The Engagement In Action Framework

Toward a Statewide Integrated Early Childhood Health System

Attachment A: Mississippi Child and Family Health and Systems Performance Data Summary

A Collaborative Project with Mississippi Thrive! and the Child and Adolescent Health Measurement Initiative

February 2023

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Mississippi Child and Family Health and Systems Performance Data Summary

Background

As part of the Engagement In Action (EnAct!) Framework development process, the Child and Adolescent Health Measurement Initiative (CAHMI) conducted research to provide an overview of Mississippi's Medicaid program for children and to create a profile of the health and health services for Mississippi's young children and their families as well as their use of well-child care services. This attachment summarizes the findings.

Methods

The Child and Adolescent Health Measurement Initiative used the most recent data available to characterize Mississippi's Medicaid program for children and profiled the health and health services use and performance for Mississippi's young children and families. Table 1 summarizes features of Mississippi's Medicaid program for children. Data was obtained from the Medicaid and CHIP Payment and Access Commission (MACPAC) MACSTATs report (December 2021 and 2022). Tables 2 and 3 used 2016-2021 National Survey of Children's Health (NSCH) data to construct an array of early childhood relevant health and health services utilization and performance indicators for Mississippi and the Nation. Comparisons in findings for Mississippi across years and by children's type of health insurance (public versus private) are presented. The NSCH is sponsored and directed by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB), and is conducted by the United States Census Bureau. The NSCH provides a broad range of information about children's health and well-being and is collected in a manner that allows comparisons among states as well as nationally. Table 3 also includes data from the Centers for Medicaid and Medicare Services (CMS) on state Medicaid program performance and the National Committee for Quality Assurance's (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS) on managed care health plan performance across states.

All data reported using the NSCH are weighted to account for complex sampling and to be representative of the population of non-institutionalized children living in Mississippi and the nation.

A Profile of Mississippi Medicaid Program for Young Children

Table 1 below uses the most recent federal Medicaid and CHIP Payment and Access Commission MACSTATs report (2022) to characterize Mississippi's Medicaid program with comparison to the nation, where possible. Included is the estimated number of children enrolled in Medicaid in Mississippi, income eligibility criteria as well as the type of health insurance program they are enrolled in. Additionally, data related to Mississippi State Medicaid expenditures for children and other characteristics are summarized. As can be seen, Mississippi children enrolled in Medicaid are more likely than children in the nation as a whole to receive care through a managed care health plan. Also, Mississippi invests less of their state budget for Medicaid but spends a higher proportion of their Medicaid budget for children compared to other age groups. These findings are impacted by the state's coverage for adults and other factors. Finally, Mississippi spends a similar amount per child compared to the nation. More recent data (e.g., 2022) would require direct report from the MS Division of Medicaid.

Table 1: High Level Summary of Mississippi's Medicaid Program for Children from the 2022 Medicaid and CHIP Payment and Action Committee MACSTATS[1]

	All US Children	All Mississippi Children Enrolled in Medicaid or CHIP (2021)
Estimated number of children enrolled in Medicaid (Full Year Enrolled Equivalent) (Ex 14)	30.9 million	379,000 (100,378 estimated to be age 0-5 using the National Survey of Children's Health)
Estimated number of children enrolled in Medicaid or CHIP Full Year Equivalent (Ex 32)	44.92 million	497,000
Proportion of Medicaid enrolled children receiving care through comprehensive managed care organizations (Ex 30)	82.0%	96.2%
Eligibility as a percent of the Federal Poverty Level (FPL) (Ex 30)	Varies by state	Medicaid Infants: 194% FPL CHIP Infants: NA Medicaid 1-5 years: 143% Medicaid 6-17 years: 133%
Federal match rate for each dollar spent by the state	Varies by state	77.86% (84.5% for CHIP)
Medicaid expenditures as a percentage of the state budget, including federal funds (Ex 5)	Average of 28.3%	27.8%
Medicaid expenditures as a percentage of the state budget, not including federal funds. (Ex 5)	Average 15.1%	10.7%
Total expenditures for Medicaid Fiscal Year 2020 (Ex 21)	628,819,000,000	5,391,000,000
Percentage of all state expenditures on Medicaid spent on children (Ex 21)	Average 15.1%	24%
Average expenditures per child enrolled in Medicaid (per full time equivalent enrollee) (Ex 22)[1]	$3,504	$3,972

[1]MACSTATs December 2022 (https://www.macpac.gov/macstats/).

Additional information on children receiving services and expenditures for other Mississippi early childhood systems programs is available from the Mississippi State Early Childhood Advisory Committee program-by-program available here. As further detailed in

Attachment C, many of the programs profiled share goals and responsibilities with Medicaid and health care and point to many needs and opportunities for resource sharing and coordination.

Summary of Mississippi Child and Health Systems Performance

The health and school readiness of Mississippi's young children and the health and productivity of Mississippi's entire population depends on fostering achievable leaps in the healthy development and flourishing of children and families. Mississippi is well poised to lead the nation in strategies to promote healthy child development by building on progress made through the five-year Mississippi Thrive! (MST) initiative and other related state efforts. Through the MST effort, Mississippi has begun to model strategies for other states to consider as they work to establish an integrated early childhood health system and drive improvements in school readiness, child flourishing, and the overall health of the population.
Specifically, MST! has made great strides to build public awareness, grow the capacity of the early childhood workforce, coordinate and fill gaps in essential child and family resources and to solidify concrete partnerships across child and family health care, early care and education, early intervention, and related state programs to ensure provision of high-quality preventive and developmental services and supports.

It is commonly reported that Mississippi ranks among the lowest across US states in indicators of child and family health and wellbeing. However, this depends upon the data that is examined and requires consideration of the larger context in which Mississippi children and families live, including historical and cultural factors. Measurement systems that heavily focus on economic and income policies and services availability (e.g., Annie E. Casey Foundation's KidsCount Data Book or Zero To Three's State of Babies Yearbook) typically rank Mississippi (MS) in the lowest few states for child and family health. Yet, other measurement systems like the National Survey of Children's Health state data paints a different picture.

Findings from CAHMI's NSCH data analysis are presented in Table 2, which reports on Mississippi's results for young children (age 0-5) and their families. Findings show improvements in several areas between 2016-2017 and 2020-2021. Specifically, Figure 1 presents the prevalence of MS children under age three who received any developmental screening, which shifted from 50th in the nation in 2016-2017 with a rate of 18.6% of children to 33rd in the nation in 2020-2021 with a rate of 34.1% (p=.02). Mississippi's 2020-2021 rate is no longer lower than the nation as a whole (34.1% vs 34.8%). Moreover, the rate of children whose caregivers/parents read, sang, or told stories to their child (an indicator of child relational health and language development) increased between 2018-2021, which were the years in which MST focused on early literacy promotion. Other indicators trending upward have been whether a child was ever breastfed (58.7% in 2016-2017 to 66.9% in 2020-2021; p=.06).

However, during this same time, there were also some worsening trends. Importantly, there has been a striking drop in the proportion of children meeting criteria for demonstrating resilience, which is critical to a child's readiness for and success in school (58.8% good self-regulation in 2018-2019 to 39.9% in 2020-2021; p=.001) (Figure 1). While factors related to the

COVID-19 pandemic may account for this change, it nonetheless should catalyze strong efforts to help children develop resilience. This involves employing the many evidence-based approaches to help children develop self-awareness and skills to regulate their bodies, emotions, and behavior. Doing so will also include ensuring caregivers/parents are coping well and children's families also practice resilience when things are difficult (e.g., maintaining hope, seeing strengths to draw on, staying connected to work out problems, etc.).

Figure 1: Five-year trends in key child health measures in Mississippi, 2016-2021

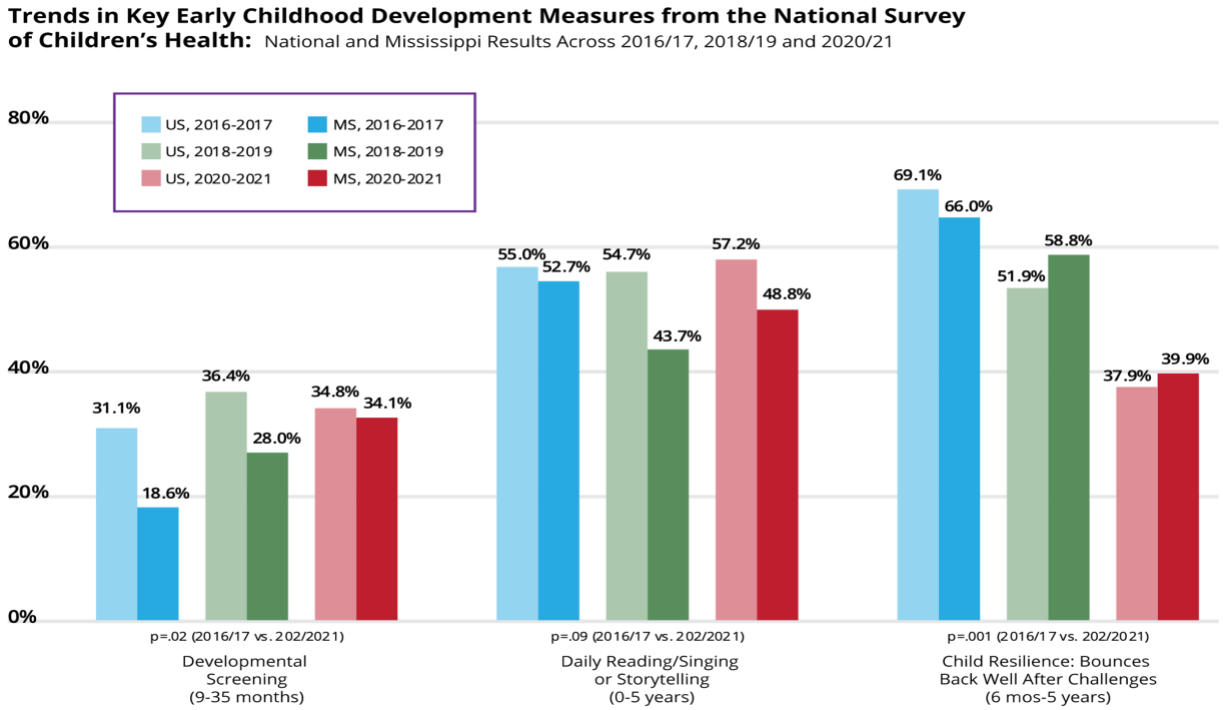

Table 2 below presents NSCH results comparing Mississippi to the Nation for 36 indicators for children age 0-5. This includes 16 indicators of child development, positive health, and health risks; 8 child and family health and protective factor indictors and 10 indicators related to children's health insurance, utilization of services and quality of care. As summarized in Table 2, important indicators critical to the healthy development of young children present important opportunities for improvement. This includes the proportion of children living with families exhibiting two important aspects of resilience — staying hopeful in difficult times and knowing they have strengths to draw on. Just over half of all Mississippi children lived in homes with hope and a sense of strengths to draw on in 2020-2021 (54.7%). Findings point to critical opportunities to promote child wellbeing by employing strategies to improve family resilience, which is demonstrated to improve child flourishing and both their readiness and engagement in school. The NSCH population-based data for Mississippi also indicate an increase in the proportion of children who were born premature or with a low birth weight between 2016-2017 to 2020-2021 (15.1% in 2018-2019 to 21.3% in 2020-2021; p=.08). In addition, Mississippi ranked among highest states on measures of children's exposure to smoking in the home and has also maintained a significantly higher than national average rate of children aged 3-17 who are

diagnosed with Attention Deficit/Hyperactivity disorder, as well a higher rate of children age 10-17 who are obese (ranking 48th across 51 states).

Compared to privately insured children in Mississippi, publicly insured children in MS are nearly two times more likely (63.8% vs 35.5%) to live in homes where caregivers report less than excellent or very good mental health and are 2.5 times more likely to experience serious social and/or relational risks to their health (e.g., serious economic hardship, multiple adverse childhood experiences). Only a little over one third of publicly insured young children 0-5 received care in settings that meet Medical Home criteria. It is crucial to target these groups of children to engage and educate these families to promote safe, stable, and nurturing environment. (Table 2)

Mirroring the tremendous opportunity that exists in Mississippi to promote children's readiness for school are findings from the NSCH. As summarized in Table 2, CAHMI constructed a 3-part ***Readiness for School Success*** metric that included three subdomains: (1) early learning skills, (2) social and emotional development and (3) focus and attention skills. Findings show that 44.7% of children in Mississippi age 3-5 met the "early learning skills" measurement domain criteria, 67% met the "social and emotional development" domain criteria and 39.8% met the "focus and attention" domain criteria. Combining results across all three domains, 19.3% of children age 0-5 in Mississippi in 2020-2021 meet criteria on all three domains. This is reduced from 2018-2019 rate which was 34.2%. This reduction is partly driven by an overall reduction in the resilience/self-regulation skills among children in this age group across these years in Mississippi (58.8% in 2018-2019 to 39.9% in 2020-2021), which may be attributable to the impact of the COVID-19 pandemic. School readiness rates for publicly insured children were lower than for children with private sector health insurance. Note that all items used across years were the same. Another measure of "Kindergarten Readiness" reported in 2022 by the Mississippi Department of Education that focuses primarily on reading and language skills and estimates that about 57.5% of kindergarteners were ready for school—with wide variations across Mississippi School Districts (29.7% in Baldwyn School District to 83.3% in Armory School District).

These and other findings reaffirm the need for continued leadership and efforts to improve preventive and developmental services for young children in Mississippi, with a focus on innovations to promote the wellbeing of the whole child and family by addressing the array of physical, emotional, social, and relational health factors that interact to either promote or diminish their healthy development and lifelong health. As broader systems and policy changes unfold, the envisioned EnAct! framework is "One Big Doable Thing!" that can immediately engage MST partners in a collaborative effort, which will also build the relationships, collaborations and insights needed for such changes to take place.

In particular, implementing the EnAct! framework will close gaps in the utilization and quality of well child visits for children aged 0-5 and will markedly increase rates of developmental screening, whole family preventive service delivery and the number of children receiving services that meet medical home and Bright Futures Guidelines criteria. Table 3

provides data on well visit use rates across children age 0-5 in Mississippi, providing a picture of how many of the estimated 562,248 well visits recommended to occur for Mississippi's estimated 215,552 children age 0-5 take place. CAHMI used data available from the federal Centers for Medicaid and Medicare Services (CMS) on Mississippi well visit rates for young children. In addition, data from the NSCH was used to construct metrics examining whether children met or did not have recommended numbers of well visits. NSCH data limitations prevent full discernment for some children since the NSCH only asks if none, 1 or 2 or more visits occurred yet recommended visits for younger children are more than 2 per year. Overall, our analysis concludes that:

1. **Fewer than Half of Well Visits for Infants Enrolled in Medicaid Are Missed**: We conclude that fewer than half of children age 0-15 months of age do not receive the 9 visits recommended through Bright Futures Guidelines. The key data point used is from the CMS reports on State performance on the Medicaid/CHIP well visit performance measure for children 0-15 months of age (see Attachment C for more information on the these Medicaid/CHIP measures). CMS reports that 57.5% of Mississippi children enrolled in Medicaid had at least 6 of 9 recommended well child visits. Yet, this means that many did not have all 9 and it is reasonable to assume that more than another 10% who did have at least 6 were still missing up to 3 other visits, which would bring the rate to 47.5%.
2. **Two in Five Children Miss Visits in the First Four Months:** Analysis of the NSCH reveals that over 2 in 5 (42.3%) infants under 4 months of age in Mississippi received none or only 1 well visit versus the four recommended to occur before 4 months of age.
3. **Only About Half of Children Age 2-3 Had Recommended Visits**: An estimated 48.6% of children age 24-35 months had 2+ well visits, which meets recommended periodicity. This was 45.5% for children with public sector insurance coverage (e.g., Medicaid)
4. **Nearly Six in Ten Children Age 3-5 Had Recommended Visits**: While 4 in 10 children 36-71 months of age (3-5) did not have recommended visits, 6 in 10 did so.

Findings support a cross-system collaborative approach where families are engaged "through any door" across all early childhood access points, such as home visiting, community-based organizations, child welfare, childcare and early education. When all early childhood system partners work to ensure young children and families receive needed health promotion and risk assessment and support services and get connected to primary care services Mississippi can dramatically improve use and quality of well visits which will directly improve children's healthy development. Medicaid, health plans and businesses in Mississippi also have important roles to play to ensure all infants, young children and families are supported by quality preventive and developmental services.

Table 2: Progress and Opportunities to Promote Child and Family Well Being: Mississippi Data Highlights for Children Age 0-5.
(Source: CAHMI analysis of the 2018-2021 National Survey of Children's Health)

	Among All US Children Age 0-5, 2020-2021 (Across State Range)	Among Mississippi Children Age 0-5 2020-2021	Among Mississippi Children by Type of Health Insurance, Age 0-5; 2020-2021		Among Mississippi Children Age 0-5, 2018-2019 *p≤.05; **p≤.10 vs. 2020-2021 MS
			Publicly Insured Children	Privately Insured Children	
A. Child Development, Positive Health, and Health Risk Status (for children age 0-5 unless otherwise noted)					
1. Prevalence of children aged 6 months-5 years meeting 4-part flourishing criteria ("Always"-most discerning predictor)[1]	31.9% (23.5% IN - 38.6% AL)	32.7%	33.9%	32.8%	39.6%
2. Prevalence of children aged 6 months-5 years demonstrating good self-regulation (Always-most discerning predictor)	37.9% (31.0% ME - 46.5% AL)	39.9%	42.2%	38.7%	58.8%*
3. Prevalence of children aged 3-5 years who met "Early Learning Skills" domain criteria on a 3-part "Readiness for School Success" measure (met on 6-8 items) [2]	50.0% (38.0% NM - 65.2% MA	44.7%	40.0%	47.1%	67.5%*
4. Prevalence of children aged 3-5 years who met "Social and Emotional Development" domain criteria on a 3-part "Readiness for School Success" measure (met on all 4 items) [2]	59.9% (49.0% NM - 78.9% RI)	66.9%	60.3%	78.1%	71.0%
5. Prevalence of children aged 3-5 years who met "Focus and Attention" domain criteria on a 3-part "Readiness for School Success" measure (met on all 4 items) [2]	46.3% (33.1% AR - 58.4% MN)	39.8%	27.7%	56.8%	54.8%*
6. Prevalence of children aged 3-5 years who met "Readiness for School Success" measure criteria (all 3 domain criteria) [2]	22.7% (13.6% TX - 34.5% RI)	19.3%	15.3%	24.7%	34.2%*
7. Prevalence of children aged 0-17 who were born premature or at low or very low birthweight	15.3% (9.4% MN - 23.2% OK)	21.3%	29.5%	10.4%	15.1%**
8. Prevalence of children living in a home with 1 or 2 caregivers in less than excellent/very good mental health	43.6% (36.1% HI - 52.3% MS)	52.3%	63.8%	35.5%	47.9%
9. Child experiences 1 or more Adverse Childhood Experiences[3]	25.5% (17.3% MA - 38.0% NM)	31.4%	44.9%	12.0%	33.6%
10. Prevalence of children aged 0-5 who meet criteria for having a current ongoing health problems and special health care needs[4]	10.4% (5.6% UT - 13.8% AR)	10.0%	11.0%	8.7%	13.0%
11. Prevalence of children aged 3-5 years of age who experience any mental, emotional and/or behavioral condition	14.0% (7.0% MN - 22.3% AR)	11.1%	14.7%	6.4%^	11.3%
12. Prevalence of children experiencing 1 or more complex social and/or relational health risk from 8 evidence-based risks[4]	39.3% (28.7% SD - 49.1% NM)	40.2%	52.6%	21.0%	43.5%

Table 2 (cont'd): Progress and Opportunities to Promote Child and Family Well Being: Mississippi Data Highlights for Children Age 0-5.
(Source: CAHMI analysis of the 2018-2021 National Survey of Children's Health)

	Among All US Children Age 0-5, 2020-2021 (Across State Range)	Among Mississippi Children Age 0-5 2020-2021	Among Mississippi Children by Type of Insurance, Age 0-5 2020-2021		Among Mississippi Children Age 0-5, 2018-2019 *p≤.05; **p≤.10 vs. 2020-21 MS
			Publicly Insured Children	Privately Insured Children	
A. (Continued) Child Development, Positive Health, and Health Risk Status (for children age 0-5 unless otherwise noted)					
13. Prevalence of children w/risks on 1or more domains on the validated Integrated Child Risk Index (Medical, Social, Relational Risks)[4]	50.8% (39.6% SD - 60.3% NM)	57.4%	71.5%	37.6%	56.9%
14. Prevalence of children experiencing 2 or more domains on the Integrated Child Risk Index (Medical, Social, Relational Risks) [4]	19.0% (12.8% MI - 27.1% NM)	20.5%	28.2%	7.2%	25.0%
15. Prevalence of children who live in a home with serious economic hardship-often hard to meet very basic needs	11.3% (6.5% PA - 17.5% MS)	17.5%	22.7%	4.9%	16.6%
16. Prevalence of children living in a home where someone smokes cigarettes	12.6% (3.5% UT - 22.2% WV)	21.0%	29.7%	10.6%	18.4%
B. Child, Family and Community Protective Factors					
1. Prevalence of children aged 0-5 who were ever breastfed	81.6% (66.9% WV/MS - 93.7% OR)	66.9%	57.3%	78.3%	57.7%*
2. Prevalence of infants aged 0-12 months put on their back to sleep	78.0% (60.8% SC - 95.3% DC)	76.4%	81.8%	72.9%	45.1%*
3. Prevalence of children aged 0-5 who are read to, told stories, or sung to 4 or more days a week	73.9% (63.3% AR - 87.1% VT)	68.8%	61.6%	75.5%	62.4%
4. Prevalence of children aged 0-5 who are read to, told stories, or sung to everyday	57.2% (46.2% AR - 73.9% NH)	48.8%	42.9%	54.1%	43.7%
5. Prevalence of children aged 0-5 living in homes where the family always practices four basic resilience skills ("All of the time"; validated response option for predicting child flourishing)[1]	47.9% (37.2% MT - 54.9% GA)	45.9%	39.7%	55.0%	50.3%
6. Prevalence of children aged 0-5 living in homes where the family always stays hopeful & knows they have strengths	55.5% (47% MN - 63.4% GA)	54.7%	51.6%	61.5%	56.7%
7. Prevalence of children aged 0-5 whose caregiver copes very well with parenting	61.6% (54.4% CO - 72.4% AL)	69.5%	74.4%	66.3%	74.5%

Table 2 (cont'd): Progress and Opportunities to Promote Child and Family Well Being: Mississippi Data Highlights for Children Age 0-5.
(Source: CAHMI analysis of the 2018-2021 National Survey of Children's Health)

	Among All US Children Age 0-5, 2020-2021 (Across State Range)	Among Mississippi Children Age 0-5 2020-2021	Among Mississippi Children by Type of Health Insurance, Age 0-5 2020-2021		Among Mississippi Children Age 0-5, 2018-2019 *p≤.05; **p≤.10 vs. 2020-21 MS
			Publicly Insured Children	Privately Insured Children	
B. (Continued) Child, Family and Community Protective Factors					
8. Prevalence of children aged 0-5 living in a neighborhood their caregiver reports is safe and supportive	47.3% (24.4% DC - 59.8% IA)	50.7%	39.8%	62.7%	53.2%
C. Child's Health Insurance, Utilization of Services and Quality of Care					
1. Prevalence of children aged 0-5 whose caregiver reports child's health insurance to be adequate and continuous	70.7% (58.1 WY - 83.8% HI)	72.3%	87.6%	68.6%	71.8%
2. Prevalence of children aged 0-5 receiving care in a setting that meets criteria for being a high-quality Medical Home	48.3% (36.3% NV - 59.2% VT)	48.0%	38.6%	62.0%	45.8%
3. Prevalence of children aged 9-35 months receiving standardized developmental screening in the past year	34.8% (18.9% AZ - 50.6% OR)	34.1%	30.8%	39.4%	28.0%*
4. Prevalence of children aged 1-5 receiving a dental visit in the past year	57.6% (48.6% IL - 75.1% HI)	50.9%	51.5%	52.2%	59.6%
5. Prevalence of children aged 0-5 who had 1 or more emergency room visit in last year	18.6% (11.4% MD - 30.5% MS)	30.5%	41.1%	22.2%	31.8%
6. Prevalence of children aged 0-5 hospitalized in last year	4.6% (2.1% FL - 9.5% IA)	7.1%	10.2%	5.0%^	7.9%
7. Prevalence of children aged 0-5 who currently receive special services to meet their developmental needs such as speech, occupational, or behavioral therapy	6.8% (3.1% MN - 11.2% AR)	3.4%	3.5%	3.3%^	6.2%
8. Prevalence of children aged 1-5 who currently receive special education or early intervention plan (IFSP or IEP)	5.0% (2.1% MN^ - 10.0% VT)	2.9%	3.0%^	3.0%^	3.7%^
9. Prevalence of children aged 0-5 whose family received some type of food or cash assistance	40.4% (23.0% NH - 55.4% LA)	50.7%	78.9%	15.0%	50.5%
10. Prevalence of children aged 0-5 whose caregiver's paid work is impacted by child's health, insurance, or childcare needs	20.2% (14.9% VA - 24.5% ME)	19.6%	22.4%	16.3%	16.7%

NOTES FOR TABLE 2: *Differences are statistically significant at p<.05.

[1]Bethell, C. et al., Family Resilience and Connection Promotes Child Flourishing, Even Amid Adversity. Health Affairs. 2019;38(5). Available at: https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.05425.

[2] CAHMI constructed a 3-part *Readiness for School Success* measure addressing early learning skills, social and emotional development and focus and attention skills. Each domain "met/did not meet" score is based on the number of items for which the child met scoring criteria using and age specific algorithm aligned with the item level scoring criteria approach to these NSCH items set forth by MCHB in this paper: Ghandour RM, Moore KA, Murphy K. et al. School Readiness among U.S. Children: Development of a Pilot Measure, Child Indicators Research. 2019(12):1389–1411. In this scoring approach, both Always and Usually/Most of the Time are nearly always combined to indicate "Met" on that item. In some cases, based on the child's age only "always" counts and in other cases "Always, Usually/Most of the Time and Half of the Time" qualify a child as "Met" on that item. For detailed measure specifications used contact cbethell@jhu.edu. [3] Bethell CD, et. al., Methods to Assess Adverse Childhood Experiences of Children and Families: Toward Approaches to Promote Child Well-being in Policy and Practice. Acad Pediatr. 2017 Sep-Oct;17(7S):S51-S69. [4] Bethell CD, et.al., Taking stock of the CSHCN screener: a review of common questions and current reflections. Acad Pediatr. 2015 Mar-Apr;15(2):165-76. [5] Bethell C, Garner AS, et.al., Toward Measurement for a Whole Child Health Policy: Validity and National and State Prevalence of the Integrated Child Risk Index. Acad Pediatr. 2022 Aug;22(6):952-964.

Measure scores with this symbol "^" also means that the sample size is especially low in that the estimate has a 95% confidence interval width exceeding 30 percentage points or 1.3 times the estimate and may not be reliable.

Table 3: Summary of Expected and Actual Utilization of Well Child Visits for Children Age 0-5 and Whether Children Met Recommended Periodicity: National, Across State and Mississippi Results
Using the National Survey of Children's Health and CMS/Medicaid Data

Whether children met recommended periodicity for well visits was estimated by age subgroups since recommended number of visits variers by age. NSCH data was optimized and variables reported are those with greatest validity. Additional data available. See NOTES TO TABLE 3 below for more information.	**All US Children Age 0-5, 2020-2021 (Across State Range)[2]**	**All Mississippi Children Aged 0-5 2020-2021**	**Mississippi Children By Type of Health Insurance, Age 0-5 2020-20221**	
			Publicly Insured Children	**Privately Insured Children**
NSCH estimated number of children aged 0-5 overall[1]	23,252,148 (2,826,106 CA - 33,869 VT)	215,552	47.4% (102,165)	43.1% (92,835)
NSCH estimated number of well child visits recommended for children aged 0-5 per yr[1]	56,096,553 (6,442,117 CA - 85,002 VT)	562,248	271,711	227,797
CMS/Medicaid estimated prevalence of children enrolled in Medicaid age 0-15 months who had at least 6 of 9 recommended well visits in the past year[2]	65.6% (CT 87.2% - WY 40.9%)	Not Tracked	57.5%	Not Tracked
NSCH estimated prevalence of children under 4 months of age who had no or only one visit since birth and CLEARLY DID NOT MEET recommended periodicity (4 visits recommended)[3]	31.8% (IL 1.5%^ - WV 58.3%) (Publicly Insured: 29.2% no visits; 6.9% only 1 visit =36.1%)	42.3%	Sample size too low to produce stable estimates for Mississippi using the National Survey of Children's Health 2020-2021 combined data file.	
NSCH estimated prevalence of children under 4 months of age who had 2+ well visits in past year. UNCLEAR if they met recommended periodicity[3]	68.2% (WV 41.7% - IL 98.5%)	57.7%		
NSCH estimated prevalence of children under 12 months of age having had no or only one well visit in the past year and CLEARLY DID NOT MEET recommended periodicity[3]	21.2% (MD 7.3%^ - LA 33.6%^) (n=47 and n=52)	21.4%^	17.0%^	13.0%^
NSCH estimated prevalence of children aged 24-35 months w/2+ well visits and CLEARLY MET recommended periodicity[1]	53.8% (34.2% SD - 73.6% KS)	48.6%	45.5%	53.3%
NSCH estimated number of well visits recommended to occur annually for children 0 to 35 months of age[4]	44,074,806 (VT 68,156 - CA 4,858,505)	460,508	219,027	175,054
NSCH estimated prevalence of children, age 0-35 months, having had no or only one well visit and CLEARLY DID NOT MEET recommended periodicity[3]	29.3% (CT 18.4% - OK 36.5%)	29.1%	29.4%	22.2%
NSCH estimated prevalence of children, age 0-35 months, having received 2 recommended well visits in the past year. UNCLEAR if met recommended periodicity[3]	70.7% (OK 63.5% - CT 81.6%)	70.9%	70.6%	77.8%
NSCH estimated prevalence of children, age 36-71 months, having received no preventive well care visits in the past year and DID NOT MEET recommended periodicity	16.5% (NH 9.3% - NM 27.0%)	25.5%	26.3%	19.3%
NSCH estimated prevalence of all children age 36-71 months who CLEARLY MET BF/AAP recommended periodicity[3]	66.0% (AR 56.1% - NC 74.5%)	58.6%	58.5%	61.9%
Prevalence of children whose provider spent more than 20 minutes during well child visits[1]	17.5% (9.7% UT - 28.0% VT)	16.9%	11.8%	18.0%

NOTES FOR TABLE 3:

[1]Estimated by the CAHMI using 2020-2021 NSCH data. The number of recommended well visits to occur was calculated by scaling the weighted NSCH population estimates for each of six age subgroups by the number of preventive pediatric health care visits recommended by BF/AAP guidelines (not counting prenatal visits) for each age group and summing across all ages subgroups. For example, a child who was 1 years old, would have three recommended visits (the 12 month, the 15 month, and the 18 month), so the 1-year-old population was multiplied by 3. The number of recommended well-child visits is estimated by multiplying the estimated number of children in each of six age 0-5 age subgroups by the number of well visits recommended for children in that group in Bright Futures Guidelines and summing results across all six subgroups. The NSCH survey item regarding preventive care visits asks, "DURING THE PAST 12 MONTHS, how many times did this child visit a doctor, nurse, or other health care professional to receive a PREVENTIVE check-up? A preventive check-up is when this child was not sick or injured, such as an annual or sports physical, or well-child visit?" with the possible response options of 0 visits, 1 visit, or 2 or more visits. As a result of this framing, limitations to the publicly available NSCH age data, and the fact that Bright Futures Guidelines and the American Academy of Pediatrics have developed Recommendations for Preventive Pediatric Health Care that advise multiple well-child visits for children less than 3 years of age, it is not always possible to determine if a child's well visits were sufficient to meet the BF/AAP recommendations.

[2]Reported by CMS for 2021 at: https://www.medicaid.gov/state-overviews/scorecard/well-child-visits-first-15-months-of-life/index.html.

[3] NSCH data pertaining to the number of preventive care visits and the age of the child were summarized into variables noting the prevalence of children who met or did not meet the BF/AAP recommended periodicity of preventive pediatric health care. Due to limitations in the data (see note 1) a substantial proportion of children were unable to be clearly identified as having met, or failing to meet, the BF/AAP recommended guidelines and are labeled as having had 2+ visits, but it is UNCLEAR if the child met recommended periodicity. These limitations should be kept in mind interpreting these data.

Scores annotated with this symbol "^" means that the sample size is especially low in that the estimate has a 95% confidence interval width exceeding 30 percentage points or 1.3 times the estimate and may not be reliable.