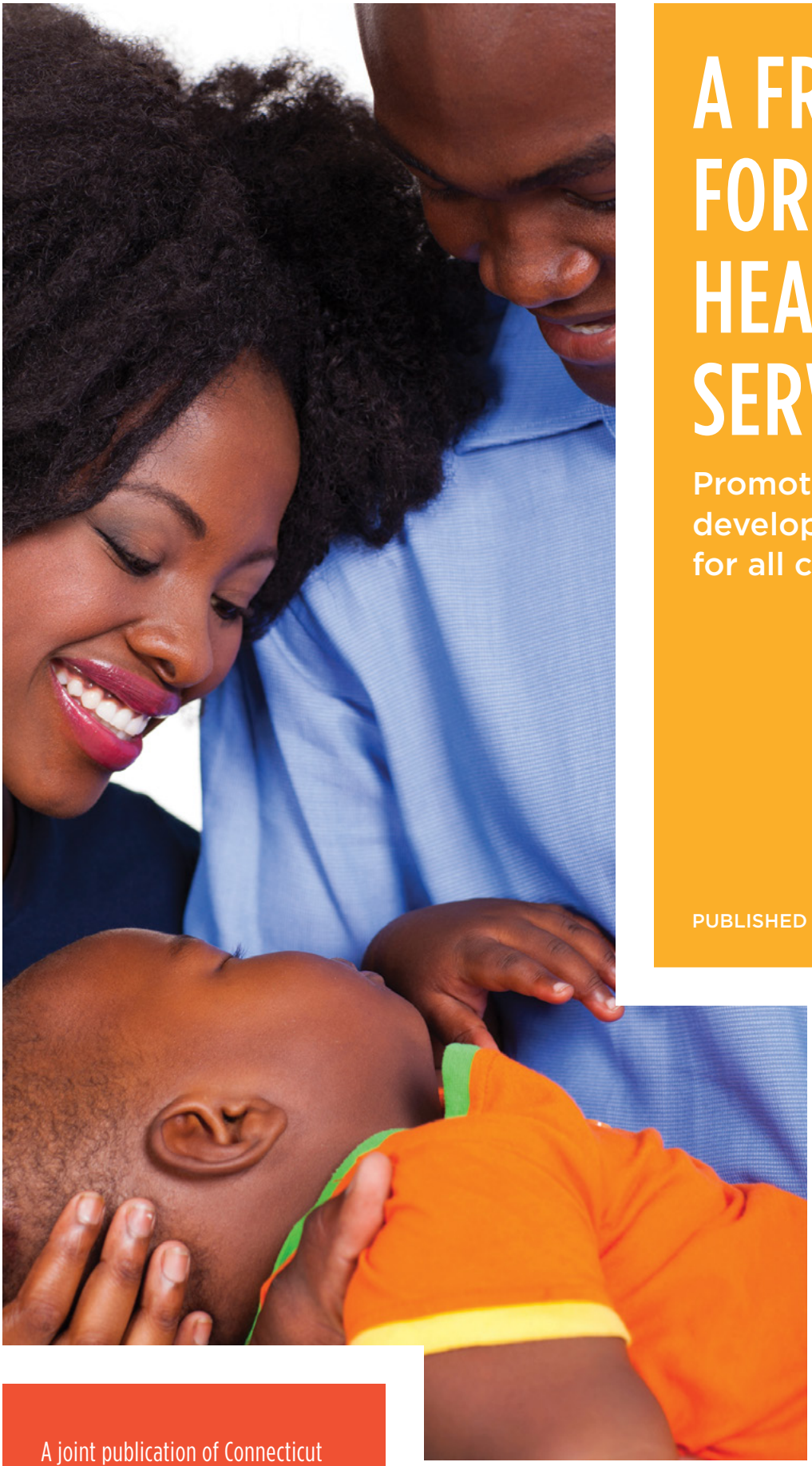

A FRAMEWORK FOR CHILD HEALTH SERVICES:

Promoting optimal health, development, and well-being for all children

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Paul H. Dworkin, MD
Connecticut Children's Office for Community Child Health

Lisa Honigfeld, PhD
Child Health and Development Institute of Connecticut

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About Connecticut Children's Office for Community Child Health

Connecticut Children's Office for Community Child Health (OCCH) is a national leader in addressing critical contemporary issues that have the potential to adversely affect children's health and development. OCCH not only serves as a critical community resource, but also cultivates innovative and cost-effective solutions to address existing gaps in our health care and child service systems. Through OCCH, Connecticut Children's Medical Center ensures that families have access to a comprehensive system of community programs and services that supports them in promoting their children's optimal healthy development.

About the Child Health and Development Institute of Connecticut

The Child Health and Development Institute of Connecticut (CHDI), a subsidiary of the Children's Fund of Connecticut, is a not-for-profit organization established to promote and maximize the healthy physical, behavioral, emotional, cognitive, and social development of children throughout Connecticut. CHDI works to ensure that children in Connecticut, particularly those who are disadvantaged, will have access to and make use of a comprehensive, effective, community-based health and mental health care system.

The authors retain full responsibility for all opinions and content.

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I. EXECUTIVE SUMMARY

In 2009, the Child Health and Development Institute published The Framework for Child Health Services,* which outlined how pediatric health services can be delivered in collaboration with other services children use, such as family support services and early care and education services. The **2009 Framework** concluded with several recommendations for strengthening the essential components of pediatric care to improve early identification of children at risk for poor life outcomes and their connection to helpful community services. The role of the medical home,† developmental surveillance and screening, care coordination, and alignment of local and state level initiatives were all highlighted through specific recommendations, which would strengthen child health services and support families in improving health and developmental outcomes among their children.

The 2019 Framework for Child Health Services: *Promoting optimal health, development, and well-being for all children*, reviews progress in implementing the recommendations put forth in 2009 and identifies key areas for inclusion in designing a new framework to guide innovation and improvements in child health services. Policy reform, system building, and practice change in Connecticut have combined to advance many of the recommendations from the **2009 Framework**.

Notably, the State has experienced wide adoption of the medical home model of primary care, with more than half of the State's children who are insured by Medicaid receiving care from a primary care site that is recognized by the National Committee for Quality Assurance as a medical home. The adoption of the medical home model in Connecticut has brought developmental screening, care coordination, and accompanying practice education to many pediatric primary care sites within the State.

In some ways, however, policy and practice change have not coalesced to bring the recommendations from the **2009 Framework** to scale across the State. Systems of care coordination for children in Connecticut remain disparate and difficult for families to navigate. While we have expanded care coordination capacity in Connecticut, there is a need to ensure that multiple care coordination efforts are integrated to best support families with seamless connections within and across service sectors. The lack of robust state-level coordination has hindered uptake of promising innovations that could bring efficiency to service provision and support families in their optimal use of services. Mid-level developmental assessment, an innovation that quickly identifies children's developmental needs and ensures that they are connected to community resources, is another example of a recommendation from the **2009 Framework** that has not achieved scale and spread and has left too many families working to fill in gaps in services when their children do not qualify for publicly funded interventions.

* Dworkin P, Honigfeld L, Meyers J. A framework for child health services: Supporting the healthy development and school readiness of Connecticut's children. Child Health and Development Institute. March 2009.

† American Academy of Pediatrics, Policy Statement. The medical home. Pediatrics. 2004;113(5):1545-1547

The 2019 Framework considers the significant progress made since the 2009 Framework, existing strengths, as well as opportunities to improve children's health and well-being that have not been fully realized in Connecticut.

The new Framework draws on current knowledge about supporting population health to craft a new understanding of, and set of recommendations for, improving child health services within the context of community service systems. Key concepts necessary for consideration in this new framework include:

1. Cross-sector collaboration in care delivery.

A child health service system that is proactive in helping families address "social determinants of health" through connection to a broad array of services and service sectors. These include services such as housing, nutrition, and faith-based initiatives.

2. Innovation in payment and care delivery.

Inclusion of key elements of the 2010 Affordable Care Act (ACA),[‡] specifically those that ensure access to health insurance and promotion of innovation within health care delivery. Provisions in the ACA allow opportunities to transform health services and Medicaid through demonstration projects that explore new arrangements in health care payment methodologies, financial support for services not traditionally included in health care payments, and patient-centered and -driven service models.

3. Integration with current health reform initiatives.

Child health services are central to both the Primary Care Modernization (PCM) and Health Enhancement Community (HEC) initiatives, both funded through the State Innovation Model (SIM). PCM is committed to including pediatric primary care in efforts going forward to add upfront, bundled payment for primary care sites to build infrastructure and support expanded services. The HEC initiative has identified "child well-being" as one of two key outcomes for HECs funded through State dollars. The second key outcome is "healthy weight," another area in which early behaviors are key to lifelong health.

4. Identify, monitor, and report cross-sector outcomes.

Health reform efforts in a growing number of states recognize a broader set of outcomes from health care services. We increasingly understand that health care, within a comprehensive system of services, can contribute to such outcomes as school readiness, school attendance, social competence, family resiliency, and general well-being. Although these outcomes may not lend themselves to immediate measurement, proxy measures, such as the protective factors,[§] can inform evaluation and improvements in the "value" of health care services.

5. Child health is family health.

If health services are to have a larger contribution to long-term outcomes for children, they must work to strengthen families' capacities to nurture children. Disparate funding streams and regulations that determine eligibility for services are barriers to pediatric health care providers addressing children's needs within the context of their families.

[‡] https://www.healthcare.gov/glossary/affordable-care-act/

[§] Harper Browne, C. The Strengthening Families Approach and Protective Factors Framework: Branching Out and Reaching Deeper. Washington, DC: Center for the Study of Social Policy; September 2014.

Current thinking about "population health" underlies the above concepts. Population health has taken on several meanings, but virtually all interpretations consider health equity, a broad set of health outcomes, social determinants of health, interventions and policies across sectors, and long-term societal and financial implications of health services.** In Connecticut, the medical home model of primary care delivery, care coordination across sectors, priorities to address early childhood as an essential component of lifelong outcomes, and collaborative relationships across public and private organizations remain relevant to a new framework for child health services and population health goals within the State.

** Kindig D, Asada Y, Booske B. A population health framework for setting national and state health goals. JAMA. 2008;299:2081-2083.

The **2019 Framework** concludes with the following recommendations, derived from the five key concepts discussed above in combination with ongoing opportunities supporting an increased focus on the role of health services in children's health and development into adulthood.

1. Multipayer demonstration project.

Support the State's health insurers' participation in a demonstration project that transforms child health services and, specifically, pediatric primary care by supporting efficacious innovations and interventions that, in collaboration with community services, strengthen families to promote children's optimal health, development, and well-being. A multi-payer demonstration project can yield important findings that inform universal support for, and adoption of, key services, such as cross-sector care coordination, promotion of the protective factors to boost resiliency, use of nutritionists to establish optimal feeding practices, universal home visiting, and group well-child care.

2. Cross-agency collaboration.

State agencies with early childhood responsibilities and authority (eg, Department of Social Services, Department of Public Health, Office of Early Childhood, Department of Children and Families) should convene with commercial insurers, philanthropic organizations, and family members to design and develop a child health system that braids and blends available public and private dollars in support of children's health and well-being. Further, funding that ensures linkage of children and families to services through the United Way 211 Child Development Infoline and regional care coordination collaboratives should sustain linkages between primary care services and community-based resources for children of all ages.

3. New models for financial analysis.

The Office of Policy and Management should develop the capacity to perform return on investment and other financial analytics that consider services across agencies and service sectors and monitor the short-, medium-, and long-term cost savings, cost benefit, and return on investment from an expanded health promotion system for all children.

4. Seamless system of care coordination.

Care coordination services for children and their families should be centralized and brought to scale statewide through the strengthening of regional care coordination collaboratives. These collaboratives, currently supported by DPH's Children and Youth with Special Health Care Needs program, would benefit from expanded support and collaboration with other service sectors that provide care coordination. A comprehensive care coordination system should cross-train care coordinators to work within a variety of disciplines and share training and resource materials to improve linkage to services and create seamless systems of care for children.

5. "What gets measured gets done."

A strength-based approach to child and family services, such as the Strengthening Families Protective Factors Framework, should be embraced by all State agencies and their programs and services. Adopting such an approach will promote the optimal health and development of all children and provide measurable short-term outcomes that speak to longer-term ones. Health outcomes should also be considered across the life span and sectors as the impact of health on school attendance, school success, social relationships, and life outcomes needs to be measured.

II. INTRODUCTION

While Connecticut has come a long way in addressing the needs of children and families to support optimal health, development, and well-being, there is far more to accomplish. This new publication, the **2019 Framework for Child Health Services**, provides a road map for updating and building upon the recommendations detailed in the original Framework, which was published by the Child Health and Development Institute (CHDI) a decade ago. The original Framework identified opportunities to change the trajectory of child development for many children by engaging child health, family support, and early care and education services in support of families raising young children. It applied neuroscience from the growing understanding of brain development and the effects of toxic stress to improve the design and delivery of child health services.

A decade later, our State has made tremendous progress. Children are now routinely assessed for developmental concerns and connected to early intervention and health promotion services through care coordination and the United Way 211 Child Development Infoline. Child health providers have access to improved training, quality improvement supports, and the ability to refer families to a network of community resources and services. But it is not enough. There remains a need to bring innovations that are working to scale so all families can benefit, as well as a need to improve the integration of child health services with other sectors' services that have an impact on the health and well-being of children and families.

The **2019 Framework for Child Health Services** considers children's physical, mental, behavioral, and developmental well-being[1] as the optimal outcomes of a comprehensive system of family-centered services across several sectors. This Framework presents a new perspective on how to achieve these outcomes and explores how Connecticut's health care reform and population health activities can take full advantage of new evidence and health care transformation to support future generations. It applies recent research correlating the social determinants of health to lifelong outcomes, reductions in disparities, and population-based cost savings. The **2019 Framework** outlines a plan to embed child health services within a comprehensive system, engaging all sectors critical to children and their families. Examples of such sectors include housing, food and nutrition, transportation, and child welfare. The Framework's recommendations aim to build a comprehensive child-serving system that is embraced across state agencies, public and private payers, service providers, and philanthropy to collectively advance optimal outcomes for children.

III. THE 2009 FRAMEWORK FOR CHILD HEALTH SERVICES

A Look Back at the Original Framework

In March 2009, the Child Health and Development Institute (CHDI) published **A Framework for Child Health Services: Supporting the Healthy Development and School Readiness of Connecticut's Children**[2], a compilation of child health information and recommendations for child health services in Connecticut that had significant implications for program development, public policy, and resource allocation. In preparing the report, stakeholders from across Connecticut and the country contributed to writing, reviewing, and clarifying areas of need to ensure that Connecticut's children grow up healthy and experience positive life outcomes. The Framework identified the many opportunities to change the trajectory of child development from an at risk trajectory to a healthy one for many children by engaging child health, family support, and early care and education services in support of families raising young children. The **2009 Framework** concluded with six recommendations for system- and service-level improvements with potential for improving health outcomes for Connecticut's young children and their families:

- Increase access to child health services
- Provide care coordination services for children and their families
- Implement developmental surveillance and screening
- Expand office-based education activities
- Improve mid-level developmental assessment capacity
- Align and support State and local early childhood initiatives

Public policy, reorganization of service delivery, and concerted efforts among Connecticut's advocates and service providers have yielded enormous gains in many of the issues addressed by the 2009 report, despite the costs associated with implementing such recommendations and the State's challenge of extreme budget deficits.

The Framework identified the many opportunities to change the trajectory of child development from an at risk trajectory to a healthy one for many children by engaging child health, family support, and early care and education services in support of families raising young children.

The Status of Recommendations from the Original Framework

Recommendation 1. **Increase access to child health services, including primary care, preventive care, and dental services, to improve child health outcomes, promote children's school readiness, and reduce health care costs.**

Several State initiatives have come together to improve children's utilization of pediatric primary care and dental services. The 2010 Affordable Care Act[3] promoted universal health insurance, which guaranteed preventive health services for children without the burden of family co-payments and/or deductibles. At the same time, Connecticut's Medicaid program, HUSKY, re-committed to insuring children under the Children's Health Insurance Program, HUSKY B in Connecticut, and, as a result, 90 percent or more of the State's children now utilize preventive health care services.[4] In 2011, the Connecticut Department of Social Services ended its managed care arrangements with three insurance companies and retained the services of a single administrative services organization, Community Health Network, to oversee several aspects of the State's Medicaid program, including support for primary care sites to obtain medical home recognition from the National Committee for Quality Assurance (NCQA). Medicaid began paying providers directly on a fee-for-service basis at an enhanced rate when they attained Person Centered Medical Home (PCMH) status and paid per-member, per-month bonuses based on performance on key quality measures. By October 2018, 89 pediatric primary care sites were in the HUSKY PCMH program, caring for almost 60 percent (205,794) of the State's children insured by Medicaid.[5]

Access to new and expanded services in primary care increased over the past 10 years as a result of the combined efforts of public and private organizations to enhance the impact of pediatric primary care. Table 1 shows the provision of behavioral health screening, dental services, developmental screening, and maternal depression screening provided as part of well-child services in Medicaid for 2017. These are all new primary care services since the publication of the **2009 Framework**, and data from Medicaid clearly show significant uptake across Connecticut primary care sites. In addition to state-level support to bring about improvements, statements from the U.S. Preventive Services Task Force, NCQA, and American Academy of Pediatrics supported adoption of these key aspects of pediatric primary care to promote children's optimal health, development, and well-being.

Table 1: Provision of Key Components of Pediatric Primary Care in Connecticut, Medicaid, 2017

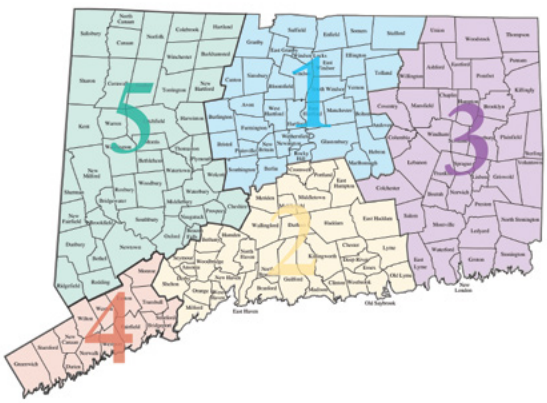
Primary Care Service	Target Child Population	# of Services Billed to Medicaid
Behavioral Health Screening	4 years and older	42,700
Dental Services	younger than 3 years	8,441
Developmental Screening	younger than 3 years	64,741
Maternal Depression Screening	first year of life	10,999

Recommendation 2. **Provide care coordination services for children and their families to increase the early detection of problems, improve management of acute and chronic disorders, promote adherence to interventions and treatment plans, and achieve efficiencies and cost savings in health care delivery.**

Over the past 10 years, Connecticut has significantly improved care coordination for children and families. Most noteworthy is the Connecticut Department of Public Health's (DPH) endorsement of regional care coordination collaboratives designed to bring together all of the care coordination services for children with special needs in designated regions. The goal of these collaboratives is to "coordinate the care coordinators" to meet families' needs across several service systems, avoid duplication of efforts, and ensure that a cross-sector approach guides service provision. DPH received federal funding to further the care coordination collaborative initiative. This support furthered the State's ability to develop and maintain infrastructure to facilitate data sharing across service systems, integrate care coordination efforts into State health reform, and expand support for regional collaboratives.

Increased care coordination, anchored in pediatric primary care, has also evolved as a result of State initiatives, including the PCMH program in Medicaid and PCMH Plus program under the State Innovation Model (SIM). In PCMH, care coordination is conducted in compliance with NCQA requirements. For PCMH Plus, a federal Medicaid state plan amendment has allowed HUSKY to engage primary care networks in a shared savings program that includes per member, per month payments for care coordination. Practices enrolled in PCMH Plus are encouraged to work with the care coordination collaboratives in their regions. Primary care entities that participate in PCMH Plus report their number of care coordination contacts each month, providing evidence that increasing numbers of families insured by HUSKY are receiving care coordination.[6]

Five Care Coordination Collaborative Regions



Recommendation 3. Implement developmental surveillance and screening to ensure that children who require intervention services are identified as early as possible.

Several forces have converged to ensure that developmental surveillance and screening are embedded in pediatric primary care and other early childhood services, such as early care and education. NCQA has sanctioned developmental screening in the first three years of life as one pediatric requirement for medical home recognition. Connecticut's PCMH and PCMH Plus programs use developmental screening in the first three years of life as a core quality measure, which ensures its inclusion in calculating practices' performance and their per member/per month payments. State agencies, CHDI, and the state chapter of the American Academy of Pediatrics have all supported education and training on developmental surveillance and screening, with the result being substantial growth in the practice over the past several years. Figure 1 shows the increase in the number of developmental screens billed for children younger than age 3 and insured by HUSKY. Figure 2 shows the increase in the number of pediatric primary care sites billing for developmental screening from 2009 to 2017.

Early childhood providers beyond pediatric primary care sites have also implemented developmental screening, including Head Start, home visiting programs, early care and education sites,[7] and child welfare. The United Way 211 Child Development Infoline supports developmental screening with universal access to an online version of the Ages and Stages Questionnaire. Families can complete the screening tools online, they are scored and reviewed by Child Development Infoline staff, families receive developmental promotion information, and families are contacted and linked to services when concerns are noted.

Figure 1: Number of developmental screens billed to Medicaid for children younger than 3

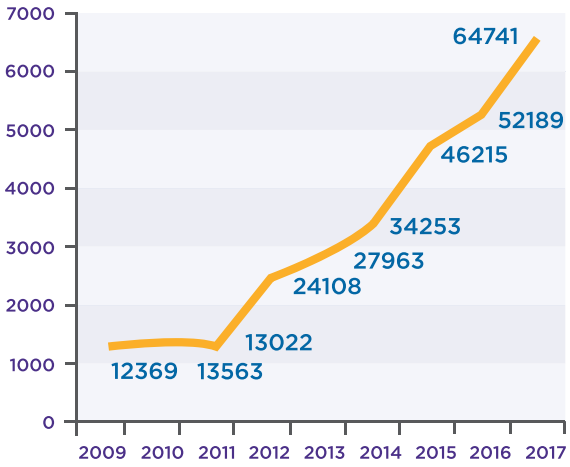
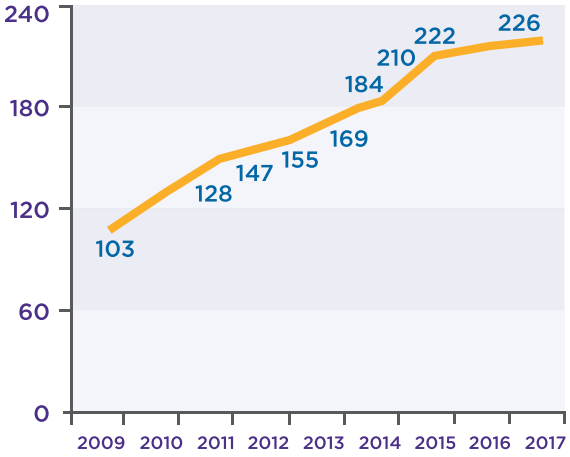


Figure 2: Number of child health sites billing Medicaid for developmental screening



Recommendation 4. **Expand office-based education activities through the Educating Practices program to better enable practices to function as effective medical homes.**

Educating Practices (formerly known as EPIC) is a signature program of CHDI that provides on-site education to pediatric primary care sites. The goal is to improve care in ways that are supported by State and local resources, policies, and systems of care. Educating Practices uses academic detailing, an evidence-based strategy for changing practice.[8] Since the publication of the **2009 Framework**, CHDI has increased the number of topics covered by Educating Practices presentations from 3 in 2008 to 22 in 2018.

The increase in the number of topics available for primary care education has been accompanied by an increase in the reach of Educating Practices from 40 office visits in 2008 to more than 80 in 2018. Partnerships with Community Health Network, Connecticut Children's Medical Center, Department of Public Health, the Office of Early Childhood, and the Connecticut Hospital Association have contributed to the substantial growth in the Educating Practices program over the past 10 years.

CHDI's Educating Practices Program Topics

- ADHD: Improving Care in Pediatric Practice
- Autism Spectrum Disorder
- Behavioral Health Screening: Integration into Pediatric Primary Care
- Care Coordination in the Medical Home
- Connecting Children to Behavioral Health Services
- Developmental Surveillance and Screening and Help Me Grow
- Domestic Violence and Children
- Family-Professional Partnerships in the Medical Home
- Hearing Loss
- Infant Mental Health
- Injection Protection: Reducing the Pain of Immunizations
- Keeping Children Healthy in Child Care
- Lead Poisoning Screening and Treatment
- Maternal Depression
- Obesity Prevention in Infancy and Early Childhood
- Oral Health
- Promoting Protective Factors
- Social and Emotional Health and Development in Infants
- Teen Driver Safety
- Trauma Screening, Identification, and Referral in Pediatric Practice
- Suicide Prevention: Improving Identification, Prevention, and Care

In 2014, CHDI partnered with Connecticut Children's Office for Community Child Health (OCCH) to add a practice quality improvement (PQI) component to many Educating Practices trainings. For several topics, providers can complete a six-month chart audit activity, use Plan-Do-Study-Act cycles to monitor their progress, and adjust their work to improve services. Once projects are completed, providers receive credits toward fulfilling their professional certification requirements. Since the inception of PQI in collaboration with Educating Practices, more than 300 pediatric providers have completed activities and received credits. The Educating Practices-PQI collaboration recently completed a project with eight practices dedicated to improving care for children with attention deficit hyperactivity disorder (ADHD). Results from practice data show many fold increases in: 1) using a standardized tool to assess for ADHD; 2) obtaining input from schools when making an ADHD diagnosis; 3) assessing for co-morbidities when children receive an ADHD diagnosis; 4) providing family support; and 5) providing behavioral interventions when children receive an ADHD diagnosis. In a national project using the Educating Practices program and PQI to support pediatric sites in screening for maternal depression, 100 percent of participating practices screened for maternal depression at least once in infants' first year of well-child visits.

Recommendation 5. **Improve Mid-Level Developmental Assessment (MLDA) capacity to enable more rapid and more efficient evaluation of children at risk for developmental delays, facilitate access to helpful programs and services, and ensure the most appropriate use of expensive and scarce resources for comprehensive evaluations.**

With funding from the Children's Fund of Connecticut, CHDI supported three organizations in pilot testing MLDA in 2012. MLDA is designed to provide a rapid assessment for children who show mild to moderate concerns during the developmental surveillance and screening process. Such an assessment reveals whether a more comprehensive evaluation is needed to determine eligibility for formal early intervention services or whether the needs of such children can be addressed through community-based developmental services. Data from the pilot sites supported MLDA as efficient and effective,[9] with 80 percent of children linked directly to helpful, community-based programs and services without the need for a full, costly evaluation.

OCCH and its Help Me Grow National Center secured two grants to bring MLDA to scale: one for Connecticut and one for affiliate states in the Help Me Grow national network. While efforts in Vermont and California have resulted in embedding MLDA within their early childhood assessment systems, Connecticut has been slow to adopt broad implementation of MLDA. The service is included in the Office of Early Childhood's plans for ensuring school readiness but has not yet reached priority status. Dissemination efforts in Connecticut and nationally have shown the imperative of implementing MLDA as part of an early childhood system that ensures early identification and connection to services as key supporting components.[10]

Recommendation 6. **Align and support state and local early childhood initiatives, particularly those focusing on the integration of health into school readiness.**

For several years, the State of Connneticut, the William Casper Graustein Memorial Fund, and the Children's Fund of Connecticut collaborated on supporting 52 early childhood community collaboratives committed to improving school readiness. CHDI also supported collaboratives in engaging health providers in their work, using data from the Early Childhood Health Assessment Records, and generally addressing health within their early childhood plans. Despite the discontinuation of funding in 2016, several communities have sustained their work with new funding and aligned their activities to take advantages of State-level initiatives. Of note, Norwalk has increased developmental screening and connection of children to developmental services through the United Way's 211 Child Development Infoline and Help Me Grow. The efforts of Opportunity Knocks in Middletown have contributed to decreases in the number of children with tooth decay and the obesity rate among preschool-aged children. Active early childhood collaboratives in New Britain, New Haven, Manchester, and other communities are closely following the State lead in improving connections between mental health, health, and early childhood services.

Final Thoughts on the 2009 Framework

Although there has been much progress in implementation of the six recommendations from the **2009 A Framework for Child Health Services**, and several recommendations are well on their way to being fully implemented within Connecticut's child health and service systems, more concerted effort and vigilance are required to ensure progress in all areas and that gains are not lost as the State moves into an era of new leadership. Advancements embedded in the medical home model of service delivery—such as developmental surveillance and screening, practice change support through academic detailing and quality improvement, and improving access to and utilization of health promotion and prevention services—are well-integrated into current health care reform efforts. Yet, there remains a need to bring efficacious innovations to scale to strengthen care coordination services, carry out developmental promotion and assessment, and align local community initiatives with state-level efforts.

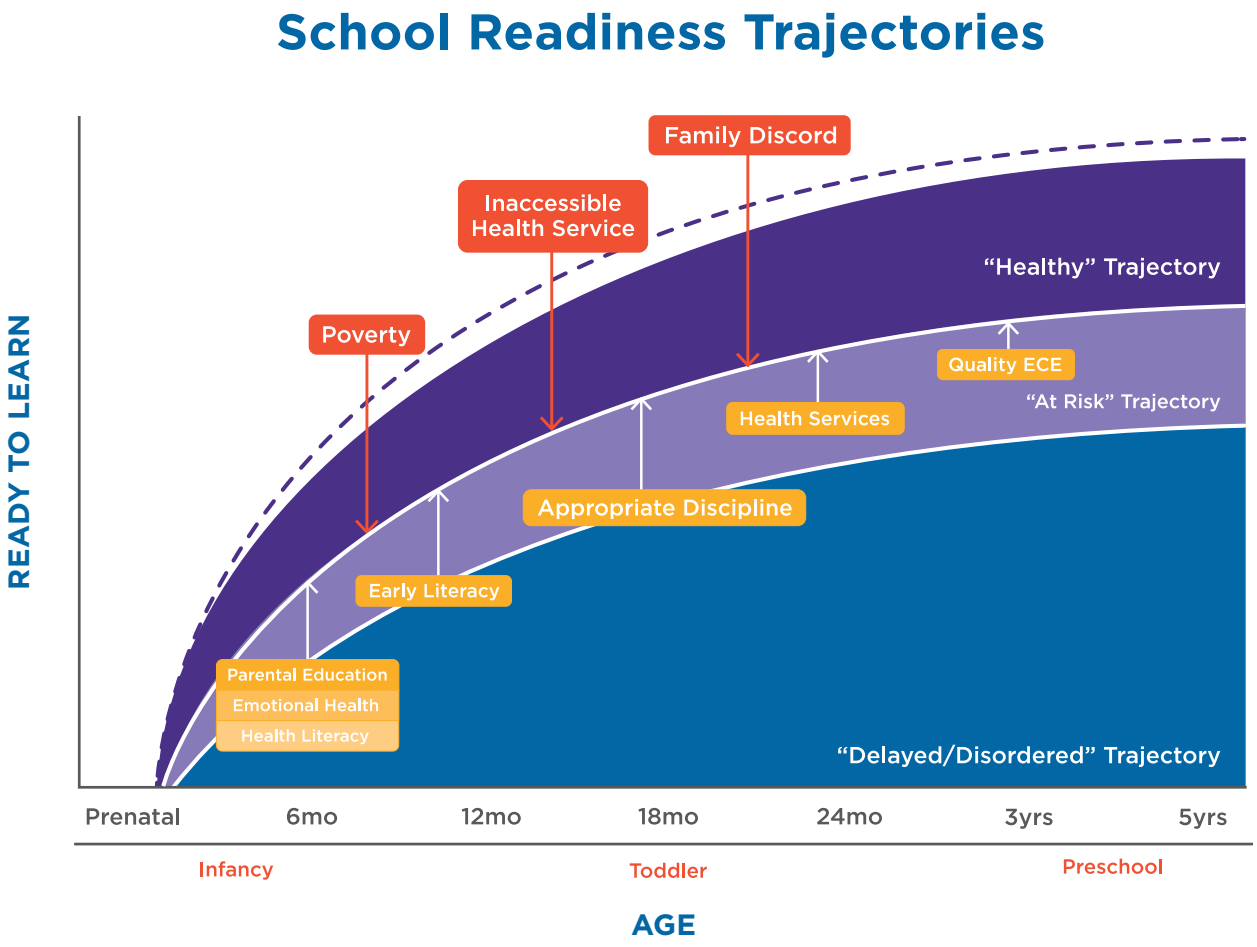
The **2009 Framework** was greatly informed by advances in understanding of brain development and early child development. The broad dissemination of critical concepts in brain development during the 1990s, the so-called decade of the brain, yielded powerful implications for the design and delivery of child health services. Examples of such concepts include:

- the recognition that brain growth disproportionately occurs prenatally and during the infancy years;
- that neural plasticity, while a life-long capacity, is particularly advantageous during early childhood;
- that critical periods of development require necessary stimulation to promote normal brain development;
- that development occurs sequentially and demands properly aligned stimuli; and
- that experience is critically important to promote essential neural pathways and capacities.

The profoundly important implications of such concepts for the design and delivery of child health services include the imperative that services and interventions begin as early as possible for optimal effectiveness; that stimulation during the infancy years is particularly important to ensure optimal development; that both early and later exposures and experiences importantly contribute to children's optimal health, development, and well-being; and that services must be comprehensive and aligned with children's developmental stages and needs.

Contemporaneous advances in recent decades of our understanding of children's overall development also yielded important implications for the design of child health services. Neal Halfon, the director of the UCLA Center for Healthier Children, Families, and Communities, has characterized children's development as progressing along three trajectories. The children on a "delayed/disordered" trajectory demand more intensive services and supports to advance. The majority of children who are progressing along a "healthy" trajectory benefit from ongoing monitoring and preventive supports. Halfon's major contribution is calling attention to a third group of children who occupy an "at risk" trajectory and are particularly vulnerable to the adverse impact of such challenges as socio-economic disparities, lack of access to quality health care services, and exposure to domestic violence. Such children may also benefit from such developmentally promoting factors as parent health literacy, access to a high-quality medical home, and participation in high-quality child care programs. The Centers for Disease Control and Prevention has estimated that, depending on the specific population under consideration, approximately 30 to 40 percent of children may be considered at risk.[11] More than 25 years ago, pediatrician Robert Chamberlin effectively articulated the important implications of this concept: "The most effective long-term strategy appears to be the development of a comprehensive, coordinated, community-wide approach focused on preventing low- and medium-risk families from becoming high-risk, as well as providing intensive services to those who already have reached a high-risk status."[12]

Figure 3: School Readiness Trajectories and Influence of Developmental Factors



Graphic Concept Adapted from Neal Halfon, UCLA

Critical concepts in brain and early childhood development called for a strengthening at the interface among child health, early care and education, and such family support services as home visiting. The **2009 Framework** highlighted the Help Me Grow model, a comprehensive, integrated approach to developmental promotion, early detection, referral, and linkage of vulnerable children and their families to community-based programs and services that is currently being installed in nearly 30 states across the nation. The focus of this initiative is to strengthen families by enhancing protective factors, such as resiliency, to promote all children's optimal health, development, and well-being. Knowledge of brain and early childhood development continue to inform the **2019 Framework**, but new considerations are also essential to understanding the potential of child health services.

IV. ESSENTIAL CONSIDERATIONS IN DEVELOPING THE 2019 FRAMEWORK FOR CHILD HEALTH SERVICES

New considerations are increasingly informing understanding of child health and development with implications for the delivery of child health services within the broader set of child and family services. These can be broadly grouped into 1) cross-sector collaboration in care delivery; 2) innovation in payment and service delivery; 3) opportunities in state health care reform; 4) new considerations about outcomes and their measurement; and 5) understanding children's health within the context of family health. Underlying these five considerations is current thinking about "population health." Population health has taken on several meanings, but virtually all interpretations recognize health equity, a broad set of health outcomes, social determinants of health, interventions and policies across sectors, and long-term societal and financial implications of health services.[13]

Cross-Sector Collaboration In Health Care Delivery

A focus during the new millennium on the "biology of adversity" encourages us to view the effectiveness of child health services through the lens of adverse childhood experiences, toxic stress, health disparities, and social determinants of health. We now recognize the extent to which the outcomes that we seek—children's optimal health, development, and well-being—are overwhelmingly influenced by social, environmental, behavioral, and genetic/epigenetic factors[14] as depicted in Figure 4. As a consequence, child health services must be embedded within a comprehensive system, engaging all sectors critical to children and their families. Child health services transformation must include strengthening the interfaces with the broad array of sectors so important in addressing families' needs and priorities, in addition to the aforementioned early care and education and family support. Examples of such sectors include, but are not limited to, housing, food and nutrition, transportation, child welfare, and arts and culture.

The emphasis on the social determinants is rapidly gaining attention in health policy, in service system enhancements and collaborations, and in practice improvements to promote population health. A prime example of such an approach is the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau's Early Childhood Comprehensive Systems (ECCS) initiative. Such a perspective offers the opportunity to elevate the promotion of all children's optimal health, development, and well-being to an even higher priority than the prevention of diseases, disorders, and delays, and highlights the need for innovations to strengthen families' capacity and circumstances.

Figure 4: Determinants of Health

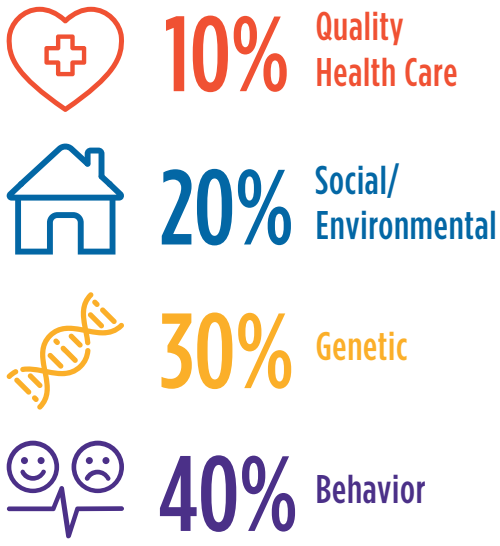
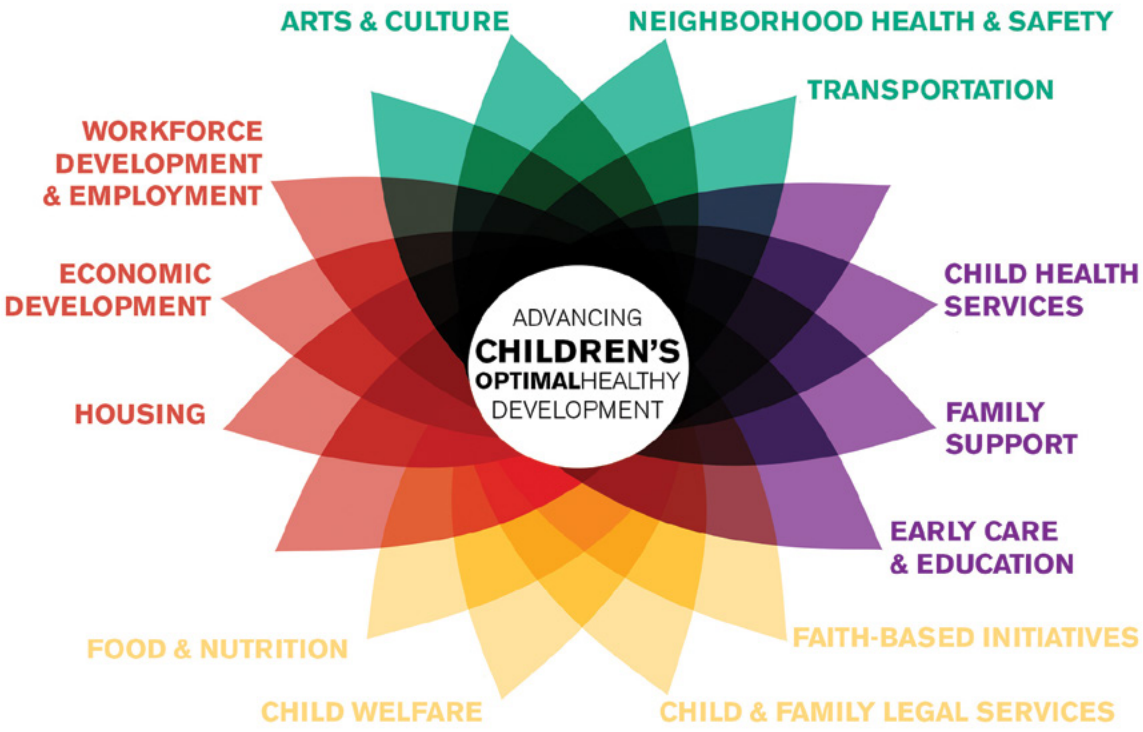


Figure 5: The sectors recognized as contributing to child health, development, and well-being.



In recognition of the many factors that influence health and the myriad of community health programs under its banner, in 2012, Connecticut Children's Medical Center (Connecticut Children's) established an Office for Community Child Health (OCCH). Connecticut Children's leaders saw the value in bringing together the institution's community health resources to do three things: 1) increase the status of Connecticut Children's as a community resource; 2) bring synergy and support to the work of the community child health initiatives within the institution; and 3) serve as a leader in identifying, developing, testing, and disseminating innovative approaches to community child health. Figure 5 depicts the OCCH's cross-sector model, and Figure 6 provides a listing of OCCH programs. Since its inception, OCCH and CHDI have collaborated on a variety of local, state, and national programs, policy reforms, and system building to address contemporary and critical issues in child health. The partnership has been strengthened through a shared vision of systems as essential to maximizing the impact of child health services through inclusion of service sectors beyond early care and education and family support as outlined in the **2009 Framework**.

Figure 6: The programs of Connecticut Children's Office for Community Child Health.

At the center of this collaborative approach is a focus on family-centered care, and the imperative that families be included in planning, implementation, and evaluation of services and innovations. OCCH and CHDI have broadened their scope of input to include families and the community services that they use to ensure that systems are co-designed to meet the needs of users and not only providers. This shifting of focus is designed to yield more effective service systems and greater satisfaction and engagement from service users.

Innovation in Payment and Service Delivery

Since the publication of the **2009 Framework**, federal legislation has dramatically changed the environment for health care delivery. In 2010, the Affordable Care Act (ACA) put in place several opportunities to improve health care quality, delivery, and outcomes and reduce health care expenditures.[15] Among other opportunities, the ACA established the Center for Medicare & Medicaid Innovation (CMMI)[16] to encourage and support states to develop and test innovative approaches to health care delivery. Many of the funded innovations are built on the medical home model of care, which calls for primary care to be accessible, comprehensive, coordinated, culturally sensitive,

and family centered.[17] States' commitment to strengthening and expanding primary care, through incentivizing practices to adopt the medical home model, provides opportunities for improving pediatric primary care and its contribution to children's health and development.

Delivery system reforms that are resulting from the ACA, including considerations of how care is delivered to improve population health and how medical services are paid, which is central to CMMI-funded initiatives, provide the greatest opportunity to improve child health services and increase their contribution to life-long health and well-being. Such reforms typically focus on such core components of the delivery system as care coordination, value-based payment incentives, provider and community collaboration, quality measurement and accountability, and data sharing and integration. However, these are likely too limited to achieve greater than incremental advances in population health.

Systems innovations, which support the integration of pediatric primary care and other children's health services, and incorporate strategies for addressing social determinants of health, must be brought to scale to significantly alter children's lifelong outcomes. Further, because the outcomes of innovations delivered in childhood settings may not manifest for several years, support cannot be delayed due to the lack of availability of sufficient and immediate cost savings. While the importance of evidence for proposed interventions portends to their likelihood of successful impact, the validity of community-driven priorities cannot be ignored. For example, the development of the impressive King County, Washington Best Starts for Kids initiative[18] puts evidence-informed and promising practices into communities to support families and children so that babies are born healthy, children thrive, and young people grow into happy, healthy adults. Figure 7 proposes five key questions to guide the assessment of innovations designed to support child health services transformation.

Figure 7: Key questions for assessing innovations for potential to advance child health

	What is the feasibility of scaling? Many evidence-based innovations fail to achieve scale. A prime example is group well-child care, for which initial evidence of efficacy was first published in the 1970s.
	Is there a plan to ensure sustainability that recognizes the potential of strategies such as blending of administrative and financial resources; public-private partnerships; demonstrating the return on investment (ROI), cost savings, and cost-benefit analysis to support an "invest/reinvest strategy;" applying meaningful, feasible pay for success approaches?
	Does the innovation lend itself to meaningful, important measures and metrics? "What we measure, we do" speaks to the importance of metrics and the imperative that they be meaningful to families, front-line providers, payers, and policy makers.
	Does the innovation take advantage of child health services, which offer a universal platform to engage almost all children and their families in the United States?
	Are there relevant tools and processes to support implementation and scaling of the innovation, so each application does not need to "reinvent the wheel?"

The ACA recognized the importance of ensuring that all people have health insurance and provided opportunities for states to use Medicaid, as a state and federal partnership for covering services, to apply for waivers and state plan amendments to promote innovation in the delivery of care for publicly insured populations. Waivers approved over the past few years have enabled states to use Medicaid payments to pay for such activities as care coordination, housing modification needs, care to a broader population of people, and use of intermediaries in service administration. As Medicaid insures almost 40 percent of children in the United States,[19] it is a critical component of system redesign to improve children's health, development, and well-being.

The ACA also spurred the development and testing of alternative payment models to improve care, enhance health outcomes, and save money. In March 2017, CMMI released a request for information on developing alternative payment models for pediatrics. More recently, in September of 2018, the Center for Medicare and Medicaid Services (CMS) announced the Integrated Care for Kids (InCK) initiative,[20] with a focus on early identification and treatment, integrated care coordination and case management, and development of state-specific alternative payment models. Other encouraging examples of CMMI's and Medicaid's potential to bring about a transformation in child health services are evident at the state level. Oregon has implemented a K-12 Literacy Framework for their Medicaid Coordinating Care Organizations to ensure all students read at or above grade level.[21] New York State adopted the First 1000 Days on Medicaid initiative recognizing that a child's first three years are the most crucial for development and leveraging Medicaid to build stronger systems to reform child health service delivery.[22]

Child Health Services in the Context of Health Care Reform

The triple aim of health care reform[23] as articulated by the Institute for Healthcare Improvement encompasses the following: 1) improving the health of the population, 2) enhancing the quality of health care services delivery and patient experience, and 3) reducing expenses and increasing cost savings. This perspective guides health reform efforts across the country, and provides a rich platform for developing, implementing, and evaluating child health services in the context of the larger set of services that contribute to health. Pediatric primary and preventive care play a critical role in health promotion, population health, the mitigation of health disparities, early detection of vulnerable children, and linking with other service systems that support children's health and development and long-term population health outcomes, thereby supporting the triple aim. Yet, until recently, health care reform has not specifically focused on children and child health services, for a variety of reasons. The "triple aim" of health care reform has prioritized a "relentless pursuit of scorable savings" that is not attainable through reform of the child health care delivery system. While children comprise 24 percent of the U.S. population, they account for less than 12 percent of health care dollars spent and are, in general, in good health. As a consequence, the potential for cost savings in child health services is paltry compared to that attainable by addressing the high costs of care for adults with chronic conditions, such as heart disease and type II diabetes.

Other factors contributing to the lack of focus on child health services in health care reform efforts include the challenge of capturing the long-term return on investments made during the childhood period, despite the documentation of such long-term benefits demonstrated by the research of Nobel laureate economist James Heckman, who demonstrated that investment in quality early childhood services yields a 13 percent return on investment.[24] Calculating and reporting such returns is further challenged by the cross-sector nature of cost savings for children. For example, investments in child health services, early care and education, and family support services, such as home visiting, lead to savings in special education, behavioral health, and the juvenile justice and corrections system. Reconciling investments and returns across these sectors is complicated and not possible in most states' budgeting and bookkeeping processes.

Additional factors contributing to the lack of emphasis on children's services in health care reform include the challenge of identifying effective and meaningful outcome measures, as the outcomes for promotion and prevention activities are less explicit than those for chronic disease management, which include hospital admissions, emergency department visits, treatment costs, and the slowing down of disease progression and decreasing co-morbidity. Also, the relative paucity of successful examples of value-based payment models in child health care discourages states from committing to reform in pediatric services. To date, there are few tested models, yet implementation in such pioneering states as New York[22] and Oregon[21] warrant monitoring and consideration in Connecticut.

Despite the many challenges, there are compelling reasons to focus on children in the context of health care, Medicaid, and commercial payment reform. Children have near universal access to health services, with more than 90 percent of children using services each year.[4] Maximizing the value and contribution of primary care pediatric health services to children's health and well-being can be a powerful beginning to improving population health and health equity.

Maximizing the value and contribution of primary care pediatric health services to children's health and well-being can be a powerful beginning to improving population health and health equity.

Furthermore, states have the opportunity to leverage the recommendations, resources, and guidelines of several federal programs that support them in promoting child health. Most notable are the federal Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program; the Title V Maternal and Child Health Block Grant program; early intervention services under the Individuals with Disabilities Education Act;[25] the Children and Youth with Special Health Care Needs program;[26] Head Start and Early Head Start;[27] and other block grant programs that provide support for families with a variety of needs.

Important Consideration for Child-Focused Health Reform: Early Childhood System Building

The area of early childhood system building provides numerous examples of how leveraging Medicaid and commercial payers for a greater purpose can lead to enhanced outcomes for children and a greater long-term payoff in terms of child health and development outcomes. Key concepts from this work include the need to:

- Promote a universal approach to identifying children with developmental and behavioral concerns and linking them to services, including a particular focus on vulnerable children who are at risk for adverse outcomes. Such an approach maximizes value and impact by ensuring even mild to moderate concerns are identified and addressed as early as possible.
- Support community-based efforts that promote the health and safety of children and their families in a variety of settings, such as home visiting, early care and education, neighborhoods, and communities.
- Support community-based efforts to identify and address children's and families' needs as early as possible.
- Integrate services and supports for children and families by linking child health, early care and education, family support services, and all other essential sectors, such as housing, neighborhood health and safety, and food and nutrition.
- Encourage the design and dissemination of, and support for, new roles for such staff as community health workers, parent mentors, home visitors, and care coordinators to support families' promotion of children's healthy development.
- Elevate, expand, and integrate the role of care coordination in accessing services within and across sectors.
- Identify ways to achieve cost efficiencies through the blending of administrative and financial resources of departments and agencies.
- Develop a methodology to document short- and longer-term cost savings of an integrated approach to developmental promotion, early detection, referral, and linkage.
- Encourage the formal financial scoring of interventions over years and decades to capture return on investment.
- Employ effective strategies to demonstrate real-time cost-effectiveness. Such strategies include addressing developmental and behavioral concerns through "de-medicalization" before medical care is needed, and identifying children with mild to moderate concerns through mid-level developmental assessment rather than higher-level evaluations, and linking such children to community-based programs and services.

Important Consideration for Child-Focused Health Reform: Child Health Services

In order to maximize the impact of child health services for long-term population health and equity, health care reform should not only include but should prioritize a focus on child health services transformation as the key priority for Medicaid and, ultimately, commercial payers. The following six strategies deserve support and advocacy.

- Shift the primary focus of reform efforts from health services for adults to children's health services. The rationale for such an approach includes the lower costs associated with a focus on children (and their families); the opportunity to have the greatest impact upon health from a life course perspective; the efficacy of available, evidence-based innovations; and the large return on investment for investments in early childhood.
- Expand the target population for health care reform efforts from an overarching focus on chronic, high cost conditions to a universal approach that pays special attention to the needs of vulnerable children who are at risk for adverse health, developmental, and behavioral conditions. The U.S. Centers for Disease Control and Prevention estimates that, depending on the specific jurisdiction, this population comprises 30 to 40 percent of all children. It is important to note that a universal approach does not exclude a focus on children with complex medical conditions, but rather expands the target population.
- View the delivery of child health services within the context of comprehensive system building through an "all sectors in" approach, which includes child health services, early care and education, family support, housing, transportation, food and nutrition, safe neighborhoods, and other areas. Such an approach responds to social as well as bio-medical determinants of health and provides fiscal support for care coordination across sectors.
- Encourage and support innovation and the diffusion of innovation, with the resources to design, test, and disseminate evidence-based strategies to achieve scale, impact, and cost savings.
- Support the development and application of broad measures of child health and well-being, including measures of social determinants that are integrally tied to health and well-being. Reward the aligning of data, such as kindergarten readiness and reading proficiency, to strengthen systems, support families, and promote health equity.
- Develop sound and convincing methodologies to project long-term return on investment, cost savings, and cost benefits for transforming Medicaid and child health services that measure progress in strengthening families and improving child health and developmental trajectories.

Measuring Child Health Outcomes

An increasing emphasis on population health[28] requires newly defined outcomes for integrated systems committed to children's health and development. Child health services has long been accountable for providing preventive care, identifying health and developmental concerns that require intervention, and treating health problems, all activities that have associated performance outcomes. And, indeed, rates of utilization of well-child services, immunization, developmental and mental health screening, application of fluoride varnish, appropriate testing for pharyngitis, and others are all important and have been adopted by payers and quality programs as essential measures for child health services. Yet, these metrics barely touch on outcomes that truly inform a population health perspective. Metrics need to represent the

true outcomes that a systemic approach to child health services strives to achieve. Although many years are required to determine if child health services are making an impact on lifelong health and well-being, creative measures can capture how children are faring on the road to adulthood with more proximal measures related to, and in many instances predictive of, the more elusive, long-term, distal outcomes.[29] This perspective supports a re-thinking of child health outcomes with consideration of the following measures related to the early childhood system, including child health:

- Infant mortality rates
- Healthy weight/Body Mass Index (BMI)
- Reduced adult dental disease
- Healthy lifestyle (reductions in tobacco use, increases in daily exercise, etc.)
- Healthy reproductive status
- School measures:
  - (a) kindergarten readiness
  - (b) third grade reading level
  - (c) school attendance
  - (d) high school graduation rates
- Employment measures:
  - (a) employment rates
  - (b) absenteeism
- Morbidity:
  - (a) child and adult prevalence of depression
  - (b) chronic illness
- Justice system involvement
- Child welfare involvement
- Protective factors and resilience

One promising opportunity for assessing more proximate, near-term child outcomes that are indicative of longer-term outcomes is the use of the **Strengthening Families' Protective Factors Framework**[30]. Developed by the Center for the Study of Social Policy (CSSP), protective factors include five measurable concepts that, when present in families, suggest future well-being. Protective factors include: 1) parental resilience; 2) social connections; 3) knowledge of parenting and child development; 4) concrete support in times of need; and 5) social and emotional competence of children. CSSP has demonstrated that when families possess these five attributes, they are less likely to be involved with child protective services.[31] Further, research from the Help Me Grow National Center has shown that connecting children who are at increased risk for adverse developmental and behavioral outcomes to community-based programs and services can significantly increase their families' protective factors and strengthen their capacity to promote their children's optimal health, development, and well-being.[32]

The Framework outlined in this report not only calls for placing families at the center of all service delivery, but also meeting their needs within comprehensive and coordinated systems.

Addressing Child Health as Family Health

Child health is family health. Children live, grow, and learn within a family and community context that has profound implications for their short- and long-term development. From their genetic make-up to the physical and emotional environment into which they are born and grow up, children are products of families. Yet traditional service delivery and financing often happens within discrete streams and silos based on ages and lifespan stages. The Framework outlined in this report not only calls for placing families at the center of all service delivery, but also meeting their needs within comprehensive and coordinated systems. Doing so has implications for staffing, financing, and measuring outcomes and impact.

The **2019 Framework** recognizes the importance of cross-sector collaboration, innovation, health care reform, emphasis on outcomes, and addressing children's needs within a two-generational approach, as essential considerations for increasing the value of child health services to child well-being. Although a new Framework can outline the essential components of an effective child health system within a larger system of family and community supports, there are, to date, relatively few examples of

comprehensive approaches to strengthening families to promote children's optimal health, development, and well-being. Select examples of community place-based initiatives, such as the Harlem Children's Zone[33] and Los Angeles' Magnolia Place Community Initiative,[34] demonstrate the impact of engaging diverse sectors in an integrated, comprehensive manner, but do not necessarily illustrate the benefits of embedding such efforts within larger, more comprehensive system building at the local, regional, and state levels. Sustainability and replication of such initiatives depend on supportive policies and systems. All too often, promising and efficacious innovations in the delivery of child services are not developed within the larger system context.

V. SPECIFIC OPPORTUNITIES TO TRANSFORM CHILD HEALTH SERVICES IN CONNECTICUT

Payment Reform

Many of the critical concepts necessary to transform child health services and advance population health are increasingly being embedded in Connecticut statewide initiatives such as the State Innovation Model, Primary Care Modernization, Pediatric Design Group,[35] and Pediatric Primary Care Payment Reform Study Group. Many states have adopted a variety of strategies to successfully leverage Medicaid and alternative payment strategies and these can inform work in Connecticut. In general, such strategies fall within three general categories of reform efforts: providing optional benefits, value-based purchasing, and delivery system reforms. States may provide optional benefits by securing a federal waiver or securing approval for a Delivery System Reform Incentive Payment program. Through such a mechanism, Medicaid programs may expand their coverage of certain populations and/or certain activities such as case management, care coordination, and the linking of beneficiaries to desired services. Another approach is to implement a version of value-based purchasing. Models vary in the extent to which providers share risk, ranging from such low-risk approaches as pay-for-performance and clinical episode/bundled payments to the greater risk sharing inherent in shared savings, risk and capitation, and global payment approaches. Delivery system reform that accompanies payment reform is the most promising approach to achieving children's optimal outcomes and life-long health and well-being.

As health reform takes hold in Connecticut, these options must be explored as possible ways to increase support and flexibility of service delivery in pediatrics and to better support a systemic approach to services. New financing mechanisms, particularly those proposed under Primary Care Modernization and the specific recommendations of the Pediatric Primary Care Payment Reform Study Group [36] and Pediatric Primary Care Design Group, can provide the flexibility for pediatric primary care sites to work under a new framework that extends their services to ensure health promotion, prevention, early detection, and linkage to services in collaboration with community service providers.

Recommendations for Payment Reform in Pediatric Primary Care

The Pediatric Primary Care Payment Reform Study Group, an initiative of CHDI and the Connecticut Health Foundation, recognizes that physical, emotional, and social factors affect children's lifelong health and well-being. By building on existing primary care structures, changes to pediatric practice can advance the long-term goals of improving population health, promoting health equity, and reducing health disparities among Connecticut's children and adults, and can better connect health care with other sectors to support life outcomes. These improvements, in turn, will have positive societal effects: an economy made stronger by a better-educated, healthier workforce, and a populace with better prospects for social mobility.

The Study Group offers the following recommendations for payment reform.

1. Payment reform in pediatrics should reward effective health promotion and prevention among all children receiving care in all practice settings and insured by all payers. Primary care should enhance families' capacity to achieve such priorities as:

a. Promoting infant and children healthy weight (eg, through lactation consultation, nutritional counseling, and connecting families to community nutrition support such as the federal Women, Infants, and Children program).

b. Promoting socio-emotional well-being among all children, and particularly for children with social or medical complexity. This can be achieved through parent support and education interventions such as the Positive Parenting Program, strategies for enhancing family and child resiliency as advanced by the Protective Factors Framework, and greater integration of behavioral health services and primary care throughout childhood and adolescence.

c. Promoting developmental outcomes to ensure school readiness and success for all children and particularly children who may experience lower rates of success due to language, cultural, and other barriers. Efficacious interventions include Reach Out and Read, Healthy Steps, Project DULCE, and the Video Interaction Project, among others.[37]

2. Payment methods for pediatric primary care should incentivize the restructuring of practices to improve population health, health equity, health care quality, and address costs.

Payments should:

a. Allow flexibility to support service innovations that would ordinarily not be covered within traditional fee-for-service payments, including two-generation approaches that involve parents and caregivers in care. New capabilities in a restructured practice might include:

   i. care coordination for children and families with medical or social complexity, or who are at risk of falling behind on health and related goals;

   ii. flexible office hours that include some weekend and evening hours;

   iii. alternative visit capabilities (such as e-consults, group visits, and telehealth video-appointments);

   iv. embedded or easy access to behavioral health screening, follow up, and consultations;

v. embedded or easy access to additional practitioners such as nutritional counselors and pharmacists; and

vi. transportation assistance.

b. Reduce physician burden, optimize efficiency, and expand practice capabilities by accommodating innovative staffing using non-physician professionals and paraprofessionals;

c. Ensure dollars are used to directly support changes at the individual practice site level;

d. Provide up-front funds, separate from payments for care and services, to support practices in developing infrastructure needed for practice innovations;

e. Support practices to report back to payers on the capabilities, activities, and outcomes enabled by new payment structures;

f. Ensure families directly experience and realize the benefits of practice innovation for their children's health and future well-being; and

g. Support existing, innovative primary care models and bring evidence-informed innovations to scale.

3. Stakeholders in Connecticut should support efforts to improve measurement and supply data that connects effective pediatric primary care to adult health and well-being.

Focusing on both process and outcome measures (proximate and distal) will fortify the evidence base for primary care innovations. Over time, this will supply the return on investment evidence that is needed to promote adoption of payment reform by different payer constituents (eg, State Medicaid agency, health insurers, self-funded employer sponsors, etc.).

4. The participation of all payers in payment reform solutions for pediatric primary care is essential to success.

- Practice transformation to achieve significant contributions to population health and health care equity requires pervasive change in the delivery of primary care services. Such change is only feasible if implemented across the entire practice population, not just for those insured by only one plan.
- Participation by all payers mitigates the disincentive any single payer has to finance innovations that may later yield its benefits (savings) to other payers.

5. Payment methods need to recognize the variety of service sectors' overlapping encounters with and responsibilities for children.

Cross-sector collaborations (eg, health, social service, education), financed through braided and/or blended funding, will allow for efficiency in service delivery, shared financing and accountability, and, ultimately, will support improved health and other benefits.

6. The benefits of improved pediatric primary care are considered a public good; they accrue across the lifespan, to many spheres of social policy, and to the State's economy in general.

As with public education, which analogously spends on children to reap benefits across the population over time, a public-sector role, in some form, is warranted.

Health Enhancement Community Initiative

Connecticut's State Innovation Model (SIM), overseen by the Connecticut State Office of Health Strategy (OHS), offers opportunities to improve the health and development of the State's children beyond its focus on payment reform. Its Health Enhancement Community (HEC) initiative will support the development of regional hubs to bring community services to bear on the health of the population in their catchment areas. HECs will engage community services and resources in a financing and delivery model that contributes to medium and long-term health outcomes. The SIM Population Health Council and HEC architects recognize two critical areas of child health for emphasis in all HECs: child well-being and healthy weight. Additionally, the HEC work is guided by an intentional focus on health care equity, which has its roots in childhood.[38] As OHS moves forward with planning and implementation of the HEC initiative, child- and family-focused resources will have more opportunities to connect with health care providers, participate in sustainability models that are based on data and outcomes, and meet the needs of children and families in collaboration with other service sectors.

Commitment to the Medical Home Model

Connecticut's commitment to the medical home as the optimal delivery model for primary care can support implementation of many components of care that are necessary to enhance family-centered services and advance child health and development. Aided by new payment models under discussion in SIM, primary care can make a much greater contribution to children's health and development, including the mitigation of health disparities. New financing for primary care, which ensures flexibility in using personnel beyond the traditional medical staff as part of care teams, can ensure that universal primary care services can address a much broader set of issues than currently supported through visit-based, fee-for-service payment. Flexible payment can also support better family connections to health services and community services that support health and development.

The State's commitment to the medical home is further exemplified in the PCMH Plus program,[39] which Medicaid rolled out in 2017 to primary care sites interested in expanding care coordination and participating in a shared savings arrangement. Sites have reported that the flexibility provided by per-member, per-month payments allows them to increase their capacity to use new providers, including community health workers and care coordinators, to better deliver care. While results as to how shared savings from PCMH Plus may enable innovation in primary care sites are still pending, the State's pathway for reforming payment is now well established. The recommendations from the Pediatric Primary Care Payment Reform Study Group are feasible and credible in Connecticut's health care financing future.

Cross-Sector Care Coordination

Care coordination is a central tenet of the State's PCMH and PCMH Plus initiatives, and is also on the agenda for Primary Care Modernization. The **2009 Framework** recognized the increasing numbers of systems and services that were adding coordinators. While the number of care coordinators continues to grow, the lack of collaboration among coordinators from diverse sectors has contributed to continued fragmentation of services across the state, leading to families' frustration and redundancy of efforts and costs. The challenge of "coordinating the care coordinators" is addressed by regional care coordination collaborations supported by DPH. The original care coordination collaborative model was conceptualized as a central utility, whereby existing care coordination from multiple sectors could bring efficiency to service linkage, thereby better meeting families' needs across the entire array of community services. As primary care sites and their networks are increasingly held accountable for care coordination, they may be challenged to delegate this function or even contract this work to an outside agency. As new models for addressing population health are rolled out by SIM, the "coordination of care coordination services," as exemplified by the care coordination collaborative model, may be a strategic approach to align efforts, increase efficacy and efficiency, minimize redundancies, and reduce costs.

Child Development Infoline and Help Me Grow

The most efficacious interventions to promote healthy development target vulnerable children who are at increased risk of, but do not yet manifest, delays, disorders, and diseases. These interventions tend to be less expensive and more widely available. An example of such an intervention is Help Me Grow,[40] a system that navigates the array of services for vulnerable children and their families to ensure linkages to services that meet family needs, do not have eligibility requirements that preclude participation, and respect families' cultural and linguistic preferences. The Help Me Grow system also supports providers by providing a central utility for locating services and linking families to them. Cost savings are accrued by optimizing efficiencies and reducing redundancies that are secured by engaging all sectors critical to addressing families' priorities and enabling cross-sector collaboration through such initiatives as Connecticut's care coordination collaborative model.

Connecticut's care coordination support for children and families can be greatly enhanced with renewed efforts to integrate United Way's 211 Child Development Infoline (CDI)[41] and Help Me Grow into the continuum of care coordination services and bring these programs to scale and impact. CDI, a centralized call line within the larger United Way 211 Information and Referral system, provides linkage for families to early intervention, preschool special education, and specialty and community services across the entire state. Families and providers can access developmental information, eligibility evaluation for early intervention services, and community-based programs and services by calling CDI. When callers' concerns do not warrant referral for formal early intervention evaluations, care coordinators at CDI can help families access publicly and privately funded services through the Help Me Grow system. With parental permission, CDI will inform the child's primary care provider about referrals and linkages made.

CDI maintains an up-to-date database of community resources that support children's health and development. When callers contact CDI, a care coordinator speaks with the family to ascertain their needs, investigates relevant and helpful resources, ensures that resources can accommodate the family or child in a timely manner, and facilitates families' linkage to services. Such referral and linkage is a daunting challenge for a busy primary care practice to undertake independently. CDI's centralized services support providers across a variety of sectors, including primary care, specialty medical services, early care and education, schools, churches and synagogues, and family resource centers. CDI can serve as a nexus for better organizing diverse care coordination services to meet family's needs and efficiently use resources.

Office of Early Childhood

In 2013, Governor Dannel Malloy recommended and the Connecticut Legislature approved consolidation of early childhood services into one new agency, the Office of Early Childhood (OEC).[42] OEC is designed to ensure the best outcomes for Connecticut's children by developing the policy and state infrastructure to support coordinated delivery of services to the State's most vulnerable children. The establishment of OEC enabled closer working relationships among home visiting, early intervention, child care, and preschool education. The new agency also provided a unified voice for young children at the State level and among State-level programs and services. While health and related services relevant for young children are not specifically within the purview of OEC, the agency collaborates with such State departments as Children and Families (DCF), Public Health (DPH), and Social Services (DSS).

CHDI-OCCH Partnership

The CHDI-OCCH partnership remains committed to system building in Connecticut to ensure the health and development of the next generation of citizens. This partnership supports individual pediatric sites with education, quality improvement, and technical assistance in applying best practices and better use of community resources to deliver optimal care to children and their families. CHDI and OCCH collaborate in providing leadership for, and critical input to, State health reform and ongoing State agency sponsored programs, including those overseen by OHS, OEC, DSS, DPH, and DCF. At the national level, the partnership has advocated for the inclusion of children in federal health reform, including efforts to strengthen such public initiatives as the Early Childhood Comprehensive Systems initiative; Maternal, Infant, and Early Childhood Home Visiting programs; Learn The Signs. Act Early; Birth to Five, Watch Me Thrive; Project LAUNCH; and the Race to the Top Early Learning Challenge. CHDI and OCCH have supported the evolution of such privately supported initiatives as the "Pediatric Big Bet" and its focus on child health services transformation. CHDI and OCCH have recently informed the CMS design of the child-specific Integrated Care for Kids (InCK) model and will provide technical assistance to states preparing applications for funding. Both entities supported implementation of the recommendations from the **2009 Framework** and are prepared to support the recommendations put forth below, reflecting new considerations, the current health care environment, and continued dedication to the well-being of children.

VI. 2019 FRAMEWORK RECOMMENDATIONS

To achieve their potential impact, child health services must be reorganized to better promote population health, health equity, and children's optimal health, development, and well-being.
Pediatric primary care is a uniquely universal vehicle for engaging and supporting children and their families, especially young children. Reform in health insurance practices and payments can support incremental improvements in primary care by offering financing flexibility not possible through fee-for-service contracts. Many of the dollars needed for new payment models are in the system but not optimally deployed. Reimbursement predominately supports visits and procedure-based services with no margin to strengthen practice infrastructure to support new capacities, such as group visits, home visiting, or team-based service delivery. Children and families will benefit even more from pediatric primary care if it is reorganized to enhance protective factors, strengthen families' capacity to nurture their children, and address families' priorities for social determinants of health.

Without all payers, commercial and public, supporting the transformation of pediatric primary care, practices cannot realize significant change, as their efforts will be only for a subgroup of their patients. Furthermore, given the myriad of inevitable changes in patient/payer relationships over the years and across the lifespan, if all payers collectively engage in and support health care transformation, they will collectively benefit, in both the short- and long-term, from advancing the health and well-being of the population as a whole.

Pediatric primary care payment reform will, at best, support incremental progress in population health. For more substantive change, efforts in Connecticut must consider child health services and pediatric primary care within a comprehensive system of services for children and families that strengthens families and addresses social determinants of health. As previously noted, the primary drivers of children's optimal health, development, and well-being are social, environmental, behavioral, and genetic/epigenetic factors. Furthermore, families are children's primary source of nurturance, support, and education. A comprehensive system, with "all sectors in" and "cross-sector collaboration" must ensure that children and their families can access services with optimal efficiency and efficacy and minimal redundancy. A well-designed and deployed linkage infrastructure can ensure this. Connecticut has such an infrastructure and has the opportunity to bring such evidence-based innovations as Help Me Grow, United Way 211 Child Development Infoline, and the Care Coordination Collaborative model to scale and impact. Strategies deserving consideration include greater investments in social services, a reconsideration of eligibility criteria for State-supported programs and services to include vulnerable children at risk for developmental and behavioral concerns, and the braiding and blending of financing to bring efficiency to service provision, as demonstrated by CDI, a prime example of multiple agencies and sectors pooling their linkage dollars to support a central point of entry for development services and information.

We enthusiastically highlight five specific activities that should serve as next steps and the starting point for enacting a new Framework.

1. Engage Payers in Projects to Transform Child Health Services:

Support the State's health insurers participation in a demonstration project that transforms child health services and, specifically, pediatric primary care, by supporting efficacious innovations and interventions that, in collaboration with community services, strengthen families to promote children's optimal health, development, and well-being. The work of the Pediatric Primary Care Payment Reform Study Group outlines specific ways that primary care can make a larger contribution to children's health and well-being. A multi-payer demonstration project can yield important findings that inform universal support for, and adoption of, key services, such as cross-sector care coordination, promotion of the protective factors to promote resiliency, use of nutritionists to establish optimal feeding practices, universal home visiting, and group well-child care.

2. Blend Funding and Across Sectors:

State agencies with early childhood responsibilities and authority (eg, Department of Social Services, Department of Public Health, Office of Early Childhood, Department of Children and Families) can convene with commercial insurers and philanthropic organizations to design and develop a childhood health care system that braids and blends available public and private dollars in support of children's health and well-being. Further, funding should be provided to ensure linkage of children and families to services through United Way 211 Child Development Infoline and regional care coordination collaboratives, and to develop and sustain linkages between primary care services and community -based resources for children of all ages.

3. Measure Return on Investment:

The Office of Policy and Management can develop the capacity to perform return on investment and other financial analytics that consider services across agencies and service sectors and monitor the short-, medium-, and long-term cost savings, cost benefit, and return on investment from an expanded health promotion system for all children.

4. Coordinate the Care Coordinators:

Care coordination services for children and their families can be centralized and brought to scale statewide through the strengthening of regional care coordination collaboratives. These collaboratives, currently supported by the Children and Youth with Special Health Care Needs program in DPH, would benefit from expanded support and collaboration with other service sectors that provide care coordination. A comprehensive care coordination system could cross-train care coordinators to work within a variety of disciplines and share training and resource materials to improve linkage to services and create seamless systems of care for children.

5. Embrace a New Concept of Outcome Measurement:

"What gets measured, gets done." Therefore, a strength-based approach to child and family services, such as the Strengthening Families Protective Factors Framework, should be embraced by all State agencies and their programs and services to measure their impact on families and to promote the optimal health and development of all children. Further, State monitoring must consider outcomes across service sectors recognizing that what happens in health care services has implications for school readiness, school success, and lifelong health.

These recommendations are feasible and their implementation is within reach in Connecticut. The State's Medicaid program, Office of Health Strategy, Departments of Public Health and Children and Families, and Office of Early Childhood have all taken some steps to support a better future for Connecticut's children. Integrating efforts and actions to build a truly comprehensive system to strengthen families to promote their children's optimal health, development, and well-being must be embraced as a shared vision across all agencies and among public and private organizations. Our children and society deserve nothing less.

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