



# Leveraging Medicaid to Address Social Determinants and Improve Child and Population Health

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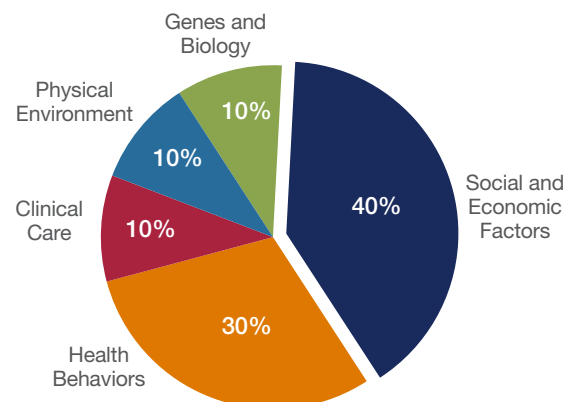
## Key Findings

- Our nation continues to struggle to reduce the cost of health care, or at least slow its growth. It is now widely recognized that addressing the social determinants of health could play a pivotal role in reducing costs while also improving health and decreasing health disparities.
- As the nation's primary insurer for the lowest-income and most vulnerable populations who are disproportionately impacted by social, economic, and environmental conditions, Medicaid has a key leadership role to play to broaden the scope of health care beyond clinical care.
- Innovative efforts are emerging through improved coordination between the health care sector and community-based social service organizations and through payment and delivery system reforms. (See Appendix A for state examples.)
- If these approaches are focused on short-term cost savings, children may be overlooked because they are generally healthy and account for the lowest per-capita spending on health care. Impacting children's trajectory in life will require early intervention and long-term investments to promote school readiness, academic achievement, and economic success as adults.<sup>1</sup>

## Introduction

For decades, health experts have recognized the decisive influence of social and environmental factors on people's health, especially among poor and disadvantaged populations. Visual models showing that medical care has less of an impact on health outcomes than social and environmental factors have been circulating for years. Public health experts find this to be no surprise. From the early days of water sanitation and waste disposal to more modern public health interventions such as water fluoridation, public health experts have known that environmental factors can have an outsized impact on individual health. In fact, social and economic factors may have the largest influence on health (Figure 1).<sup>2</sup> However, efforts in the U.S. to address structural problems in health care systems by controlling health care expenditures and increasing efficiency have done little to tackle the social, economic, and environmental factors that influence health to a much greater degree than medical care.

Figure 1. The Determinants of Health



Source: "Advancing Health Equity in Minnesota: Report to the Legislature," February 2014.



Addressing the social determinants of health (SDOH) has long been a priority for global, national, state, and local public health efforts. But until recently much of the health care delivery system in the U.S. has focused almost exclusively on its role of providing clinical care to individuals. The U.S. spends \$3.3 trillion dollars on health care annually<sup>3</sup>—more than 2.5 times more than any other country. But with studies showing that the impact of medical care on health may be as low as 10 percent, the health care sector is beginning to embrace a new reality—reducing health care costs and improving health outcomes necessitates addressing the root of the problem: SDOH. There is a growing interest among policy experts and health care leaders to explore opportunities to address the social determinants. Recently, Politico reported that a February 2018 Health Affairs summit on health spending included, “*much glumness about all the rainbows and unicorns that have been chased and proved illusory . . . but the topic that got the overflow crowd jazzed...was spending on social determinants of health.*”<sup>4</sup>

What better place to innovate than in Medicaid? After all, it is the single largest health insurer in the U.S. serving more than 74 million people,<sup>5</sup> including the lowest-income and most vulnerable children and families whose health is more likely to be impacted by economic, social, and environmental conditions.

This brief is intended to ground health care advocates on SDOH basics and describe ways Medicaid, in partnership with the health plans and providers that deliver public coverage benefits, can improve the health of enrollees by addressing the SDOH. It provides background and highlights resources that can support advocacy efforts to drive change in how our public coverage programs evolve in order to achieve better health outcomes and reduce health disparities for low-income children and families.



Check out Appendix B for helpful resources to learn more about how Medicaid is and can be leveraged to address the SDOH.

## What are the social determinants of health?

Social determinants of health are most often defined as the conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources: complex issues that need to be addressed at multiple levels.<sup>6</sup> Importantly, SDOH are largely responsible for health disparities and inequities.

Affordable housing, economic security, safe neighborhoods, and access to adequate and healthy foods are major factors that impact the health of low-income children and families every day. Medicaid could play an even bigger role in addressing these issues in today’s health policy landscape.

## Leveraging Medicaid to Address the SDOH

### Optional Benefits

States are required to cover certain populations and benefits to be in compliance with federal Medicaid rules and receive federal funding, but there are also many optional benefits that, properly designed, could help address the SDOH. States may select these optional benefits through a state plan amendment or waiver.

Under state plan authority, states may cover case management services to assess the needs of beneficiaries,

identify and track community-based resources, and link beneficiaries to needed services.<sup>7</sup> States may also rely on targeted case management, which allows states to limit case management services to specific populations or regions.<sup>8</sup> Case management programs can be tailored to meet different levels of need, with general case management services provided to healthy children that may experience access barriers and more intensive case



management for children with serious and chronic health conditions.<sup>9</sup> For example, Arizona provides intensive case management services for children in child welfare by establishing low care coordinator to child ratios (e.g., 1:8-10).<sup>10</sup>

States may also establish health homes to provide more expansive care coordination for beneficiaries with two or more chronic conditions, one chronic condition and a risk of acquiring a second, or one serious and persistent mental health condition.<sup>11</sup> Chronic conditions listed in the statute include mental health, substance abuse, asthma, diabetes, heart disease and being overweight; others may be considered by CMS for approval.



Find out whether your state offers case management, targeted case management, and health home services, then look for opportunities to expand or improve these optional benefits.

When designing benefits for children, it is important to bear in mind that Medicaid's required pediatric benefits are broad in scope. Specifically, Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit requires states to provide all children with the medically necessary services they need to grow and thrive. This includes all services for which Medicaid matching funds are available, even if the state typically does not cover such services or only does so for select populations or in select areas. Thus, states are able to cover services for children through EPSDT that, if targeting parents or caretakers, would require a waiver.

## Payment Reforms

Payment reforms can be as simple as rewarding good outcomes on a case-by-case basis or as complex as comprehensive, population-based payment systems. The goal of payment reform is to drive value over volume by rewarding positive outcomes instead of paying for each service delivered. Oftentimes, these payment reforms are thought of in a fee-for-service (FFS) context. That is, moving away from paying per service delivered to global payments based on quality and efficiency.

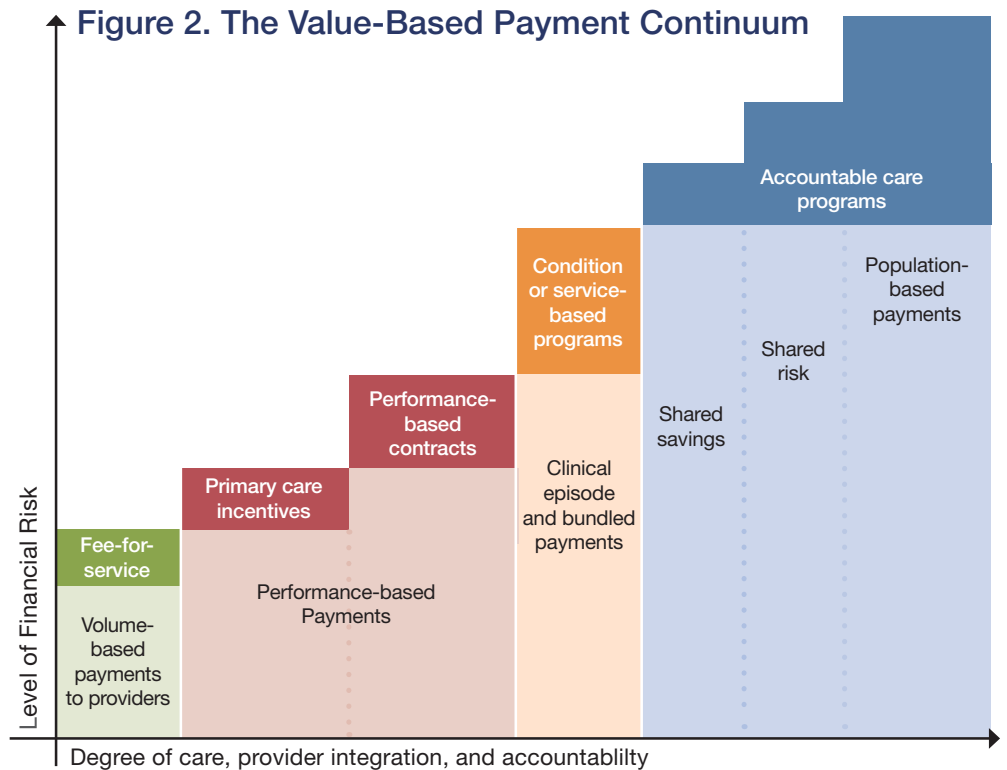
However, three quarters of Medicaid enrollees and nine out of 10 children in Medicaid are in some type of managed care arrangement—either a primary care case management model or comprehensive, risk-based managed care.<sup>12</sup> Simply contracting with a managed care organization (MCO) to deliver care does not mean that payments are value-based. It is important to look beyond how the state pays the MCO into how the MCO pays the provider. It is common in Medicaid managed care for the state to pay the MCO on a capitated basis but for the MCO to pay providers on a FFS basis. Payment reforms originally designed for a completely FFS system can be adapted to Medicaid managed care delivery systems through contractual arrangements. For example, a state could alter MCO payments based on reductions in maternal mortality or improvements in blood lead level screening for children and require the MCO to link provider payments to these outcomes too.<sup>13</sup>

Value-Based Purchasing (VBP) is a broad category of payment reforms intended to align provider incentives to deliver high quality care by rewarding value/quality instead of volume/quantity. The four most common VBP approaches in Medicaid are:

- **Pay-for-performance:** provider payments are tied directly to specific indicators of quality or efficiency, including rewards for positive outcomes and/or penalties for not meeting specific metrics;
- **Clinical episode/bundled payments:** provider payments for multiple services are linked to quality outcomes and bundled based on a certain setting, procedure, or condition;
- **Shared savings/risk:** providers are paid retrospectively based on cost and quality performance and a portion of any savings achieved for keeping costs below a specified benchmark are passed down; and
- **Capitation/global payments:** providers are paid prospectively on a per member per month basis and can invest in quality improvement to improve efficiency but bear full financial risk for any excess costs.<sup>14</sup>



The design elements get more complex for more integrated approaches, but some key elements to successful VBP models are: selecting a target population, identifying the services to be included, defining the financial and quality performance measurement approach and goals, assigning patients, and adjusting for various risk factors.<sup>15</sup> The model to the right shows the range of Medicaid payment models that span the VBP continuum (Figure 2).<sup>16</sup> The goal of many current payment reform initiatives is to move more in the direction of accountable care programs that link global provider payments to desired quality outcomes.



Source: Adapted from CMS IAP Webinar.

## Delivery System Reforms

As payment reforms have developed over time, newer, more complex models of care have emerged. These models aim to change both how medical services are paid and how care is delivered in order to improve population health. The Affordable Care Act (ACA) promoted a shift to more integrated care models like Medicaid Accountable Care Organizations (ACOs). As of January 2018, 11 states are operating Medicaid ACOs and at least another 11 are pursuing them.<sup>17</sup> ACOs can take different shapes, but the core components are: care coordination, value-based payment incentives, provider and community collaboration, quality measurement and accountability, and data sharing and integration.<sup>18</sup> To date, ACOs have tended to limit interventions to an enrolled patient population—e.g., only those patients covered by Medicaid on a particular physician's patient panel—and focus on high-cost, high-need patients in order to show cost savings in the short term. Oftentimes, this means that children are not the target population, with the exception of certain very high-cost children like those with disabilities receiving Supplemental Security Income.

As these models continue to develop and include more geographically defined ACOs (like Colorado's Regional Care Collaborative Organizations, New Jersey's Medicaid ACO demonstration project, and Oregon's Coordinated Care Organizations), children's health may become a higher priority. A focus on children's health can also be incorporated if states require ACOs to partner with certain public health and social services agencies focused on children's health and other family issues, like Maine's Accountable Communities program that partners with nutrition entities.<sup>19</sup>

More recently, the Centers for Medicare & Medicaid Services (CMS) launched the Accountable Health Communities Model to promote clinical-community collaboration by screening community members for unmet health-related social needs, referring them to appropriate community services, and providing navigation services to those at highest risk. The model also seeks to align clinical and community services to make sure they are responsive to community needs.<sup>20</sup> Rather than requiring each model



to develop its own screening tool, CMS developed a tool that includes 10 straightforward questions to assess housing instability, food insecurity, transportation needs, utility needs, and interpersonal safety.<sup>21</sup> Though not specifically targeting pediatric needs, the tool is generally applicable regardless of age or background and the food insecurity measures are modeled on questions recommended by the American Academy of Pediatrics (AAP) for all children.<sup>22</sup> It is also important to note that interventions targeting parent and caretaker populations often have a direct impact on child health. For example, screening for housing instability and connecting parents to more secure housing would improve children's lives too.



Check [innovation.cms.gov](http://innovation.cms.gov) to see whether your state is participating in any payment or delivery system reforms.

There may be an opportunity to include Medicaid and target interventions to help children and families.

## Multi-Benefit Applications and Integrated Eligibility Systems

A different way to leverage Medicaid in addressing the SDOH is through the use of multi-benefit applications and integrated systems that determine eligibility for Medicaid and non-health programs. Through system integration, children and families can receive not only health coverage but also other critical supports including food or cash assistance.

Prior to the ACA, most states used one system to determine eligibility for all Medicaid groups and some non-health programs, such as the Supplemental Nutrition Assistance Program (SNAP) or Temporary Aid to Needy Families. Many of these systems were based on obsolete, mainframe technology that needed to be replaced in order to implement new efficient and accurate ways to verify eligibility electronically. Given the complexity of designing and launching new systems, many states initially built their new systems to determine eligibility only for the non-

disabled groups affected by the ACA. As new systems were first put into place for these groups, states continued to use their old systems to determine eligibility for seniors and individuals with disabilities as well as non-health programs. After successfully launching and refining their new systems, many states began expanding them to include other Medicaid groups and re-integrating non-health programs using ongoing federal funding available for system development and upgrades.<sup>23</sup>

While the federal government picks up 90 percent of the cost of Medicaid eligibility system development, it also provides time-limited flexibility for non-health programs to be integrated into the Medicaid system by paying for only the added cost of integration.<sup>24</sup> As of January 2017, 21 states had re-integrated at least one non-health program into their Medicaid system with more indicating plans to do so in the future.<sup>25</sup> If this flexibility expires on December 31, 2018 as currently slated,<sup>26</sup> it may thwart state efforts to integrate essential programs that can help states support the socio-economic needs of low-income children and families served by Medicaid.



Encourage your state to take advantage of enhanced federal funding to integrate non-health programs into Medicaid systems. States and stakeholders should advocate for additional time to take advantage of the flexibility to integrate non-health programs into their systems.

## Adopting Bright Futures

All states are required to set periodicity schedules to ensure that children receive preventive care and screenings required under EPSDT. A number of states have adopted Bright Futures as the standard for Medicaid's pediatric benefit. Bright Futures is a national health promotion and prevention initiative led by the AAP. The Bright Futures guidelines—which include a recommended schedule for specific screenings,



immunizations, and procedures such as testing for blood lead levels—provide theory-based and evidence-driven guidance for all preventive and well-child visits.<sup>27</sup> The ACA also adopted these standards to guide pediatric preventive care in private insurance as part of the Essential Health Benefits (EHB) package. And now these pediatrician-developed preventive care guidelines for children incorporate recommended screenings for poverty and the social determinants of health.<sup>28</sup> However, the adoption of Bright Futures is not consistent across states, and there may be delays in implementing the new guidelines.



If your state has adopted Bright Futures, work with state officials and your local AAP chapter to ensure that health plans and providers are working to incorporate the new SDOH guidelines into clinical practice.



In states using other periodicity schedules, work with your local AAP chapter and other stakeholders to encourage your state to adopt Bright Futures.

## Improving data in efforts to address SDOH

Data play a critical and multi-faceted role in efforts to address the SDOH.<sup>29</sup> Data help identify populations that are impacted more than others by their social, economic, and environmental conditions. For example, data show zip code is a stronger predictor of a person's health than genetics.<sup>30</sup> Large disparities can be found among pockets of populations that live short distances from each other. For instance, the average life expectancy for babies born to mothers in New Orleans can vary by as much as 25 years across neighborhoods just a few miles apart.<sup>31</sup>

As noted above, payment reforms and new models of care focused on improving health outcomes and reducing costs are leading the health care sector to address the underlying social needs that are root causes of poor health and high health care costs. Collecting and using SDOH data to understand these needs is essential to Medicaid agencies, MCOs, and health care providers in designing and evaluating innovative approaches.<sup>32</sup>

By combining socioeconomic data with health care encounter data and health risk assessments, healthcare organizations can better understand and address risk factors in order to meet the needs of the populations they serve. Collecting data on social risks, including food, housing, employment, and transportation, is key to developing and implementing interventions that can improve health outcomes and lower health care costs.

SDOH data are used in two primary ways: 1) to aid in the delivery of newer care models and 2) to support payment reforms. At the patient level, health risk assessments and socio-economic data are used to target individual patient interventions. Data help to improve care within and across sectors in order to make referrals, facilitate care coordination, and connect individuals to social supports. Data are also a prerequisite in setting provider or capitated rates and making risk adjustment calculations. And data are essential in determining the metrics that will be used in measuring quality and outcomes in order to make incentive payments for performance.

Although various organizations are in the early stages of standardizing data collection and measurement protocols for providers, these nascent efforts have yet to result in uniform measures or a consistent approach.<sup>33</sup> Lacking common definitions and standardized, validated measures, there is considerable variation in how data are collected, used, and reported.<sup>34</sup> But this is not the only data challenge. Other barriers include security and privacy of patient data, IT development costs, securing data sharing agreements across sectors, and a complex array of overlapping state and federal laws.<sup>35</sup> Medicaid, working in partnership with states and other stakeholders, has an important role to play in addressing these challenges and removing barriers to effective use of SDOH data.

To date, there is little Medicaid-specific guidance for collecting SDOH data and supporting the role of state agencies or healthcare organizations in addressing social needs. Assessing and addressing the social determinants of health was noted as a gap area in the 2017 final report on strengthening the Adult Core Set of Healthcare Quality Measures in Medicaid.<sup>36</sup> However, recently, the National Quality Forum (NQF), in collaboration with CMS, convened an Expert Panel to identify a framework for state Medicaid programs to facilitate the collection of SDOH data and the integration of health and non-health services, using food insecurity and housing instability as illustrative examples. This effort produced a set of recommendations to support the connection of health and non-health services that can address SDOH, including information sharing and measurement (see box).<sup>37</sup>

### NQF and CMS Recommendations to Advance the Role of the Health Care System in Addressing the Social Determinants of Health<sup>38</sup>

#### Community and Healthcare System Linkages

- Acknowledge that Medicaid has a role in addressing social determinants of health.
- Create a comprehensive, accessible, routinely updated list of community resources.

#### Information Sharing and Measurement

- Harmonize tools that assess social determinants of health.
- Create standards for inputting and extracting social needs data from electronic health records.
- Increase information sharing between government agencies.

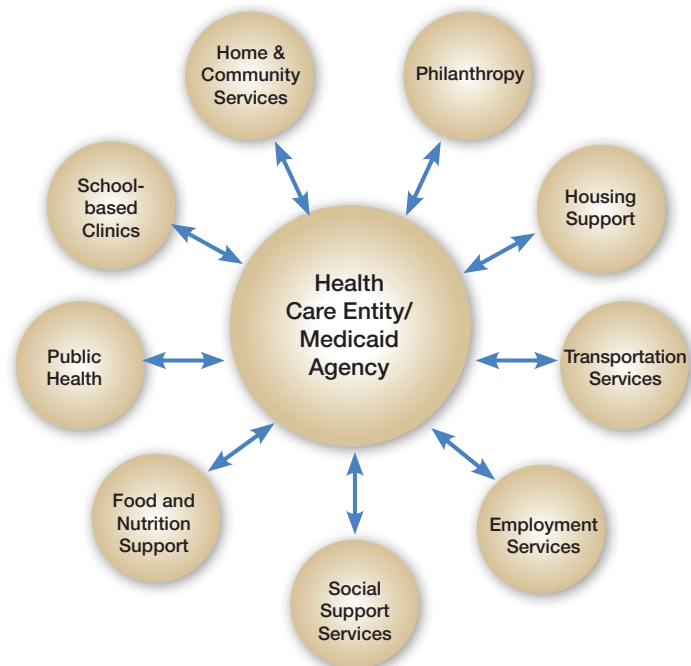
#### Payment Methods and Innovative Use of Resources

- Expand the use of waivers and demonstration projects to learn what works best for screening and addressing SDOH.

## Creating a Framework in Medicaid to Address SDOH

In recent SDOH literature, a “hub and spoke model” is gaining attention. The hub allocates funding to and coordinates activities of the spokes. A key question is whether a health care or other entity should serve as the hub; both models are in practice.<sup>39</sup> It is also a model that is being tested in Accountable Health Communities, a new CMS demonstration project. As discussed above, the project is intended to address the gap between clinical care and community services.<sup>40</sup> Another way of structuring the hub and spoke model is to position Medicaid agencies at the center with community-based organizations as the spokes as suggested by the Expert Panel convened by NQF noted above (Figure 3). However the model is structured, the concept is the same. An entity—a healthcare organization, the Medicaid agency, or a local philanthropy—takes responsibility for coordinating and supporting efforts within the healthcare sector to address SDOH.

Figure 3. Framework for State Medicaid Programs/Health Care Organizations to Address Social Determinants of Health



Source: Adapted from “A Framework for Medicaid Programs to Address Social Determinants of Health: Food Insecurity and House Instability,” National Quality Forum, December 2017.



## Conclusion

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There is growing support for efforts to address the root causes of poor health such as underlying social, economic, and environmental issues, in order to improve health outcomes and reduce costs. A number of promising initiatives to address SDOH within health care settings have been launched, however, many are happening in silos.<sup>41</sup> More can and should be done to develop a broader framework for Medicaid programs seeking to make strategic investments in addressing SDOH and to share lessons learned and promising practices. Medicaid has a critical role to play but cannot shift the system without a solid underlying investment in the social safety net, including funding for housing, nutrition, transportation, and cash assistance.

Health advocates can play an important role by identifying ways to improve care for children and families such as adding optional Medicaid benefits, integrating data systems, and incorporating social determinants of health in screening and care delivery. It is important to advocate for initiatives that focus not only on high cost populations with complex medical needs, but also on low-income children and their families where early investments can lead to long-term results including greater economic success and independence as adults.<sup>42</sup>





## Appendix A: State Examples

There is a growing list of initiatives and demonstration projects involving Medicaid and the social determinants of health. Below is a selection of these but more examples can be found in publications included in the endnotes or highlighted in Appendix B.

### Colorado

In 2007, the Colorado legislature established criteria for pediatric medical homes with the goal of supporting comprehensive, community-based care for children in Medicaid. Several years later, the state built on this work through the development of the state's Accountable Care Collaborative. One of seven Regional Care Collaborative Organizations connects beneficiaries to health care providers as well as social and community services. The concept is to ensure that every individual enrolled in Medicaid has a primary care provider who not only serves as a central point of contact for medical care, but also assesses a person's nonmedical needs.

### Connecticut

In Connecticut, Medicaid transitioned from using capitated managed care arrangements in 2012 to a self-insured, managed fee-for-service approach. The agency has adopted various strategies to connect beneficiaries across programs and address social factors influencing health and health care. The state integrates questions around housing stability, food security, and personal safety as basic elements of its Administrative Services Organization structure and Intensive Care Management. It is based on the concept that members cannot meaningfully engage around health goals if basic human needs are not effectively met. These data are maintained in a fully integrated, statewide Medicaid claims data set.

### Massachusetts

Since late 2016, MassHealth, which includes both Medicaid and CHIP, has allocated payments to managed care organizations according to enrollee social and medical risk. One of the state's innovations was the development of a "neighborhood stress score" that combined a number of variables including income, employment, education, and transportation into a composite measure. Extra payments, or risk adjustments, are made for socially vulnerable enrollees and can be used to fund a variety of activities to address root social and economic issues. Specifically, the model pays an extra \$50 in certain increments associated with what is called "neighborhood stress." In distressed areas, this could give clinicians who serve 1,000 to 2,000 people an extra \$100,000 to support innovations that address the social determinants of health.<sup>43</sup>

### Michigan

Following the public health crisis in Flint Michigan resulting from excessive levels of lead in the water supply, Michigan received CMS approval to address the long-term health impacts from lead exposure for children. The waiver expanded eligibility for higher income children and pregnant women who were impacted and waives premiums and cost-sharing for Flint beneficiaries. The waiver also expands Medicaid targeted case management to coordinate health and related community support services for all Medicaid-eligible children and pregnant women served by the Flint water system.

### New York

New York is cultivating stronger linkages between health and other sectors through a pilot project between Medicaid and The Albany Promise. The project will use Medicaid to reward pediatricians with higher payments for patients who enter kindergarten healthy and ready to learn. New York created the pilot to address the reality that 40 percent of children across the country enter kindergarten unprepared to learn, and school readiness is a powerful predictor of lifetime success. By establishing cross-collaboration between health and education, the pilot seeks to create a foundation for academic performance, improving long-term outcomes in both sectors.<sup>44</sup>

### Oregon

Oregon is working toward improved outcomes for children and families through the transformation of its health and early learning systems. Sixteen Coordinated Care Organizations (CCOs) and sixteen Early Learning Hubs now serve Oregon's children and families. The Oregon Health Authority and the Early Learning Division of the Oregon Department of Education work closely to ensure coordination and alignment between these systems.

### Pennsylvania

The online health and human services programs eligibility system known as COMPASS in Pennsylvania allows individuals and families to simultaneously apply for Medicaid, the Children's Health Insurance Program (CHIP), and the health insurance marketplace, together with programs that administer SNAP, school lunches, child care assistance, and other benefits. There is evidence from a range of social programs that the difficulty of applying negatively impacts enrollment. Multi-benefit applications and integrated eligibility systems can facilitate access.



## Appendix B: Resource List

The resources below were invaluable in the writing of this report, and we encourage interested parties to read them in full as they each have more to offer this discussion.

Two issue briefs prepared at the request of the Milbank Memorial Fund's Reforming States Group to inform policymakers about social well-being and Medicaid coverage for social interventions.

“[Population Health in Medicaid Delivery System Reforms](#),” looks at ways states have incorporated population health goals into Medicaid Accountable Care Organizations.

“[Medicaid Coverage for Social Interventions: A Roadmap for States](#),” shows the options available to states that would allow Medicaid to pay for some social services, recognizing that there are limits on how federal Medicaid funding can be used.

CMS has several resources available on their website.

The [Innovation Center](#) and as part of the [Innovation Accelerator Program](#).

The national learning webinar on [Medicaid Value-Based Payment Approaches and Key Design Considerations](#) is particularly useful to get a sense of how states are approaching payment and delivery reforms in Medicaid, including in Medicaid Managed Care.

The Center for Health Care Strategies, Inc. has a number of useful research reports on addressing the social determinants of health in Medicaid.

A recent [State Update](#) summarizes current state activity implementing Medicaid Accountable Care Organizations with information on general structure in each of the 11 states currently operating a Medicaid ACO.

The data section of this report draws heavily from two publications published by or in collaboration with CHCS: “[Measuring Social Determinations of Health among Medicaid Beneficiaries: Early State Lessons](#)” and “[Population Health in Medicaid Delivery Systems Reforms](#)”.

The Robert Wood Johnson Foundation has focused on the SDOH for some time. You can find a number of resources [here](#).

Two recent blogs in *Health Affairs* also address the role of the health care system in general and Medicaid specifically in addressing the SDOH:

“[Defining the Health Care System's Role in Addressing Social Determinants and Population Health](#)” and “[Why Medicaid is the Platform Best Suited for Addressing Both Health Care and Social Needs](#)”.

The National Quality Forum, in collaboration with CMS, convened an Expert Panel to identify [a framework](#) for Medicaid to support the collection of SDOH data and the integration of health and non-health services that provides a useful example of how initiatives to address SDOH could be better coordinated.



## Endnotes

- <sup>1</sup> K. Wagnerman, A. Chester, and J. Alker, Georgetown University Center for Children and Families, “Medicaid is a Smart Investment in Children,” March 2017, available at <https://ccf.georgetown.edu/wp-content/uploads/2017/03/MedicaidSmartInvestment.pdf>.
- <sup>2</sup> Minnesota Department of Health, “Advancing Health Equity in Minnesota: Report to the Legislature,” February 2014, available at [http://www.health.state.mn.us/divs/chs/healthequity/ahe\\_leg\\_report\\_020414.pdf](http://www.health.state.mn.us/divs/chs/healthequity/ahe_leg_report_020414.pdf).
- <sup>3</sup> Centers for Medicare & Medicaid Services, National Health Expenditure Data, “NHE Fact Sheet,” available at <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html>.
- <sup>4</sup> A. Cancryn, *Politico* Afternoon Pulse newsletter, February 1, 2018.
- <sup>5</sup> Medicaid and CHIP Enrollment Data, November 2017, available at <https://www.medicaid.gov/medicaid/program-information/downloads/november-2017-enrollment-data.zip>.
- <sup>6</sup> O. Solar and A. Irwin, World Health Organization, “A Conceptual Framework for Action on the Social Determinants of Health,” Social Determinants of Health Discussion Paper 2 (Policy and Practice), 2010, available at <http://www.who.int/social-determinants/corner/SDHDP2.pdf>.
- <sup>7</sup> D. Bachrach, J. Guyer, and A. Levin, Manatt Health, “Medicaid Coverage of Social Interventions: A Road Map for States,” July 2016, available at <https://www.milbank.org/publications/medicaid-coverage-social-interventions-road-map-states/>.
- <sup>8</sup> See sections 1902(a)(19) and 1915(g) of the *Social Security Act* along with 42 CFR 440.169.
- <sup>9</sup> S. Rosenbaum, K. Johnson, E. Jones, and A. Markus, “Medicaid and Case Management to Promote Healthy Child Development,” October 2008, available at [https://publichealth.gwu.edu/departments/healthpolicy/DHP\\_Publications/pub\\_uploads/dhpPublication\\_FB044708-5056-9D20-3D1C4A53DFA85EC7.pdf](https://publichealth.gwu.edu/departments/healthpolicy/DHP_Publications/pub_uploads/dhpPublication_FB044708-5056-9D20-3D1C4A53DFA85EC7.pdf).
- <sup>10</sup> S. Pires and B. Stroul, Center for Health Care Strategies, Inc., “Making Medicaid Work for Children in Child Welfare: Examples from the Field,” June 2013, available at [https://www.chcs.org/media/Making\\_Medicaid\\_Work.pdf](https://www.chcs.org/media/Making_Medicaid_Work.pdf).
- <sup>11</sup> D. Bachrach, et al., Manatt Health, “Medicaid Coverage of Social Interventions: A Road Map for States,” July 2016.
- <sup>12</sup> Medicaid and CHIP Payment and Access Commission, Distribution of Managed Care Enrollees by Eligibility Group, FY 2013, available at <https://www.macpac.gov/subtopic/enrollment-and-spending-on-medicaid-managed-care/>.
- <sup>13</sup> D. Machledt, The Commonwealth Fund, “Addressing the Social Determinants of Health Through Medicaid Managed Care,” November 2017, available at <http://www.commonwealthfund.org/publications/issue-briefs/2017/nov/social-determinants-health-medicaid-managed-care>.
- <sup>14</sup> Centers for Medicare & Medicaid Services, Innovation Accelerator Program, Value-Based Payment and Financial Simulations, see <https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/iap-functional-areas/value-based-payment/index.html> and <https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/iap-downloads/functional-areas/vbp-learning-webinar.pdf>, October 5, 2017.
- <sup>15</sup> Ibid.
- <sup>16</sup> Ibid.
- <sup>17</sup> Center for Health Care Strategies, Inc., “Medicaid Accountable Care Organizations: State Update,” January 2018, available at <https://www.chcs.org/resource/medicaid-accountable-care-organizations-state-update/>.
- <sup>18</sup> M. Crawford and T. McGinnis, Center for Health Care Strategies, J. Auerbach and K. Golden, Northeastern University, “Population Health in Medicaid Delivery System Reforms,” March 2015, available at <https://www.milbank.org/publications/population-health-in-medicaid-delivery-system-reforms/>.
- <sup>19</sup> Ibid.
- <sup>20</sup> Centers for Medicare & Medicaid Services Innovation Center, Accountable Health Communities Model, available at <https://innovation.cms.gov/initiatives/ahcm/>.
- <sup>21</sup> A. Billioux, K. Verlander, S. Anthony, and D. Alley, Centers for Medicare & Medicaid Services, “Standardized Screening for Health-Related Social Needs in Clinical Settings: The Accountable Health Communities Screening Tool,” May 2017, available at <https://nam.edu/wp-content/uploads/2017/05/Standardized-Screening-for-Health-Related-Social-Needs-in-Clinical-Settings.pdf>.
- <sup>22</sup> Ibid.
- <sup>23</sup> T. Brooks and K. Wagnerman, Georgetown University Center for Children and Families, and S. Artiga, E. Cornachione, and P. Ubri, Kaiser Family Foundation, “Medicaid and CHIP Eligibility, Enrollment, Renewal, and Cost Sharing Policies as of January 2017: Findings from a 50-State Survey,” January 2017, available at <https://ccf.georgetown.edu/2017/01/12/medicaid-and-chip-eligibility-enrollment-renewal-and-cost-sharing-policies-as-of-january-2017-findings-from-a-50-state-survey/>.
- <sup>24</sup> T. Brooks, Georgetown University Center for Children and Families, “CMS Offers a Sweeter Deal in Trading Up Integrated Eligibility Systems,” Say Ahhh! Blog, August 2011, available at [https://ccf.georgetown.edu/2011/08/11/cms\\_offers\\_a\\_sweeter\\_deal\\_in\\_trading\\_up\\_integrated\\_eligibility\\_systems/](https://ccf.georgetown.edu/2011/08/11/cms_offers_a_sweeter_deal_in_trading_up_integrated_eligibility_systems/).
- <sup>25</sup> T. Brooks, et al., Georgetown University Center for Children and Families and Kaiser Family Foundation, “Medicaid and CHIP Eligibility, Enrollment, Renewal, and Cost Sharing Policies as of January 2017: Findings from a 50-State Survey,” January 2017.
- <sup>26</sup> Federal requirements that require costs associated with shared information technology systems to be allocated across all benefiting programs were waived initially through 2015 and then extended through 2018. The waiver has helped states re-integrate non-health programs by requiring that only the additional cost of integration be paid for by the other program. For more information



see <https://www.medicaid.gov/federal-policy-guidance/downloads/smd072015.pdf>.

<sup>27</sup> American Academy of Pediatrics, Bright Futures, “Recommendations for Preventive Pediatric Health Care,” available at <https://www.aap.org/en-us/Documents/periodicity-schedule.pdf>.

<sup>28</sup> T. Brooks, Georgetown University Center for Children and Families, “AAP’s Bright Futures Takes Step Forward to Incorporate Social Determinants of Health,” Say Ahhh! Blog, April 2017, available at <https://ccf.georgetown.edu/2017/04/03/aaps-bright-futures-takes-step-forward-to-incorporate-social-determinants-of-health/>.

<sup>29</sup> The data section of this report draws heavily from research and findings published by the Center on Health Care Strategies; see reports below by A. Spencer et al. and M. Crawford et al.

<sup>30</sup> H. Heiman and S. Artiga, Kaiser Family Foundation, “Beyond Health Care: The Role of Social Determinants in Promotion Health and Health Equity,” November 2015, available at <https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>.

<sup>31</sup> Robert Wood Johnson Foundation, “Mapping Life Expectancy: Short Distances to Large Gaps in Health,” September 2015, available at <https://www.rwjf.org/en/library/articles-and-news/2015/09/city-maps.html>.

<sup>32</sup> A. Spencer, B. Frida, and T. McGinnis, Center for Health Care Strategies, Inc., and L. Gottlieb, University of California San Francisco, “Measuring the Social Determinants of Health among Medicaid Beneficiaries: Early State Lessons,” December 2016, available at <https://www.chcs.org/resource/measuring-social-determinants-health-among-medicaid-beneficiaries-early-state-lessons/>.

<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

<sup>35</sup> M. Crawford et al., “Population Health in Medicaid Delivery System Reforms,” March 2015.

<sup>36</sup> Measure Applications Partnership, National Quality Forum, “Strengthening the Core Set of Healthcare Quality Measures for Adults Enrolled in Medicaid, 2017,” August 2017, available at [https://www.qualityforum.org/Publications/2017/08/Strengthening\\_the\\_Core\\_Set\\_of\\_Healthcare\\_Quality\\_Measures\\_for\\_Adults\\_Enrolled\\_in\\_Medicaid\\_2017.aspx](https://www.qualityforum.org/Publications/2017/08/Strengthening_the_Core_Set_of_Healthcare_Quality_Measures_for_Adults_Enrolled_in_Medicaid_2017.aspx).

<sup>37</sup> National Quality Forum, “A Framework for Medicaid Programs to Address Social Determinants of Health: Food Insecurity and Housing Instability,” December 2017, available at [http://www.qualityforum.org/Publications/2017/12/Food\\_Insecurity\\_and\\_Housing\\_Instability\\_Final\\_Report.aspx](http://www.qualityforum.org/Publications/2017/12/Food_Insecurity_and_Housing_Instability_Final_Report.aspx).

<sup>38</sup> Ibid.

<sup>39</sup> L. Taylor, A. Hyatt, and M. Sandel, “Defining the health care system’s role in addressing social determinants and population health,” Health Affairs Blog, November 2016, available at <https://www.healthaffairs.org/action/showDoPubSecure?doi=10.1377%2Fhblog20161117.057601&format=full>.

<sup>40</sup> See Centers for Medicare & Medicaid Services Innovation Center, Accountable Health Communities Model, available at <https://innovation.cms.gov/initiatives/ahcm/>.

<sup>41</sup> National Health Quality Forum, “A Framework for Medicaid Programs to Address Social Determinants of Health: Food Insecurity and Housing Instability,” December 2017.

<sup>42</sup> K. Wagnerman, et al, “Medicaid is a Smart Investment in Children,” Georgetown University Center for Children and Families, March 2017.

<sup>43</sup> A.S. Ash, E. Mich, and R. Ellis, “Social Determinants of Health in Managed Care Payment Formulas,” *JAMA Internal Medicine*, August 2017, available at <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2647322?redirect=true>.

<sup>44</sup> National Association of Medicaid Directors, “Medicaid Innovations for Children,” May 2017, available at [http://medicaiddirectors.org/wp-content/uploads/2017/05/Medicaid-Innovations-for-Children\\_5\\_12\\_2017\\_FINAL.pdf](http://medicaiddirectors.org/wp-content/uploads/2017/05/Medicaid-Innovations-for-Children_5_12_2017_FINAL.pdf).

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