

A group of diverse children, including a young girl in the foreground with curly hair and a boy in a striped shirt, are smiling and laughing joyfully. The background shows other children, creating a warm and happy atmosphere.

Addressing Social Drivers through Pediatric Value-Based Care Models: Emerging Examples and Promising Approaches



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INTRODUCTION

The prenatal period and early childhood build the foundation for optimal health and wellbeing across the lifespan.^{1,2} Exposure to certain stressors in the early years can impact long-term social, cognitive, emotional, and physical development in children.^{3,4,5} Health systems, working collaboratively with community partners and families, play a vital role in promoting children’s healthy development and addressing their health-related social needs at the individual and community level.^{6,7}

Across the health system, efforts to achieve greater value and improve health outcomes are accelerating although best practices, financing, and policy alignment are still emerging. Among children under age 6, 44 percent rely on Medicaid for their health insurance. Medicaid, along with the Children’s Health Insurance Program (CHIP), serves four out of five young children in poverty.⁸ These programs therefore offer great potential to influence children’s physical and mental health and wellbeing. In December 2019, the Center for Medicare and Medicaid Innovation (CMMI) announced \$126 million in funding for eight awardees to implement the Integrated Care for Kids (InCK) model. The InCK initiativeⁱ and other innovative efforts from states and organizations create an exciting opportunity to advance integrated, child-centered delivery and payment models that aim to reduce expenditures in the long term; and improve the quality of care for children by addressing underlying health and social needs (e.g. access to healthy food, stable housing, transportation, high-quality education, and freedom from poverty and adverse childhood experiences).⁹

This brief highlights a growing body of work on pediatric value-based payment (VBP) and integrated care delivery models that address social determinants of health (SDOH), defined by the World Health Organization as “the conditions in which people are born, grow, live, work, and age” and “the fundamental drivers of these conditions.”¹⁰ It highlights the current state of the field by offering bright spots presented through a framework of essential building blocks that create a supportive and enabling context for transformation. These building blocks are nested amid mutually reinforcing topics emanating from a literature review, interviews (Appendix), a convening of key thought leaders co-hosted by Nemours Children’s Health System (Nemours) and Duke-Margolis Center for Health Policy (Appendix of brief 2), as well as insights from a two-year Collaborative on Accountable Communities for Health for Children and Families.ⁱⁱ A companion brief presents recommendations to further promote transformative value-based payment and integrated care models for children. The audience for both briefs includes InCK awardees, other pioneering states, payers, health system leaders, and policymakers interested in testing integrated value-based models that address social drivers to improve the health of children in Medicaid and beyond, as well as thought leaders and public/private funders focused on health.



ⁱ <https://innovation.cms.gov/initiatives/integrated-care-for-kids-model/>. The CMS Innovation Center announced the selection of eight awardees for the Integrated Care for Kids (InCK) Model in seven states. This seven-year model is a child-centered *local service delivery* and *state payment model* aimed at reducing expenditures and improving the quality of care for children covered by Medicaid and the Children’s Health Insurance Program (CHIP).

ⁱⁱ [The Collaborative on Accountable Communities for Health for Children and Families](#) was organized by the National Academies Forum for Children’s Well-Being under the leadership of Nemours Children’s Health System and Mental Health America. This brief is not endorsed by the NAS C-CAB forum or any of its members.

BUILDING BLOCKS

Six building blocks are described for consideration in the design of transformative, integrated pediatric models that address social drivers. The impact of model design to achieve equity should be considered across each building block. The building blocks are: 1) multi-sector partnerships with shared goals and metrics and financial alignment across sectors; 2) alternative payment and delivery models; 3) cross-sector data infrastructure; 4) workforce redesign; 5) patient and community engagement and equity; and 6) policy and practice accelerators. This is not to suggest that these are the only factors in a comprehensive approach to value-based care for children. The selected building blocks emerged as the key, common elements after reviewing bright spots from across the country. This brief describes each, providing more detailed descriptions on payment model design and cross-sector data infrastructure, given the complexity of those topics.

Building Block #1: Multi-Sector Partnerships with Shared Goals and Metrics and Financial Alignment across Sectors

Among the key foundational elements to successful integrated models are multi-sector partnerships that promote health equity, are built on trust, and establish shared goals and metrics. Operating at state and local levels, Children’s Cabinets, often organized by governors, and Accountable Communities for Healthⁱⁱⁱ, funded through Medicaid and philanthropy, increasingly are being implemented as partnerships working to align goals and resources. Consensus is high that effective multi-sector partnerships include organizations within and beyond health care as well as community residents.¹¹ Effective multi-sector collaboration is facilitated by support from an “[integrator](#)” entity to convene, align outcomes, and monitor progress. Developing principles and shared goals at the outset through relationship-building across a broad range of stakeholders helps build the foundational trust required for successful and sustainable integrated models. Many communities find that aligning existing resources is a natural outgrowth of shared goals. For example, leveraging community benefit dollars and blending and braiding^{iv} funding across partners can increase impact beyond that which organizations can accomplish alone. Establishing agreement on aligned goals and outcomes is needed to ensure that the design of metrics and population health outcomes leads to shared accountability across partners.¹²

Yamhill Community Care Organization (YCCO) is a nonprofit Coordinated Care Organization serving Yamhill County, Oregon, and surrounding areas. Oregon’s Community Care Organizations are the entities that provide integrated health and health-related services to Medicaid beneficiaries. YCCO has a governance structure built on partnerships among community residents, social service providers, and local health care providers. YCCO also is designated as an Early Learning Hub from the Oregon Department of Early Learning Division, facilitating a more holistic system of collaboration and care across health, social services, and education. Multi-sector community partnerships have facilitated the development of shared goals and are a prominent feature of YCCO’s model. According to CEO Seamus McCarthy, “We were formed by the community and continue to be governed by the community. There is synergy in having early learning professionals at the same table with health care providers; we hear directly from educators about behavioral health and social needs, and it drives our approach.”¹³

ⁱⁱⁱ Accountable Communities for Health (ACHs) sometimes go by different names, but what they share in common are community-based partnerships formed across sectors such as health care, housing, social services, public health, employment training, and economic development to focus on a shared vision and responsibility for the health of the community.

^{iv} *Braiding* coordinates several funding streams to support a single initiative; each funding stream remains a distinguishable strand, tracked and connected back to its original funding sources and reporting requirements. *Blending* pools several funding sources into one flexible funding stream to support an initiative. Pooled funds have one single set of tracking, reporting, and other requirements.

Building Block #2: Alternative Payment and Delivery Models that Address Social Drivers

Integrated Delivery Models:

Transformed child health delivery models, supported by aligned payment models, should include a holistic and two-generation approach to addressing the health, wellbeing, and community conditions of the whole child and family. Efficacious models that address social factors and early relational health (i.e. interpersonal interactions between young children and their caregivers, which can have positive impact on a child's healthy development)¹⁴ are critical to optimizing a child's development and wellbeing and will require clinical practice changes, particularly in the primary care setting, as well as multi-sector system alignment to deliver seamless services and address underlying community conditions such as food insecurity, poverty, and inadequate housing. More widespread adoption of such integrated delivery models will require financing that enables and incentivizes providers to pursue primary care practice transformation to incorporate Pediatric Medical Home models and work with partners to become high-performing health neighborhoods.¹⁵

Alternative payment models (APMs) designed specifically to address the comprehensive needs of children (physical health, behavioral health, social needs) are a critical component of transforming health care to address the social drivers of health. Within the APM framework from the Health Care Payment Learning and Action Network ([HCP-LAN](#)), a range of payment models are being tested for child health that acknowledge or include the social drivers of health. Because the breadth of potential payment models is large, we highlight the following promising approaches for addressing whole child health based on the literature and existing model structures: care delivery structures that are traditionally paired with APMs (accountable communities for health and accountable care organizations) and two payment structures (bundled payments and population-based payments). Finally, the design of such models, ideally multi-payer initiatives, should take into account special considerations for children with regard to risk adjustment, quality measure selection, and attribution that accounts for churn.



Accountable Communities for Health (ACHs):

An Accountable Community for Health (ACH) is an emerging cross-sector population health model that incentivizes enhanced clinical–community partnerships and shared responsibility to improve health outcomes and reduce costs.¹⁶ A distinguishing characteristic of ACHs is that the target population is defined by geography, such as a county or neighborhood, rather than the institution where patients seek care, as is usually seen in ACOs. ACHs rely on integrator functions and employ multiple building blocks described here. ACHs may also include a novel strategy to braid or blend health and social resources through pooled financing mechanisms, such as local Wellness Trusts. ACHs are being piloted through the CMMI Accountable Health Communities Model, state-level initiatives such as in Washington and Oregon, and privately funded endeavors, such as the California Accountable Communities for Health Initiative ([CACHI](#)).¹⁷ Some ACHs focus directly on children, such as All Children Thrive in CACHI; others focus on health conditions through a lifespan approach. ACHs with a primary focus on children remain relatively nascent in design and implementation. The InCK model will test child-focused ACH models for Medicaid-insured children under 21 years of age.

Accountable Care Organizations (ACOs):

ACOs are groups of doctors, hospitals, and/or other health care providers organized to deliver coordinated care at lower cost and share in the savings achieved through a risk-bearing contract.¹⁸ The vast majority of ACO models to date have been adult-focused and do not integrate partners and services for children's health-related social needs; nor do they incorporate a two-generation approach to services.¹⁹ In a published series of case studies of early adopters of pediatric ACOs and a convening, leaders call for the development of pediatric-specific financial models to support pediatric ACO development.²⁰ Participating pediatric ACOs noted the need for upfront capital to support healthcare transformation for children, often provided by large children's hospitals or Centers for Medicare and Medicaid Services (CMS) awards. ACOs can be designed to include only children (for example, the Children's Hospital of Orange County operates a pediatric-specific ACO), or children can be included as part of a broader ACO with child and adult members.



Bundled Payments:

Bundled payments have been implemented in the adult and Medicare populations to incentivize value-based care²¹ for specific conditions (e.g., knee replacement) while similar arrangements for children have lagged. Bundled payment models under current consideration focus on high-cost pediatric conditions, such as asthma²² and maternal/early childhood,²³ both of which can include components to address social drivers of health (e.g. home remediation, such as removing moldy carpets for children with asthma). Bundled payments offer a more focused entry point for payment innovation as entities move towards more comprehensive value-based models of care and payment.

Population-Based Payments:

Population-based payments refer to fixed or capitated payments made to health care providers based on benchmarked expected costs for an identified population.²⁴ These arrangements give health delivery systems greater flexibility to make investments, such as those related to providing social services, independent of fee-for-service constructs. In the current roadmap to VBP arrangements,²⁵ global population-based payments are the most advanced form of value-based payment, identified as LAN Category 4 in the HCP-LAN framework. Some states, such as California, have been operating with capitated payments for over two decades, although strategies to address social services and associated risk factors remain more limited.²⁶

Arizona Health Care Cost Containment System includes alternative payments that operate at both managed care organization (MCO) and provider levels. APM incentives and penalties, including capitation withhold, are tied to performance on a range of quality measures and a requirement for achieving 60 percent VBP (will increase to 80 percent in the future) through provider contracts. Incentive payments total \$80 million that MCOs earn back through seven metrics, four of which are child-based. Specialized population initiatives under the overall value-based payment umbrella includes an incentive for utilization of Centers of Excellence that implement evidence-based practices and track outcomes for children with special health care needs.²⁷

Some states require their MCOs to make investments in the community to strengthen the capacity of community-based organizations to provide social services or otherwise address the non-medical factors that drive health outcomes. For example, Arizona requires its MCOs to reinvest 6 percent of any profits back into their communities, giving them broad discretion to identify appropriate investments. North Carolina's draft Medicaid managed care contract encourages MCOs to make voluntary investments in community-based resources to address social factors. If they do so, they can count these contributions in the numerator of their medical loss ratio (MLR).²⁸

Additional Considerations for Child Health:

Quality Measure Selection

The quality measures selected in APMs are another critical component as a health system's performance on quality benchmarks can drive consumer demand and have an impact on payments. If child-focused quality measures are used, measures are most commonly selected from the "child core" set, the majority of which rely on claims-based utilization metrics (e.g. percent of children with well-child checks or immunizations).²⁹ The InCK model will require the use of some of these traditional metrics along with more cross-sector measures, such as kindergarten readiness, chronic school absence, and food and housing insecurity.

Risk Adjustment

Risk adjustment models produce an adjustment factor for each patient based on factors, such as diagnoses and age, that inform cost benchmarks. The most common risk adjustment algorithms have been developed among adult cohorts, such as Medicare CMS-Hierarchical Condition Category risk adjuster or the Chronic Illness and Disability Payment System.³⁰ Recalibrated algorithms are needed specifically for pediatric populations, including those that account for social drivers of health, health disparities, and a two-generation approach.

Alongside traditional risk adjustment practices, some states are developing enhanced risk adjustment models that account for social determinants of health. In Massachusetts, ACOs and community partners (CPs) work in tandem to address SDOH through four strategies:

- 1) Requiring ACOs and CPs to identify health-related social needs (HRSN) for every member;
- 2) Incentivizing and measuring HRSN screening rates, tied to ACO accountability;
- 3) Adjusting for social risk in payment and quality measurement by including administrative social risk data in risk adjustment models³¹; and
- 4) Providing targeted housing and nutrition services through the Flexible Services Program (financed through the state's Delivery System Reform Incentive Payment Program waiver). Additional work is ongoing to develop a future value-based payment strategy specifically accounting for child health focused on healthy development, family and community determinants, and savings over a longer time horizon and across sectors.

Another social-factor risk adjustment model in Minnesota is being fine-tuned and draws from six social indicators from county-based data, including caregivers receiving mental health or substance abuse treatment and a foster care measure. Risk adjustments are being further developed and refined with consideration for what health systems and community organizations can address for more meaningful measures selection. Children's Minnesota is leveraging a Community Connect platform to deliver on these new SDOH requirements, working towards connecting patients to services in addition to identifying needs through screening.³²

Attribution

Because cost and quality benchmarks are determined based on the attributed population, which children are attributed to a model is a critical factor for consideration. Child attribution, as for adults, is likely to be driven primarily on selection or documentation of a primary care provider, although these data are sometimes unavailable.³³ Attribution for children using specialty care requires additional contemplation because children access specialty care differently than adults; pediatric specialists are fewer and more geographically concentrated around large medical centers, resulting in some families traveling further distances for specialized care.³⁴ Patterns of specialist availability, in-network coverage, and family travel could be particularly important considerations for children in geographically defined models, such as Accountable Health Communities.



Building Block #3: Cross-Sector Data Infrastructure

Value-based care models that reach beyond the traditional health care sector rely on data infrastructure across multiple levels and sectors.³⁵ To date, cross-sector data-sharing systems that connect health care and community organizations are not consistently available or financed; and in some cases, data may be unreliable. These data gaps present significant hurdles for the successful design and impact of value-based models for children.³⁶ For example, definitions for data measures and benchmarks, data collection methods, and data reporting structures are not typically aligned or compatible to support value-based models across systems as disparate as hospitals, schools, child welfare, and housing systems.

Successful whole-child approaches in value-based models require data infrastructure to identify social needs, establish closed-loop referrals to community services, coordinate follow-up, and report on activities and outcomes aligned to the benchmarks and payment arrangements. The challenge of how to collect and use meaningful information from multiple sectors is emerging as a critical focus under value-based models as partners grapple with multiple operational, financing, structural, and privacy challenges.³⁷ To address these challenges, states are beginning to encourage, and sometimes require, the use of standardized screening tools with core data elements and closed-loop referral systems as an element of practice change to support the move to a value-based system. State-level procurement of standardized referral technology platforms are being piloted to solve for disparate approaches and duplicative technology, such as those being pursued in Arizona, Oregon, and Pennsylvania.³⁸ A community or statewide health information exchange can link data sources from various sectors to foster broad participation and gather a more accurate and richer picture of needs, while ensuring robust privacy and data governance. Equity considerations must be embedded in data strategy and design to ensure that the data collected and reported is useful to measuring and reducing disparities, not exacerbating existing inequities.



NCCARE360 emerged from a public–private partnership between the North Carolina Department of Health and Human Services and private sector partners, including the Foundation for Health Leadership & Innovation, Unite US, Expound, North Carolina 211, and United Way of North Carolina.³⁹ It is the first statewide coordinated collaborative care network of health care and human services organizations utilizing a shared technology platform that allows for a coordinated, community-oriented, person-centered approach to delivering care. It is a payer-agnostic platform that streamlines the experience and reduces duplication for families enrolling in services through electronic closed-loop referrals across the state of North Carolina, so all providers use a single system. NCCARE360 allows providers to electronically connect individuals with identified needs to community resources and confirm receipt of service through a feedback loop on the outcome of that connection. To overcome the initial challenge of buy-in and active engagement by community organizations, Unite US employs community engagement managers. This technology platform allows accountability around services delivered, improved accuracy of referrals, a confidential “no wrong door” approach, closed-loop referrals, and reports on individual and aggregate outcomes of that connection. NCCARE360 is currently being phased in by region and will be available statewide by the end of 2020.

Information exchange to link different sets of available data to build a population-level picture is a time-consuming barrier even when partners agree on the goals.⁴⁰ Alongside technological incompatibilities and infrastructure challenges, legal considerations, both real and perceived, can slow progress on data use agreements and data governance in order to protect privacy while supporting the transparent information exchange necessary for integrated care.⁴¹ The Health Insurance Portability and Accountability Act (HIPAA), CFR Part 2, and the Family Educational Rights and Privacy Act (FERPA)^v are often at the core of child cross-sector data-sharing hurdles.⁴² Relying on trusted partnerships and shared goals helps communities and states stay committed and work collaboratively to address complex health and social needs of children and families while still ensuring compliance with these important privacy laws.⁴³ Additionally, some communities have developed HIPAA and FERPA-compliant forms to assist in cross-sector data-sharing.

In Delaware, Nemours has a partnership with school nurses that enables those nurses, with parent/guardian permission, to access Nemours' Electronic Health Records through a web-based portal. Read-only access allows the school nurse to view current medications, diagnoses, treatment plans, and care instructions, as well as appointments or procedures at the Nemours/Alfred I. duPont Hospital for Children or a Nemours duPont Pediatrics office. School nurses may only view a child's records if a parent or guardian has signed a legally compliant [authorization form](#) in advance. For added safety, Nemours tracks of everyone who uses the portal and what they view. Nemours enrolls between 1,400 and 1,700 students/patients into the program annually.⁴⁴ As models like this evolve, two-way information exchange could be explored.



Building Block #4: Workforce Redesign

As programs engage in more comprehensive and value-based models, a diverse, culturally competent workforce is needed to support children, families, and other stakeholders and requires new skills, training programs, and scopes of work.⁴⁵ Workforce redesign for pediatrics includes patient-focused positions such as care coordinators, community health workers, parent navigators, and social workers to address individual health and social needs as well as “[integrator](#)” functions that build and sustain community collaborations and partnerships to more systematically address upstream needs for the entire community. Navigator and integrator roles in the workforce can also facilitate a two-generation or multi-generational approach to simultaneously address the needs of children and their adult caregivers and improve outcomes for the family, building on the lessons of communities that have engaged in this work, for example, through the [Aspen Institute's Ascend Initiative](#).

Local leadership across sectors, including mayors, businesses, and training/vocational programs can partner on overarching economic development and workforce redesign strategies that align with state-level licensing and certification requirements. A diverse workforce that is recruited from, and remains connected to, the community served is required for a holistic, family-centered, and culturally competent approach that is grounded in equity.

^v The Health Insurance Portability and Accountability Act (HIPAA) is a federal law that provides data privacy and security provisions for safeguarding protected health information. The Family Education Rights and Privacy Act (FERPA) is a federal privacy law that gives parents certain protections with regard to their children's education records, such as report cards, transcripts, disciplinary records, contact and family information, and class schedule. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

Addressing Social Drivers through Pediatric Value-based Care Models: Emerging Examples and Promising Approaches

To support systems that provide integrated, whole-person care, new workflows and organizational policies for the workforce are needed. Examples include accommodating screening for social needs, team huddles, team-based chronic disease management, home or community visits, and health coaching.⁴⁶ Training programs and an ongoing quality improvement approach are needed to support workforce redesign that builds systems to support clinical standard work, address social needs, recognize and reduce disparities, integrate the role of community-facing staff, and sustain connections with community partners.



Children's Hospital of Orange County (CHOC), California, is an integrated pediatric health care system affiliated with the University of California, Irvine. CHOC supports a Population Health Division that brings together inpatient, outpatient, after-hours triage, partnership with schools, and connections to the early childhood Help Me Grow team. CHOC has incorporated multiple staff and workflow changes and integrated care between pediatric practices and the hospital. For example, patients are risk-stratified and assigned to a lay care coordinator who helps families navigate the system and work on social needs. Special whole-person care coordinators lead interdisciplinary team meetings with patients and their families where meetings open with "How can we help you?" and focus the discussion on social drivers of health rather than traditional medical care coordination. Additionally, there are five quality improvement managers who are in touch with primary care practices to work on redesign using the LEAN process⁴⁷. One care improvement project focused on asthma action plans and pre-visit chart reviews led to 4,000 fewer emergency department visits.⁴⁸

Partners for Kids, a pediatric ACO at Nationwide Children's Hospital in Columbus, Ohio, is actively pursuing short-term and longer-term workforce strategies, including "grow your own," an initiative to recruit and train the workforce from its own community; grow others' workforce through cross-sector training; address recruitment gaps (e.g. men, multiple languages); partner with high schools and mentor in schools; and participate in learning networks to collectively develop solutions and leverage experiences of others. The program includes an intentional effort to engage non-traditional communities and partners, including those that may have experienced negative interactions with the health system.

A Connecticut study group recommended a newly envisioned health care system in which children's primary care providers would expand two-generation approaches and focus on population health and health equity.⁴⁹ Connecticut's Framework for Child Health promotes the use of payment methods to incentivize the restructuring of pediatric practices by linking payments to a robust set of performance and quality measures that reflect best practices in care delivery for children. This would include embedded family support services, such as behavioral health care; connections to community services, such as assistance with food or housing; and redesigned access to care, such as weekend hours and telehealth visits.⁵⁰ A more holistic approach would provide access to and coordination with non-medical personnel to work with children and parents, such as legal consultants, nutritionists, care coordinators, home visitors, community health workers, developmental specialists, and others.⁵¹

Building Block #5: Patient and Community Engagement & Equity

As states move towards more integrated, value-based systems, engaging children and their families through the promotion of active partnerships will be critical. Most transformation efforts have focused on clinician engagement and behavior change, with incentives for performance that primarily target clinician experience, capabilities, and support.⁵² However, communities and patients are equally or more important in influencing the measures and outcomes for which systems will be accountable, especially as models include more patient-centered outcome metrics over claims-based measures. For more integrated or value-based models, such as AHCs or ACOs, it is critical to rely on patients and families with lived experience to inform strategy, participate actively in care options, and support services to improve health. Leadership and input from families can result in more effective and equitable policies and practices and can have direct positive impact on residents' health through social connectedness and collective efficacy.⁵³

Working with children and families early in a co-design process and throughout implementation is needed to ensure the development of child- and family-centered models. However, authentic community engagement is not yet common practice in health systems or early childhood sectors. Therefore, even where willingness and readiness to engage communities exists, systems are challenged to effectively navigate roles, language, practices, and power dynamics. The Oregon Health Authority produced a guide that compiles best practices for community engagement so that communities can leverage knowledge of what works.⁵⁴ Similarly, the New York Department of Health and Mental Hygiene developed the *Race to Justice Community Engagement Framework* as a practical guide to comprehensive community strategies.⁵⁵ In Connecticut, a child health framework published in 2019 outlines best practices, policies, measures, outcomes, and so forth to create a shared foundation for child health policy work.⁵⁶

Some hospitals and health systems are deepening relationships with community organizing and collaborative integrator organizations to support their increased focus on addressing health disparities and promoting equity; and to bring the voice of lived experience directly into design, governance, and assessment of impact.⁵⁷ In particular, community engagement through an asset-based approach that identifies strengths and increases protective factors is emerging as a best practice. In addition, to address concerns that payment model design could inadvertently contribute to existing or create new inequities, health systems can work with patients and communities to better understand their unique needs and challenges, and ensure that equity-focused metrics used in the payment model measure the impact of the model on accelerating reductions in health inequities.⁵⁸

The Rhode Island Department of Health (RIDOH) is braiding multiple resources to test and support Health Equity Zones (HEZ) across the state. Through a collaborative, community-led process, each HEZ conducts a needs assessment and implements a data-driven plan of action to address conditions that are preventing people from being as healthy as possible. RIDOH provides support to communities to ensure the model is successfully implemented in line with core public health principles and equity goals.

Boston Vital Village is a place-based, community engagement network of residents and organizations committed to maximizing child, family, and community well-being through a collective impact approach between educators, clinicians, social service providers, legal advocates, and residents. The network focuses on the root causes and generational implications of poor health outcomes; and draws on the experience of residents to understand existing data and acknowledge and address community and social context as a social determinant of health. Vital Village builds community capacity through a service learning and leadership model that employs a community-driven solution-finding approach, uses a trauma-informed framework, curates and shares data, and commits to iterative improvement.⁵⁹

Building Block #6: Practice and Policy Accelerators

The overarching policy context at the federal, state, and local levels plays an important role in catalyzing integrated systems to address individual and community health. The state initiatives described in this brief have leveraged a variety of federal and state-level programs and funding streams to support their move to integrated models that address social determinants of health. The two bright spots highlighted in the next section were possible due to a combination of federal and state-level laws and programs, as well as implementation of best practices. The companion to this issue brief will focus more specifically on policy recommendations and best practices.

BRIGHT SPOTS:

Highlighting Integrated Models that Address Social Determinants of Health

The following two examples highlight states that have achieved significant progress in advancing integrated models that address SDOH, including a focus on the pediatric population. Oregon and New York, both of which have been named InCK awardees, demonstrate great progress within many of the building blocks described throughout this brief. The summaries below provide examples of how states can align foundational building blocks to begin long-term transformation efforts inclusive of children and families.

OREGON: Statewide Value through Coordinated Care Organizations

Oregon leverages health and education federal and state programs, funding streams, and laws to catalyze transformation and improve child health outcomes. Oregon has promoted advanced health system transformation with support from successive Section 1115 Medicaid waivers (2012-2017 and 2017-2022) and a State Innovation Model award from CMMI (2013). As part of its 1115 waiver and supported by state legislation, Oregon Health Plan (Medicaid/CHIP) developed risk-based contracts to 15 local Coordinated Care Organizations (CCOs), networks of physical, behavioral, and oral health providers that have achieved \$2.2 billion in avoided cost.⁶⁰ A portion of the CCO payments is set aside for shared savings based on performance on statewide benchmarks and improvement targets. For example, in 2019, there were 18 metrics, including six child-specific metrics such as developmental screenings, adolescent well-care visits, and assessments for children in Department of Human Services custody. The state is developing a suite of health system measures of kindergarten readiness, with the first measures to be implemented within the incentive metric program in 2020. Incentive metrics are revised every year via a government-approved committee. Oregon is also developing an SDOH metric to capture both screening and referral data with anticipated implementation in 2023.

Oregon has implemented a second iteration of value-based payment models outlining specified target increases of the portion of CCO payments to be paid to providers in value-based arrangements. Some of these value-based payment models will have a child-specific focus, with CCOs expected to develop children's health and maternal health care value-based payment models.



The CCOs utilize many of the building blocks described above as central features of their model. For example, sustained multi-sector partnerships, increasing value-based payment contracts with providers, data measures addressing SDOH, community health worker staff, and robust patient and community engagement are all part of CCO operational priorities. Oregon is also working to define criteria for a new state requirement that CCOs invest a portion of net income or reserves on services to address health disparities and SDOH.

Additional initiatives in support of child-centered care include work to develop an Oregon Community Information Exchange (Oregon CIE), a data repository of shared community resources that connects health care, human, and social services. A technology platform will support a statewide social services directory, shared risk assessment capabilities, real-time closed-loop referral management, collaborative care plans, and standardized outcomes and data analysis. This tool will increase CCOs' ability to address identified needs within their Medicaid populations, which will parallel Oregon's efforts to offer CCOs medical and social service data alongside the health complexity score they currently receive.

In total, the combination of federal and state funding, commitment from state leaders, and landmark state legislation have together created a fertile foundation for sustained transformation efforts in Oregon that may be informative to other states.

NEW YORK: Medicaid's Waiver Programs and First 1000 Days on Medicaid Initiative

Like Oregon, New York exhibits many of the building blocks described in this brief and has focused on policy as a lever to catalyze transformation. New York has set an ambitious goal of moving 80 percent of Medicaid MCO expenditures into value-based arrangements, which include children, by April 2020. New York's Medicaid program covers 60 percent of children age 0-3 in the state.⁶¹ Through its Delivery System Reform Incentive Payment and value-based payment programs, a clinical advisory group of pediatric stakeholders has recommended a pediatric population-based model with the full continuum of care, from prevention to treatment to care management for children. It targets improvements for healthy children, approximately 90 percent of New York's Medicaid child enrollment.⁶² The state acknowledges that savings, normally a goal under payment reform, will accrue over periods much longer than through yearly VBP contracts and are as likely to be realized in education, child welfare systems, and other sectors before becoming apparent in health care. The recommended child-focused, value-based payment approach is a capitated model, and New York is actively seeking opportunities to test it with managed care plans and primary care providers.⁶³



New York incorporated several key building blocks as part of its First 1000 Days on Medicaid initiative.⁶⁴ For example, a multi-sector partnership of stakeholders developed a 10-point plan to improve child health that is in early implementation. New York has incentivized providers to become Primary Care Patient-Centered Medical Homes and is poised to go farther to ensure that primary care practices serving children build additional capacity for prevention, coordinate social needs as well as clinical care, and integrate behavioral health screening and referral with a two-generation approach.⁶⁵ Workforce redesign is occurring through the deployment of a peer navigator pilot and expansion of home visitors. New York will also be recommending specific population-based and pediatric measures to address social determinants of health.

To promote community engagement, there is a requirement for providers and MCOs to connect with community-based organizations as part of their risk-sharing contracts. The state has also invested heavily in the Statewide Health Information Network of NY, or SHIN-NY, which connects regional health information exchanges, called Qualified Entities, that allow participating healthcare professionals, with patient consent, to quickly access electronic health information and securely exchange data with any other participants in the state.⁶⁶ Specific to children, New York is working on linking medical data to school data, with the state leading efforts to overcome legal barriers of the Family Educational Rights and Privacy Act. The combination of state-level leadership, policy change, and a pediatric focus are setting the foundation for transformation in New York.

CONCLUSION

Child health transformation efforts that center around integrated models addressing social determinants of health are beginning to emerge across the country and exhibit many of the core building blocks described above. This issue brief highlights existing bright spots to address SDOH in Medicaid, primarily at the individual level. While addressing SDOH at the individual level is an important step forward, future efforts to focus on upstream policy and systems changes that affect a broader geographic population will be an important area for further exploration and focus as state models continue to evolve. A complementary brief highlights policy recommendations and best practices to catalyze emerging efforts and potentially stimulate further focus on pediatric transformation in additional states and communities.



Appendix: Health Leaders Interviewed

The authors of this brief interviewed the following individuals in order to spotlight the work occurring in their states. This brief reflects the perspectives of the authors and does not necessarily reflect the perspectives of the interviewees.

1. Renée D Boynton-Jarrett, MD, ScD, Pediatrician, Associate Professor of Pediatrics, Boston University School of Medicine
2. Kelly Crosbie, MSW, LCSW, Director, Quality and Population Health, North Carolina Medicaid
3. Chris DeMars, MPH, Director, Transformation Center, Oregon Health Authority
4. Paul H. Dworkin, MD, Executive Vice President for Community Child Health, Connecticut Children's Medical Center; Founding Director, Help Me Grow National Center
5. Clara Filice, MD, MPH, MHS, Senior Medical Director, Payment and Care Delivery Innovation, MassHealth and Commonwealth Medicine
6. Douglas Fish, MD, Medical Director, New York State Department of Health
7. Seamus McCarthy, PhD, President & Chief Executive Officer, Yamhill Community Care
8. Shelli Silver, MBA, Deputy Director for Health Plan Operations, Arizona Health Care Cost Containment System
9. Mike Weiss, MD, Vice President, Population Health, Children's Hospital of Orange County Health Alliance

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