



# **The Engagement In Action Framework** *Toward a Statewide Integrated Early Childhood Health System*

# Attachment B: Summary of Framework Design Process and Methods

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

February 2023

# **Table of Contents**

Background	. 1
Figure 1: Illustration of the Engagement in Action Framework Development Process	2
Design and Development Methods	. 3
Essential EnAct! framework Design Parameters	. 5
Overview of Prior Frameworks and Agendas to Promote Early Childhood Development that Contributed to the EnAct! framework Specification	
Figure 2: US Administration for Children and Families' Early Childhood Systems Integration Framework (illustration among many frameworks)	12
Leveraging CAHMI's Family Engagement, Systems Change, Measurement, Data and Research and Policy Work to Promote Healthy Development	14
Appendix I	22
References	25

**Citation:** Bethell, C. *The Engagement In Action Framework. Attachment B: Summary of Framework Design Process and Methods.* Child and Adolescent Health Measurement Initiative, February 2023. Retrieved [mm/dd/yy] from <a href="https://cahmi.org/docs/default-source/ms-enact-documents/attachment-b\_enact">https://cahmi.org/docs/default-source/ms-enact-documents/attachment-b\_enact</a>

Acknowledgement: This work was initiated through a subaward from the Child Health and Development Project: Mississippi Thrive! to the Child and Adolescent Health Measurement Initiative (CAHMI) at Johns Hopkins University. In addition, a grant to the CAHMI from the Robert Wood Johnson Foundation (#79164) and in-kind resources from CAHMI enabled completion of this work. The Child Health & Development Project: Mississippi Thrive! was supported through a \$17.4 million, five year (2017-2023) Cooperative Agreement grant (#UK2MC31456) from the Health Resources & Services Administration (HRSA) of the U.S. Department of Health & Human Services (HHS) to the University of Mississippi Medical Center's Center for the Advancement of Youth (UMMC CAY). The contents are those of the authors and do not necessarily represent the official views nor an endorsement of HRSA, HHS, or the U.S. Government.

For more information, please visit <u>www.HRSA.gov</u>

"An early decision was made to focus the framework to achieve "One Big Doable Thing!", which was to engage families, providers and all early childhood health system partners to ensure all young children and families receive timely, comprehensive, high quality, whole child and family-centered preventive and developmental services."

# Background

The Engagement in Action (EnAct!) Framework was collaboratively developed with Mississippi Thrive! by the Child and Adolescent Health Measurement Initiative (CAHMI) proceeded through five distinct phases of work using seven designbased, collaborative methods that resulted in the following:



- (1) Design team consensus on design parameters, strategic priorities, purpose, goals, assumptions, an approach for integrated services and an implementation roadmap, including integration into the Mississippi Thrive! Early Childhood Development Coalition Charter
- (2) An environmental scan to identify, learn from and discover existing similar frameworks and the existing policies and progress to inform our work and to confirm the need for the framework to address gaps in existing frameworks specifying detail.
- (3) A data report assessing the status and trends in Mississippi early childhood health and healthcare system performance to identify progress, gaps, and opportunities.
- (4) A set of ten Possibility Prototype case examples and pretest pilot lessons to inform that also informed the framework design and implementation plan and demonstrated the value, relevance, roles and implementation across early childhood health system programs and partners.
- (5) A summary and mapping of the relevance of the framework across key partners' and their potential roles, including a summary of performance measures used across programs and gaps or needs for measurement and measurement harmonization opportunities that can support shared accountability across partner programs.
- (6) Specification of policy priorities, levers, and strategies to advance the EnAct! framework integrated early childhood health system.

## **Figure 1: Illustration of the Engagement in Action Framework Development Process**

The Engagement in Action (EnAct!) Framework for a Statewide Integrated Early Childhood Health System The EnAct! Framework Design Process Inputs, Activities and Outputs

Assets & Inputs	Design-Based Activities and Methods	Outputs—The EnAct! Integrated Health System Framework
<b>Existing state progress</b> to lift family centered medical homes, build workforce capacity, create centralized resources, educate the public, establish partner commitment to family engagement and an integrated system framework approach	<b>Collaborative analysis</b> of baseline progress, practices, partners, structures and policy levers	Framework Purpose: Positive Health Equity The purpose of the EnAct! framework is to catalyze child health equity and improve child flourishing, school readiness and family resilience.
	<b>Collaborative specification</b> of shared purpose, goals, design principles, approach to care, relevance/roles of partners, implementation roadmap	<ul> <li>Framework Goals—One Big Doable Thing</li> <li>All In: Universal provision of comprehensive, personalized, whole child and family preventive and developmental services.</li> <li>Real Engagement: Families are engaged to access and ensure services are personalized to their goals and needs and to shape improvements in practice, policy and systems of care</li> </ul>
expertise on evidence- based models, tools and approaches that engage families and cross- sector partners to drive equitable, healthy development of children and families. Bright Futures Guidelines translated into actionable tools linked to payment and policy incentives.	Action Research using environmental scans, document, policy, program reviews, state specific data and policy analysis, structured interviews, case study development, fact checking, etc.	<ul> <li>3. Seamless System: All early childhood systems intentionally collaborate to optimize early screening, address social and relational health needs, and promote well-being</li> <li>Framework Approach         <ul> <li>"Through any door" family engagement to activate trust and partner in care</li> <li>Universal developmental and comprehensive whole child and family screening and assessments</li> <li>Personalized, Strengths-Based Health Promotion and Supports</li> </ul> </li> </ul>
	Partnership landscape analysis to specify relevance of emerging framework and current and potential roles across partners	Coordinated, Warm Links to Quality Services and Interventions Outcomes and Equity-Based Quality Measurement and Improvement
	Create <b>"Possibility Prototypes"</b> for each key partner to illustrate applied relevance, roles,	Implementation Roadmap: Key Actions           Establish a sustainable, cross-system,         Create a culture of engagement among families,         Catalyze, facilitate, study and spread         Drive enabling and incentivizing policies and
The science of healthy development and Positive/Adverse Experiences (PACEs) with available state data to track needs and outcomes.	requirements and inform framework and implementation roadmap	ross-system, professionals, and system practice-based implementation to success
	<b>Pilot testing</b> in pediatric primary care and community based resource partners to foster use and collaboration	Engaged Leadership • Mississippi Thrive! Early Childhood Development Coalition advances the EnAct! framework across state partners

The Child and Adolescent Health Measurement Initiative, 2023

# **Engagement In Action Framework Design and Development Methods**

The **Engagement In Action (EnAct!) Framework** was created over 11 months (April 2022-February 2023) through five phases of drafting, review, and revision, with an initial outline created in June, 2022, a first draft developed in August 2022, second draft in October 2022 and iterative final drafts and reviews during December 2022 and February, 2023. A rapid cycle, daily interactive, design-based process was used that employed seven methods summarized below and in Figure 1. These methods were simultaneously implemented using an iterative review, refinement, and decision-making process to advance shared understanding, vision, goals, and detailed elements for the framework across key Mississippi Thrive! partners and that build on and complement existing strengths and progress. Below is a summary of the process and methods:

1. Structured interviews, MST document reviews and weekly group discussions:

Starting point questions were created for the MST team to assess current progress, relationships, priorities, opportunities, and interests. About two dozen larger group MST team meetings and over 50 small group meetings related to pilots, prototype development and relationship building were also conducted and contributed to the creation of starting point concepts and assumptions to shape the Engagement In Action (EnAct!) Framework approach and implementation strategies. Reviews by external experts also took place to verify key assumptions and obtain further input and guidance. A range of written materials relevant to the MST effort (e.g., grant documents and reports, MST policy and issue briefs, MST and partner websites, network surveys and asset maps, etc.) were carefully reviewed, and ongoing MST leadership discussions were held to confirm assumptions and conclusions derived about high leverage opportunities, needs and partners and co-design shared understanding of work completed, and key accomplishments and lessons learned to build upon through the EnAct! framework.

- 2. <u>An in-depth review and synthesis of the literature and related framework in the</u> <u>field:</u> An extensive scan of the literature was conducted along with a scan to related frameworks in the field set forth by other states, federal agencies, other countries and national initiatives. A key finding was the absence of an integrated early childhood health system model that delineated cross-sector collaboration with a specific focus on health care as well as other early childhood health systems. Results are further delineated below.
- 3. <u>System research and data analysis:</u> Essential data was identified and curated using publicly accessible sources to accurately characterize Mississippi's existing early childhood policy and program environment. In addition, an in-depth analysis of the National Survey of Children's Health data across MST program years was conducted to summarize the health, health risks, protective factors, and performance of Mississippi programs for young children and their families. See <u>Attachment A</u> for a summary of data findings. Additional research led to a synthesis of performance measure findings for

The Child and Adolescent Health Measurement Initiative, 2023

Mississippi's Medicaid program, managed care plans, FQHC's Title V, MIECHV, Early Intervention, Head Start and other relevant programs to identify shared metrics and gaps in measures. Research to identify evidence related to early childhood preventive care bundles and most recent research findings on best practice strategies to advance early childhood systems was also conducted along with research on existing strategies used in the MST Enhanced Pediatric Medical Home Services (EPMHS) model (e.g., Ages and Stages, Reach Out and Read, Vroom, MST searchable, county specific resource summaries, etc.) and to carefully evaluate whether and how the CAHMI's Cycle of Engagement Well Visit Planner approach may enhance and integrate with this model.

- 4. Partner environmental scan: An in-depth investigation was conducted to clarify the goals, programs, strategies, and potential interest in the emerging EnAct! framework across MST existing and potential partners. Research included website and document reviews across over 25 organizations and potential partners (e.g., Division of Medicaid State Quality Strategy, health plan contracts, External Quality Review Organization reports on health plan performance on state required performance measures, federal Block Grant funding requirements for numerous state programs, early intervention and high-risk home visiting program eligibility and processes, etc.). In addition, numerous key informant and small group interviews and in-depth discussions with MST partners were conducted, leading to larger group education about findings on MST partners and key policy and program strengths, levers, and gaps. This led to a starting point proposal that identified key policy and program levers. An in-depth summary on key partners and the relevance and potential roles of MST partners as it related to the starting point *Engagement in Action Framework* was also created and is further summarized in <u>Attachment C</u> to the <u>MST Summary Report</u>.
- 5. <u>MST partner "Possibilities Prototype" development:</u> Based on formulation of the EnAct! framework approach to services and system integration, MST partners were engaged to create ten "Possibility Prototypes" that set forth the potential value and a vision for how each partner might benefit from and participate in the implementation of the EnAct! framework in the short and longer term. Iterative reviews and results of program research led to a final set of initial "prototypes" to inform future implementation. The prototypes are provided in <u>Attachment D</u> to the <u>MST Summary Report.</u>
- 6. <u>EnAct! framework approach pretest pilots:</u> From the beginning of the framework development CAHMI facilitated individual weekly meetings with the MST Enhanced Pediatric Medical Home Services (EPMHS) working group as well as numerous meetings with MST partners, Families as Allies (FAA) and Mississippi Families For Kids/Help Me Grow (MFFK/HMG). The MST team also coordinated explorations with leaders from Mississippi's Department of Health's Early Intervention, Title V programs, and the Mississippi Department of Human Services, Division of Early Childhood Care and Development. Additional interactions were conducted with the Mississippi Head

Start/Early Head Start program through workshop presentations and an investigation of Mississippi's Child Welfare/Child Protective Services Infant and Toddler Court Program pilot was conducted to evaluate potential relevance and partnership with this important effort. These efforts led to pretest pilot efforts by EPMHS, FAA, MFFK/HMG, each of which chose to focus on the application of the Well Visit Planner (WVP) component to the EnAct! framework approach, which was deemed most relevant to the goals of each of these MST partners. Work is underway to conduct more deliberate pilots across MST partners, including the DHS/Division of Early Childhood Care and Education; and to advance formal collaborative agreements essential to effective health care and community-based services coordination. Concepts for engaging MST partners are further outlined in the Possibility Prototypes that were developed parallel to the pretest pilot explorations.

7. Policy research, analysis and group discernment on policy levers and priority strategies to pursue to advance the Engagement In Action Framework. This involved assessing the current policy landscape, strengths and barriers, assessment of optional policy levers and strategies, research on approaches from other states and specification of specific recommendations for shorter- and longer-term action. See Attachment E for 21 policy levers identified as important to consider. See also Appendix I at the end of this report for a synthesis of recommendations across 20 reports published between 2017-2021 on transforming the child health system with a focus on early childhood as well as a summary of a 2020 national summit meeting bringing leaders of these reports, federal and state agencies and others together to advance the approach set forth with a specific focus on the Cycle of Engagement model and tools which the field had recognized and relevant to meeting many goals and requirements to promote early childhood development.

# **Essential EnAct! framework Design Parameters**

The methods outlined above led to the iterative specification of the EnAct! framework purpose statement, goals, priorities, approach and implementation and policy roadmap, which was shaped by a set of essential design parameters agreed to early in the process. Early in the process, five key design parameters were agreed to ensure that the emerging framework would:

- 1. Put families at the center of services and system change efforts.
- 2. Be interoperable so that community, family, and other early childhood system partners and health care providers fully partner to assess and support families and create a seamless link between primary care and community-based supports and services.
- **3. Build on MST progress** to scale high quality medical home services that optimize pediatric well visits that address the health of the whole child and family and address social and relational health promotion and a centralized resource and referral capacity.

- 4. Leverage existing Mississippi policies and program strengths, promote shared accountability and integrated performance measurement and identify and advance policy levers to pursue in the shorter- and longer-term.
- **5.** Activate short term actions and improvements in services and programs for families across key MST partners so that action can take place as learning and improvement evolve through sustainable implementation supports and resources.

Below is further information about how these design parameters impacted the process and design of the EnAct! framework, the early development approach to services, the formulation of the case examples/Possibility Prototypes and delineation of the roles and relevance of the EnAct! framework across MST! partners.

# <u>More About Design Parameter #4:</u> Specify an approach that leverages existing Mississippi early childhood program and policy strengths.

Research and deliberations outlined above revealed promising opportunities to leverage existing state and early childhood development system programs and strengths by ensuring alignment with the goals, statutory requirements and performance standards across key child health programs and partners. Section III of the <u>MST Summary Report</u> and <u>Attachment C</u> delineate the potential roles and relevance of the EnAct! framework approach to services across MST existing and potential partners.

Of particular importance to the EnAct! framework design was recognition of the gap in integrating healthcare with other state and local early childhood development programs and resources. As such, of central importance to this work was defining how to align with and engage the Mississippi Division of Medicaid (DOM), which has tremendous power and influence over the services and supports available to promote the healthy development for about half of Mississippi's young children.

Partners engaged in the EnAct! framework design process agreed that approaches needed to be identified that would help the Mississippi DOM to fulfill its intention (as set forth in its **State Quality Strategy**) to prioritize prevention and the engagement of families and to fulfill statutory requirements to ensure the provision of preventive services that are aligned with the federally required Early and Periodic Screening, Diagnostic and Testing (EPSDT) standards and the American Academy of Pediatrics Bright Futures Guidelines for screening, health promotion and early intervention services that all US health plans are required to provide under Section 2713 of the Public Health Service Act. In addition to the DOM State Quality Strategy, Mississippi DOM intentions to improve preventive and developmental services for young children are reflected in the language, requirements and payment incentives included in DOM contracts with the three managed care health plans that serve over 95% of young children enrolled in Medicaid in Mississippi. While these incentives and requirements can be strengthened, those in place during this design process confirmed the high relevance of the

emerging EnAct! framework approach to both the Mississippi DOM and to the health plans they contract with.

Importantly, it became clear that leveraging Mississippi's existing DOM and Coordinated Care Organizations (health plans) goals and requirements would be best enabled through an EnAct! framework care approach that sought to ensure a whole child and family comprehensive approach aligned with both EPSDT and Bright Futures Guidelines. In addition, an approach is required that includes strong family engagement and that is interoperable to enable collaboration and coordination across pediatric health care, community-based and family support services, early childhood care and education and other high risk and early intervention programs and services to help meet children's developmental, social, and relational health needs. Specification of quality measures that go beyond the "well visit utilization" and "developmental screening" measures that are in current use would also be important to inform and incentivize the type and degree of improvements required to fill the gaps in the health and performance of Mississippi's early childhood development systems.

As mentioned above, our research also revealed new opportunities to advance Mississippi DOM goals to ensure high performance of their contracted health plans (called Coordinated Care Organizations/CCOs). Specifically, new federal requirements went into effect in December 2021 that require all US health plans to provide child preventive services that are aligned with the age specific Bright Futures Guidelines. This requirement is specified in the federal Public Health Service Act, Section 2713, which was authorized into law in 2011 through the Affordable Care Act and activated for implementation in December 2021 after a ten-year waiting period to give states and health plans time to prepare to improve preventive services for children. The Centers for Medicaid and Medicare Services (CMS) is charged to oversee the implementation of this newly activated law. Many HRSA funded programs, including the MST Child Health Development Program and several grant programs like the Transforming Pediatrics for Early Childhood (TPEC) | HRSA, the early childhood funding opportunity for Community Health Centers, as well as CMS's Statewide Learning Network on Infant Well Visits, and the CMS National Quality Strategy, are examples of efforts to drive implementation of the federal Early and Periodic Screening, Diagnostic and Treatment (EPSDT) and Affordable Care Act statutes requiring provision of high quality, comprehensive preventive and developmental services for children..

As noted, alignment with the existing goals and requirements of other Mississippi early childhood development programs was central to the design of the EnAct! framework and approach. This includes alignment with: (1) Mississippi's Head Start/Early Head Start program; the Mississippi Department of Health's (2) Title V, (3) Healthy Families, Maternal, Infant and Child Home Visiting (MIECHV), (3) First Steps Early Intervention/Part C and (4) Healthy Mom's Healthy Babies pregnancy and high risk infant services program; the Mississippi Department of Human Services' Division of Early Childhood Care and Development (5) resource and referral centers and (6) early care and education programs; as well as (7)

Mississippi's Department of Child Protective Services and (8) Women, Infant and Children's Nutrition Program.

A synthesis of findings on the goals, programs, and statutory and performance requirements across these programs (see <u>Attachment C</u>) further confirmed the importance of advancing an EnAct! framework approach that would set forth interoperable family engaged data collection and sharing strategies to enable community-based service, early childhood care and education, and other early childhood professionals to lead the engagement of families, help them learn about and conduct developmental and related screenings, and assist them to schedule well visits with a pediatric primary care provider. These programs and services are also ideally designed to ensure that critical supports are provided to address the social needs (e.g., food and housing supports), promote relational health (supporting healthy parenting and positive childhood experiences), and identify and coordinating other resources to support children's healthy development.

Taken together, research and deliberations on Mississippi's DOM, health plans and the range of other child health related programs confirmed the relevance of the starting point EnAct! framework approach concept initially considered at the beginning of design process. This concept was to integrate the MST EPMHS model featured resources with the CAHMI's Cycle of Engagement Well Visit Planner model and family facing digital tools. Results of the research and methods conducted revealed the particular relevance of integrating the CAHMI's Cycle of Engagement Well Visit Planner approach with the MST! EPMHS model. This is the case because the WVP provides an interoperable, "through any door" mechanism to engage and educate families with a brief family driven digital tool that translates age specific Bright Futures Guidelines to ensure completion of all required screenings on child development and identification of child and family health, social needs, strengths and priorities resulting in the generation of actionable reports shared with families, providers and any other early childhood development professionals that might be the appropriate family engagement partner. In addition, to make the EnAct! framework relevant to Medicaid, health plans and healthcare, the integration of the Cycle of Engagement Well Visit Planner approach (COE/WVP) with the MST! EMPHS model enabled use of the validated Online Promoting Healthy Development Survey (PHDS). This family reported, comprehensive quality measurement tool is an important compliment to other performance measures to monitor and incentivize improvements among health plans, providers and the system as a whole. It can also be used by all pediatric providers and early childhood professional in order to continuously monitor and improve services in partnership with families and was implemented by Mississippi DOM in 2005 to assess quality of preventive services for young children. The COE/WVP approach was also relevant given that fact that National Help Me Grow under a *Pediatrics Supporting Parenting* grant confirmed the importance and value of this model in a 2019 report vetting this approach with providers and families in the field and was further vetted and supported through a 2020 national Maternal and Child Health Measurement Research Network summit meeting. The COE/WVP approach is also referenced as a key resource through the Administration for Children and Families' Head Start

program and in an ACF and Department of Education <u>federal letter</u> in Summer 2022. These recognitions and others combined with the relevance and evidence of impact of the COE/WVP for pediatric providers was important to engage partners (e.g., Mississippi Help Me Grow, Early Care and Education/Head Start, Early Intervention, etc.).

# <u>More About Design Parameter #5</u>: Specify an approach that will activate short term action and improvement for MST partners.

Ensuring that the EnAct! framework approach and implementation roadmap would spark immediate action across MST partners and would not be solely dependent on achieving changes to policy or programs that were not deemed feasible to achieve in the short term were informed by the partnership landscape scan summarized in <u>Attachment C</u>, the consideration of current and recommended policy levers summarized in <u>Attachment E</u> and was further guided by the discernment of partner roles and actions that could be taken as illustrated in the ten Possibility Prototypes (<u>Attachment D</u>) created to spark action and envision possibilities. In particular, these analysis and deliberations MST Enhanced Pediatric Medical Home Services (EPMHS) team, Families as Allies, Mississippi Families for Kids/Help Me Grow and with DHS Early Childhood Care and Education leaders confirmed that many elements of the EnAct! framework approach were feasible for immediate action due to the relevance of these approaches to the existing goals, programs and requirements of each of these partners. These explorations with MST partners confirmed that the EnAct! framework approach and care bundle initially conceptualized was relevant for short term action across many MST partners. Examples are depicted in the "Possibility Prototypes" set forth <u>Attachment D</u> to the <u>MST Summary Report</u>.

Importantly, one of the "Possibility Prototypes" created focused on ways to quickly engage health plans that the DOM contracts with, including building on existing DOM targeted initiatives. An example is the DOM's Health Services Initiative (HSI) with Magnolia Health Plan, which focuses on improving utilization and quality of well visits for children with complex needs and promoting ways to ensure whole child and family approaches that assess and address the social and relational health risks and needs of children with complex health conditions. During the design process it was noted that the DOM could advance other HSIs with all health plans that focus on improving early childhood development and doing so would support action by health care providers and a range of other MST partners.

Specifically, the pretest and "Possibility Prototype" design phases of the project revealed the critical importance of engaging health plans as a key strategy to ensure that frontline pediatric health care providers and community-based services and support programs would be supported by the health plans that shape the services and impact the quality of care that is provided through well child visits. Strengthening the engagement of health plans was considered essential to ensure appropriate payment for well child preventive screenings, health promotion services and care coordination with essential child and family support programs. Importantly, the fact that health plans in the US are required to provide coverage for the EnAct! framework approach to care aligned with the Bright Futures Guidelines was viewed as essential.

Engaging health plans early in the implementation of the EnAct! framework approach was also viewed as promising since these plans are already obligated in their DOM contracts to support the training and capacity of licensed providers. As such, they were viewed as important to helping support and build on MST and other state programs' progress to build the capacity of the early childhood development workforce. In addition, health plans can be important to ensure the availability of essential care coordination resources, such as can be provided by family resource specialists (or "navigators") or community health workers. Support from these professionals is central to the EnAct! framework approach since family support specialists, care coordinators and community health workers play essential roles to engage families, address social needs and provide important education and support for children facing risks to their healthy development. These professionals are often trusted by and connected with families, which enables them to meaningfully support and partner with families. Finally, health plans were viewed as important to track which children receive or do not receive recommended well visits and to assist health systems and pediatric health care providers to engage families to help them learn about and ensure they schedule and bring their child in for well child visits. Health plans are also well positioned to make families aware of the importance of developmental screening and Bright Futures Guidelines and to the use of the Well Visit Planner and other EnAct! framework approach elements, like Reach Out and Read and the Vroom app. Health plans may also incentivize families to access these resources for improving preventive services and the healthy development of their children since doing so will lead to the prevention of avoidable emergency and hospital care and needs for more complex services for both children and families.

# **Overview of Prior Frameworks and Agendas to Promote Early Childhood Development that Contributed to the EnAct! framework Specification.**

## What the Engagement In Action Framework adds?

The EnAct! framework design process integrated information about prior models, longstanding recommendations, and innovations to optimize health care and early childhood systems integration in policy and practice in states. See Appendix I, the narrative section below and the reference section at the end of this document for a list of the range of publications and resources (not exhaustive) reviewed and considered in this work. An environmental scan conducted of many existing models took place in the context of the recognition that despite decades of calls to action, related models and recommendations and guidelines, substantial gaps in implementation remain. The analysis revealed an opportunity to further specify a current, action-oriented framework that would:

- (1) <u>Explicitly prioritize the integration of health care and other early childhood systems</u> anchored to principles of family engagement and whole child health outcomes;
- (2) <u>Define a shared purpose rooted in positive health for all that has available, population</u> <u>level measures</u> that can be disaggregated;

- (3) Go into <u>detail to identify a shared approach to services</u> anchored to evidence-based strategies;
- (4) <u>Define roles and responsibilities</u> rooted in currently available funding streams, programmatic expectations, and power to act across essential partners;
- (5) <u>Illustrate application scenarios</u> across partners;
- (6) <u>Set goals that could be embraced and measured across</u> key integrated early childhood healthy system partners;
- (7) Set forth an <u>implementation roadmap;</u>
- (8) Address measurement and data sharing;
- (9) Lay out <u>key policy and financing levers;</u>
- (10) Specify a leadership infrastructure that might enable success and sustainability across time.
- (11) Root in what is possible, realistic, and transformative and envisioning possibilities for innovation and not only on already scaled and sustained statewide examples.

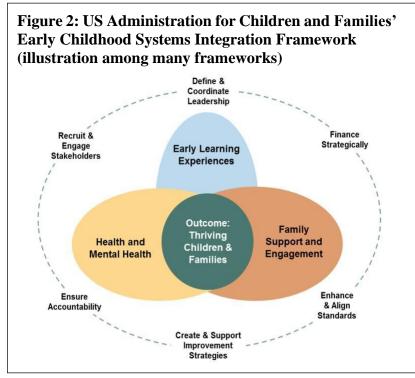
The EnAct! framework sought to build on prior work and innovation to further the field by addressing these aspects of implementation and action. As extensive as this work was, we also recognize much more detail is still required, but we hope the EnAct! framework will foster progress toward concrete action and transformation in Mississippi and other states.

Retrospectively, the <u>Global Nurturing Care Framework</u> was reviewed provides recommendations to further advance systems-change at the country, state, and local levels. Specifically, this framework asserts that to spark effective action cross sector teams need to assemble and do the following: (1) assess the current situation and identify opportunities within and across different sectors for strengthening support for nurturing care; (2) develop a common vision, set of goals and targets; (3) prepare a coordinated plan of action; (4) specify an approach to advance integrated policies on early childhood development; (5) assign clear roles and responsibilities for implementing the plan, at all levels of government; (6) give sub-national and local authorities the means to act; (7) prepare a long-term financing strategy; and (8) build on any available funding streams that support the components of nurturing care. The EnAct! framework proceed made progress in each of these areas.

## A Brief Summary of Current and Historical Work Leveraged and Integrated

As noted, numerous national and state efforts, strategic frameworks and guidelines have long sought to drive the translation of the science of early childhood development into practice and policy. Developmental screening and provision of pediatric primary care well child visits are established national public health performance measures. Health plans in the United States are required to provide preventive services aligned with the age specific Bright Futures Guidelines for screening and health promotion promoted by the American Academy of Pediatrics. Federal Early and Periodic Screening, Diagnostic and Treatment (EPSDT) policies require state Medicaid agencies to enrich strategies and policies to improve healthy development. Yet, barriers have limited progress. Despite shared vision and dedication of many, change has been slow.

This is in part due to the complexity of rewiring systems that need to collaborate to succeed in promoting healthy child development. Also, approaches are required that adopt a whole child and family approach and data and resource linkage strategies that make is easy for families and professionals to consider the health and context of the whole child and family and fully engage families and the community as the central force for a child's healthy development. Policies are



needed to enable effective coordination across healthcare, early education and intervention and social and community-based services.

Several national efforts help define a pathway for an early childhood integrated health system, including the <u>Administration</u> for <u>Children and Families</u>' (ACF) Early Childhood Systems Integration Framework (Figure 2) and the federal Health Resources and Services Administration's (HRSA)

Early Childhood Comprehensive Systems (ECCS) program and the ECCS improvement collaborative led by the National Initiative for Children's Healthcare Quality. Also lighting the way are the <u>Robert Wood Johnson Foundation's Child Health Transformation</u> initiatives, like the Center for the Healthcare Strategies' <u>Accelerating Child Health Transformation</u> (AHCT) and <u>InCK Marks</u>' numerous reports on fostering child health transformation by leveraging pediatric primary care. In addition, Dr. <u>Paul Dworkin</u> (Help Me Grow) has set forth concepts and resources to advance integrated health and community services as has the <u>Center for the Study of</u> <u>Social Policy</u>, the National Initiative for Children's Health Care Quality many efforts to promote social and emotional health are reflected in this work. Others set forth relevant framework to guide the cross-sector partnerships essential to promoting integrated systems to promote early and lifelong health (<u>Liu, Beck, et. al.</u>) for all children and families (<u>Ward, Schultz, et.al.</u>)

The Engagement In Action Framework was also informed by the CAHMI's ongoing work to create a family centered, whole health system of health care, including work with AcademyHealth, the Robert Wood Johnson Foundation and Children's Hospital Association to create the stakeholder defined <u>Prioritizing Possibilities National Agenda</u> to Promote Child and Family Well-Being and the associated <u>Payment for Progress</u> report recommending financing approaches to catalyze system improvements to promote early childhood development. More recent <u>cross-sector frameworks</u> to address childhood adversity and <u>integrated early childhood</u> <u>systems</u> (Aspen Institute) were also consulted.

Of course, many more historical and groundbreaking calls to action have been built the field and are iteratively integrated in more recent work. This includes efforts advanced through the Commonwealth Fund's <u>Child Health and Development Program</u> under the leadership of <u>Dr.</u> <u>Edward Schor</u> and the related Assuring Better Child Development (ABCD) and leadership of <u>Marian Earls</u>, work to <u>engage families</u> through measurement and in care, to operationalize Bright Futures Guidelines and transform systems through performance measurement and data (Christina Bethell lead), <u>improving health systems for young children</u> (Neal Halfon lead), ensuring <u>high</u> <u>quality well child care</u> (David Bergman lead) and advancing <u>early childhood integrated services</u> (Kay Johnson lead). Many others influenced our work, including the groundbreaking <u>early</u> <u>childhood systems change</u> work of Dr. Cynthia Minkowitz and that of the <u>National Academy of</u> <u>State Health Policy</u>. In addition, Child Trends and the <u>Alliance for Success</u> reports offer research summaries and guidance on state policies to promote the health of young children.

Importantly, the systems measurement and change efforts for children with special health care needs led by the Maternal and Child Health Bureau have also long advocated for an integrated, well-functioning system, such by defining and measuring systems of care for CSHCN (Bonnie Strickland lead, CAHMI close partner). The EnAct! framework builds on the work to define and advance a well-functioning system as set forth in the new Maternal and Child Health Bureau <u>CSHCN Blueprint for Change.</u> The EnAct! framework explicitly considers CSHCN by including screening and services important to these children in the approach to care and featured resources. Finally, several new federal funding opportunities have also emerged to further implementation of approaches to improve system performance to promote the healthy development of young children, including HRSA's <u>Transforming Pediatrics for Early Childhood</u> (TPEC) and <u>Community Health Center</u> grant program to improve early childhood development and the Substance Abuse and Mental Health Services Administration's <u>Project Launch</u> funding opportunity to address unmet needs to promote the healthy development and mental health of children.

Most of the aforementioned reports and efforts recognize the need for improvements in child health and well-being and how this can be catalyzed by leveraging the pediatric primary care well visit and aligning approaches to preventive and developmental services to the Health Resources and Services Administration supported and American Academy of Pediatrics led <u>Bright Futures Guidelines</u> as well as the long-ago articulated <u>family centered medical home</u> (FCMH) approach. The FCMH approach is a roadmap for advancing comprehensive, family centered preventive and developmental services ("well child visits"-WCVs) to ensure family engagement, comprehensive whole child and family assessments, collaboration and coordination with community, early care and social services and supports and continuous quality assessment

and improvement. A <u>2020 national summit meeting</u> across numerous stakeholders whose work has advance this approach, further demonstrated the strength of the agreement in the field for this approach.

Yet, recent data show that fewer than one-half of young children receive care in such a <u>Family Centered Medical Home</u> setting; and 9 out of 10 young children do not receive even four basic components of preventive services. Reasons include the absence of feasible approaches that make is easier to engage families, conduct comprehensive child and family assessments and get actionable results and resources to address needs and priorities. Ensuring these approaches are interoperable to enable a "through any door" approach to engage and support families and link them to resources and services is also important. The Engagement In Action (EnAct!) Framework seeks to address these barriers.

With over 15 well child visits recommended and paid for in a child's first six years of life, the primary care well child visit is one of the most accessible and important opportunities to identify needs and promote the wellbeing of young children and their families. Yet, the majority of recommended well visits for children under age 3 do not take place, representing a largely missed opportunity. Transformational methods and policies are required and have been set forth in recent years. See <u>Attachment A</u> for a further synthesis of strengths and gaps in early childhood health, protective factors and systems performance that informed this work.

# Leveraging CAHMI's Family Engagement, Systems Change, Measurement, Data and Research and Policy Work to Promote Healthy Development

As noted, the Child and Adolescent Health Measurement Initiative facilitated the design of the EnAct! framework based on long standing work related to advance a family centered, systems oriented, personalized and guideline based approach to preventive and developmental services for children, which started in 1997 with the initial creation of a nationally endorsed, family-centered measurement framework and comprehensive set of metrics to drive positive health outcomes with a focus on early childhood (as well as youth and all children with special health care needs). Measurement areas CAHMI led in include the collaborative design and validations of the Promoting Healthy Development Survey, measures to identify and assess system performance for Children With Special Health Care Needs (e.g., the Consumer Assessment of Health Providers and System for CSHCN), assess Medical Home, Developmental Screening, Family Resilience, Child Flourishing, Positive Childhood Experiences, ACEs. CAHMI's work also led to early creation and testing of the Cycle of Engagement model and a set of family engaged and guideline based interoperable digital tools (e.g., the Well Visit Planner, the Online Promoting Healthy Development Survey to enable Personalized Connected Encounters that engage families and optimize well child visits based on Bright Futures Guidelines. CAHMI's work led work to advance the measures needed to conduct research on positive health and contributed to the evidence-base to driving efforts to prioritize child resilience and flourishing, family resilience and relational health and positive childhood experiences as a focus for preventing and mitigating the impact of adverse childhood experiences and promoting healthy development. The WVP approach, which is featured in the EnAct! framework, incorporates this evidence and measurement expertise and has been referenced for use in a 2022 <u>federal letter</u> to promote children's social, emotional and mental health, by the <u>federal Head Start</u> program, in the more recent community health center <u>federal grant</u> opportunity (noted above) to promote early childhood preventive services in community health centers. The model and tools have been validated in two multi-year studies (including an RCT) and is supported as a model approach across many field leaders working through the national <u>Maternal and Child Health Measurement Research Network</u>. CAHMI's work also included advancing making <u>national and state level data</u> easily accessible to inform policy and transformation efforts (and research) through its <u>National Data Resource Center for Child and Adolescent Health</u>.; and the <u>Maternal and Child Health Measurement Compendium</u>. All efforts were conducted in partnership with federal, state, and local health agencies, families and providers and systems of care.

Several previously developed CAHMI led agendas and recommendations to promote child wellbeing using a stakeholder, cross-sector process were also explicitly built upon in the design of the EnAct! framework, as described above. This includes the stakeholder developed 2018 Payment for Progress report and the multi-year, collaboratively designed Prioritizing Possibilities national agenda to promote child and family well-being by promoting the social and relational roots to well-being. These two reports set forth an approach and recommendations that arose through structured processes, including the four-year national stakeholder process facilitated by CAHMI and AcademyHealth to create the Prioritizing Possibilities National Agenda. The Engagement In Action Framework was specifically informed by these models and recommendations, as well as through an ongoing review and synthesis of reports in the field CAHMI conducts to keep track of field alignment and innovations and the state of agreement on key strategies and recommendations in this area. See Appendix I below for a summary of 20 reports most relevant to the EnAct! framework that were carefully reviewed to inform the framework design process. Links to the full Payment for Progress report and Prioritizing Possibilities paper are provided below, along with short executive summaries for each for ease of review. Note that related work to specifying recommendations for state expenditures to advance child and youth well-being were also integrated and built off the Payment for Progress and Prioritizing Possibilities work noted (see www.prop64roadmap.org for more information).

A: Payment for Progress Full Report

https://academyhealth.org/sites/default/files/payment\_for\_progress\_fullreport\_nov2018.pdf

**B. Prioritizing Possibilities for Child and Family Health**: A National Agenda to Address Adverse Childhood Experiences and Promote the Social and Emotional Roots of Well-Being (https://pubmed.ncbi.nlm.nih.gov/28865659/)





# Payment for Progress: Investing to Catalyze Child and Family Well-Being Using Personalized and Integrated Strategies to Address Social and Emotional Determinants of Health

Christina Bethell, PhD, MBA, MPH; Susan Kennedy, MPP, MSW; Enrique Martinez-Vidal, MPP; Lisa Simpson, MD, BCh, MPH, FAAP

# **Executive Summary**

Child health and well-being paves the way to a healthier and more productive adulthood. Conversely, childhoods lacking the safe, stable, nurturing relationships (SSNRs) and environments critical to healthy development sets the stage for greater adult disease, mental health challenges, higher health care costs and diminished social contributions over a lifetime.<sup>1,2</sup> Creating a culture persistently dedicated to promoting the early and lifelong health of all children is the most important priority for the health and wellbeing of the US population and society. Despite this, our health care system

# **Priority Recommendations**

- 1. Pay to Improve Child and Family Well-Being
- 2. Support Enhanced and Personalized Well-Child Care
- 3. Build Sustainable Capacity for Transformation

in America does not adequately invest in the proactive promotion of positive social and emotional determinants of health (SEDH), like positive parenting and the prevention and mitigation of impacts of Adverse Childhood Experiences (ACEs).<sup>3</sup> Doing so requires creating integrated community systems of care that address the full range of SEDH, including adequate housing, safe and supportive neighborhoods and a range of other contextual factors impacting child and family health. The consequences are clear: fewer than half of US school age children meet basic criteria for flourishing (40.8%) and only about two in five pre-school children (41.8%) are estimated to be "on-track" for being "healthy and ready to learn."<sup>4,5</sup> Even more sobering, half of all US children and two-thirds of those with public sector health insurance have been exposed to one or more Adverse Childhood Experiences (ACEs) that can lead to toxic stress and trauma and impact brain development and lifelong health and well-being.<sup>4,6</sup> While paradigm shi%s to greater investments in the systems, workforce and models of care needed to catalyze healthy child development have long been called for,<sup>3</sup> doing so requires redefining goals and value in health care and aligning models of care and payment accordingly. This was the focus of the "*Payment Transformation to Address Social and Emotional Determinants of Health for Children*" project reported on here.

This project built on prior work led by the Child and Adolescent Health Measurement Initiative (CAHMI) and AcademyHealth to develop a framework, measures, data, knowledge, capacity and consensus in the field to advance a national agenda<sup>7</sup> for promoting child and family well-being by addressing the social and emotional determinants of health (SEDH) and ACEs in children's health services. The Children's Hospital Association supported the AcademyHealth/CAHMI team to promote the translation of this agenda into policy and payment approaches in children's health services. Eight approaches and activities were undertaken, including engagement of a National Advisory Committee, assessing the "goodness of fit" of existing payment approaches and models of care, and conducting a national invitational meeting.

The mandate to continue to embed a focus on the proactive promotion of healthy development and well-being that addresses SEDH and ACEs in *all* systems that care for children and families was unanimous and shaped the strategic priorities and recommendations emerging from this project. Strategies and recommendations set forth are envisioned to work together to expedite payment approaches and policies that catalyze action to promote positive SEDH (e.g., child-parent connection, emotional regulation, social engagement, persisting to achieve goals and safe and supportive neighborhoods) and address risks like ACEs and the toxic stress and trauma that can result from adverse family and community experiences. The three priority recommendations emerging from this project are summarized below.

**Strategic Priority #1—Pay to Improve Child and Family Well-Being:** *Measure value and return on investment in health services for children, including children with special needs, to incentivize and build capacity to implement a life-course approach that promotes positive social and emo-tional well-being, prevents and mitigates risks from ACEs and addresses SEDH.* 

Current definitions of value and return on investment focus on short term reductions of health care utilization (e.g., emergency care, avoidable hospitalizations, low value care), concomitants costs, and negative health outcomes (e.g., illness severity and symptoms). These are not sufficient for children's health services. The "goodness of fit" analysis conducted to examine the degree to which existing interventions and payment approaches supporting healthier children and families identified many promising models if aligned with a payment model supporting child and family well-being. Medicaid and its Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit provide the grounding for defining value in that way, but state actions o%en do not realize this vision. Current value-based payment strategies—capitation and bundled payments for routine and primary care for all children; tiered, targeted and tailored case management and care coordination payments for children and families with more complex needs; and the use of value-based purchasing and total cost care payment models—have some potential to advance and incentivize more preventive and developmental responses to children. However, they are not currently structured to do so. Project findings support immediate action to review these and emerging alternative payment mechanisms with a specific focus upon children and ensuring that value is defined in relation to improving child health trajectories, whether or not there are immediate cost-o'sets.

**Strategic Priority #2—Support Enhanced and Personalized Well-Child Care**: Leverage and align existing payment approaches, federal law and practice innovations to establish an enhanced well-child care services model to promote healthy development that is *guideline-based*, *personalized and systems-oriented (GPS)*.

A core place to start is primary care. Existing insurance coverage is in place for well-child care services for virtually all US children. Bright Futures Guidelines are recognized as evidence-informed guidelines for well-child care services that are designed to advance healthy child development and wellness as well as respond to social and medical determinants of health. Yet, payment approaches for such care—and the attendant care coordination and linkages to health and health related services—need to be sufficient to establish that level of care in a way that is personalized to each child and family and integrated across systems of care in a community. Distinct bundles of care to pay for an enhanced This project found that experts and stakeholders in the field already embrace the importance of wholechild, whole-family, whole-population approach to health care.

GPS model of well-child care services will ensure comprehensive implementation of guidelines, personalized education and supports for each child and family and provide support for targeted care coordination and case management as needed.

**Strategic Priority #3—Build Sustainable Capacity for Transformation:** Invest and collaborate across sectors to build the cross-cutting workforce capacity, systems integration, data and measurement and continuous learning infrastructure to both scale high value primary care and the related services and supports children and families need to thrive.

While e'orts in the field are impressive, project findings conclude that even in the context of the most enabling payment models—like a Pediatric Accountable Care Organization—at least four categories of infrastructure are needed to e'ectively finance approaches to address SEDH. These include: (1) workforce and environmental capacity building; (2) strategies that enable e'ective cross sector collaboration; (3) aligned measurement and data systems; *and* (4) robust learning and improvement platforms.

Complementing the many other emerging e'orts in the field, recommended next steps include the design and implementation of a largescale, multi-state collaborative initiative to support health systems and state/local policymakers in leveraging opportunities to impact the early and lifelong health trajectories of all children and children with special needs. The objective of this multi-state e'ort will be to promote positive social and emotional well-being, prevent, heal and mitigate risks from ACEs, strengthen protective factors and address social determinants of health.

Overall, this project found that experts and stakeholders in the field already embrace the importance of whole-child, whole-family, wholepopulation approach to health care. They value the proactive promotion of positive social and emotional well-being and prevention and mitigation of risks like ACEs, toxic stress and trauma. This work identified many existing or emerging payment approaches adaptable to support this transformation. Yet, until payment aligns to ensure the new emerging systems of care can support a "health" vs. "disease" model, we will fall short of our national opportunity to improve the health and health care costs of future adults.

## To learn more about this and other related work, please visit www.academyhealth.org.

This project was made possible through support from the Children's Hospital Association.

# A National Agenda to Address Adverse Childhood Experiences

## What are ACEs and Why Do They Matter?

In 2016,<sup>1</sup> nearly half of U.S. children – 34 million kids – had at least one Adverse Childhood Experience (ACE) and more than 20 percent experienced two or more. The new brain sciences and science of human development explain how ACEs can have devastating, long-lasting effects on children's health and wellbeing. These events resonate well beyond the individual child to have far-reaching consequences for families, neighborhoods, and communities.

ACEs disrupt a child's sense of safety and the nurturing they need to develop, thrive and learn. ACEs include household issues like alcohol or substance abuse, untreated mental illness like depression, death or incarceration of a parent, family discord leading to divorce or separation of parents, child physical or emotional neglect and/or abuse and experiencing or witnessing any type of violence in the home or the community. ACEs also include being judged or treated unfairly due different factors such as living in homes where parents have difficulty getting by on their income. Most children with any one ACE have at least one other.<sup>1,2</sup>

Fewer than two in five children flourish when they have had two or more of ACEs. They are more likely to have a chronic condition, miss school, bully or be bullied, have emotional and behavioral health problems and mothers who are not in good physical and mental health.<sup>3,4</sup> Wide variation exists in the impact of ACEs and many thrive despite adversity; which is driven by helping children learn resilience, identifying and addressing trauma and toxic stress early and restoring safe, stable and nurturing relationships and environments.<sup>5</sup> The science of ACEs and healing point to the urgent need to promote healthy parenting, teach resilience and address factors limiting family and community capacity to heal and prevent ACEs.

### **Developing a National Agenda**

Over a four-year period, the Child and Adolescent Health Measurement Initiative (CAHMI) and Academy Health engaged more than 500 people across multiple sectors in a rigorous process to establish a national agenda to address ACEs. It began with the first-ever available national and state level data on ACEs, resilience, and family functioning from the 2011–12 National Survey of Children's Health. To develop the agenda, a series of in-person meetings and listening forums were conducted along with several rounds of online crowdsourcing to identify goals and priorities across 10 stakeholder groups; educational sessions with stakeholders; and a range of research-in-action; coupled with community efforts.

From this process, the following emerged:

- A special issue of *Academic Pediatrics* devoted to ACEs.
- Four overarching agenda priorities to address ACEs and promote child wellbeing in children's health services;
- Four specific areas of research that will advance these agenda priorities; and,
- Sixteen short-term actions and recommendations, each of which leverages existing research, policy, and practice systems and structures.

# September 2017 Special Issue of *Academic Pediatrics*: Child Wellbeing and Adverse Childhood Experiences in the U.S.

A special issue of *Academic Pediatrics* highlights new national research with 28 inspiring commentaries and research articles across a wide range of leaders, each of whom focuses on the critical importance of an immediate, strong and collective policy response to ACEs. They also highlight the critical roles for Medicaid and private sector health plans, children's hospitals, primary care providers and all children's health services as key partners with families and communities. Science-driven methods to proactively promote resilience and healthy relationships is central to mitigate the far-reaching consequences of ACEs for children, families and communities.

The journal issue sets forth a collectively developed action agenda to promote the possible—flourishing for all—by healing the effects of current and accumulated individual, intergenerational, systems and community-level ACEs.

## **Priority Areas for Research**

To address Adverse Childhood Experiences and promote child wellbeing, we need more research on:

- Clinical protocols: Specify and test family- and youthcentered methods to assess and discuss ACEs and foster essential self-care, resilience, and relationship skills in clinical and other settings.
- **Outcomes and costs:** Evaluate the effects of alternative clinical and self-care interventions, including effects on health outcomes, utilization, and health care costs.
- Capacity building and accountability: Define and cultivate provider, health care system, and community-based core competencies related to ACEs, and the training, payment, and accountability models that will be effective in establishing these competencies.
- Provider self-care: Promote and examine the effects of provider self-care related to ACEs, resilience, and relationship skills on quality of care and other outcomes.

# Four Priorities to Address ACEs and Promote Child Wellbeing



Translate the science of ACEs, resilience, and nurturing relationships.

There is urgency for rapid and widespread training about the science of ACEs. We must prioritize strategies to translate the science of ACEs and thriving in both children's health services and all sectors working with children, youth and families.



Cultivate the conditions for cross-sector collaboration to incentivize action.

Adverse Childhood Experiences can be linked to a number of factors, such as poverty, opportunities for employment, and access to health care.

Addressing these factors will require effective collaboration and partnerships within and between child and family healthrelated systems, as well as across sectors, including between schools, health services, social services, businesses, and more.



# Fuel "launch and learn" research, innovation, and implementation efforts.

To address ACEs and promote healing and positive health, we must establish a purposeful research, policy analysis, technical assistance, and funding-assistance infrastructure that enables innovation and real-time learning, improvement, and implementation.

44

Restore and reward safe and nurturing relationships and self-, family-, and community-led

#### prevention and healing.

Create widespread understanding in pediatrics about safe and nurturing relationships, ways to advance them, and the environments to promote healthy child development and wellbeing. This would include training and financing to build a caring capacity, and would reward providers who focus on establishing and restoring safe and nurturing relationships and helping families engage in methods to promote healing.

# Short-Term Research, Policy and Practice Opportunities to Address ACEs

Leverage existing policy-driven systems, structures, and innovation platforms

- Make early and periodic screening, diagnosis, treatment, and prevention of ACEs a priority.
- Integrate ACEs and positive health topics into hospital community benefits standards and community needs assessment efforts. Make available local data on ACEs, resilience, protective factors, and other social determinants.
- Advance trauma-informed and positive health-oriented payment reform, accountability measurement, and integrated systems efforts in practice innovation models, as well as through the range of maternal, child, youth, and family and school health programs.
- Develop and demonstrate models for addressing ACEs, promoting resilience, and healthy parenting in the context of addressing other social determinants of health in Medicaid.
- Make recommendations for and evaluate the effects of legislation, regulations, and related actions to address ACEs. Proactively ensure ACEs and childhood trauma are considered in health policies.

# Leverage existing and evolving practice transformation efforts

- Use existing primary care medical home demonstrations and related efforts to address social and emotional determinants of health to focus on ACEs and promote safe and nurturing relationships in families and communities.
- Evaluate and advance efforts to engage children, youth, and families by including them in measurement and improvement efforts and IT tools to support learning and healing.
- Evaluate the use of nontraditional "providers," such as peer-topeer and family-to-family supports, as well as community health workers and others trained to promote healthy parenting, stress management, trauma healing, and building resilience.
- Empower community-based services and resource brokers such as Head Start and Help Me Grown as well as school health and afterschool programs, to educate and engage parents, youth, and families.
- Integrate trauma and resilience-informed knowledge, policies, and practices into existing initiatives, such as complex chronic condition care, early childhood systems, childhood obesity, school health, and social and emotional learning in schools.

Leverage existing research and data platforms, resources, and opportunities

- Optimize existing federal surveys and data that can inform, monitor, and build knowledge on ways to prevent ACES and promote positive health development.
- Optimize state surveys to gain access to critical data on children, youth, and families in state-led surveys.
- Liberate available data on ACEs, resilience, and related information by removing barriers to using data and making information to support national, state, and local efforts available in real-time.
- Allow data collected through crowdsourcing and citizen-science methods that engage people and communities in self-led learning and healing around ACEs and resilience to fast-track learning about "what works for whom" and enable rapid discovery and spread of knowledge.
- Integrate research questions, as well as measurement and analytic methods, into existing longitudinal and birth cohort studies to address questions about prevention, risk, and mitigation effects associated with ACEs.
- Link to collaborative learning and research networks to advance ACEs, resilience, and positive health-related research.





### **Our Vision to Address Childhood Trauma**

Adopting and implementing these priorities and actions can lead to:

- Improved resilience, positive health and healthy social-emotional skills for children and families.
- Higher rates of children who are healthy and ready to learn and positively engaged in school and life.
- Increase in families providing safe, stable, and nurturing relationships and environments for children.
- Increases in self, family, and community self-care and use of evidence-based mind-body and related trauma healing and stress reduction methods.
- Trauma-informed systems of care and workplaces.
- Reductions in health problems and costs associated with ACEs, trauma, and chronic and toxic stress, including social costs due to poor health behaviors, loss of hope and crime.
- Reduced provider burnout.
- Reduced factors that contribute to stress, ACEs, and pose barriers to healing trauma.
- Reduction in ACEs.









info@cahmi.org www.cahmi.org @CAHMI2Thrive

#### References

- Bethell, CD, Davis, MB, Gombojav, N, Stumbo, S, Powers, K. Fact Sheet: Adverse Childhood Experiences Among US Children, Child and Adolescent Health Measurement Initiative, Johns Hopkins Bloomberg School of Public Health, October 2017 <u>www.cahmi.org/projects/adverse-childhood-experiences-aces</u>
- Bethell, CD, Carle, A, Hudziak, J, et al. Methods to Assess Adverse Childhood Experiences of Children and Families: Towards Resilience and Well-Being Based Approaches in Policy and Practice. *Academic Pediatrics* (In Press; Sept 2017)
- Bethell CD, Newacheck P, Hawes E, Halfon N. Adverse Childhood Experiences: Assessing the Impact on Health and School. Engagement and the Mitigating Role of Resilience. Health Affairs, 33, no.12 (2014):2106-2115. doi: 10.1377/hlthaff.2014.0914
- 4. Bethell CD, Gombojav N, Solloway M, Wissow L. Adverse Childhood Experiences, Resilience and Mindfulness-Based Approaches: Common Denominator Issues for Children with Emotional, Mental, or Behavioral Problems. Child Adolesc Psychiatr Clin N Am. Dec 2015. doi:10.1016/j.chc.2015.12.001
- Sege, RD, Harper Brown, C. Responding to ACEs With HOPE: Health Outcomes From Positive Experiences. Academic Pediatrics, Sept 2017 pp. S79-S85: <u>http://www.academicpedsjnl.net/article/S1876-2859(17)30107-9/pdf</u>

This fact sheet has been adapted from: Prioritizing Possibilities for Child and Family Health: An Agenda to Address Adverse Childhood Experiences and Foster the Social and Emotional Roots of Well-being in Pediatrics. Bethell, C.D., Solloway, M.R., Guinosso, S., Hassink, S., Srivastav, A., Ford, D., & Simpson, L.A. pp. S36-S50: http://www.academicpedsjnl.net/ article/S1876-2859(17)30354-6/pdf

# Appendix I

High Level Summary of Results Comparing 20 Reports on Promoting the Healthy Development of Young Children Through Healthcare and Systems Transformation

The CAHMI keeps a cross walk of reports and their common recommendations and strategies as it related to early childhood and child healthcare systems transformation. The initial synthesis of recommendations and themes across reports was conducted as background to the <u>April 2020</u> <u>Maternal and Child Health Measurement Research Network summit meeting</u> that brought together many of the author organizations/leaders for these reports, federal agencies, state, family and provider leaders and others to further efforts to advance standardized, whole child and family assessments feasible to implement in a family engaged manner and that enable partners across an early childhood health system to partners. This was the CAHMI's Cycle of Engagement Model, featuring the Well Visit Planner and Promoting Healthy Development Survey tools that were also created and validated in partnership with stakeholders since 1997.

Below is a summary of key themes cutting across the 20 reports, which also align with the deliberations that took place through the MCH MRN National Summit meeting noted above that included many of the authors/organizations advancing these reports. Not that the list of reports reviewed listed below is not inclusive of ALL such reports, nor are findings exhaustive. Further detail is available. Reports included in the analysis are: (listed by year of publication):

- 1. <u>Prioritizing Possibilities</u> for Child and Family Health National Agenda (CAHMI/AcademyHealth 2017)
- Payment for Progress: Investing to Catalyze Child and Family Well-Being Using Personalized and Integrated Strategies to Address Social and Emotional Determinants of Health (AcademyHealth/CAHMI, CHA 2018)
- 3. <u>A Sourcebook for Medicaid's Role in Early Childhood</u> (InCK Marks/Johnson/Bruner, 2018)
- 4. <u>Strategically Advancing Patient and Family</u> Advisory Councils in New York State Hospitals (NY Health Foundation, 2018)
- 5. <u>Opportunities for Medicaid</u> to Transform Pediatric Care for Young Children to Promote Health, Development, and Health Equity (NICHQ, 2019)
- 6. <u>Fostering Social and Emotional Health</u> through Pediatric Primary Care: A Blueprint for Leveraging Medicaid and CHIP to Finance Change (CSSP, 2019)
- 7. <u>Driving Primary Care Innovation</u> through Medicaid Managed Care: State Approaches (CHCS, 2019)
- 8. Investing in Primary Care A STATE-LEVEL ANALYSIS (PCPCC, 2019)
- 9. <u>Delivering Value-based Transformation</u> In Primary Care (CMS, 2019)
- 10. <u>Behavioral Health Provider Participation</u> in Medicaid Value-Based Payment Models: An Environmental Scan and Policy Considerations (CHCS, 2019)
- 11. <u>Fostering Healthy</u> Mental, Emotional, and Behavioral Development in Children and Youth (NASEM, 2019)

- 12. <u>Transforming pediatrics to support population health</u> (Connecticut Health Foundation, 2019)
- 13. <u>Fostering Social and Emotional Health</u> through Pediatric Primary Care: Common Threads to Transform Everyday Practice and Systems (CSSP, 2019)
- 14. <u>Reforming Payment for Children's Long-Term Health</u>: Lessons from New York's Children's Value-Based Payment Effort (United Health Foundation, 2019)
- 15. <u>Strengthening Children's Social-Emotional Well-Being</u> and Ensuring a Parent-Led Agenda: Transforming the Pediatric Well-Child Visit through Technology Oct. 2019. (National Help Me Grow/Pediatrics Supporting Parenting)
- 16. How Children Can Transform the Economy...and Health Care (Nemours, 2020)
- 17. <u>Vibrant and Healthy Kids</u> ALIGNING SCIENCE, PRACTICE, AND POLICY TO ADVANCE HEALTH EQUITY (NASEM, 2019)
- 18. <u>Health Care Transformation for Young Children</u>: The State of the Field and the Need for Action (InCK Marks, 2020)
- 19. <u>Supporting Policy Making with Research</u>: Challenges, Opportunities, and Lessons Learned (Child Trends, 2020)
- 20. <u>Guide to Leveraging Opportunities</u> Between Title V and Medicaid for Promoting Social and Emotional Development (CSSP/Johnson Group Consulting, 2020)

CAHMI, AcademyHealth, CHA	InCK Marks, Child Health Equity	
CHCS	NASEM	
Child Trends	NICHQ	
CMS	Nemours	
CSSP	NY Health Foundation	
Child and Family Policy Center	PCPCC	
Connecticut Health Foundation	United Hospital Fund	
National Help Me Grow/Pediatrics Supporting Parenting		

Includes reports from the following organizations:

## Summary of System Transformation and Policy Recommendations Shared Across Reports

Collectively, these reports illustrate the overall pediatric health policy landscape, putting forth recommendations for systems transformation and policy that are consistent throughout the literature on child health transformation. Key policy recommendations addressed in these reports can be grouped into three categories: 1) practice transformation, 2) policy transformation, 3) systems transformation. Within each category, the specific policy recommendations include:

# PRACTICE TRANSFORMATION

• Address whole child health - addressing social and relational determinants of health and focusing on positive health outcomes for all.

- **Promote early and lifelong health and development** life-course perspective; multigenerational approaches to child care.
- **Family-centered** nurture parents' competence and confidence by using strengths-based observations and positive feedback; partnering with parents to set goals.
- **Personalized** care coordination/case management should reflect specific child/family needs.
- **Guidelines-based** update clinical guidelines and continue to advance guideline-based care in accordance with Bright Futures.
- **Systems-oriented** connecting with additional services outside of healthcare, such as home visiting, family support, social services, etc. Integrated behavioral health in a primary care setting.
- **Quality improvement** developing actionable and meaningful performance measures to support payment models; anticipatory guidance to strengthen family supports; enhancements to well-child care includes care coordination and family engagement.

## POLICY TRANSFORMATION

- Metrics development and application develop measurement approaches at both the clinical and population level, with a focus on SDOH. Highlights importance of data sharing infrastructure.
- Value-based payment models develop alternative payment models that measure value and return on investment in health services for all children, emphasizing the life-course perspective and longer-term outcomes not only limited to the health care system.

## SYSTEMS TRANSFORMATION

- **Support cross-sector collaboration** payment and service delivery models must consider the variety of sectors that work with children; improving access to programs and services across systems that provide parental supports and help promote family functioning; data sharing across sectors is necessary to achieve effective collaborations.
- **Build workforce and environmental capacity** build a diverse, culturally informed workforce across all relevant systems; relational health should emphasize the importance of recognizing and valuing family backgrounds in effective family engagement.
- **Fund learning and innovation** support high-value learning cohorts to develop, evaluate, and share innovative approaches; fund infrastructure needed for practice transformation/innovation.

# References

## (Attachment B)

# Specifically reviewed and considered in the EnAct! framework Design Process (not exhaustive) Listed alphabetically by author.

- AAP. Practical tips for promoting relational health. American Academy of Pediatrics. Accessed August 30, 2022 at: https://downloads.aap.org/AAP/PDF/BF\_RelationalHealth\_Tipsheet.pdf?\_ga=2.67517585.14362 76159.1662340530-117639433.1657155964
- 2. Administration for Children and Families and the Department of Education. Federal Letter on the Social, Emotional, Development and Mental Health of Children. June 14, 2022. https://www.acf.hhs.gov/ecd/policy-guidance/dear-colleague-social-emotional-development-and-mental-health
- 3. Administration for Children and Families, US Department of Health and Human Services, Office of Head Start, The Well Visit Planner for Families. Accessed Aug. 15, 2022 at: <a href="https://eclkc.ohs.acf.hhs.gov/physical-health/article/well-visit-planner-families">https://eclkc.ohs.acf.hhs.gov/physical-health/article/well-visit-planner-families</a>
- 4. Administration for Children and Families, US Department of Health and Human Services Early Childhood Systems Building Resource Guide. https://childcareta.acf.hhs.gov/systemsbuilding/systems-guides/understanding-systems-building
- Agency for Healthcare Research and Quality. Integrating Patient-Generated Digital Health Data into Electronic Health Records in Ambulatory Care Settings: An Environmental Scan. May 2021. Accessed August 30, 2022 at: <u>https://digital.ahrq.gov/sites/default/files/docs/citation/pghd-environmental-scan.pdf</u>.
- **6.** Alexander KE, Brijnath B, Biezen R, Hampton K, Mazza D. Preventive healthcare for young children: A systematic review of interventions in primary care. Prev Med. 2017 Jun;99:236-250. doi: 10.1016/j.ypmed.2017.02.024. Epub 2017 Mar 6. PMID: 28279679
- 7. American Academy of Pediatrics (2017). Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents, 4th Edition. Doi: <u>https://doi.org/10.1542/9781610020237</u>.
- American Academy of Pediatrics. Early Relational Health Implementation Guide.. Accessed August 30, 2022 at: <u>https://downloads.aap.org/AAP/PDF/Final%20AAP%20ASHEW%20Implementation%20Guide</u> %2006.14.22 ld.pdf
- **9.** American Academy of Pediatrics. Patient Centered Medical Home. Accessed on Oct 12, 2022 at: <u>https://www.aap.org/en/practice-management/care-delivery-approaches/patient-and-family-</u> centered-medical-home/
- **10.** Assistant Secretary for Planning and Evaluation, Early Childhood Systems Collective Impact Project, <u>https://aspe.hhs.gov/reports/ecs-project-overview</u>
- 11. Bethell C, Jones J, Gombojav N, Linkenbach J, Sege R. Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels [published correction appears in JAMA Pediatr. 2019 Sep 30;:]. JAMA Pediatr. 2019;173(11):e193007. doi:10.1001/jamapediatrics.2019.3007
- Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: The Promoting Healthy Development Survey. Pediatrics. 2001 May;107(5):1084-94. doi: 10.1542/peds.107.5.1084. PMID: 11331691.
- Bethell C, Reuland C, Schor E, Abrahms M, Halfon N. Rates of parent-centered developmental screening: disparities and links to services access. Pediatrics. 2011 Jul;128(1):146-55. doi: 10.1542/peds.2010-0424. Epub 2011 Jun 6. PMID: 21646266.

- Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. Pediatrics. 2004 Jun;113(6 Suppl):1973-83. PMID: 15173469.
- 15. Bethell CD, Blackwell CK, Gombojav N, Davis MB, Bruner C, Garner AS. Toward measurement for a whole child health policy: Validity and national and state prevalence of the Integrated Child Risk Index. Academic Pediatrics (Online: December 2021; Print: August 2022), doi: <u>https://doi.org/10.1016/j.acap.2021.12.001</u>
- 16. Bethell CD, Garner A, Blackwell, CK et al Social and Relational Health Risks and Common Mental Health Problems Among US Children: The mitigating role of family resilience and connection to promote socio-emotional and school outcomes. Child and Adol. Psychiatric Clinics of N. A., January 25, 2022; 31(1): 45 – 70.
- Bethell CD, Gombojav N, Whitaker RC. Family Resilience And Connection Promote Flourishing Among US Children, Even Amid Adversity. Health Aff (Millwood). 2019 May;38(5):729-737. doi: 10.1377/hlthaff.2018.05425. PMID: 31059374.
- 18. Bethell CD, Solloway M, Guinosso S, Hassink S, Srivastav A, Ford D, Simpson L Prioritizing Possibilities for Child and Family Health: An Agenda to Address Adverse Childhood Experiences and Foster the Social and Emotional Roots of Well-being in Pediatrics. Academic Pediatrics (2017)
- **19.** Bethell, C. We Are the Medicine® framework. Accessed Aug 2, 2022 at: https://www.cahmi.org/our-work-in-action/flourishing-in-action/we-are-the-medicine
- 20. Bethell, CD, Kennedy, S, Martinez-Vidal, E, Simpson, L (November 2018). Payment for Progress: Investing to Catalyze Child and Family Well-Being Using Personalized and Integrated Strategies to Address Social and Emotional Determinants of Health <u>https://academyhealth.org/sites/default/files/payment\_for\_progress\_fullreport\_nov2018.pdf</u>
- **21.** Boat TF, Kelleher KJ. Fostering Healthy Mental, Emotional, and Behavioral Development in Child Health Care. *JAMA Pediatr.* 2020;174(8):745–746. doi:10.1001/jamapediatrics.2020.148
- **22.** Bronfenbrenner U, Morris PA. The Bioecological Model of Human Development. In: Lerner RM, Damon W, editors. Handbook of child psychology: Theoretical models of human development. Hoboken, NJ: John Wiley & Sons Inc; 2006. p. 793–828.
- 23. <u>Bruner, C, Davis, M. A generational opportunity to invest in our children.</u> <u>https://www.rwjf.org/en/blog/2022/07/a-generational-opportunity-to-invest-in-our-children.html</u>
- 24. Build Initiative, The Early Childhood Systems Working Group (<u>www.buildinitative.org</u>)
- 25. CAHMI. Data Resource Center https://www.childhealthdata.org/browse/survey/allstates?q=7094; https://www.childhealthdata.org/browse/survey/allstates?q=6856
- **26.** CDC. Healthy People. https://health.gov/healthypeople/priority-areas/social-determinantshealth/literature-summaries/poverty
- 27. Center for Health Care Strategies. Supporting Technology-Enabled Innovation in Medicaid Managed Care to Improve Quality and Equity. Accessed August 18, 2022 at: https://www.chcs.org/resource/supporting-technology-enabled-innovation-in-medicaid-managedcare-to-improve-quality-and-equity-state-considerations/
- 28. Center for Healthcare Strategies. <u>https://www.chcs.org/project/aligning-early-childhood-and-medicaid/</u>
- **29.** Center for Mississippi Health Policy. Healthcare System Performance Issue Brief. Dec. 2022. Accessed 1/2/22 at: <u>https://mshealthpolicy.com/wp-content/uploads/2022/12/Health-Care-System-Performance-2022.pdf</u>
- **30.** Center for Mississippi Health Policy. Mississippi Indicators and Health Care Infrastructure: Opportunities for Improvement. June 2022. Accessed Aug 14, 2022 at: https://mshealthpolicy.com/healthcare-system-performance/

- **31.** Center for the Developing Child. Three principles to improve outcomes for children and families. 2017. Accessed Aug 2, 2022 at: <u>https://developingchild.harvard.edu/resources/three-early-childhood-development-principles-improve-child-family-outcomes/</u>
- **32.** Center for the Study of Social Policy (2019). Early Childhood System Performance Assessment Toolkit. (2019). Washington, DC. <u>https://cssp.org/wp-content/uploads/2019/01/Early-Childhood-Systems-Performance-Assessment-Toolkit-FINAL.pdf</u>
- 33. Center for the Study of Social Policy. Early Childhood Learning and Innovation Network (EC-LINC). <u>https://cssp.org/our-work/project/early-childhood-learning-and-innovation-network-for-communities/#:~:text=CSSP%20defines%20an%20early%20childhood,%2C%20county%2C%20 or%20regional%20level.</u>
- **34.** Center for the Study of Social Policy. Pediatric Supporting Parenting. Accessed on August 23, 2022 at: <u>https://cssp.org/our-work/project/pediatrics-supporting-parents/</u>
- **35.** Centers for Medicaid and Medicare Services. Early and Periodic Diagnostic and Treatment Services. Accessed August 22, 2022 at: <u>https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html</u>.
- 36. Centers for Medicare and Medicaid Services. 2022 Children's Health Care Quality Core Set of Medicaid and CHIP Measures. Accessed Feb 10, 2023 at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2022-child-core-set.pdf
- 37. Centers for Medicare and Medicaid Services. CMCS Informational Bulletin: Leveraging Medicaid, CHIP, and Other Federal Programs in the Delivery of Behavioral Health Services for Children and Youth. August 18, 2022. Accessed August 26, 2022 at: https://www.medicaid.gov/federal-policy-guidance/downloads/bhccib08182022.pdf
- **38.** Child and Adolescent Health Measurement Initiative, About, Accessed on Aug 2, 2022 at: https://cahmi.org/about-us#our-team
- 39. Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health. Poverty, Developmental Screening, Low Birth Weight State Rankings, 2016-2017 National Survey of Children's Health. Accessed on Aug. 2, 2022 at: https://www.childhealthdata.org/browse/survey/allstates?q=6452;
- 40. Child and Adolescent Health Measurement Initiative, Possibilities Data Query, Integrated Child Risk Index, National Findings for Children Aged 0-5. Accessed on 10-14-22 at: <u>https://www.cahmi.org/data-in-action/prioritizing-possibilities-data-</u> <u>query/results?r=1&topicId=2782&q=8822&g=825</u>
- **41.** Child and Adolescent Health Measurement Initiative. About the National Survey of Children's Health. Accessed Aug 2, 2022 at: <u>https://www.childhealthdata.org/learn-about-the-nsch</u>
- **42.** Child and Adolescent Health Measurement Initiative. About the Online Promoting Healthy Development Survey. Accessed Aug 2, 2022 at: <u>https://onlinephds.org/ProviderInfo.aspx</u>
- **43.** Child and Adolescent Health Measurement Initiative. Data Resource Center for Child and Adolescent Health Interactive Data Query. Accessed Aug 2, 2022 at: <a href="https://www.childhealthdata.org/browse/survey/allstates?q=5454">https://www.childhealthdata.org/browse/survey/allstates?q=5454</a>
- **44.** Child and Adolescent Health Measurement Initiative. HOPE and the New Science of Thriving. Accessed on Aug 2, 2023 at: <u>https://www.cahmi.org/docs/default-source/resources/hope-and-the-new-science-of-thriving---a-summit-to-build-the-field-of-positive-health-and-nurturance.pdf?sfvrsn=19d4a6d8\_0</u>
- **45.** Child and Adolescent Health Measurement Initiative. Measuring Medical Home for Children and Youth. Accessed Aug 2, 2022 at: <u>https://www.childhealthdata.org/docs/medical-home/mhmanual\_withappendices-updated-12-7-10-pdf</u>
- 46. Children's Foundation of Mississippi. Mississippi Risk and Reach Report: Opportunities for Children, Youth and Communities, 2021. Accessed 8/14/22 at: https://childrensfoundationms.org/research/mississippis-risk-reach-report-opportunities-forchildren-youth-and-communities/

- 47. Cilenti, D., Tissue, M.M. & deRosset, L. Developing and Strengthening the Current and Future MCH Public Health Workforce: Building Capacity, Aligning Systems and Addressing Emerging Challenges. *Matern Child Health J* 26 (Suppl 1), 1–2 (2022). https://doi.org/10.1007/s10995-022-03459-6
- **48.** Clark J. The narrative in patient-centred care. *Br J Gen Pract*. 2008;58(557):896. doi:10.3399/bjgp08X37636
- **49.** <u>CMS National Quality Strategy 2022: https://www.cms.gov/blog/cms-national-quality-strategy-person-centered-approach-improving-quality</u>
- 50. CMS. Person and Family Engagement Strategy, Sharing With Our Partners. Centers for Medicare and Medicaid Services. Accessed Auguste 15, 2022 at: <u>https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/Person-and-Family-Engagement-Strategy-Summary.pdf</u>
- **51.** CMS. Person and Family Engagement Website . Centers for Medicare and Medicaid Services. Accessed August 15,, 2022 at: <u>https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Person-and-Family-Engagement.html</u>
- 52. Cohen Ross D, Guyer J, Lam A., Toups M. Fostering Social and Emotional Health through Pediatric Primary Care: A Blueprint for Leveraging Medicaid and CHIP to Finance Change (June 2019). Center for the Study of Social. Accessed August 21, 2022 at https://cssp.org/wpcontent/uploads/2019/10/Fostering-Social-Emotional-Health-Full-Report.pdf
- **53.** Cornell, E., Strengthening Children's Social-Emotional Well-Being and Ensuring a Parent-Led Agenda: Transforming the Pediatric Well-Child Visit through Technology Oct. 2019. Access on 6.2.22 at: <u>https://helpmegrownational.org/wp-content/uploads/2021/11/Pediatrics-Supporting-Parents\_Phase-1-Full-Final-Report.pdf</u>
- 54. Coker TR, Chacon S, Elliott MN, Bruno Y, Chavis T, Biely C, Bethell CD, et al. A Parent Coach Model for Well-Child Care Among Low-Income Children: A Randomized Controlled Trial. Pediatrics. 2016;137(3):e20153013 March 2016.
- 55. COUNCIL ON COMMUNITY PEDIATRICS. Poverty and Child Health in the United States. Pediatrics. 2016 Apr;137(4):e20160339. doi: 10.1542/peds.2016-0339. Epub 2016 Mar 9. PMID: 26962238
- **56.** Crandall A, Miller JR, Cheung A, et al. ACEs and counter-ACEs: How positive and negative childhood experiences influence adult health. Child Abuse Negl. 2019;96:104089. doi:10.1016/j.chiabu.2019.104089
- **57.** Daelmans B, Manji SA, Raina N. Nurturing Care for Early Childhood Development: Global Perspective and Guidance. Indian Pediatr. 2021 Nov 15;58 Suppl 1:S11-S15. PMID: 34687182.
- 58. Davy, C., Bleasel, J., Liu, H. *et al.* Effectiveness of chronic care models: opportunities for improving healthcare practice and health outcomes: a systematic review. *BMC Health Serv Res* 15, 194 (2015). <u>https://doi.org/10.1186/s12913-015-0854-8</u>
- **59.** Doyle, S., Chavez, S., Cohen, S., and Morrison, S. Fostering Social and Emotional Health through Pediatric Primary Care: Common Threads to Transform Practice and Systems. Center for the Study of Social Policy, September 2019. Available at: https://cssp.org/resource/ fostering-social-emotional-health-executive-summary/.
- **60.** Dworetzky, B., Chavez, S. Moving Beyond the Family Engagement Check Box: An Innovative Partnership to Promote Authentic Family Engagement in Systems Change. October 2020. Available at: https://cssp.org/resource/moving-beyond-the-familyengagement-check-box.
- **61.** Earls MF, Andrews JE, Hay SS. A longitudinal study of developmental and behavioral screening and referral in North Carolina's Assuring Better Child Health and Development participating practices. Clin Pediatr (Phila). 2009 Oct;48(8):824-33. doi: 10.1177/0009922809335322. Epub 2009 Jul 1. PMID: 19571336.
- **62.** Early Childhood Technical Assistance Center (2022). Briefing paper: infant and early childhood mental health and early intervention (Part C): policies and practices for supporting the social and emotional development and mental health of infants and toddlers in the context of parent-child

relationships. FPG Child Development Institute, University of North Carolina. <u>https://ectacenter.org/topics/iecmh/iecmhpartc.asp</u>

- **63.** Easterling D, Perry AC, Woodside R, Patel T, Gesell SB. Clarifying the concept of a learning health system for healthcare delivery organizations: Implications from a qualitative analysis of the scientific literature. Learn Health Syst. 2021 Jul 22;6(2):e10287. doi: 10.1002/lrh2.10287. PMID: 35434353; PMCID: PMC9006535.
- **64.** Erika Poethig, Matt Onek, and Matt Eldridge, "Collaborative Place-Based Impact Investing Models: Deploying Capital on the Ground Together" (Washington, DC: Urban Institute; New York City: Mission Investors Exchange, 2019).
- **65.** Family Engagement In Title V Programs. Accessed August 15, 2022 at http://www.amchp.org/programsandtopics/family-engagement/Pages/default.aspx
- **66.** Federal Grants. Early Childhood Developmental Health Systems: Implementation in a High Need State. Accessed on Oct 23, 2022 at: <u>https://www.federalgrants.com/Early-Childhood-Developmental-Health-System-Implementation-in-a-High-Need-State-66479.html</u>
- **67.** Flower KB, Massie S, Janies K, Bassewitz JB, Coker TR, Gillespie RJ, Macias MM, Whitaker TM, Zubler J, Steinberg D, DeStigter L, Earls MF. Increasing Early Childhood Screening in Primary Care Through a Quality Improvement Collaborative. Pediatrics. 2020 Sep;146(3):e20192328. doi: 10.1542/peds.2019-2328. Epub 2020 Aug 7. PMID: 32769199.
- 68. Foy JM, Green CM, Earls MF; COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, MENTAL HEALTH LEADERSHIP WORK GROUP. Mental Health Competencies for Pediatric Practice. Pediatrics. 2019 Nov;144(5):e20192757. doi: 10.1542/peds.2019-2757. Epub 2019 Oct 21. PMID: 31636143.
- **69.** Frampton, S. B., S. Guastello, L. Hoy, M. et.al. 2017. Harnessing Evidence and Experience to Change Culture: A Guiding Framework for Patient and Family Engaged Care. National Academy of Medicine, Washington, DC.
- **70.** Garner AS, Saul RA. Thinking developmentally: Nurturing wellness in childhood to promote lifelong health. Itasca, IL: American Academy of Pediatrics; 2020.
- **71.** Garner, AS, Yogman, M, and the American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health, the Section on Developmental and Behavioral Pediatrics, and the Council on Early Childhood (2021). Preventing Childhood Toxic Stress: Partnering With Families and Communities to Promote Relational Health. *Pediatrics*, July 2021
- 72. Ghandour R.M., Moore K.A., Murphy K., Bethell C., Jones J.R., Harwood R., Buerlein J., Lu M. School Readiness among U.S. Children: Development of a Pilot Measure. (2019) *Child Indicators Research*, 12 (4), pp. 1389-1411.
- **73.** Gottlieb LM, Adler NE, Wing H, et al. Effects of In-Person Assistance vs Personalized Written Resources About Social Services on Household Social Risks and Child and Caregiver Health: A Randomized Clinical Trial. *JAMA Netw Open*. 2020;3(3):e200701. Published 2020 Mar 2. doi:10.1001/jamanetworkopen.2020.070.
- 74. Greenwood DA, Gee PM, Fatkin KJ, Peeples M. A Systematic Review of Reviews Evaluating Technology-Enabled Diabetes Self-Management Education and Support. J Diabetes Sci Technol. 2017 Sep;11(5):1015-1027. doi: 10.1177/1932296817713506. Epub 2017 May 31. PMID: 28560898; PMCID: PMC5951000.
- **75.** Hagan J, Shaw J, & Duncan P. Bright Futures: Guidelines for health supervision of infants, children, and adolescents. (4th Edition). American Academy of Pediatrics. 2017.
- 76. Halfon N, Russ SA, Kahn RS. Inequality and child health: dynamic population health interventions. Curr Opin Pediatr. 2022 Feb 1;34(1):33-38. doi: 10.1097/MOP.00000000001087. PMID: 34879028; PMCID: PMC8728680.
- 77. Health Resources and Services Administration Early Childhood Systems programs: https://mchb.hrsa.gov/programs-impact/early-childhood-systems
- **78.** Health Resources and Services Administration. Bright Futures. Accessed Aug 13, 2022 at: https://mchb.hrsa.gov/programs-impact/bright-futures.

- **79.** Health Resources and Services Administration. Bright Futures. <u>https://mchb.hrsa.gov/programs-impact/bright-futures</u>. Accessed Auguste 13, 2022.
- Hirai AH, Kogan MD, Kandasamy V, Reuland C, Bethell C. Prevalence and Variation of Developmental Screening and Surveillance in Early Childhood. *JAMA Pediatr.* 2018;172(9):857– 866.
- 81. Johnson K, Bruner C. Medicaid managed care: Transformation to accelerate use of high performing medical homes for young children. InCK Marks Working Paper Series. No. 5 InCK Marks Initiative. January 2021. https://www.inckmarks.org/docs/newresources/InCKWP5MedicaidManagedCare.pdf
- 82. Johnson, K., Bruner, C. 2018. A Sourcebook on Medicaid's Role in Early Childhood. Accessed April 15, 2022 at: https://www.inckmarks.org/docs/pdfs\_for\_Medicaid\_and\_EPSDT\_page/SourcebookMEDICAID YOUNGCHILDRENALL.pdf
- 83. Liu PY, Beck AF, Lindau ST, Holguin M, Kahn RS, Fleegler E, Henize AW, Halfon N, Schickedanz A. A Framework for Cross-Sector Partnerships to Address Childhood Adversity and Improve Life Course Health. Pediatrics. 2022 May 1;149(Suppl 5):e2021053509O. doi: 10.1542/peds.2021-053509O. PMID: 35503315;
- 84. Lipkin PH, Macias MM; COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS. Promoting Optimal Development: Identifying Infants and Young Children With Developmental Disorders Through Developmental Surveillance and Screening. Pediatrics. 2020 Jan;145(1):e20193449. doi: 10.1542/peds.2019-3449. Epub 2019 Dec 16. PMID: 31843861.
- 85. Marmot M. Social determinants of health inequalities. Lancet. 2005;365(9464):1099-104.
- **86.** Maternal and Child Health Bureau, Health Resources and Services Administration. Bright Futures. (Website). U.S. Department of Health and Human Services. https://mchb.hrsa.gov/maternal-child-health-topics/childhealth/bright-futures.html
- 87. Medicaid and CHIP Payment Access Commission. MACSTATS Medicaid Data Book. Exhibit 29. December 2022. Accessed Feb 3, 2023 at: <u>https://www.macpac.gov/wp-content/uploads/2022/12/MACSTATS\_Dec2022\_WEB-508.pdf</u>
- **88.** Medical Home/ MH Service Data: Child and Adolescent Health Measurement Initiative, Data Resource Center, Accessed 3/27/22 at www.childhealthdata.org
- **89.** Mimila NA, Chung PJ, Elliott MN, Bethell CD, Chacon S, Biely C, Contreras S, Chavis T, Bruno Y, Moss T, Coker TR, Well-Child Care Redesign: A Mixed Methods Analysis of Parent Experiences in the PARENT Trial, Academic Pediatrics (2017), doi: 10.1016/j.acap.2017.02.004.
- **90.** Minkovitz CS. The Road to Equity Is Paved With More Than Good Intentions: Building an Effective Early Childhood System. Acad Pediatr. 2021 Mar;21(2):223-224. doi: 10.1016/j.acap.2020.11.012. Epub 2020 Nov 20. PMID: 33221492.
- **91.** Mississippi Division of Medicaid. Comprehensive Quality Strategy, September, 2021. Accessed May 2, 2022 at: https://medicaid.ms.gov/wp-content/uploads/2021/09/MS-DOM-Comprehensive-Quality-Strategy-2021.pdf
- **92.** Mississippi Early Childhood System Asset Map. State Early Childhood Advisory Committee. Prepared by Start Early. Accessed August 16, 2022 at: <u>https://mssecac.org/wp-</u> content/uploads/2022/08/v8-Miss-SECAC-Program-Profiles.pdf
- **93.** Mississippi Early Learning Association. Early Childhood Capital Day. Jan 20, 2023. Accessed on Feb 2, 2023 at: <u>https://www.msearlylearning.org/early-childhood-capitol-day-sees-business-leaders-early-childhood-professionals-rally-around-shared-policy-agenda/</u>
- 94. Mississippi State Early Childhood Advisory Council and Start Early, Mississippi Early Childhood Asset Map: Strengths and Opportunities. September 29, 2022. Accessed on 1.23.23 at: <u>https://mssecac.org/wp-content/uploads/2022/10/MS-EC-System-Asset-Map-Part-I-Program-Profiles-FINAL.pdf</u>

- **95.** Mississippi State University, Social Science Research Center, Systems Change Lab. Accessed Aug. 2, 2022 at: <u>https://scl.ssrc.msstate.edu/</u>
- **96.** Moore, KA, et. al, A. Summary Report: The Development of a Pilot Recommended National Outcome Measure for Healthy and Ready to Learn. Child Trends. 2017. <sup>3</sup> 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
- 97. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Division of Behavioral and Social Sciences and Education; Board on Children, Youth, and Families; Committee on Financing Early Care and Education with a Highly Qualified Workforce. Transforming the Financing of Early Care and Education. Backes EP, Allen LR, editors. Washington (DC): National Academies Press (US); 2018 Feb 22. PMID: 30088880
- 98. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Care Services; Committee on Implementing High-Quality Primary Care. Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care. Robinson SK, Meisnere M, Phillips RL Jr, McCauley L, editors. Washington (DC): National Academies Press (US); 2021 May 4. PMID: 34251766.
- **99.** National Conference on State Legislators. Policy Levers for Preventing Child Maltreatment. February 23, 2023. Accessed March 21, 2023 at: https://www.ncsl.org/human-services/policy-levers-for-preventing-child-maltreatment
- **100.** National Committee for Quality Assurance. Healthcare Effectiveness Data and Information Set (HEDIS) Child and Adolescent Well Care Summary 2022. Accessed Feb 10, 2023 at: <u>https://www.ncqa.org/hedis/measures/child-and-adolescent-well-care-visits/</u>
- 101. National Initiative for Children's Health Care Quality. ACCELERATING ACTION AND GAINING TRACTION IN EC SYSTEMS BUILDING INITIATIVES: Improving Systems Performance Measurement Case. Studies from the ECCS Impact CoIIN, 2021. Accessed on 12.2.22 at: <u>https://nichq.org/sites/default/files/inline-files/SystemsPerformanceMeasurement 10.25.21 pdf</u>

files/SystemsPerformanceMeasurement 10.25.21.pdf

- **102.** National Scientific Council on the Developing Child. Connecting the Brain to the Rest of the Body: Early Childhood Development and Lifelong Health Are Deeply Intertwined: Working Paper No. 15. Cambridge, MA: Center on the Developing Child at Havard University; 2020.
- 103. Nelson BB, Dudovitz RN, Coker TR, Barnert ES, Biely C, Li N, Szilagyi PG, Larson K, Halfon N, Zimmerman FJ, Chung PJ. Predictors of Poor School Readiness in Children Without Developmental Delay at Age 2. Pediatrics. 2016 Aug;138(2):e20154477. doi: 10.1542/peds.2015-4477. Epub 2016 Jul 18. PMID: 27432845; PMCID: PMC4960729.
- **104.** NIMHD Minority Health and Health Disparities Research Framework. Accessed August 30, 2022 at: <u>https://www.nimhd.nih.gov/about/overview/research-framework/nimhd-framework.html</u>
- **105.** Osher D, Cantor P, Berg J, Steyer L, Rose T. Drivers of human development: How relationships and context shape learning and development. Applied Developmental Science. 2020;24(1):6-36.
- **106.** Perrin JM, Duncan G, Diaz A, Kelleher K. Principles And Policies To Strengthen Child And Adolescent Health And Well-Being. Health Aff (Millwood). 2020 Oct;39(10):1677-1683. doi: 10.1377/hlthaff.2020.00709. PMID: 33017241.
- **107.** Prenatal to Three Policy Research Center. Prenatal to 3 Policy Roadmap for Mississippi, 2022, Accessed August 1, 2022 at: <u>https://pn3policy.org/pn-3-state-policy-roadmap-2021/ms/</u>.
- 108. Radecki L, Olson LM, Frintner MP, Tanner JL, Stein MT. What do families want from well-child care? Including parents in the rethinking discussion. Pediatrics. 2009 Sep;124(3):858-65. doi: 10.1542/peds.2008-2352. Epub 2009 Aug 24. PMID: 19706562.
- **109.** Ramos, L.R., Tissue, M.M., Johnson, A. *et al.* Building the MCH Public Health Workforce of the Future: A Call to Action from the MCHB Strategic Plan. *Matern Child*

The Child and Adolescent Health Measurement Initiative, 2023

Health J 26 (Suppl 1), 44–50 (2022). https://doi.org/10.1007/s10995-022-03377-7

- **110.** Reed JE, Howe C, Doyle C, Bell D. Simple rules for evidence translation in complex systems: A qualitative study. BMC Med. 2018 Jun 20;16(1):92. doi: 10.1186/s12916-018-1076-9. PMID: 29921274; PMCID: PMC6009041.
- **111.** Ringel, Jeanne S., Dana Schultz, Joshua Mendelsohn, Stephanie Brooks Holliday, Katharine Sieck, Ifeanyi Edochie, and Lauren Davis, Improving Child Welfare Outcomes: Balancing Investments in Prevention and Treatment. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/research\_reports/RR1775-1.html.
- **112.** Rosenbaum S, et al. How states are using Medicaid managed care to strengthen and improve primary health care. Commonwealth Fund Issue Brief. 2020. <u>https://www.commonwealthfund.org/publications/issue-briefs/2020/jul/how-states-are-using-comprehensive-medicaid-managed-care</u>
- **113.** Rosti G. Role of narrative-based medicine in proper patient assessment. *Support Care Cancer*. 2017;25(Suppl 1):3-6. doi:10.1007/s00520-017-3637-4.
- **114.** Schickedanz A, Halfon N. Evolving Roles for Health Care in Supporting Healthy Child Development. Future Child. 2020 Fall;30(2):143-164. PMID: 33875912; PMCID: PMC8053141.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8053141/pdf/nihms-1688252.pdf
- 115. Sharfstein JM. Rethinking Payment and Incentives for a Healthy Early Childhood. Acad Pediatr. 2021 Mar;21(2):225-227. doi: 10.1016/j.acap.2020.09.011. Epub 2020 Sep 28. PMID: 32992027.
- **116.** Shaw, D.S., Mendelsohn, A.L. & Morris, P.A. Reducing Poverty-Related Disparities in Child Development and School Readiness: The Smart Beginnings Tiered Prevention Strategy that Combines Pediatric Primary Care with Home Visiting. *Clin Child Fam Psychol Rev* (2021). https://doi.org/10.1007/s10567-021-00366-0
- **117.** Smith JD, Cruden GH, Rojas LM, Van Ryzin M, Fu E, Davis MM, Landsverk J, Brown CH. Parenting Interventions in Pediatric Primary Care: A Systematic Review. Pediatrics. 2020 Jul;146(1):e20193548. doi: 10.1542/peds.2019-3548. PMID: 32581000; PMCID: PMC7329253.
- Stein S, Swerlick A, Chokshi B. Employing an Adaptive Leadership Framework to Childhood Adversity Screening. Pediatrics. 2020 Jan;145(1):e20183820. doi: 10.1542/peds.2018-3820. PMID: 31892520
- 119. Tanner JL, Stein MT, Olson LM, Frintner MP, Radecki L. Reflections on well-child care practice: a national study of pediatric clinicians. Pediatrics. 2009 Sep;124(3):849-57. doi: 10.1542/peds.2008-2351. Epub 2009 Aug 10. PMID: 19706587.
- **120.** University of Mississippi Medical Center, L.S. Buttross. Accessed Aug 2, 2022 at: <a href="https://www.umc.edu/Provider/Buttross\_L\_Susan/">https://www.umc.edu/Provider/Buttross\_L\_Susan/</a>
- **121.** Urban Institute. https://testurban1.pantheonsite.io/sites/default/files/2019/05/30/collaborative-place-based-impact-investingmodels-deploying-capital-on-the-ground-together.pdf
- 122. van Veenendaal NR, van der Schoor SRD, Broekman BFP, et al. Association of a Family Integrated Care Model With Paternal Mental Health Outcomes During Neonatal Hospitalization. *JAMA Netw Open*. 2022;5(1):e2144720. doi:10.1001/jamanetworkopen.2021.44720
- **123.** Ward M, Schulz AJ, Israel BA, Rice K, Martenies SE, Markarian E. A conceptual framework for evaluating health equity promotion within community-based participatory research partnerships. Eval Program Plann. 2018 Oct;70:25-34. doi: 10.1016/j.evalprogplan.2018.04.014. Epub 2018 Apr 30. PMID: 29894902; PMCID: PMC6077092.
- 124. Wolf ER, Hochheimer CJ, Sabo RT, DeVoe J, Wasserman R, Geissal E, Opel DJ, Warren N, Puro J, O'Neil J, Pecsok J, Krist AH. Gaps in Well-Child Care Attendance Among Primary Care Clinics Serving Low-Income Families. Pediatrics. 2018 Nov;142(5):e20174019. doi: 10.1542/peds.2017-4019. Epub 2018 Oct 10. PMID: 30305388; PMCID: PMC7063686
- **125.** Yamada J, Kouri A, Simard SN, Segovia SA, Gupta S. Barriers and Enablers to Using a Patient-Facing Electronic Questionnaire: A Qualitative Theoretical Domains Framework

The Child and Adolescent Health Measurement Initiative, 2023

Analysis. J Med Internet Res. 2020 Oct 8;22(10):e19474. doi: 10.2196/19474. PMID: 33030437; PMCID: PMC7582145.

- **126.** Yeager CM, Benight CC. If we build it, will they come? Issues of engagement with digital health interventions for trauma recovery. Mhealth. 2018 Sep 11;4:37. doi: 10.21037/mhealth.2018.08.04. PMID: 30363749; PMCID: PMC6182033.
- **127.** Zero to Three. The State of Babies Yearbook: Mississippi State Summary. Zero to Three. Accessed on August 1, 2022 at: <u>file:///C:/Users/cbethell/Downloads/Mississippi%20(MS)%20%20State%20of%20Babies%20Ye</u> <u>arbook%202021.pdf</u>