

# **Children's Access to Health Care in Oregon: What Factors Matter Most?**

## **Results from a Statewide Survey of Oregon's Food Stamp Population**



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Preliminary Results – Do not cite or reproduce without consent

# Research Team

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# Brief Outline



- **Why Study this Issue?**
- **How Was the Study Designed?**
- **When Was the Survey Implemented?**
- **Who Responded to the Survey?**
- **What Did Parents Say?**

# In 2004, over 117,000 Oregon children did not have health insurance.



**Insurance:**  
Many children eligible, but not enrolled

## Oregon's children's coverage is ailing

**Health care** | The state's ranking of fifth from the bottom in insuring the poor signals tough choices ahead

# Approximately 2/3 of these uninsured children appeared eligible for public health insurance coverage.

(Oregon Population Study, 2004)

**We conducted a survey of Oregon's food stamp population to find out why many eligible children lack health insurance coverage and to identify factors impacting their access to healthcare services.**



Photo by Jamie Francis,  
The Oregonian

**This study included a stratified, random sample of all families with children (age 1-18) enrolled in the food stamp program as of January 31, 2005.**

Total Food Stamp Enrollment as of January 31, 2005  
84,087 Households with Children (age 1-18)

Random Sample of 10,175 Households

Total Ineligible in Random Sample: 1,539

Total Eligible in Random Sample: 8,636

Total Completed Surveys: 2,681  
31.0% of Eligible

# Respondents to the survey were demographically similar to the eligible sample.

Demographics	Eligible Sample (n=8,636)	Respondents (n=2,681)
Male	51.1%	51.7%
Female	48.9%	48.3%
<b>Race/Ethnicity</b>		
Asian	1.1%	1.2%
African-American/Black	2.5%	1.9%
Hispanic	18.5%	17.7%
Native Hawaiian/Pacific Islander	0.1%	0.2%
Native American/Alaska Native	3.3%	2.8%
White	73.7%	75.6%
Other or Unknown	0.7%%	0.7%
<b>Age</b>		
1 to 4 years of age	26.2%	25.6%
5 to 9 years of age	28.9%	30.2%
10 to 14 years of age	25.4%	26.4%
15 and over	19.6%	17.8%

<b>Demographics</b>	<b>Eligible Sample (n=8,636)</b>	<b>Survey Respondents (n=2,681)</b>
<b>At Least One Child Enrolled in Public Insurance</b>	<b>50.3%</b>	<b>54.9%</b>
<b>No Children Enrolled in Public Insurance</b>	<b>49.7%</b>	<b>45.1%</b>
<b>Household Monthly Income</b>		
<b>&lt;\$500</b>	<b>30.0%</b>	<b>28.7%</b>
<b>\$501-1,000</b>	<b>25.7%</b>	<b>26.5%</b>
<b>\$1,001-1,500</b>	<b>19.3%</b>	<b>18.2%</b>
<b>\$1,501-2,000</b>	<b>14.5%</b>	<b>15.4%</b>
<b>&gt;\$2,000</b>	<b>10.5%</b>	<b>11.2%</b>
<b>Geographic Region</b>		
<b>1 (NW Coastal)</b>	<b>16.9%</b>	<b>18.8%</b>
<b>2 (Portland Area)</b>	<b>16.1%</b>	<b>15.6%</b>
<b>3 (Central Western)</b>	<b>16.8%</b>	<b>15.9%</b>
<b>4 (SW Coastal)</b>	<b>16.9%</b>	<b>16.2%</b>
<b>5 (North Central, Columbia Gorge)</b>	<b>16.5%</b>	<b>15.2%</b>
<b>6 (Southern and Eastern)</b>	<b>16.9%</b>	<b>18.2%</b>

**We weighted the data back to the original population, and we used a raking ratio estimation process to adjust for non-response.**

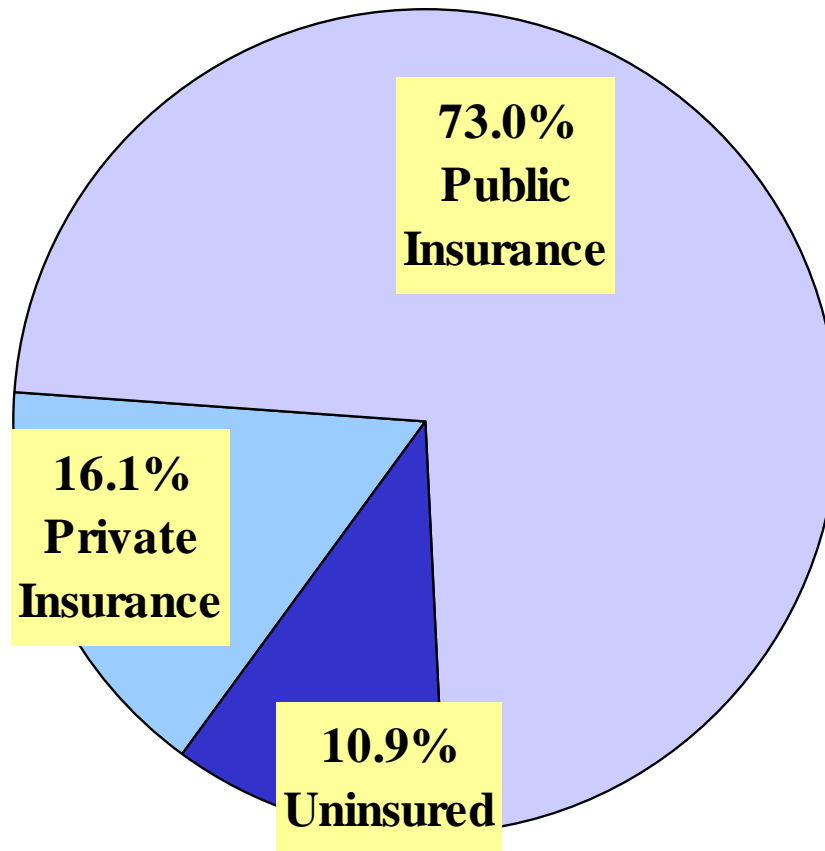


# Children's Access to Health Insurance



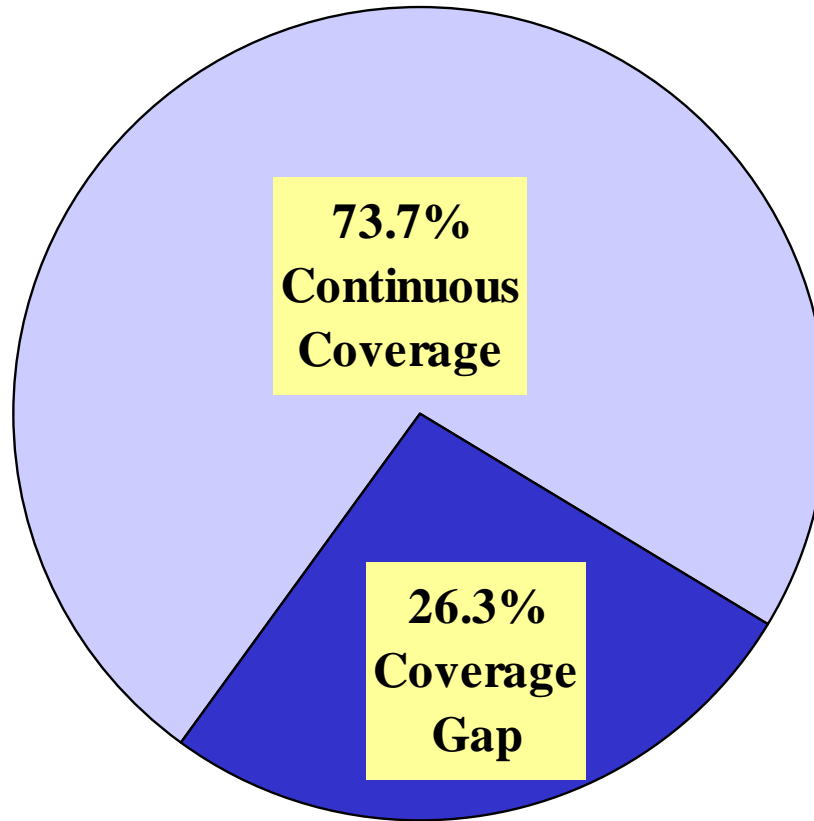
Preliminary Results – Do not cite or reproduce without consent

# Nearly 11% of the children in this population, presumed eligible for Oregon Health Plan, were uninsured.



N=2,649 (weighted 98.7% of total population)

# Over 26% of the children had a health insurance coverage gap in the 12 months prior to the survey.



N=2510

# Uninsurance Rates Highest Among...

- **Hispanic children**
- **Teenagers over age 14**
- **Children in families earning 133%-185% of the Federal Poverty Level**
- **Children of employed parents**
- **Children with uninsured parents**



# Children's Access to Health Care Services



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**Access to health insurance is distinct from access to health care services; however, the two are often associated.**



**And, similar factors may influence how well children are able to access health insurance and health care services.**

# Analytic Strategy

- **Descriptive analysis to identify significant factors that affected access to health care.**
- **Multivariate logistic regression to assess the net affect of each factor, while controlling for all other factors, on a child's access to health care.**



# Predictor Variables

- **Age**
- **Race/Ethnicity**
- **Parental Employment Status**
- **Household Income**
- **Rural/urban Residence**
- **Parental Insurance Status**
- **Usual Source of Care**
- **Child's Insurance Status**



# **Outcome Variables**

## **(Access to Health Care Measures)**

- **Unmet Medical Need**
- **Unmet Prescription Need**
- **Delayed Urgent Care**
- **No Doctor Visits in 12 Months**
- **Problem Getting Dental Care**

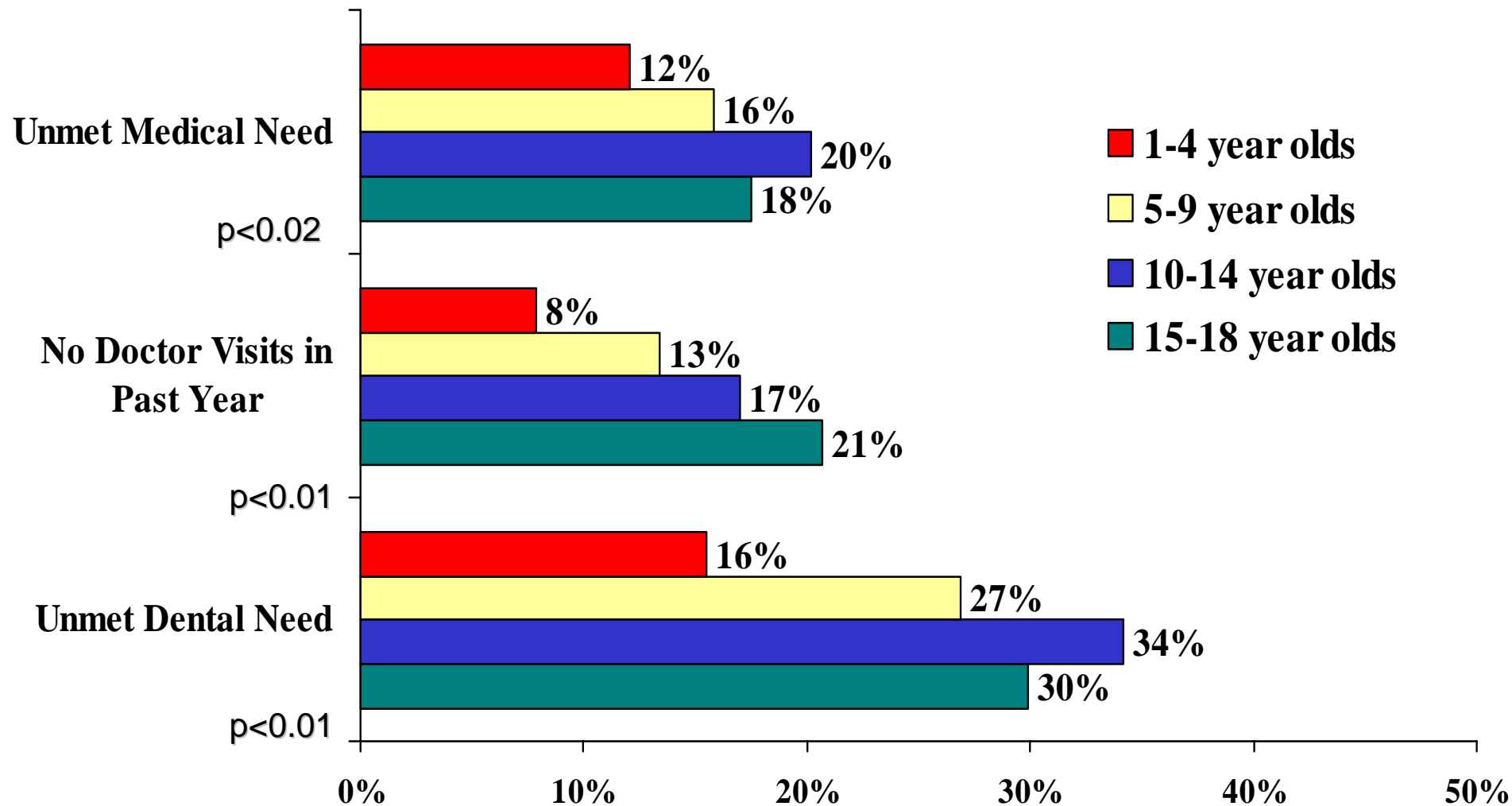


# Analytic Strategy

- **Descriptive analysis to identify significant factors that affected access to health care.**
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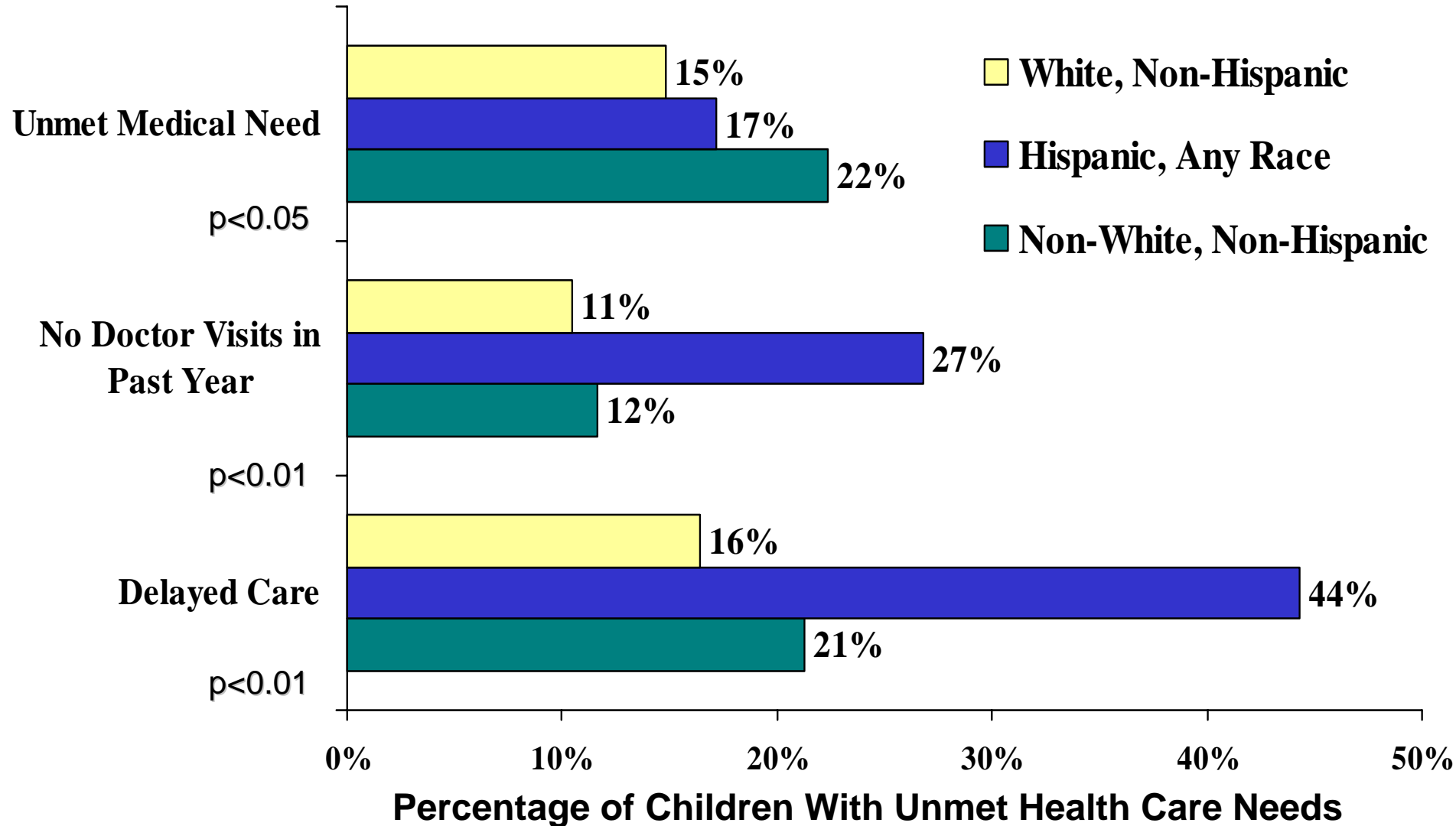


# Older Children Were More Likely to Have Unmet Medical Need, Dental Need, and No Doctor Visits.



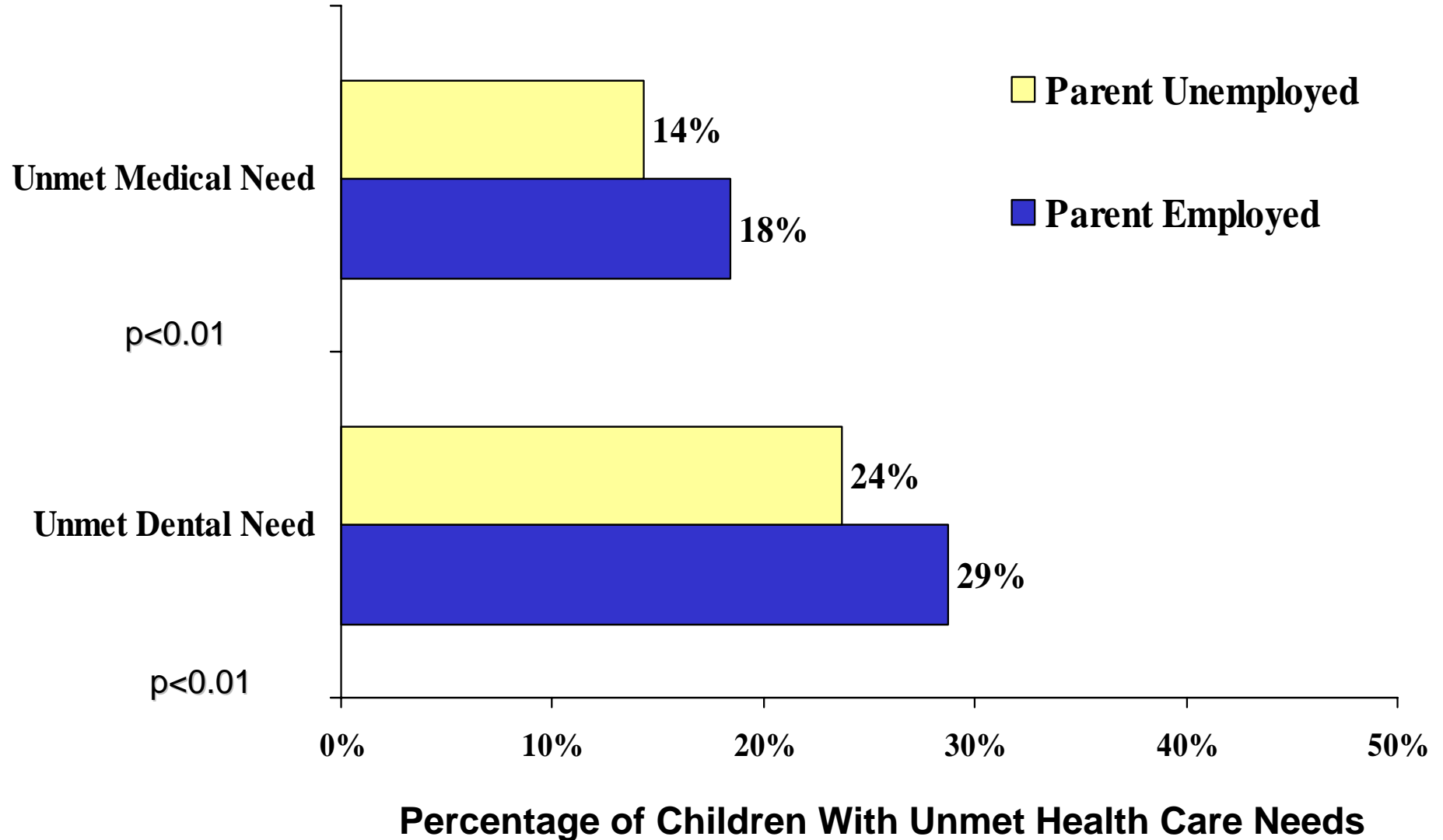
Percentage of Children With Unmet Health Care Needs

# Racial/Ethnic Minorities Were More Likely to Have Unmet Medical Need, No Doctor Visits, and Delayed Care.

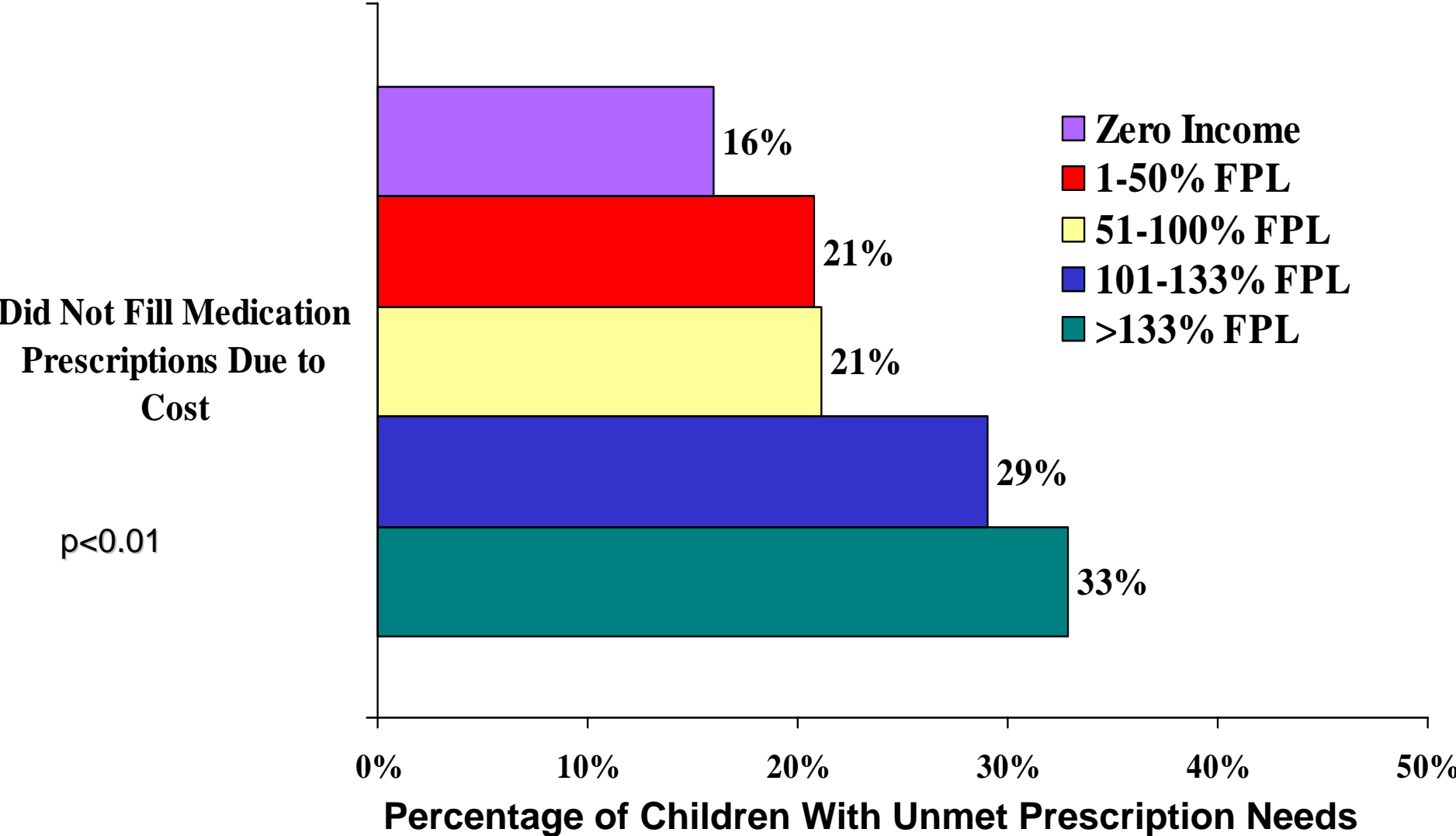


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# Children of Employed Parents Had More Unmet Medical and Dental Needs.

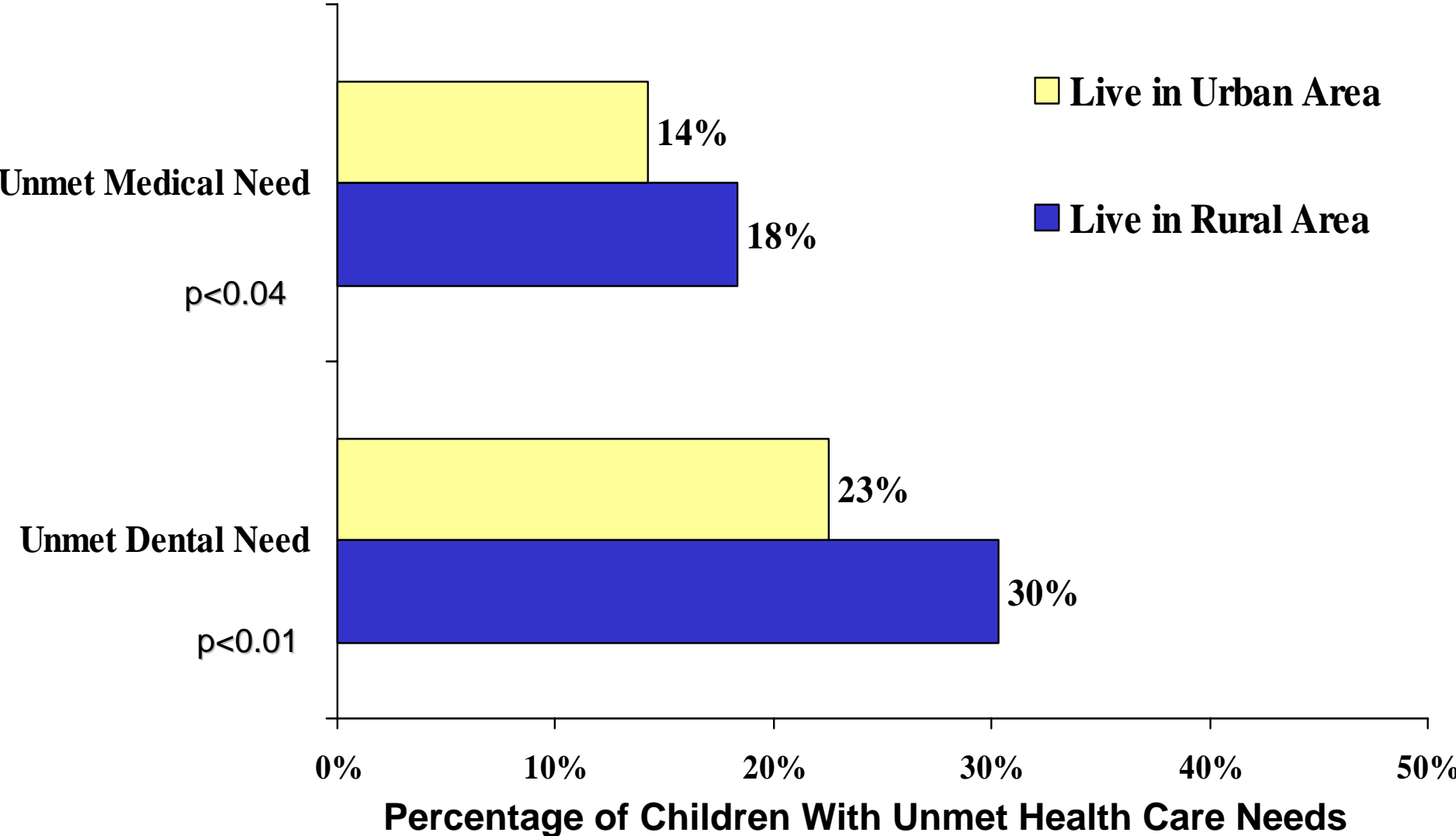


# Children in Families with Higher Incomes Had More Unmet Prescription Needs.



Preliminary Results – Do not cite or reproduce without consent

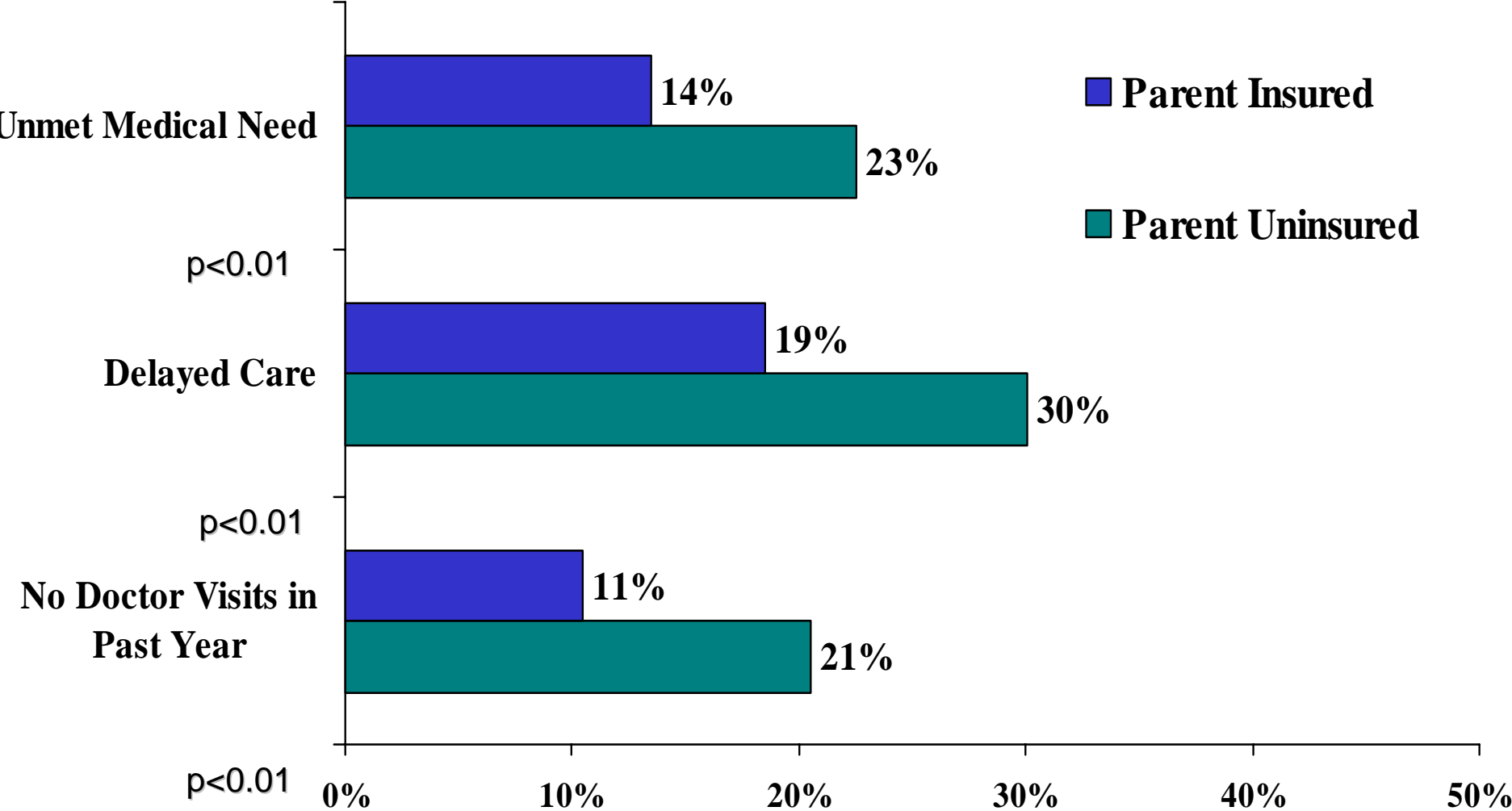
# Children Living in Rural Areas Had Higher Rates of Unmet Medical and Dental Needs.



Percentage of Children With Unmet Health Care Needs

Preliminary Results – Do not cite or reproduce without consent

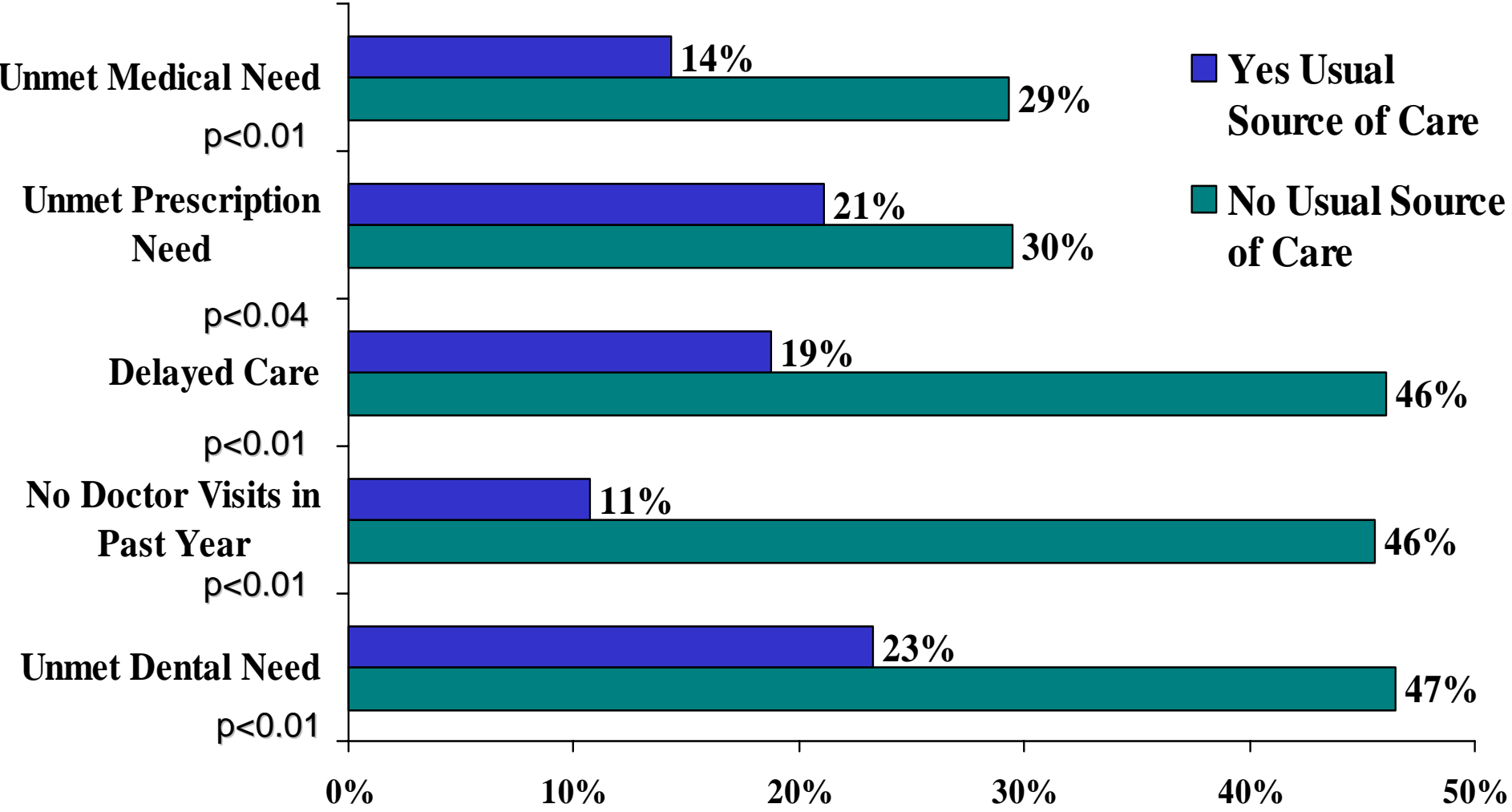
# Children With Uninsured Parents Were More Likely to Have Unmet Medical Need, No Doctor Visits, and Delayed Care.



Percentage of Children With Unmet Health Care Needs

Preliminary Results – Do not cite or reproduce without consent

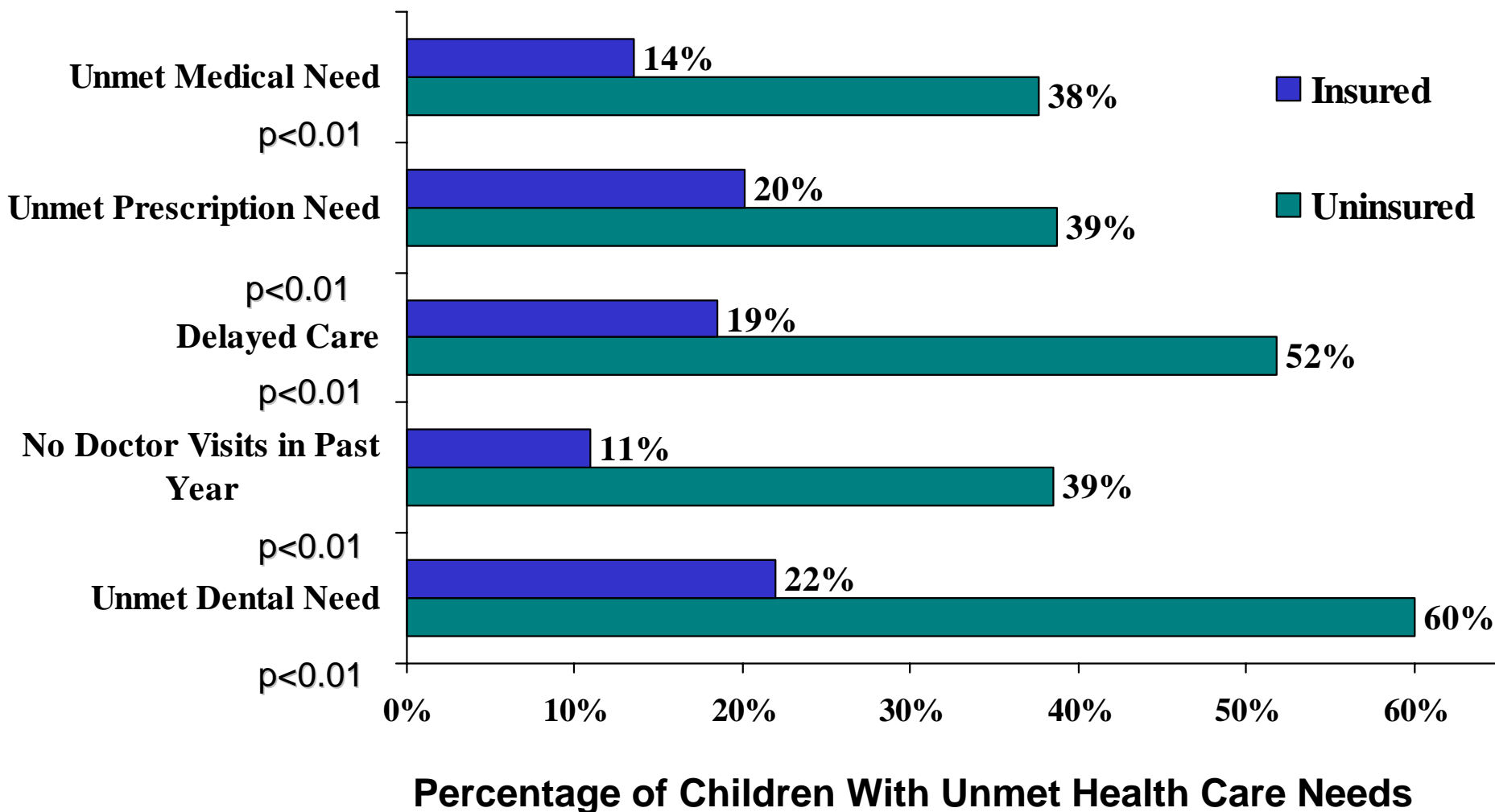
# Children Without a Usual Source of Care Had Higher Rates of All Five Unmet Healthcare Needs.



Percentage of Children With Unmet Health Care Needs

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# Uninsured Children Had Higher Rates of All Five Unmet Healthcare Needs.



# Analytic Strategy

- **Descriptive analysis to identify significant factors that affected access to health care.**
- **Multivariate logistic regression to assess the net affect of each factor, while controlling for all other factors, on a child's access to health care.**



# Predictor Variables

- **Age**
- **Race/Ethnicity**
- **Parental Employment Status**
- **Household Income**
- **Rural/urban Residence**
- **Parental Insurance Status**
- **Usual Source of Care**
- **Child's Insurance Status**



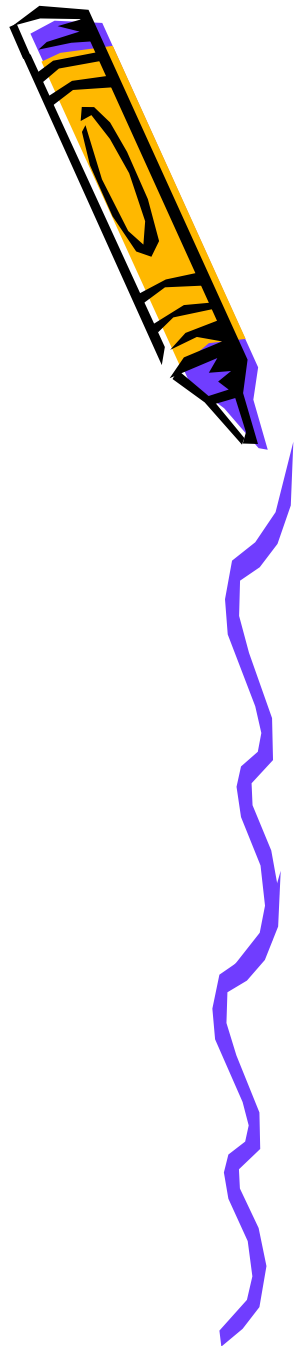
# Children's Unmet Medical Need



	*ADJUSTED ODDS RATIOS Odds of Child Having Unmet Medical Care Need Odds Ratio (95% Confidence Interval)
<b>Race/Ethnicity</b>	
White, Non-Hispanic	1.00
Hispanic, Any Race	0.96 (0.61, 1.52)
Non-White, Non-Hispanic	2.08 (1.16, 3.70)
<b>Place of Residence</b>	
Urban	1.00
Rural	1.39 (1.01, 1.92)
<b>Parent's Insurance Status</b>	
Parent Insured	1.00
Parent Uninsured	1.48 (1.04, 2.12)
<b>Child's Insurance Status</b>	
Child Insured	1.00
Child Uninsured	2.97 (1.94, 4.56)

**\*Adjusting for age, race/ethnicity, parental employment, household income, rural/urban residence, parental insurance status, usual source of care, child's insurance status.**

"I have worked my way off welfare and OHP . . . and elected to receive medical insurance through my employer. I cannot afford to use the insurance--my son has needed glasses and medical evaluation for over 2 years--I cannot afford to provide that for him, and it really upsets me so much . . . It is not fair to my child and makes me feel I am failing him as a parent."



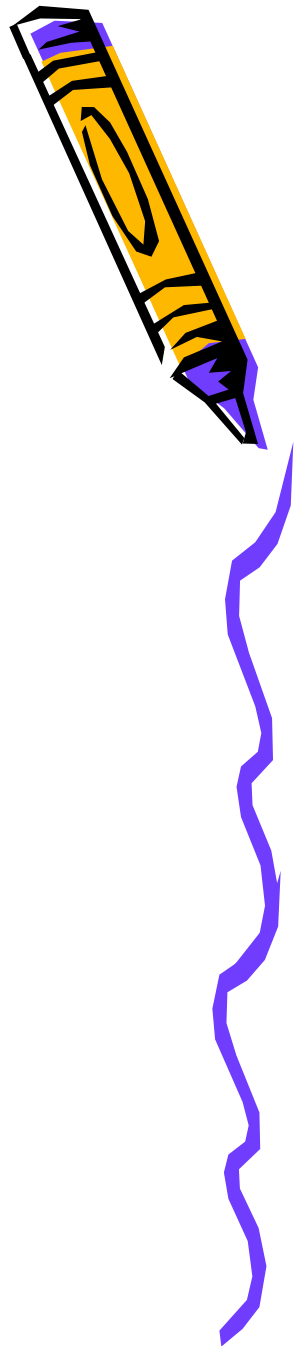
# Children's Unmet Prescription Need



	<b>*ADJUSTED ODDS RATIOS</b> <b>Odds of Child Having Unmet Prescription Need</b> <b>Odds Ratio (95% Confidence Interval)</b>
<b>Child's Insurance Status</b>	
Child Insured	1.00
Child Uninsured	2.55 (1.68, 3.87)

**\*Adjusting for age, race/ethnicity, parental employment, household income, rural/urban residence, parental insurance status, usual source of care, child's insurance status.**

"I can't afford to pay co-pays or buy prescriptions when all I have is \$200 child support for rent, gas, diapers and anything else I need for my apartment like dish soap or toilet paper."



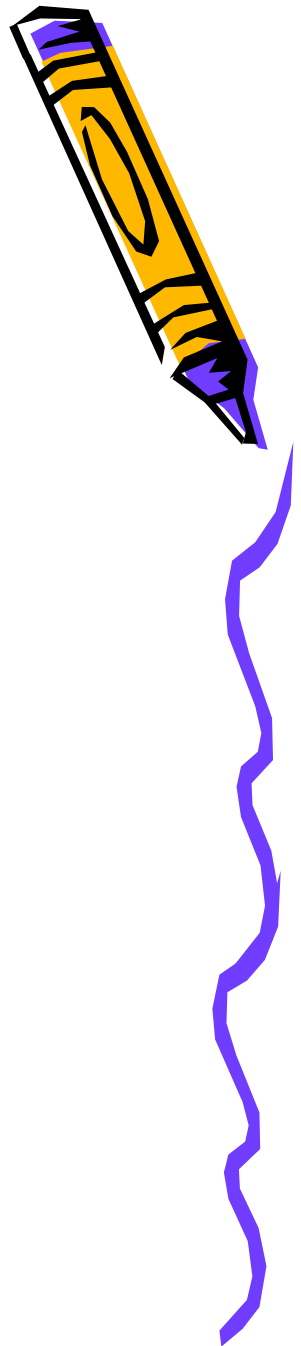
# Delayed Urgent Care for Children



	<b>*ADJUSTED ODDS RATIOS</b> <b>Odds of Child Having Delayed Urgent Care</b> <b>Odds Ratio (95% Confidence Interval)</b>
<b>Race/Ethnicity</b> White, Non-Hispanic Hispanic, Any Race Non-White, Non-Hispanic	1.00 3.36 (2.13, 5.31) 1.45 (0.72, 2.92)
<b>Usual Source of Care</b> Child has a USC Child has No USC	1.00 2.24 (1.35, 3.72)
<b>Child's Insurance Status</b> Child Insured Child Uninsured	1.00 3.88 (2.30, 6.53)

**\*Adjusting for age, race/ethnicity, parental employment, household income, rural/urban residence, parental insurance status, usual source of care, child's insurance status.**

"I was actually relieved when my husband lost his job because it made my son eligible for coverage again. There is no feeling in the world worse than trying to figure out if you should really take an injured child to the doctor or not because of lack of money."





# No Doctor Visits in Past 12 Months

	<b>*ADJUSTED ODDS RATIOS</b> Odds of Child Having No Doctor Visits Odds Ratio (95% Confidence Interval)
<b>Race/Ethnicity</b>	
White, Non-Hispanic	1.00
Hispanic, Any Race	3.54 (2.31, 5.42)
Non-White, Non-Hispanic	0.93 (0.45, 1.91)
<b>Usual Source of Care</b>	
Child has a USC	1.00
Child has No USC	6.20 (3.83, 10.04)
<b>Child's Insurance Status</b>	
Child Insured	1.00
Child Uninsured	2.40 (1.51, 3.82)

**\*Adjusting for age, race/ethnicity, parental employment, household income, rural/urban residence, parental insurance status, usual source of care, child's insurance status.**

"Although my children and I have health insurance, the premium is \$175.00 per month, which I cannot afford. The deductibles are so high, that I end up paying most (if not all) the cost. Right now, I owe almost \$3,000.00 in medical bills not covered by the insurance. My doctor would not schedule a follow-up visit because I owed her money and could not pay for the visit "cash upfront." It would mean so much if my children could get basic healthcare needs met, I simply do not have the money to meet the high deductibles.



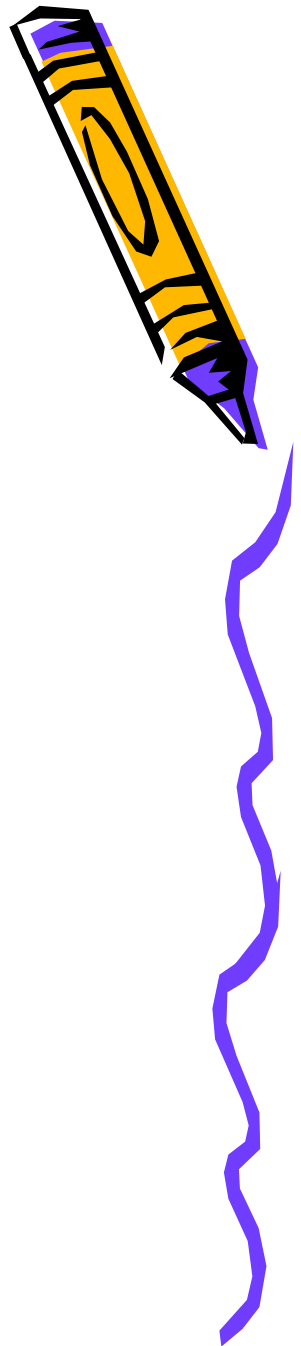


# Children's Unmet Dental Need

	<b>*ADJUSTED ODDS RATIOS</b> <b>Odds of Child Having A Big Problem Accessing</b> <b>Dental Care</b> <b>Odds Ratio (95% Confidence Interval)</b>
<b>Place of Residence</b> Urban Rural	1.00 1.37 (1.04, 1.80)
<b>Usual Source of Care</b> Child has a USC Child has No USC	1.00 2.11 (1.33, 3.33)
<b>Child's Insurance Status</b> Child Insured Child Uninsured	1.00 5.39 (3.67, 7.90)

**\*Adjusting for age, race/ethnicity, parental employment, household income, rural/urban residence, parental insurance status, usual source of care, child's insurance status.**

- “We have to drive for 1.5 hours just to see a dentist for a check-up or cleaning.”
- “There's never space for my children at the dentist.”



	Unmet Medical Need OR (95% CI)	Unmet Prescription Need OR (95% CI)	Delayed Care OR (95% CI)	No Doctor Visits OR (95% CI)	Unmet Dental Need OR (95% CI)
<b>Age</b>					
1-4 years of age	1.00	1.00	1.00	1.00	1.00
5-9 years of age	1.25 (0.80, 1.95)	0.98 (0.68, 1.43)	0.88 (0.54, 1.44)	<b>1.78 (1.06, 2.98)</b>	<b>1.98 (1.35, 2.92)</b>
10-14 years of age	<b>1.71 (1.08, 2.68)</b>	1.31 (0.89, 1.93)	1.13 (0.67, 1.89)	<b>2.93 (1.71, 5.03)</b>	<b>2.57 (1.74, 3.82)</b>
15-18 years of age	1.37 (0.85, 2.20)	1.42 (0.93, 2.15)	1.00 (0.60, 1.65)	<b>4.39 (2.50, 7.69)</b>	<b>2.08 (1.32, 3.26)</b>
<b>Race/Ethnicity</b>					
White, Not Hispanic	1.00	1.00	1.00	1.00	1.00
Hispanic, Any Race	0.96 (0.61, 1.52)	0.73 (0.48, 1.10)	<b>3.36 (2.13, 5.31)</b>	<b>3.54 (2.31, 5.42)</b>	0.77 (0.52, 1.14)
Non-White, Non-Hisp	<b>2.08 (1.16, 3.70)</b>	0.68 (0.37, 1.22)	1.45 (0.72, 2.92)	0.93 (0.45, 1.91)	<b>0.31 (0.17, 0.55)</b>
<b>Parent's Employment</b>					
Employed/Self-Empl	1.00	1.00	1.00	1.00	1.00
Not Employed	0.79 (0.56, 1.11)	0.90 (0.67, 1.21)	0.73 (0.49, 1.07)	1.01 (0.69, 1.47)	0.95 (0.72, 1.26)
<b>Household Income</b>					
> 133% FPL	1.00	1.00	1.00	1.00	1.00
101% - 133% FPL	1.43 (0.77, 2.66)	1.04 (0.63, 1.71)	1.50 (0.73, 3.12)	1.54 (0.68, 3.48)	1.40 (0.84, 2.33)
51% - 100% FPL	0.75 (0.42, 1.36)	0.64 (0.40, 1.02)	1.12 (0.60, 2.10)	0.93 (0.45, 1.94)	0.99 (0.62, 1.58)
1% - 50% FPL	1.11 (0.63, 1.96)	0.64 (0.40, 1.01)	1.52 (0.83, 2.75)	1.11 (0.54, 2.30)	0.92 (0.57, 1.48)
Zero Income	1.39 (0.69, 2.79)	0.47 (0.26, 0.84)	1.49 (0.67, 3.32)	1.25 (0.54, 2.93)	0.82 (0.44, 1.52)
<b>Place of Residence</b>					
Urban	1.00	1.00	1.00	1.00	1.00
Rural	<b>1.39 (1.01, 1.92)</b>	1.18 (0.90, 1.55)	1.00 (0.70, 1.45)	0.73 (0.51, 1.04)	<b>1.37 (1.04, 1.80)</b>
<b>Parent's Insurance</b>					
Parent Insured	1.00	1.00	1.00	1.00	1.00
Parent Uninsured	<b>1.48 (1.04, 2.12)</b>	0.89 (0.64, 1.22)	1.08 (0.70, 1.68)	1.18 (0.80, 1.76)	0.82 (0.60, 1.10)
<b>Usual Source of Care</b>					
Child has a USC	1.00	1.00	1.00	1.00	1.00
Child has No USC	1.44 (0.90, 2.31)	1.03 (0.66, 1.61)	<b>2.24 (1.35, 3.72)</b>	<b>6.20 (3.83, 10.04)</b>	<b>2.11 (1.33, 3.33)</b>
<b>Child's Insurance</b>					
Child Insured	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>
Child Uninsured	<b>2.97 (1.94, 4.56)</b>	<b>2.55 (1.68, 3.87)</b>	<b>3.88 (2.30, 6.53)</b>	<b>2.40 (1.51, 3.82)</b>	<b>5.39 (3.67, 7.90)</b>



# Study Limitations

- **Analysis is based on self-reported information from mail-return data from 31% of the eligible sample population.**
- **Survey respondents may have higher rates of uninsurance compared with the general food stamp population.**
- **This is a preliminary cross-sectional analysis and associations cannot be proven causal.**

# Access to Health Insurance



**More than 1 in 10 children in Oregon's food stamp program have no health insurance coverage.**



**1 in 4 children in Oregon's food stamp program had a gap in insurance coverage during a 12-month period.**

**(Photos from OHSU public website)**

# Access to Health Care Services

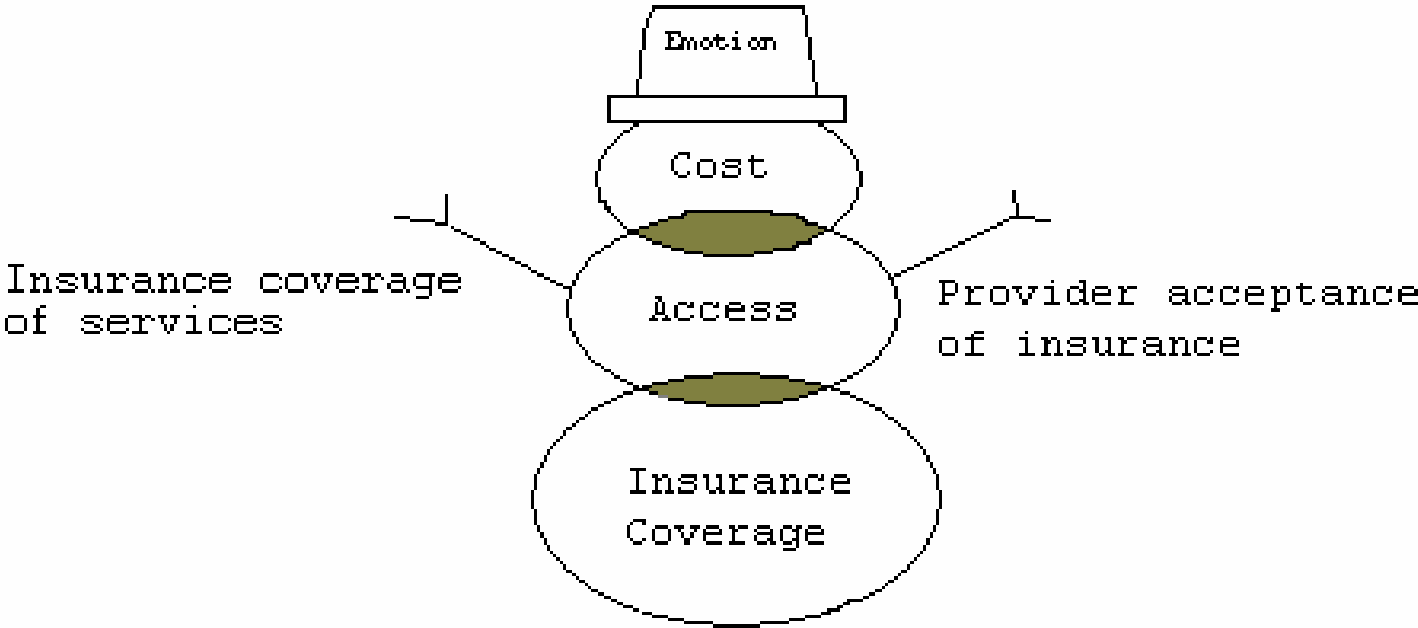


**Even after controlling for other factors, health insurance was the key factor influencing children's access to health care services.**

**In addition to uninsured children, the risk for unmet health care need was also higher among racial/ethnic minorities, children in rural areas, children with uninsured parents, and children without a usual source of care.**



# The Snowman Model of Health Care Concerns



# In Closing, The Words of One Parent...



"I hope that people "in charge" in the state of Oregon can get this all figured out for the health and safety of our children -- they are our future -- please help all of them to survive until then."

# ACKNOWLEDGEMENTS



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A special thanks to Janne Boone, Jessica Miller and James Oliver (OHPR); Rebecca Ramsey and Pooya Naderi (PSU); additionally, our appreciation for the efforts of Ron Taylor and Jeff Tharpe (CAF)