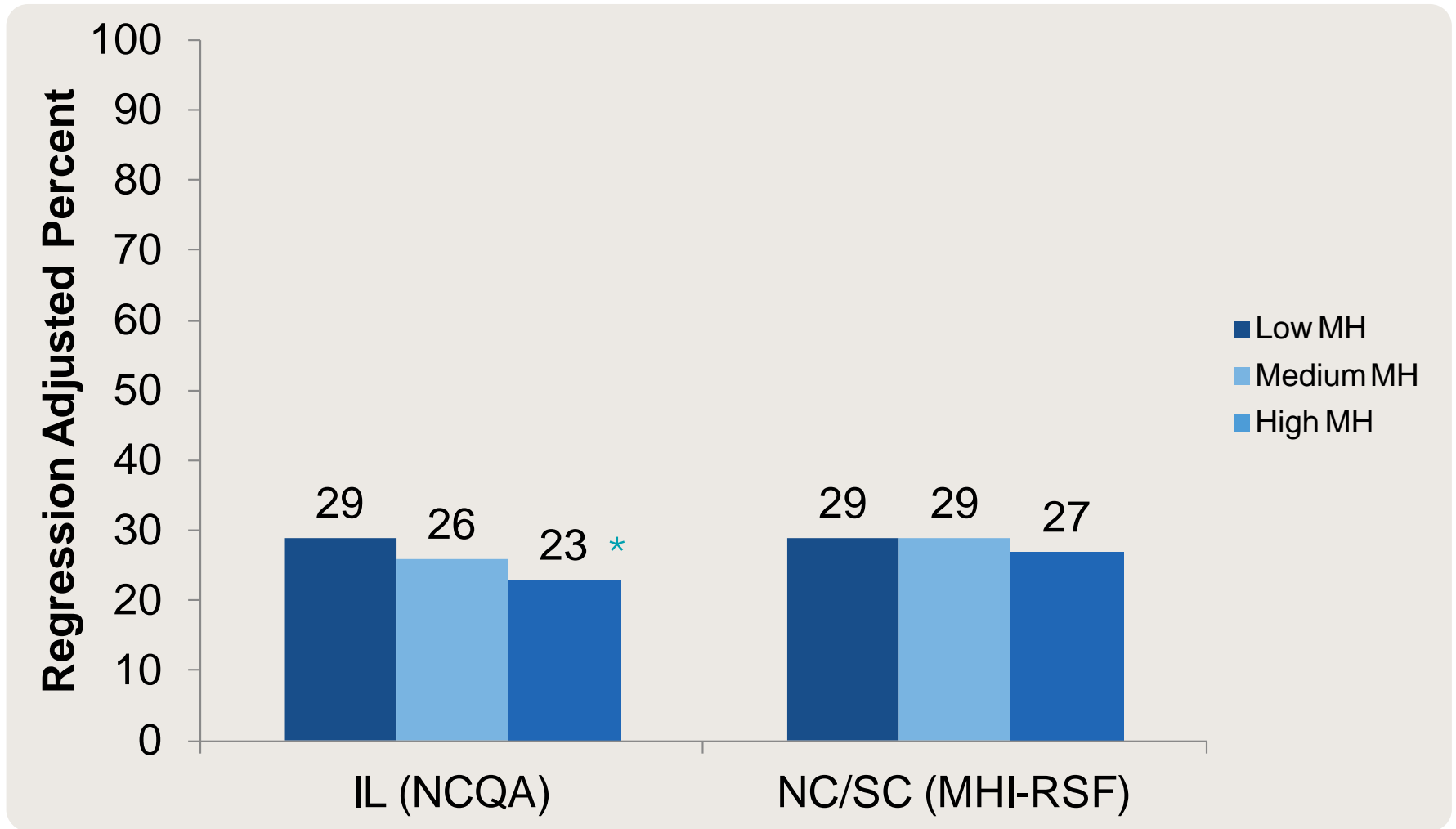
Results: Medical Homeness & Well-Child Visits



Medical Homeness & Non-Urgent ED Visits



Medical Homeness & Non-Urgent ED 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

Implications

- Measuring medical homelessness
 - No single best measure
 - Different measures capture different processes
 - Differences in definitions and measures of medical homelessness may contribute to mixed findings in current literature
 - Consider using more than one measure

For More Information

- National Evaluation of the CHIPRA Quality Demonstration Grant Program

<http://www.ahrq.gov/policymakers/chipra/demoeval/index.html>

- Anna Christensen

achristensen@mathematica-mpr.com

- Henry Ireys, Project Director

hireys@mathematica-mpr.com

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Extra Slides

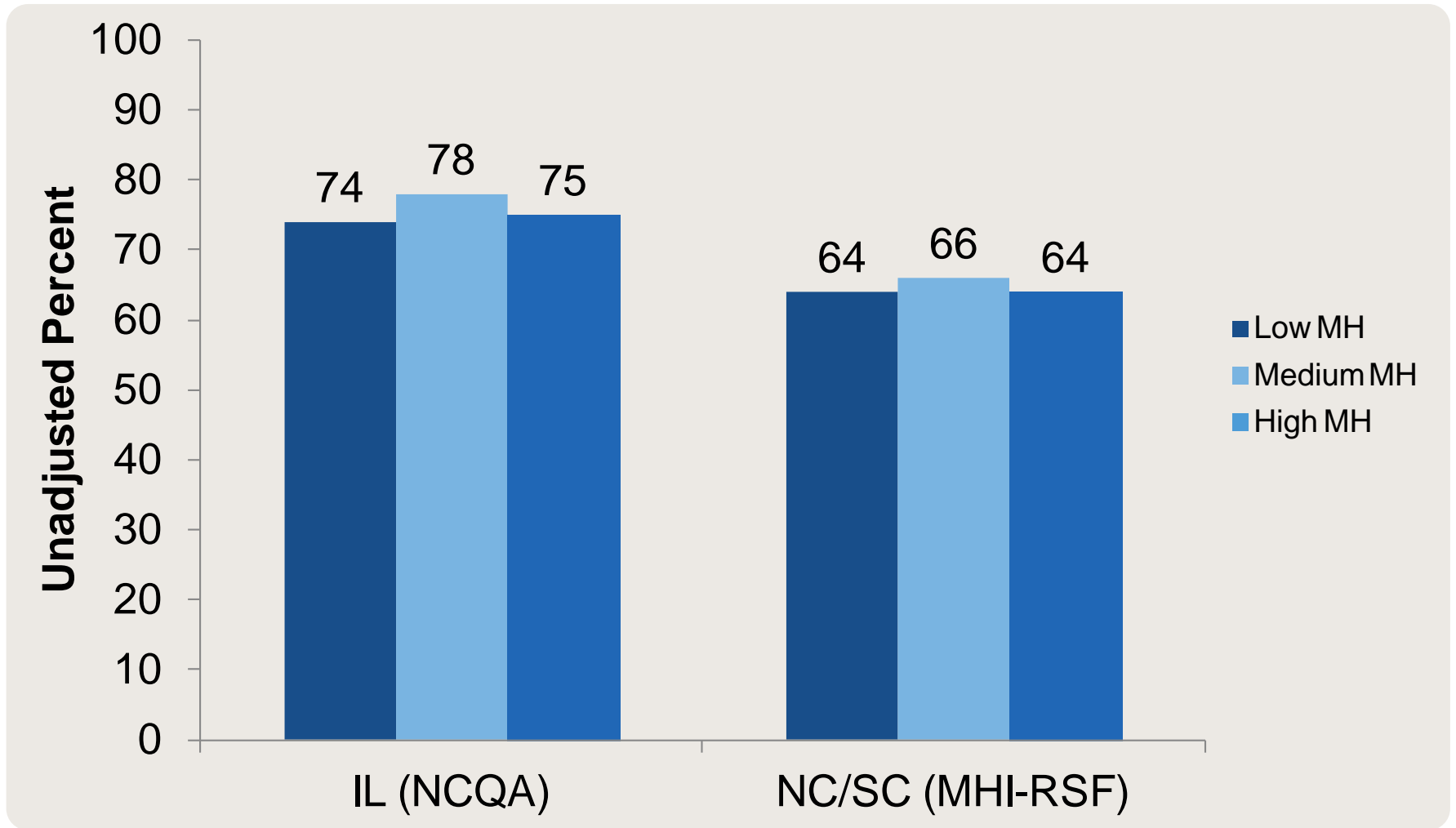
CHIPRA Quality Demonstration Program Focus: Five Broad Strategies to Improve Quality

- Use CMS' core pediatric quality measures (Category A)
- Promote Health Information Technology/Electronic Health Records (Category B)
- Implement provider-based models (Category C)
- Apply model pediatric EHR format (Category D)
- Other innovative approaches (Category E)

Demonstration Grantees* and Partnering States, by Grant Category

States	A	B	C	D	E
Oregon*	x	x	x		
Alaska	x	x	x		
West Virginia	x	x	x		
Maryland*			x		x
Georgia			x		x
Wyoming		x	x		x
Utah*		x	x		x
Idaho		x	x		x
Florida*	x	x	x		x
Illinois	x	x	x		x
Maine*	x	x	x		
Vermont		x	x		x
Colorado*			x		x
New Mexico			x		x
Massachusetts*	x		x		x
South Carolina*	x	x	x		
Pennsylvania*	x	x		x	
North Carolina*	x		x	x	

Results: Medical Homeness & Well-Child Visits



Medical Homeness & Non-Urgent ED Visits

