State Policy and the Health Care Access of Low-Income Children with Special Health Care Needs in the American South

Susan L. Parish, Roderick Rose,
Joan Yoo, Jamie Swaine

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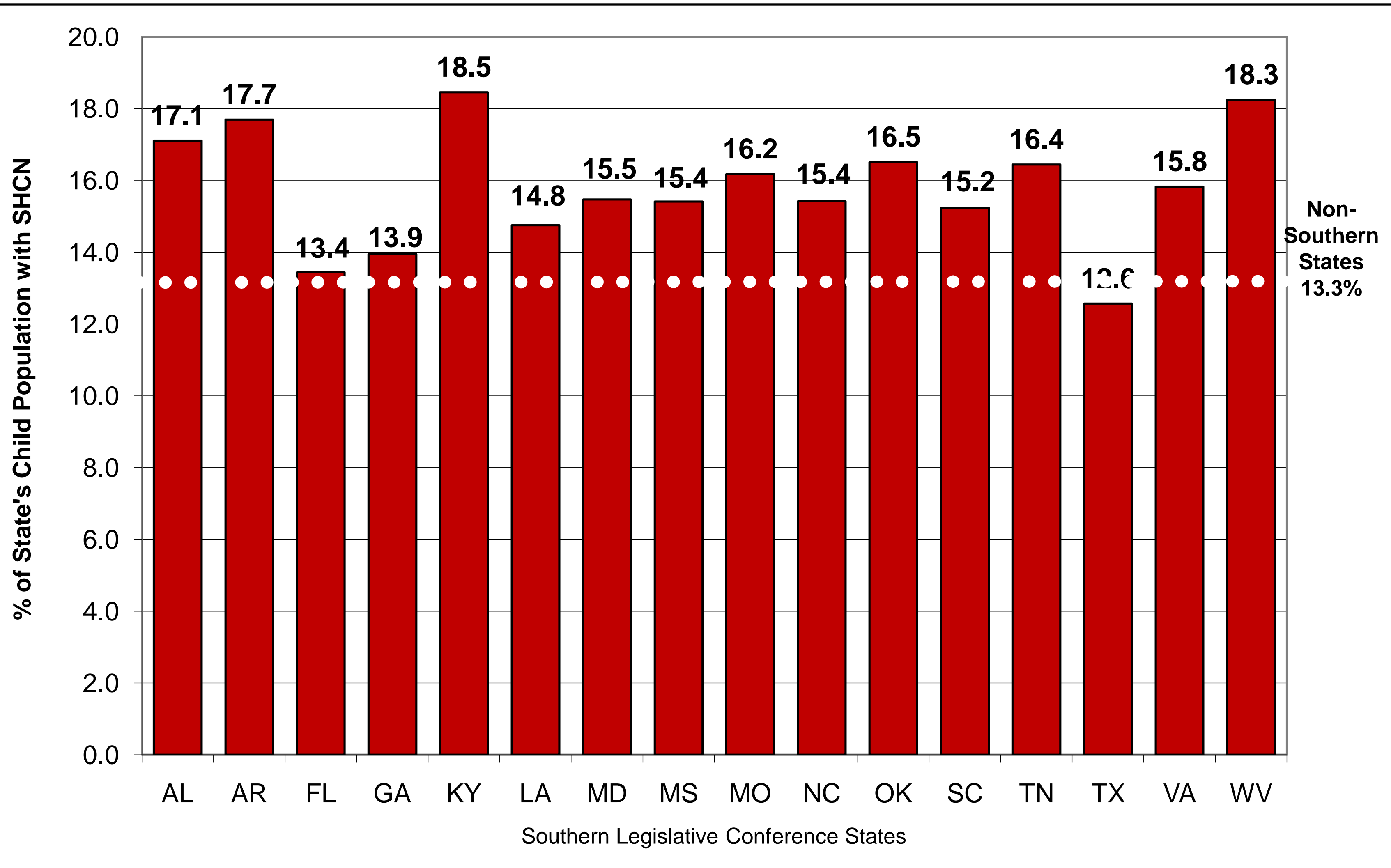
Special health care needs

- Children with special health care needs have emotional, physical, intellectual and/or developmental conditions that result in elevated health care costs
  - Heterogeneous population: children with intellectual and developmental disabilities, asthma, autism, cancer, HIV/AIDS, muscular dystrophy, cerebral palsy, congenital birth defects
- Approximately 14% prevalence of special health care needs in the United States among children

Prevalence of children with special health care needs in the South



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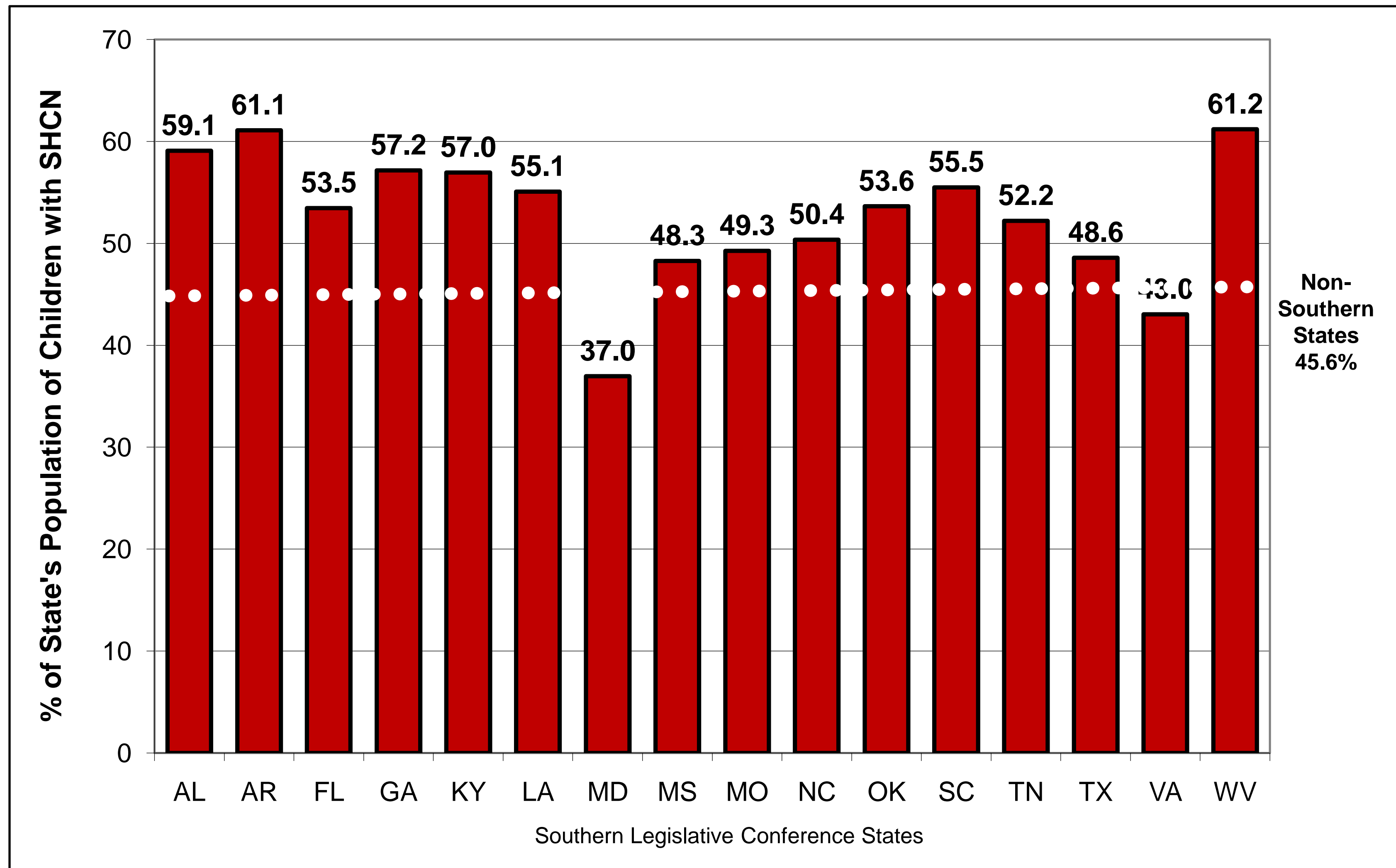
Poverty & childhood impairment

- Bidirectional relationship between poverty and impairment
  - Having children with disabilities increases living costs and caregiving requirements and likely pushes some families into poverty
    - Many costs of care are not covered by insurance (diapers, therapies, special equipment, medications, ancillary services) or have high copays
  - Living in poverty increases likelihood of having children with disabilities
    - Due to inadequate health care, environmental exposure, limited stimulation

Children with special health care needs <200% FPL in the South



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Medicaid &State Budget Crisis

- Medicaid constitutes >21% of state budget expenditures
- Medicaid spending for fiscal 2010 is estimated at $353.8 billion (8.2% increase over FY2009)
- States attempt to control costs
  - In FY 2010, all states made some policy changes to reduce Medicaid outlays
  - Economic downturn not surprisingly associated with significant growth in demand for Medicaid
    - Average enrollment growth of 8.5% in FY2010

DRAFT

Research Question

- What is the association between state Medicaid and CHIP policy features and the health care access of low-income Southern children with special health care needs?

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Data Source

- 2005-06 National Survey of Children with Special Health Care Needs
  - Fielded by the National Center on Health Statistics
  - Cross-sectional study fielded in 2001-02 and again in 2010 (data not available yet)
- Random-digit dialed telephone survey representative of US non-institutionalized civilian population< 18
- ~750 interviews per state with parents of children with special health care needs
- ~40,000 total interviews
  - 13,348 children with special health care needs in sample (low-income)
  - 4,560 in Southern states
  - 8,788 elsewhere in US

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Description of the Sample

	South		Other U.S.		
	N	%	N	%	Chi. Sq.
Income < 100% FPL	2,111	48	3,466	45	4.3*
Race: Black	1,138	32	1,166	21	60.4***
Ethnicity: Hispanic	460	14	1,601	21	28.3***
Parent is single mother	2,100	50	3,921	49	NS
Type of Insurance					
Private only	1,010	20	2,358	24	6.5***
Public only	2,723	62	4,620	56	
Both private and public	479	11	1,049	13	
Other comprehensive insurance	65	1	206	2	
None (uninsured)	271	6	539	5	
	Mean	**SD**	**Mean**	**SD**	**t test**
Age of Child	9.4	6.8	9.9	8.8	3.0**

Dependent Measures of Health Care Access

- Delayed or foregone care in past year
- Difficulty using services
- Referral problems
- Unmet routine service needs
- Unmet specialist needs

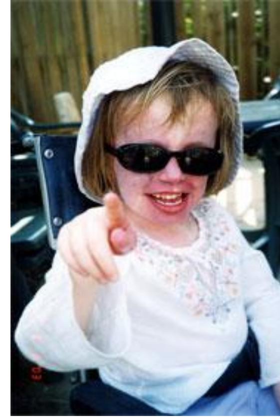
Dependent Measures of Health Care Access among low-income CSHCN in the South

- Delayed or foregone care in past year
  - 11.1% of children
- Difficulty using health care services
  - 13.7% of children
- Specialist referral problems
  - 23.7% of children
- Unmet routine service needs
  - 4.8% of children
- Unmet specialist needs
  - 8.3% of children

Policy Predictors

- Medicaid & SCHIP renewal frequency
  - States determine the frequency with which families renew their applications for Medicaid & SCHIP
  - We hypothesized that less frequent renewal requirements would be associated with better health care access
- Medicaid reimbursement rates for high-complexity and moderate-complexity pediatric office visits
  - We hypothesized that higher reimbursement rates would be associated with better health care access

Analysis



- Multilevel descriptive analysis
  - Multilevel data (children within states)
  - All outcomes binary, indicating presence (=1) or absence (=0) of health care burden
  - Hierarchical generalized linear modeling combines multilevel modeling and logistic regression
  - National Survey of CSHCN: stratified random sample
  - Data properly weighted and adjusted
- Individual & family-level covariates: condition severity, health insurance status, sex, race, ethnicity, age of child; parental education, family structure, household income
- State-level covariates: median state income for families with children; percentage of population that is rural; state unemployment rate

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Findings

Percentage of low-income CSHCN with health care access problems

	Obtaining Specialty Referrals	Unmet Routine Care Needs	Unmet Specialty Care Needs	Delayed Care	Difficulty Receiving Services
Alabama	18.8	1.8	3.1	5.7	10.2
Arkansas	16.6	3.0	8.0	8.4	15.2
Florida	27.4	4.9	10.0	13.1	17.0
Georgia	20.4	6.0	9.7	11.6	12.7
Kentucky	14.6	2.1	2.0	7.6	10.1
Louisiana	10.7	2.2	2.9	5.8	9.9
Maryland	22.2	4.1	6.3	6.5	10.9
Missouri	23.0	5.9	8.6	12.5	11.0
Mississippi	20.8	6.6	7.9	7.6	11.6
North Carolina	16.9	2.6	7.1	6.7	12.1
Oklahoma	22.8	4.1	10.5	13.8	13.0
South Carolina	17.3	6.4	9.6	11.3	7.9
Tennessee	17.8	1.9	3.5	9.4	10.6
Virginia	18.2	3.2	4.9	10.4	14.1
West Virginia	20.0	2.6	4.7	10.1	11.1
Texas	40.3	8.8	14.3	17.1	19.1
Non-South	26.0	4.3	9.6	13.7	14.7

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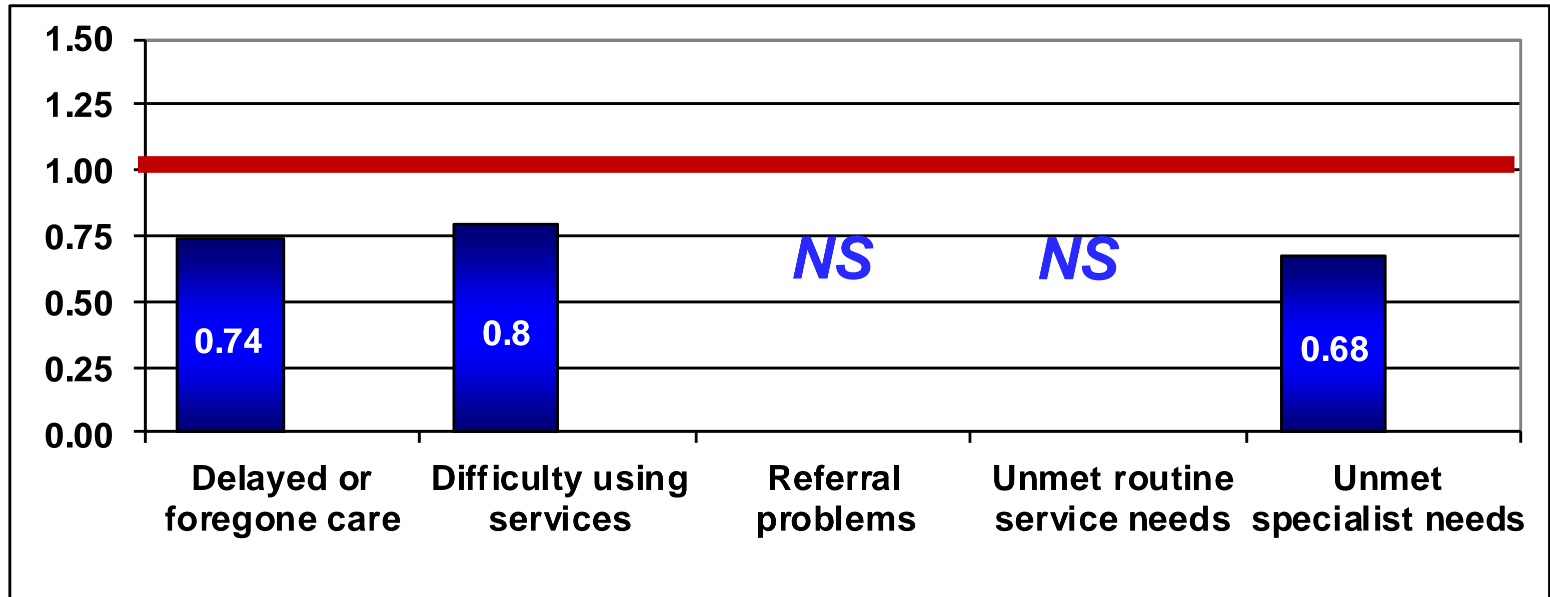
Odds ratios for 12-month Medicaid renewal frequency (compared to 6 month renewal frequency

	Delayed or foregone care	Difficulty using services	Referral problems	Unmet routine service needs	Unmet specialist needs
Odds ratio	0.72	0.86	0.68	0.69	0.72

(Y-axis: 0.00, 0.25, 0.50, 0.75, 1.00, 1.25, 1.50)

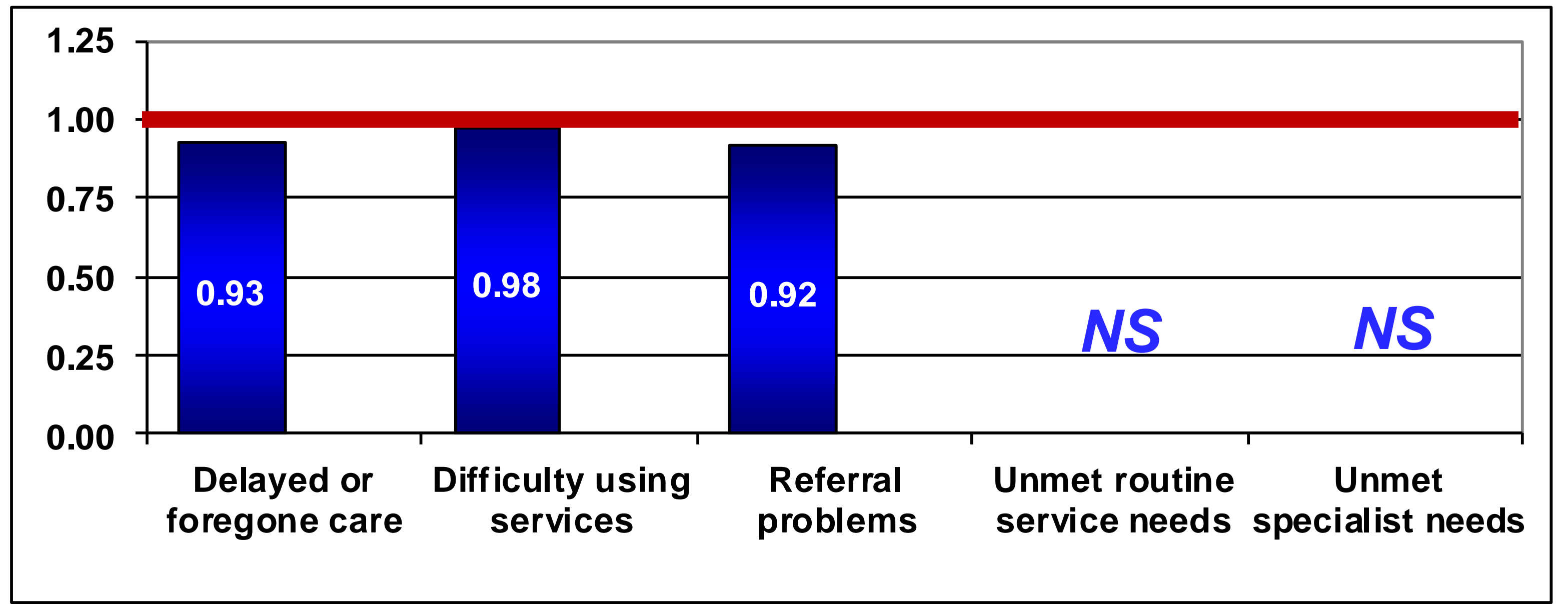
Children in Southern states with 6 month renewals are the referents (=1.00)

Odds ratios of 12-month SCHIP renewal frequency (compared to 6 month renewals)



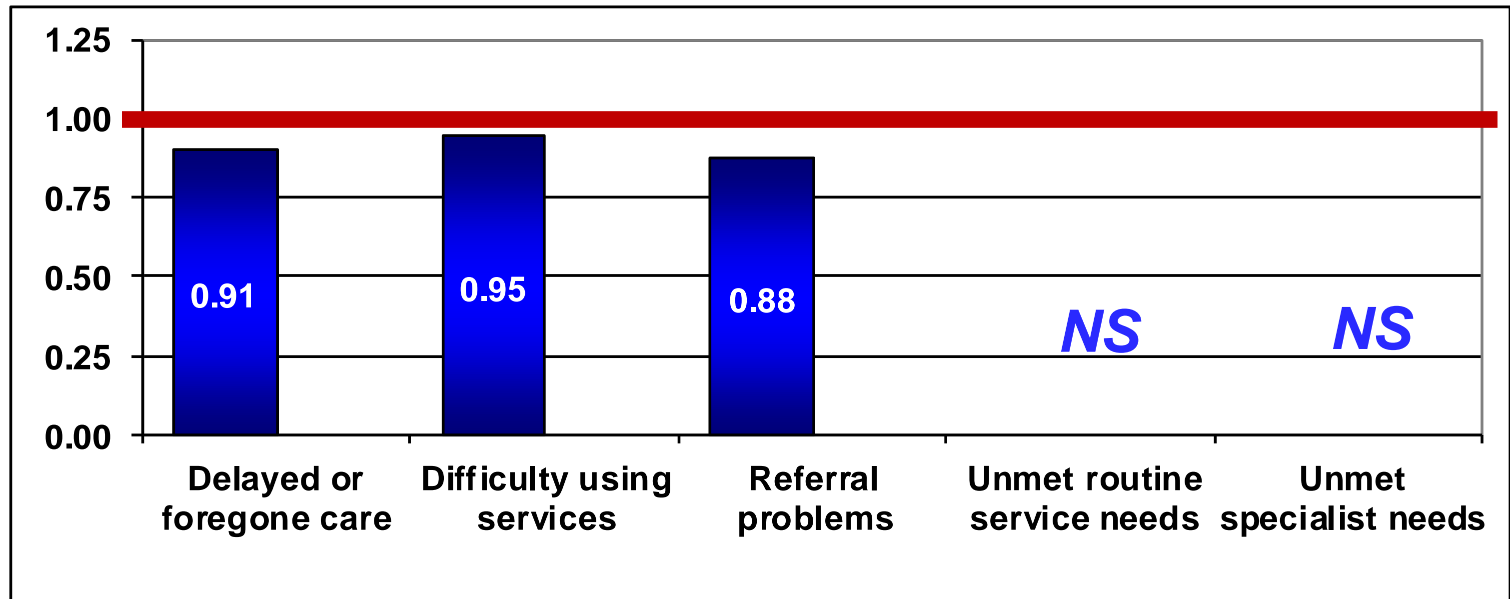
Children in Southern states with 6 month renewals are the referents (=1.00)

Odds ratios for $10 increase in high-complexity office visit reimbursement rate



Odds ratios reflect decreased likelihood of access problem for every $10 increase in per-visit reimbursement rate

Odds ratios for $10 increase in moderate-complexity office visit reimbursement rate



Odds ratios reflect decreased likelihood of access problem for every $10 increase in per-visit reimbursement rate

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Limitations

- Reliance on self-reported information from parents
  - No independent or clinical corroboration of child's diagnosis or condition
  - No independent or clinical corroboration of child's health care needs, or service utilization
- Variables that help explain children's health care access are somewhat limited in the National Survey of Children with Special Health Care Needs
  - (e.g., parental employment; detailed information about type of public insurance and coverage periods)
- Cross sectional data
- Gross measures of health care access (period: one year)
  - While consistent with other national health surveys, greater detail would be more informative

Implications: Health care access

- The relationship between health care access and frequency of Medicaid/SCHIP renewals and provider reimbursement rates is consistent and robust
- State policymakers interested in improving health care access of low-income CSHCN in the South should consider decreasing the frequency of required renewal applications and increasing provider rates
  - Families may be burdened by renewals every 6 months
  - Providers seem to be responding to the incentive of higher reimbursement rates for their child Medicaid patients
- Children whose families are subjected to more frequent renewals have gaps in access
- Health care access gaps are particularly worrisome for children with special health care needs
  - Increased rate of incurring secondary conditions; untreated and under-treated conditions limit long-term academic and physical well-being

Implications, II

- These findings are particularly worrisome now
- State budget crises are not abating; most states are turning to Medicaid to control costs
- The Ryan plan in the House would have a dire impact on low-income children with special health care needs in the South

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