

Racial Disparities in Access to Pediatric Medical Homes: An Analysis of the National Survey of Children's Health 2019-2021.



Cassie McCoy, B.S.,¹ Pedro Braga, B.S.,¹ Colony Fugate, D.O.,² & Micah Hartwell, Ph.D.¹

1. Oklahoma State University College of Osteopathic Medicine at Cherokee Nation, Office of Medical Student Research; 2. Oklahoma State University Center for Health Sciences, Department of Pediatrics, Tulsa, OK

INTRODUCTION

- A medical home, outlined as the standard of care by the American Academy of Pediatrics, is characterized as accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective.¹
- Access to medical homes is associated with improved health outcomes:
 - Increased preventative care visits, well-child checks, immunizations, and vitals measured.
 - Decreased outpatient sick visits, and inappropriate antibiotic usage.²
- Children of marginalized racial/ethnic groups experience disparities in access to healthcare and adverse health outcomes.^{3,4}

OBJECTIVES

- The primary aim of our study was to identify associations between children receiving care in a medical home and its components among different ethno-racial groups in the United States using data from the National Survey of Children's Health from 2019-2021.

METHODS

- Utilizing NSCH 2019-2021 data, we determined rates of children with access to medical homes.
- We determined the rates for access to each medical home component by racial/ethnic groups.
- To assess for disparities in medical home access by race, we constructed a logistic regression model to measure associations, via odds ratio, between medical home access and race.
- We controlled for child sex, age, federal poverty level (FPL), caregiver education level, and urbanicity.

RESULTS

Table 1. Sample Demographics and Percent Meeting Medical Home Criteria.

Variable	Total No. (%)	Meets Medical Home Criteria No. (%)
Sex		
Male	63820 (51.11)	33698 (47.1)
Female	59159 (48.89)	31377 (46.64)
Age group		
<2	4972 (10.19)	2750 (51.08)
2-5	15326 (21.84)	8467 (48.57)
6-10	17970 (27.58)	9465 (46.6)
11-14	17536 (23.46)	9212 (46.77)
15-17	16328 (16.92)	8322 (42.46)
Race		
White	82166 (50.12)	47383 (55.61)
Black	8090 (13.27)	3214 (38.27)
AIAN	764 (0.3813)	302 (36.69)
Asian	6641 (4.562)	2831 (37.22)
NHPI	360 (0.2298)	118 (27.42)
Muliracial	8748 (5.744)	4644 (52.23)
HL	16210 (25.69)	6583 (35.13)
Urbanicity		
Metro	79670 (87.86)	42296 (46.71)
Non-Metro	16868 (12.14)	8769 (47.44)
Income level (%Federal Poverty Level FPL)		
0-99%	15043 (18.57)	5299 (28.96)
100-199%	20241 (21.21)	8972 (39.25)
200-399%	37810 (28.96)	20047 (49.43)
>400%	49885 (31.26)	30757 (60.34)
Education		
<HS	3185 (9.438)	831 (23.7)
HS	16096 (19.33)	6133 (33.95)
Some college	27240 (20.61)	12865 (43.83)
College +	76458 (50.62)	45246 (57.37)

AIAN: American Indian/Alaska Native; NHPI: Native Hawaiian/ Other Pacific Islander; HL: Hispanic/Latino

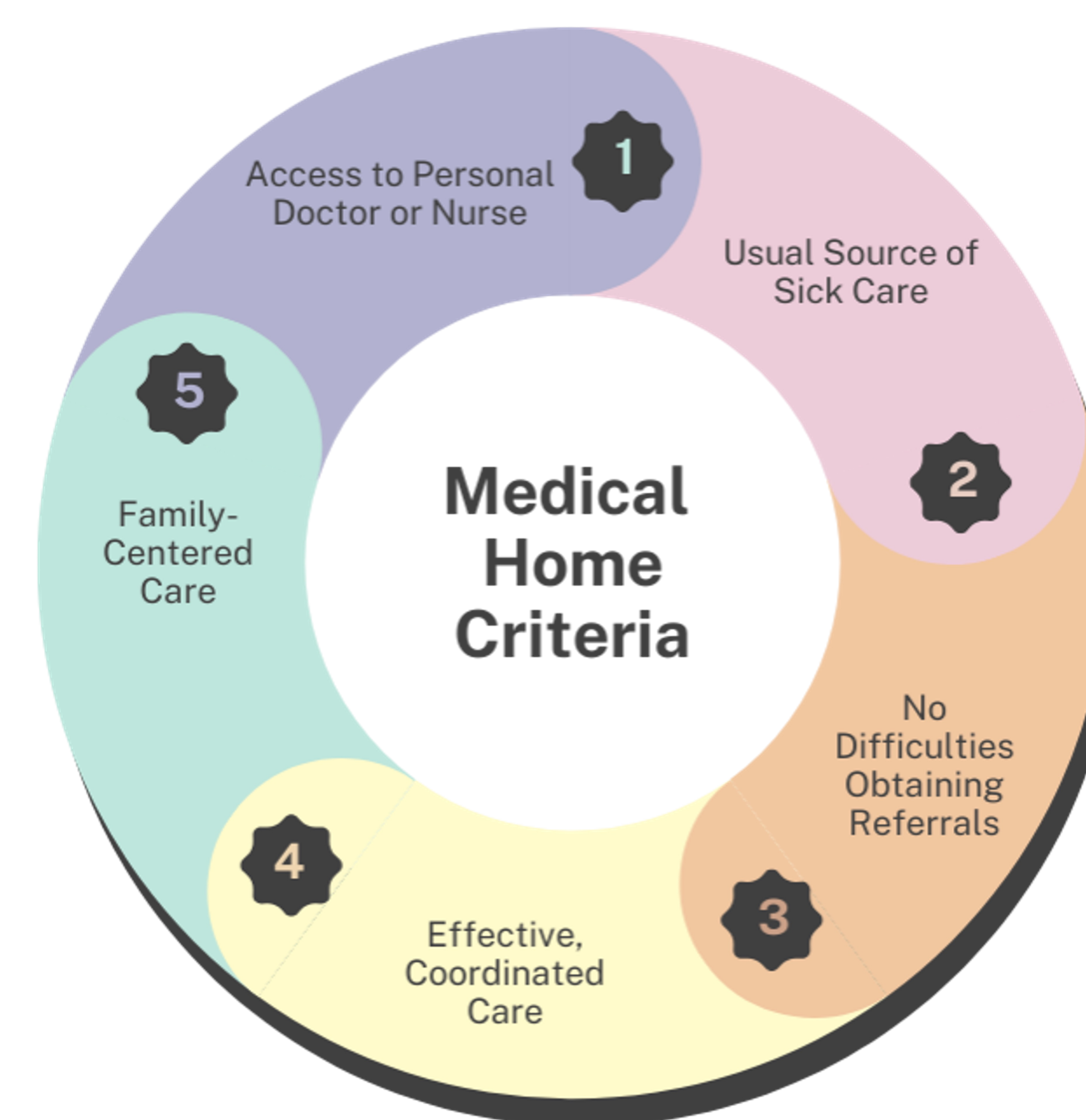


Figure 1: Five medical home criteria variables collected through NSCH data.

Table 2. Logistic Regression of Ethnoracial Disparities in Medical Home Access.

	Binary model OR (95%CI)	Adjusted model AOR (95%CI)
Race/Ethnicity		
White	1 [Ref]	1 [Ref]
Black	2.02 (1.86-2.19)	1.44 (1.27-1.62)
AIAN	2.16 (1.68-2.78)	1.58 (1.04-2.41)
Asian	2.11 (1.9-2.35)	1.97 (1.69-2.28)
NHPI	3.32 (1.99-5.52)	3.69 (1.45-9.39)
Muliracial	1.15 (1.04-1.26)	1.13 (0.98-1.31)
Hispanic/Latino	2.31 (2.14-2.5)	1.61 (1.44-1.8)

RESULTS

- Among the 122,979 children in the sample, 57,904 children lacked medical home access—representing approximately 38.7 million children (53.12%) in the US annually.
- Compared to White children, all racial minority children were statistically significantly more likely to lack access to medical homes except for Multiracial children.
- With 72.58% lacking access, NHPI children were most likely to lack medical homes overall and for four of the components in Fig 1.
- Hispanic/Latino had the highest rates of difficulties with referrals.

CONCLUSIONS

- Given the majority of children lack care in a medical home, efforts are needed to provide more of the pediatric population with comprehensive, quality care in medical homes.
- The most prominent barriers include access to personal providers and sources of sick care—the two highest unmet criteria in Fig 1.
- Children of minority groups have disproportionately less receipt of care in medical homes, highlighting inherent racial barriers within the healthcare system.
- Efforts to address systemic racial barriers and the physician shortage are needed to increase the receipt of children with care in medical homes, which may improve health equity.

REFERENCES

1. What is Medical Home? Accessed August 3, 2023. <https://www.aap.org/en/practice-management/medical-home/medical-home-overview/what-is-medical-home/>
2. Weller BE, Faubert SJ, Ault AK. Youth Access to Medical Homes and Medical Home Components by Race and Ethnicity. *Matern Child Health J.* 2020;24(2):241-249.
3. Zickafosse JS, Davis MM. Medical home disparities are not created equal: differences in the medical home for children from different vulnerable groups. *J Health Care Poor Underserved.* 2013;24(3):1331-1343.
4. Lichstein JC, Ghandour RM, Mann MY. Access to the Medical Home Among Children With and Without Special Health Care Needs. *Pediatrics.* 2018;142(6). doi:10.1542/peds.2018-1795