

# Parents' perceptions of medical provider encounters and access to care by race/ethnicity from the National Survey of Children's Health

Norton Children's

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### BACKGROUND

- High quality primary care is important for promoting optimal child health. From birth to five years of age, a child should be seen by a primary care provider about fourteen times for health maintenance.
- An optimal relationship between a caregiver and a pediatric provider is based in communication. The quality of parentprovider communication may vary by race, poverty, and/or education, which may be associated with inequitable health outcomes.
- The Institute of Medicine's vision of 21st century care emphasizes patient-centered care and equitable care (Nieman 2014).
- There are studies looking at parent perception of care, but many focus on subspeciality care or on patients with certain insurance type.
- The purpose of this study was to describe parents' perceptions of care quality for pediatric primary care in a nationally representative sample.



# **METHODS**

- National Survey of Children's Health (NSCH) database was used to examine perceived quality of care (PQC) and if the child has a personal doctor or nurse.
- Sample: Children 0 to 5 years old (n=12,141)
- We created a composite score measuring parental perception of whether the provider spent enough time, listened carefully, showed sensitivity, provided specific information, and made them feel like a partner.
- Scores ranged from 5-20 with 20 being the highest quality.
- Composite score satisfaction level was classified into 2 categories: 5 to 14 (low) and 15 to 20 (high)
- Multivariate logistic regression analysis was used to examine the association between the 2 composite score levels and education, poverty level, child having a personal MD/DO or RN, and by racial/ethnicity group.

# RESULTS

Table 1. Descriptive Analysis

Variable	N (%)
	(n = 12,141)
Race/Ethnicity	0.040 (00.4)
White NH	8,019 (66.1)
Black NH	724 (6.0)
Hispanic	1,674 (13.8)
Asian NH	637 (5.3)
Two or more race NH	979 (8.1)
Other NH	108 (0.9)
Family Poverty Ratio (FPL)	
<u>&lt;</u> 100	1,559 (12.8)
101-200	2,020 (16.6)
201-300	1,926 (15.9)
> 300	6,636 (54.7)
Adult 1 - Highest Completed Year of School	
<12th grade/No diploma	376 ( 3.1)
High school or GED	1,332 (11.0)
Some college: Associate/Vocational	3,223 (26.6)
College: Bachelors/Masters/Doctorate	7,210 (59.4)
Personal Doctor or Nurse - One or More (Yes)	9,285 (76.9)
How Often - Spend Enough Time	0,200 (1010)
Always	7,592 (69.3)
Usually	2,634 (24.0)
Sometime	593 (5.4)
Never	138 ( 1.3)
How Often - Listen Carefully	100 ( 1.0)
Always	8,518 (77.8)
Usually	2,047 (18.7)
Sometime	,
	340 ( 3.1)
Never	46 ( 0.4)
How Often - Show Sensitivity	0.700 (70.5)
Always	8,706 (79.5)
Usually	1,797 (16.4)
Sometime	348 ( 3.2)
Never	96 ( 0.9)
How Often - Provide Specific Information	
Always	8,589 (78.6)
Usually	1,944 (17.8)
Sometime	329 ( 3.0)
Never	73 ( 0.7)
How Often - Feel Like a Partner	
Always	8,705 (79.5)
Usually	1,817 (16.6)
Sometime	356 ( 3.3)
Never	76 ( 0.7)
Composite score satisfaction level	
5 - 14	2,111 (19.4)
15 - 20	8,783 (80.6)

Table 2. Results of Factors Associated with Composite Score Level of Satisfaction: Multivariate Logistic Regression Analysis

Covariates	Odds Ratio	95% CI		Р
Race/Ethnicity White NH	Reference			
Black NH	0.86	0.70	1.0	6 0.155
Hispanic	0.70	0.61	0.8	1 <.0001
Asian NH	0.66	0.54	0.8	1 <.0001
Two or more races NH	0.79	0.66	0.9	4 0.007
Other NH	0.56	0.36	0.8	8 <b>0.012</b>
Education <12th grade ***	Reference			
HS or GED	1.12	0.82	1.54	0.477
Some/Associate/Vocational	1.08	0.80	1.46	0.596
Bachelors/Masters/Doctorate	0.97	0.72	1.31	0.860
% U.S. Federal Poverty Level ≤ 100	Reference			
101-200	1.09	0.92	1.30	0.326
201-300	1.12	0.93	1.34	0.233
> 300	1.40	1.19	1.66	<.0001
Personal MD/DO or RN				
No	Reference			
Yes	1.52	1.36	1.70	<.0001

\*CI: confidence interval; P = p-value of Wald Chi-Square test.



# CONCLUSIONS

- Overall, the majority of parents reported a positive health care visit experience.
- There are significant differences in the perceived quality of care based upon race/ethnicity, poverty ratio and children having a personal MD/DO or RN.
- The odds of high satisfaction are lower for each race but did not reach statistical significance among Black parents.
- Further investigation is warranted to understand the specific reasons within each group for differences in perceived quality of care.
- Targeting care quality factors for specific groups can reduce inequity in health outcomes for young children and foster trust and positive relationships between parents and their primary care provider.

# STRENGTHS/LIMITATIONS

#### **Strengths**

- Nationally representative sample from well-validated survey
   Limitations
- Retrospective study
- Scoring for the PQC was created for this study, although the variables included are from validated questionnaires

### REFERENCES

- 1. Nieman CL, Benke JR, Ishman SL, Smith DF, Boss EF. Whose experience is measured? A pilot study of patient satisfaction demographics in pediatric otolaryngology. *Laryngoscope*. 2014 Jan;124(1):290-4.
- 2. Nieman CL, Benke JR, Boss EF. Does Race/Ethnicity or Socioeconomic Status Influence Patient Satisfaction in Pediatric Surgical Care? *Otolaryngol Head Neck Surg.* 2015 Oct;153(4):620-8.
- 3. Wilkins V, Elliott MN, Richardson A, Lozano P, Mangione-Smith R. The association between care experiences and parent ratings of care for different racial, ethnic, and language groups in a Medicaid population. *Health Serv Res.* 2011 Jun;46(3):821-39.
- 4. Wilkins V, Elliott MN, Richardson A, Lozano P, Mangione-Smith R. The association between care experiences and parent ratings of care for different racial, ethnic, and language groups in a Medicaid population. *Health Serv Res.* 2011 Jun;46(3):821-39.

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