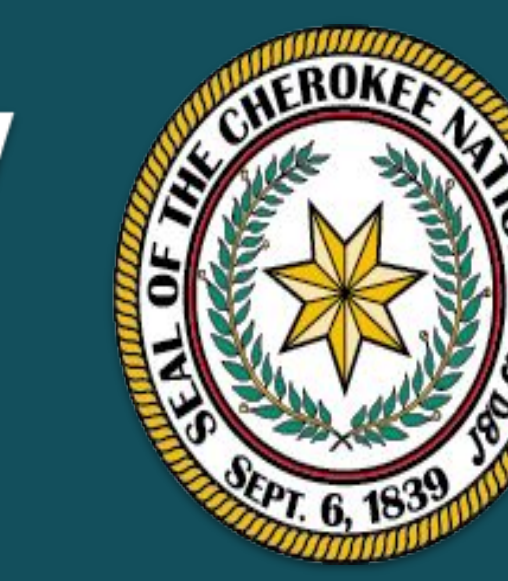


# Trends and Disparities in Unmet Childhood Mental Health Care Needs: Analysis of National Survey of Children's Health 2016-2020



COLLEGE OF  
**OSTEOPATHIC MEDICINE**  
at the Cherokee Nation

**Cassie McCoy, B.S.,<sup>1</sup> Pedro Braga, B.S.,<sup>1</sup> Covenant Elenwo, M.P.H.,<sup>1</sup> Michael A. Baxter, M.D.,<sup>3</sup> Tessa Chesher, D.O.,<sup>2</sup> & Micah Hartwell, Ph.D.<sup>1,2</sup>**

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 Psychiatry and Behavioral Science, Tulsa, OK  
3. University of Oklahoma School of Community Medicine, Department of Pediatrics Tulsa, OK

## INTRODUCTION

- With 20% of children experiencing mental health disorders, it is critical to ensure mental health care (MHC) is accessible.<sup>1</sup>
- MH disorders can hinder children from adequately developing psychological, cognitive, physical, and emotional characteristics essential for a healthy transition into adulthood.<sup>2</sup>
- The COVID-19 pandemic created challenges in both MHC delivery and accessibility.<sup>3</sup>
- Minority children have shown an increased risk for poor mental health (MH) correlated to the effects of both structural and individual racism.<sup>4</sup>

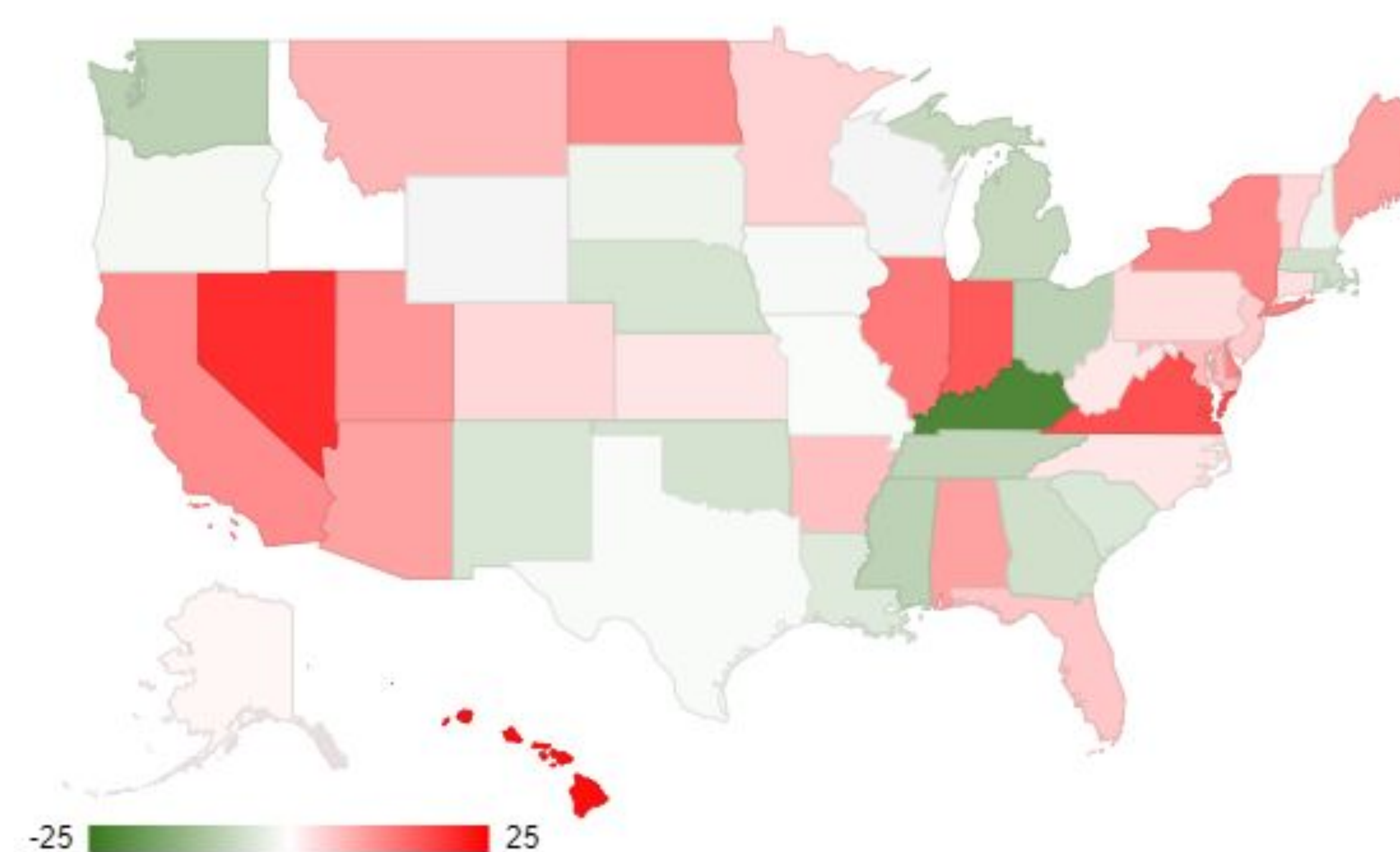
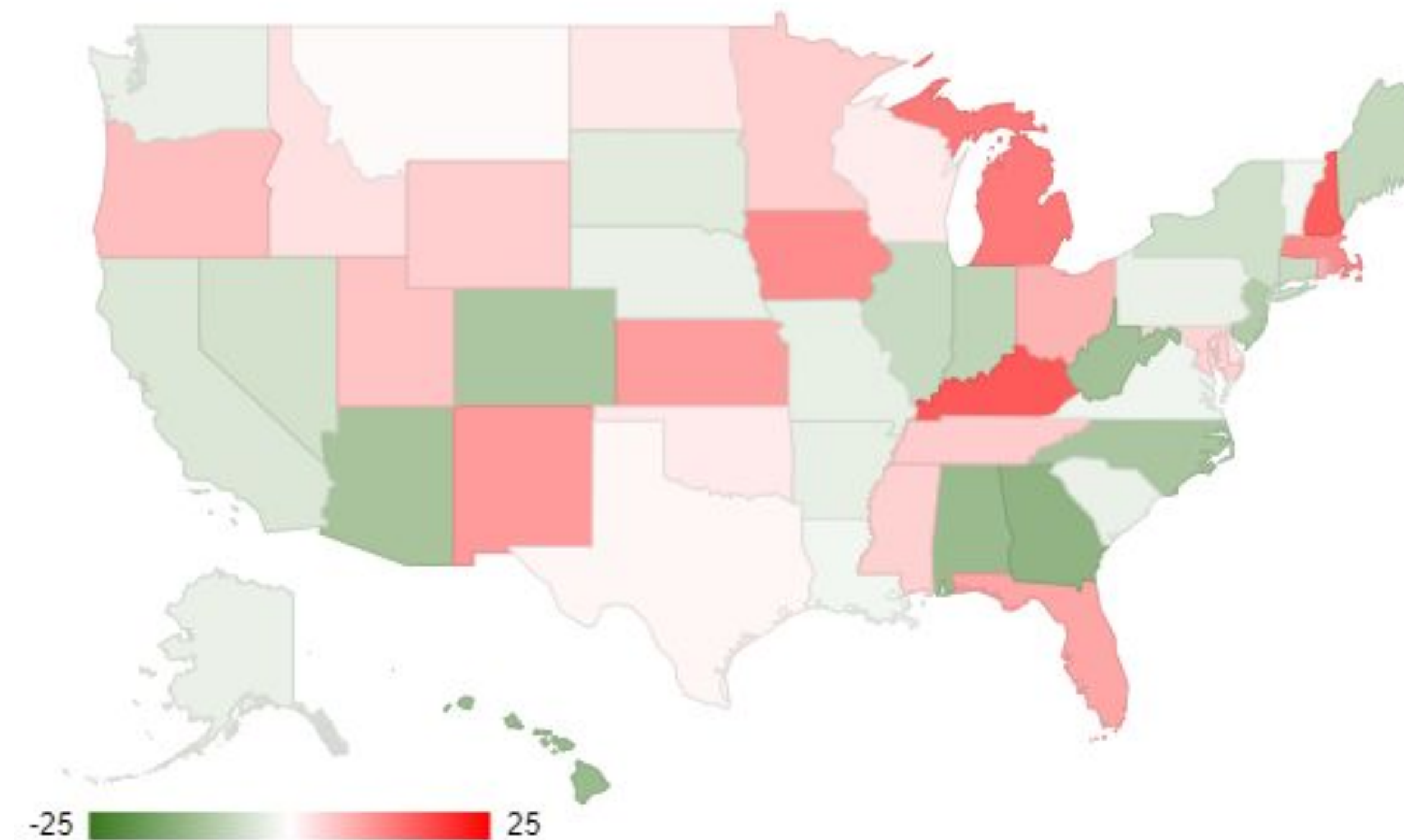
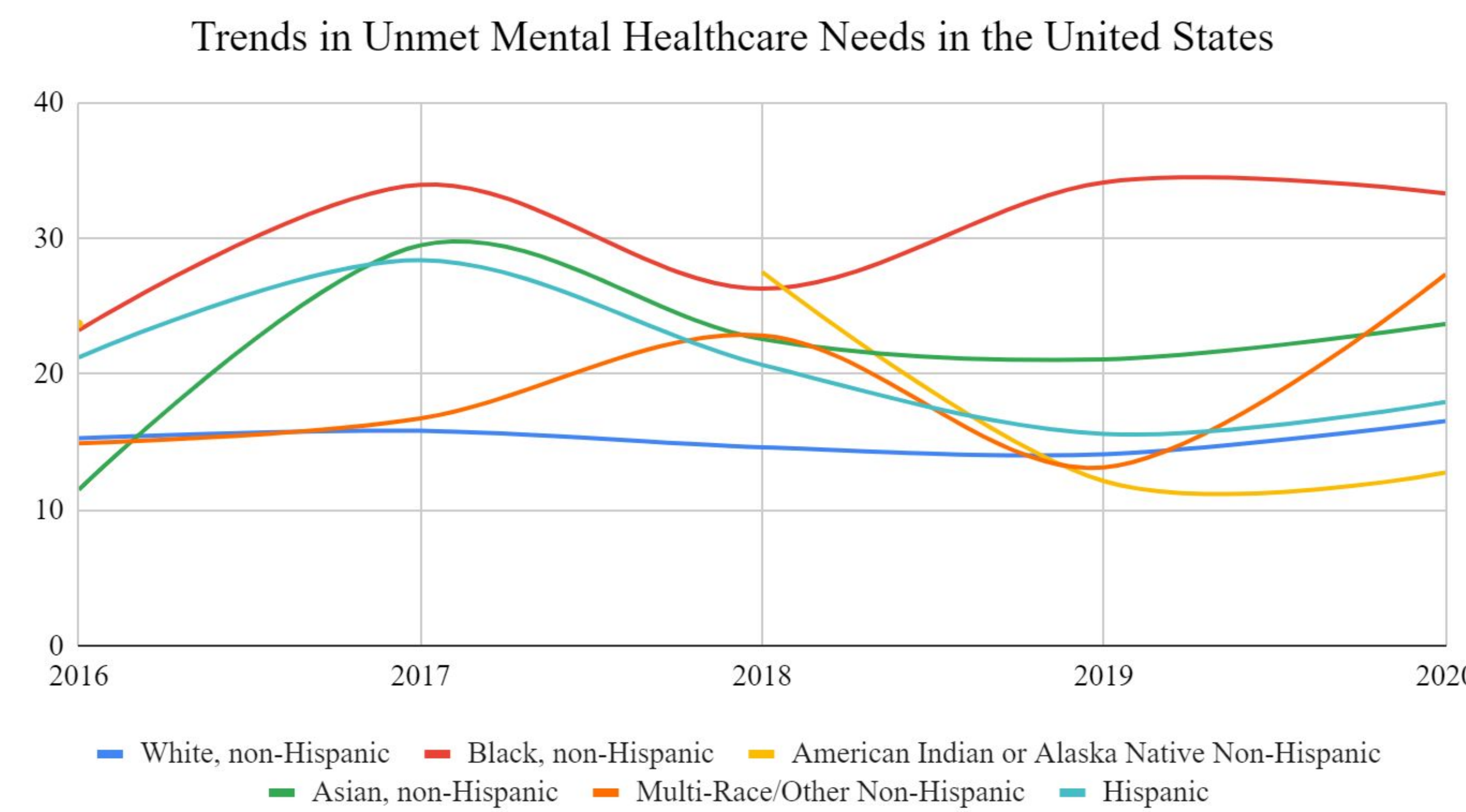
## OBJECTIVES

- Assessing trends in children's unmet MHC needs from 2016–2020 may aid in the development of strategies to overcome those barriers, thus our objectives were to identify:
  1. the disparities among age groups, race/ethnicity, federal poverty level, or urbanicity
  2. the changes among each state
  3. the potential effects of the COVID-19 pandemic

## METHODS

- We assessed the National Survey of Children's Health to estimate trends of unmet MHC needs from 2016-2020.
- To identify state-level trends, we calculated each state's percent change between 2016-2019 and between 2019-2020 to determine the impact of COVID-19.
- Lastly, we measured associations, via logistic regression, between children's unmet MHC needs and demographic factors to assess disparities.

## RESULTS



**Figure 1A.** Difference in percentage of children unmet MHC needs among children from 2016-2019.

**Figure 1B.** Difference in percentage of children unmet MHC needs among children from 2019-2020.

**Table 1.** Unmet Mental Health Care needs among Children by Sociodemographics.

Characteristic	Multivariable logistic Regression
<b>Age group</b>	<b>AOR</b>
6-10	1 [Reference]
3-5	<b>1.62**</b>
11-14	0.91
15-17	0.84
<b>Race/Ethnicity</b>	
White, non-Hispanic	1 [Reference]
Black, non-Hispanic	<b>1.91**</b>
Indigenous, non-Hispanic	0.60
Asian, non-Hispanic	1.48
Native Hawaiian and Other Pac.	1.14
Multi-Race/Other Non-Hispanic	1.26
Hispanic	1.25
<b>% Federal Poverty Level</b>	
400+	1 [Reference]
0-99	<b>2.25**</b>
100-199	<b>1.73**</b>
200-399	<b>1.55**</b>
<b>Urbanicity</b>	
Metro	1 [Reference]
Non-metro	1.10

\* P < .05, \*\* P < .01

## RESULTS

- There was no significant improvement in the number of children with unmet MHC needs from 2016-2019 nor 2019-2020.
- By 2020, 20.14% of the pediatric population did not receive MHC when it was needed.
- Nevada had the highest unmet MHC needs overall.
- Compared to White children, Black children were significantly more likely to have unmet MHC.
- Unmet MHC was significantly associated with household income, but not urbanicity.

## CONCLUSIONS

- From 2016-2020, there were no significant improvements in unmet MHC needs among children
- Disparities in receiving MHC exist, primarily among Black children and among those between the ages of 3–5.
- Unmet MHC needs could affect the proper development to adulthood, future efforts to minimize barriers to MHC services could reduce unmet MH needs and potentially reduce chronic MH disorders.
- Efforts to improve accessibility of MHC through advocacy, optimized payment options and expansion of evidence-based programs targeting groups most likely to have unmet MHC needs may improve MH outcomes.

## REFERENCES

1. Lebrun-Harris LA, Ghandour RM, Kogan MD, Warren MD. Five-Year Trends in US Children's Health and Well-being, 2016-2020. *JAMA Pediatr.* Published online March 14, 2022. doi:10.1001/jamapediatrics.2022.0056
2. Rodgers CRR, Flores MW, Bassey O, Augenblick JM, Cook BL. Racial/Ethnic Disparity Trends in Children's Mental Health Care Access and Expenditures From 2010 to 2017: Disparities Remain Despite Sweeping Policy Reform. *J Am Acad Child Adolesc Psychiatry.* Published online October 7, 2021. doi:10.1016/j.jaac.2021.09.420
3. de Figueiredo CS, Sandre PC, Portugal LCL, et al. COVID-19 pandemic impact on children and adolescents' mental health: Biological, environmental, and social factors. *Prog Neuropsychopharmacol Biol Psychiatry.* 2021;106:110171.
4. Rodgers CRR, Flores MW, Bassey O, Augenblick JM, Cook BL. Racial/Ethnic Disparity Trends in Children's Mental Health Care Access and Expenditures From 2010 to 2017: Disparities Remain Despite Sweeping Policy Reform. *J Am Acad Child Adolesc Psychiatry.* Published online October 7, 2021. doi:10.1016/j.jaac.2021.09.420