

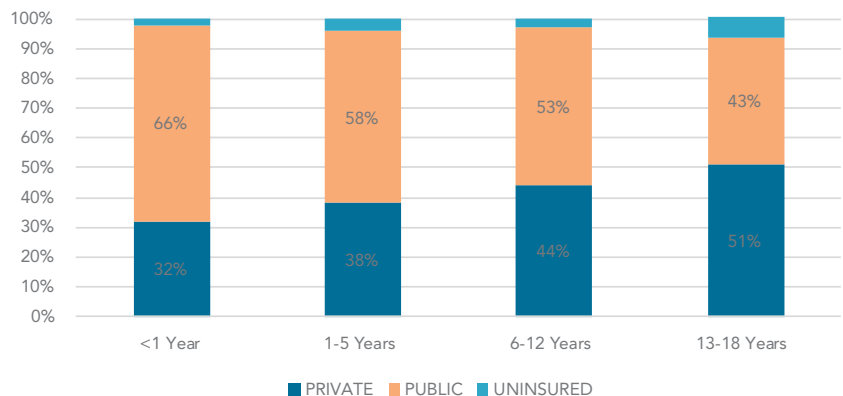
# STARTING EARLY: Developmental Screenings Can Increase a Child's Potential

Health is a crucial component of childhood academic success. Healthier students consistently perform better on standardized assessments and have lower rates of absenteeism<sup>1</sup>, while asthma, vision problems, obesity, and other chronic conditions can prevent children from attending and participating in school. Health is also closely linked to poverty. Family income is one of several factors linked to poor child health outcomes<sup>2</sup>. Children who grow up in economically-stressed environments have higher rates of chronic illness, poorer nutrition, and slower language development<sup>3,4</sup>. Early childhood screening provides an important opportunity to close the achievement gap by identifying developmental delays and health problems during the child's most developmentally critical period.

In Mississippi, the effects of early screening might be particularly potent, as young children face persistent poverty and health challenges: 34.6% of children under age 5 live in poverty and 11.4% of infants are born with low birthweight, both the highest rates in the nation<sup>5</sup>. Over half of Mississippi's children (51%) are enrolled in Medicaid or the Children's Health Insurance Program (CHIP), indicating these programs play a crucial role in the health of Mississippi's children<sup>6</sup>. Rates of public coverage are particularly high for Mississippi's youngest children. Given the connection between health and education and the significant number of children in Mississippi covered by public insurance, preventative care programs such as Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Program have the potential to not only improve child health, but to improve education outcomes and close the achievement gap for Mississippi's children.

This brief was made possible with support from the Annie E. Casey Foundation and technical assistance through the Early Childhood Data Collaborative at Child Trends. This research has built upon work funded by the W.K. Kellogg Foundation in implementing the Mississippi Data Project ([msdatapoint.com](http://msdatapoint.com)). Together, this support has allowed researchers at Mississippi KIDS COUNT to conduct a study on school readiness of children enrolled in Mississippi's Medicaid Program. This brief provides information on the characteristics of kindergarten students enrolled in Medicaid, their participation in Medicaid's EPSDT program, and their level of kindergarten readiness.

MISSISSIPPI CHILDREN 0-18 YEARS OF AGE BY TYPE OF COVERAGE, 2015



Source: Center for Mississippi Health Policy (2017)

## Early, Periodic Screening, Diagnosis, and Treatment (EPSDT)

The Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program is an integral part of preventative healthcare for children on Medicaid. At EPSDT visits, children receive physical, mental, developmental, hearing, vision and other screening tests in order to diagnose and treat health issues as early as possible. The American Academy of Pediatrics (AAP) recommends nine EPSDT visits during the first two years of life: six in the first year and three in the second year<sup>7</sup>. Regular EPSDT visits provide opportunities for primary care physicians to identify and treat health issues that might otherwise interfere with a child's academic success. Improving well-child preventative healthcare for economically-disadvantaged children may positively impact school readiness, as indicated by existing studies<sup>8,9,10</sup>.

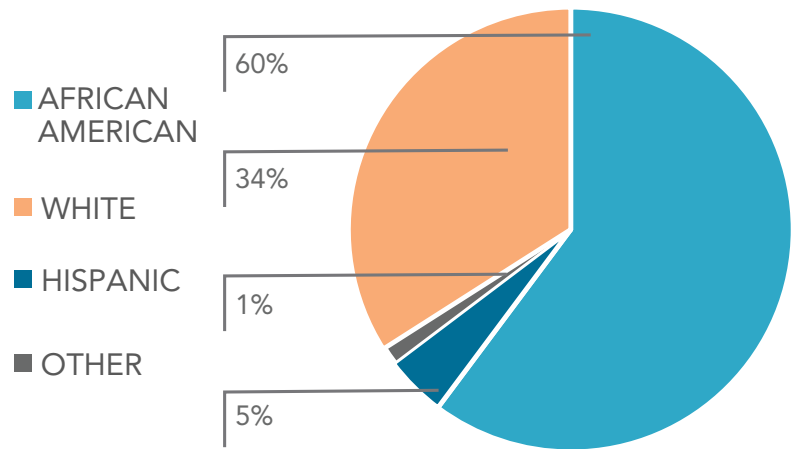
### METHODOLOGY

The data used in this policy brief includes educational records from the Mississippi Department of Education and claims data from the Mississippi Division of Medicaid. These data sources were linked using a series of identifiers common to each data source. The data used in our analysis included kindergarten students enrolled in the Mississippi public school system during the 2014-2015 school year who had also been enrolled in Medicaid at any point during the period of 2013-2015. Additional details about this report, including study methodology can be found in a methodological supplement available at: [www.kidscount.ssrc.msstate.edu](http://www.kidscount.ssrc.msstate.edu)

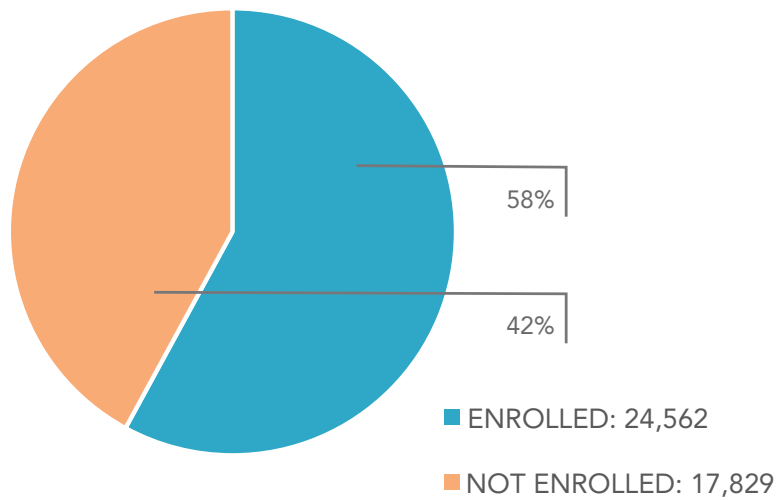
# Medicaid Enrollment of Mississippi Kindergarten Students, 2014/15

In 2014, 24,562 Mississippi kindergarteners (58%) were enrolled in Medicaid. Of kindergarteners enrolled in Medicaid, black children were proportionally the largest group served (60%). Additionally, black children have the highest rate of Medicaid enrollment with the majority of black kindergarteners (72.2%) being enrolled in Medicaid during 2014.

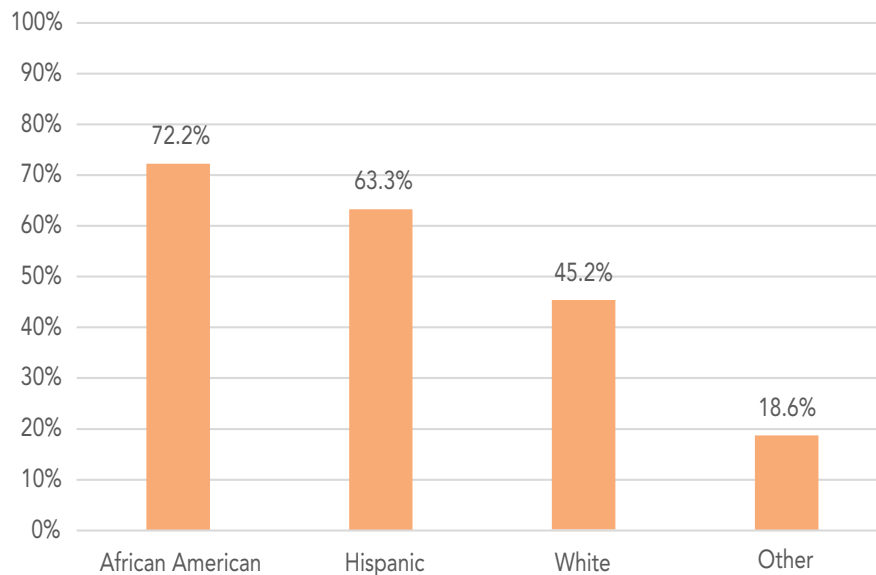
KINDERGARTENERS ENROLLED IN MEDICAID BY RACE/ETHNICITY, 2014/15



KINDERGARTENERS BY MEDICAID ENROLLMENT, 2014/15



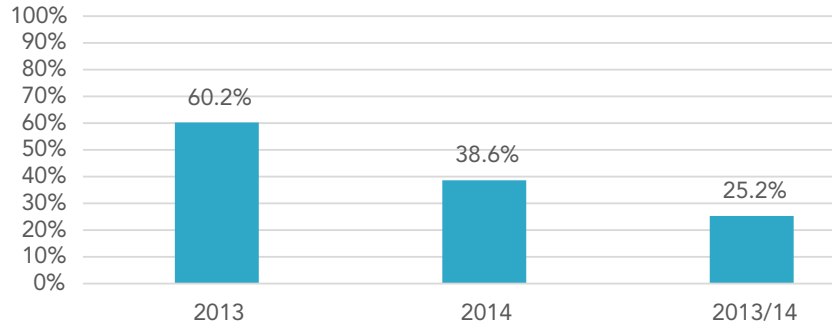
MEDICAID ENROLLMENT RATE FOR KINDERGARTENERS BY RACE, 2014/15



# Participation in Medicaid's Early Period Screening and Testing Program (EPSDT)

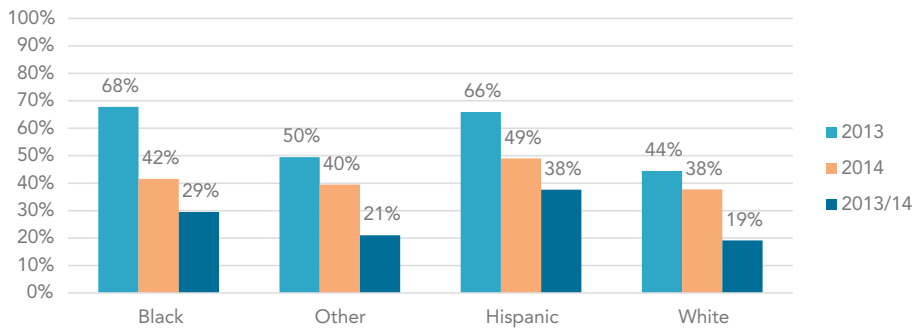
The chart to the right shows the percentage of kindergarten students (2014/15 school year) who received the recommended number of EPSDT screenings. Based on these students age range the total number of recommended screenings in the two years prior to entering kindergarten would have been one screening per year. Overall, the rates of screening for kindergarten children are low and tend to decrease as students age. Of the students entering Kindergarten in the 2014/15 school year, over half (60.3%) received the recommended number of screenings in 2013. However, this figure dropped to less than half (40.7%) in the following year. Even fewer children (26.6%) received the recommended number of screenings for two consecutive years (2013/14).

KINDERGARTENERS RECEIVING RECOMMENDED EPSDT VISITS PRIOR TO ENTERING KINDERGARTEN, 2014-15



Note. Analysis includes children who were continuously enrolled in Medicaid during 2013 and 2014.

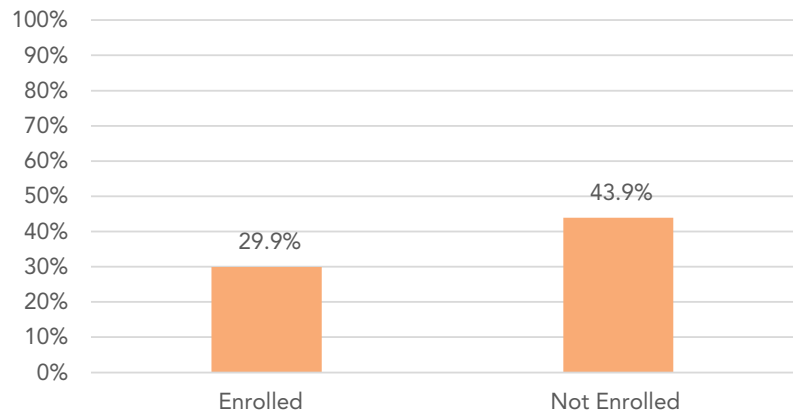
KINDERGARTEN STUDENTS RECEIVING RECOMMENDED EPSDT VISITS BY RACE



Disaggregating EPSDT utilization data by race reveals a number of important patterns. Black students had the highest EPSDT participation rates in the two years prior to their entering kindergarten followed by Hispanic students. Although participation rates were higher for Black students compared to other groups, they also had a decrease of 26 percentage points, the largest of any group.

## Kindergarten Readiness in the Mississippi Medicaid Population

The figure below shows the percentage of students who passed the Mississippi Department of Education's Kindergarten Readiness assessment. The kindergarten readiness benchmark is 530 which has been shown to be associated with 70% mastery of the assessed early literacy skills (Mississippi Department of Education, 2015). In 2014, less than half of students entering Kindergarten scored above the 530 benchmark (Mississippi Department of Education, 2015). Kindergarteners who were enrolled in Medicaid lagged significantly behind their peers who were not enrolled in Medicaid with only 29.9% passing compared to 43.9%.



# Strategies to Increase Kindergarten Readiness:

Promote parent, community and state-wide awareness of the importance of early screening, intervention and follow-up of Mississippi's youngest children

Increase the number of children who receive developmental screening, appropriate intervention and follow-up, beginning with the youngest children in the state's most impoverished areas

Conduct research to determine reasons for the low participation rate of children who receive EPSDT services

Increase strategies to provide optimal funding for Mississippi's Early Intervention programs and Pre-Kindergarten programs on both the community and state level

Enhance mechanisms to coordinate and integrate services between Early Intervention and Pre-Kindergarten programs

## References

1. Michael, S. L., Merlo, C. L., Basch, C. E., Wentzel, K. R., & Wechsler, H. (2015). Critical connections: health and academics. *Journal of School Health*, 85(11), 740–758.
2. Bauman, L. J., Silver, E., & Stein, R. (2006). Cumulative social disadvantage and child health. *PEDIATRICS*, 117(4), 1321–1328. <https://doi.org/10.1542/peds.2005-1647>
3. Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children*, 55–71.
4. Shonkoff, J., & Garner, A. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232–e246.
5. Mississippi indicators. (2018). Retrieved from Kids Count Data Center website.
6. Health insurance coverage in Mississippi. (2017, February). Retrieved from Center for Mississippi Health Policy website.
7. Recommendations for Preventive Pediatric Health Care. (2016). Retrieved from the American Academy of Pediatrics website.
8. Pittard, W., Hulse, T., Laditka, J., & Laditka, S. (2012). School readiness among children insured by Medicaid, South Carolina. *Preventing Chronic Disease*. <https://doi.org/10.5888/pcd9.110333>
9. Schor, E. L., Abrams, M., & Shea, K. (2007). Medicaid: Health promotion and disease prevention for school readiness. *Health Affairs*, 26(2), 420–429. <https://doi.org/10.1377/hlthaff.26.2.420>
10. Levine, P. B., & Schanzenbach, D. (2009). The impact of children's public health insurance expansions on educational outcomes. In *Forum for Health Economics & Policy* (Vol. 12).

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