

# Shining the Light on Parity and Disparity in Childhood Asthma Care

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We grew up in an area of the United States with racial inequality, where white and black persons experience disparate opportunities for community inclusion, education, employment, wealth, and wellbeing. As general pediatricians, we felt it was our duty to decrease the impact of these disparities on the health of our patients. Unfortunately, we continue to witness differences by race in the survival, access to care, use of health services, and the development and control of chronic conditions in children. These racial disparities have been reported repeatedly in children throughout the United States for decades.<sup>1</sup>

The work of Silber and colleagues<sup>2</sup> published in the current issue of *Pediatrics* assesses differences by race in lengths of stay and 30-day readmission rates for hospitalized children with asthma who were enrolled in Medicaid. The work applies rigorous methods to match children across race groups by their other demographic characteristics, comorbid conditions, and history of asthma medication use. Using these methods, the authors found that length of stay and 30-day readmission did not vary significantly by the children's race. Previous studies of inpatient asthma care using standard risk adjustment methods in children report similar findings.<sup>3</sup>

The findings reported by Silber et al<sup>2</sup> corroborate our experiences with asthma care in a variety of hospitals, including children's and non-children's, small and large, urban and rural. We have found that a child's race, by

itself, neither influences the efficiency of inpatient care nor the quality of discharge care. In the hospital, we have not encountered race itself to significantly affect the timing or administration of oxygen,  $\beta$ -agonists, or corticosteroids, or the quality of asthma education and teach-back, action plan development, follow-up appointment arrangement, or other components of hospital discharge care.

Although race may not substantially affect the inpatient care of hospitalized children with asthma, other socioeconomic characteristics clearly do.<sup>4</sup> Poverty, limited education, low health literacy, an unclean home environment, family practice of cigarette smoking, employment challenges, and restricted means of transportation are well known to affect the health care and health outcomes of children with asthma.<sup>4</sup> We keep children with asthma in the hospital longer when family caregivers need more time for asthma education (eg, understanding the importance of a spacer or adhering with controller medications when their child is not sick), for addressing home environmental triggers that worsen asthma, and for arranging transportation to follow-up appointments. We have been fortunate to work in multiple hospitals with resources and personnel (eg, case managers and social workers) that are equipped to help address those issues. Long-standing federal health care policies have helped equalize the availability of these resources and personnel to patients across most hospitals.<sup>5</sup>

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We find it more difficult in the outpatient setting than in the hospital to provide high quality asthma care to children with challenging socioeconomic attributes. In the outpatient setting, more frequent and lengthier office visits, extra phone calls to the family, and home visits are sometimes required to help children with asthma who reside among impoverished families of limited health literacy and ill-equipped home environments. Moreover, many parents of these children are employed with jobs that offer limited or no flexibility to attend their child's appointments. These parents often require work-release documents (eg, Family Medical Leave Act forms) just to attend the appointments without risk of termination. Unfortunately, there is unequal opportunity for children with socioeconomic challenges, including those relying on Medicaid, to access pediatric clinicians and practices that offer the breadth of health services needed to deliver high quality asthma care management.

In our experience, the most disturbing disparities in asthma care result from this: many pediatric clinicians and practices severely limit or completely deny outpatient and community care to children with Medicaid, including those with asthma. Among the reasons for these actions is that Medicaid payment, in some US states, does not underwrite the cost of the time and effort-intensive health services required to

optimize the health of the children. Moreover, some US states recurrently threaten or enact reductions in funding for their Medicaid program.<sup>6</sup> These legislative actions undoubtedly de-incentivize outpatient pediatric providers to care for children with Medicaid. This may help explain why emergency department visits and long-term hospital readmissions (eg, 90 days and beyond after discharge) are higher for children with asthma who use Medicaid versus private insurance.<sup>3,7</sup>

We recognize that the discussion above extends beyond the scope of Silber and colleagues'<sup>2</sup> current article in *Pediatrics*, which purposely restricted its cohort to children using Medicaid and exclusively measured use for hospital care. By doing this, the authors were (1) able to group the cohort by family income, thereby minimizing the effect of poverty on the race findings; and (2) focus on a well-circumscribed, specific health service encounter (ie, hospitalization). However, it is nearly impossible to consider and interpret the findings from the Silber et al article<sup>2</sup> without thinking about, in the larger context, how racial disparities in children's health are heavily influenced by the complicated interactions of poverty, Medicaid, and access to high quality outpatient and community care. Although we are pleased that Silber and colleagues' work<sup>2</sup> reports parity in hospital use for children with asthma by race, it will remain important to shine light on other disparities in children with

asthma until those disparities are eliminated.

## REFERENCES

1. Flores G; Committee on Pediatric Research. Technical report--racial and ethnic disparities in the health and health care of children. *Pediatrics*. 2010;125(4). Available at: [www.pediatrics.org/cgi/content/full/125/4/e979](http://www.pediatrics.org/cgi/content/full/125/4/e979)
2. Silber JH, Rosenbaum PR, Calhoun S, et al. Racial disparities in Medicaid asthma hospitalizations. *Pediatrics*. 2016;139(1):e20161221
3. Kenyon CC, Melvin PR, Chiang VW, Elliott MN, Schuster MA, Berry JG. Rehospitalization for childhood asthma: timing, variation, and opportunities for intervention. *J Pediatr*. 2014;164(2):300–305
4. Williams DR, Sternthal M, Wright RJ. Social determinants: taking the social context of asthma seriously. *Pediatrics*. 2009;123(suppl 3):S174–S184
5. Birmingham J. *Discharge Planning Guide: Tools for Compliance*. 3rd ed. Danvers, MA: HCPro, Inc; 2010
6. Little J. Medicaid cuts could hurt children's access to care. *Opelika-Auburn News*. July 9, 2016. Available at: [www.oanow.com/news/lee\\_county/medicaid-cuts-could-hurt-children-s-access-to-care/article\\_efbc3052-4652-11e6-bac7-d3360a673d92.html](http://www.oanow.com/news/lee_county/medicaid-cuts-could-hurt-children-s-access-to-care/article_efbc3052-4652-11e6-bac7-d3360a673d92.html)
7. National Asthma Education and Prevention Program. Appendix C: Racial disparities. *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma*. Washington, DC: National Heart, Lung, and Blood Institute, US Department of Health and Human Services; 2008

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