

TO: Connecticut Health Care Cabinet  
FROM: Marge Houy, Megan Burns and Michael Bailit  
DATE: August 29, 2016  
RE: Strategies for Addressing Social Determinants of Health

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In response to the increased understanding about the impact on health of socioeconomic factors, the Cabinet expressed concern that the Straw Proposal did not expressly provide strategies for improving health by addressing social determinants of health. The following memo outlines several strategies that states have developed or policy experts are recommending to better integrate health care, behavioral health, social and human services.

### **I. Background**

National statistics document the increased health burden on minority populations compared to whites.<sup>1</sup> To need to reduce these health disparities by addressing social determinants of health is underscored by a growing body of research that is documenting their impact on health. A 2007 study concluded that medical care's contribution to premature death is 10%, whereas behavioral health (including lifestyle choices) contributes 40%, genetic predisposition contributes 30%, social circumstances (e.g., employment, housing, transportation and poverty) contributes 15% and environmental exposure contributes 15%.<sup>2</sup>

Other research has documented that children are particularly vulnerable to the negative impact of social determinants of health because the determinants' impact is cumulative and can lead to poor health and exacerbated chronic conditions into adulthood.<sup>3,4</sup> A child's exposure to a specific subset of socioeconomic and psychosocial events referred to as Adverse Childhood Experiences (ACEs) has been found to have a strong and consistent relationship with significant chronic disease, and to produce an increased likelihood of child engagement in risky behavior which can negatively impact the health and wellbeing of the child.<sup>5</sup> Other studies have found higher incidence of adult heart

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<sup>1</sup> Peterson-Kaiser Health System Tracker: Measuring the Performance of the U.S. Health System.

Available at: <http://www.healthsystemtracker.org/chart-collection/how-do-health-expenditures-vary-across-the-population/>

<sup>2</sup> Schroeder SA. "We can do better: Improving the health of the American people." *New England Journal of Medicine*. 2007; 357: 1221-1228.

<sup>3</sup> Cook J, Frank DA, Berkowitz C, Black MM, et al. "Food insecurity is associated with adverse health outcomes among human infants and toddlers." *J Nutr*. 2004 Jun; 134(6): 1432-8.

<sup>4</sup> A study of children's use of inpatient resources in relationship to ZIP code-based median annual household income associated poverty with greater rates of hospitalization, longer lengths of stay and increased mortality. Jones j, Elder J, Noonan K, Rubin D, Fieldston E. "Shifting the care and payment paradigm for vulnerable children." Policy Lab. Center to Bridge Research, Practice and Policy, Page 3. Evidence to Action, Spring 2015

<sup>5</sup> [www.cdc.gov/violenceprevention/acestudy](http://www.cdc.gov/violenceprevention/acestudy)

disease and behavioral health conditions in children who were exposed to ACEs.<sup>6</sup> Moreover, the percentage of children experiencing one or more ACE increases as income falls, reducing a child's ability to bounce back from traumatic events.<sup>7</sup>

Health inequities are well documented in Connecticut. A recent report stated:

The racial/ethnic background of Connecticut adults was significantly associated with certain poorer health outcomes. Relative to non-Hispanic Whites, Hispanics and non-Hispanic Blacks were more likely to be obese, to lack a personal healthcare provider, to have foregone needed care because of cost, or to lead sedentary lifestyles. Compared to adults of other ethnic backgrounds, Hispanics were significantly more likely to experience poor physical health, be uninsured, and have depression.<sup>8</sup>

In response to these “facts on the ground,” the Connecticut Department of Public Health and the Connecticut State Innovation Model (SIM) initiative both have as a key focus the reduction of health care disparities.<sup>9,10</sup> Both initiatives recognize the impact of factors other than health care, such as inadequate housing, educational challenges and food insecurities, on a person's health and are working to promote cross-agency and community involvement to address social determinants of health to improve the population's health status. The state is also participating in the National Governors Association's High-Cost, High-Need Policy Academy, which is designed to assist governors and their senior staff in establishing or enhancing programs that improve outcomes and reduce cost of health care for people with complex care needs.<sup>11</sup>

Research is providing evidence that addressing social service needs of vulnerable populations can improve health status and reduce health disparities. Various studies have associated the provision of housing vouchers, assistance with covered home energy needs and availability of supermarkets with reductions in extreme obesity,

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<sup>6</sup> Brundage SC. *Seizing the Moment: Strengthening Children's Primary Care in New York*. United Hospital Fund. January 2016.

<sup>7</sup> Halfon N, Wise PH, Forrest CB. “The changing nature of children's health development: new challenges require major policy solutions.” *Health Affairs* 33(12), 2014: 2116-124.

<sup>8</sup> “Health Risk Behaviors in Connecticut: Results of the 2012 Behavioral Risk Factor Surveillance Survey.” Page 11. Connecticut Department of Public Health. April 2014.

<sup>9</sup> “Connecticut State Innovation Model: Operational Plan.” August 1, 2016

<sup>10</sup> For information on Department of Public Health initiatives to identify and reduce health disparities, see Healthy Connecticut 2020, available at:

[http://www.ct.gov/dph/lib/dph/state\\_health\\_planning/shipment/hct2020/hct2020\\_state\\_hlth\\_impv\\_032514.pdf](http://www.ct.gov/dph/lib/dph/state_health_planning/shipment/hct2020/hct2020_state_hlth_impv_032514.pdf)

<sup>11</sup> <http://www.nga.org/cms/home/news-room/news-releases/2015--news-releases/col2-content/states-improve-care-reduce-cost.html>

diabetes and nutritional risk among children.<sup>12</sup> High quality early childhood education has been found to have an ameliorating effect on the cognitive and emotional deficits of poverty and improves the long-term health status of disadvantaged children.<sup>13</sup> Moreover, a recent study found that states with a higher ratio of social to health spending (calculated as the sum of social service spending and public health spending divided by the sum of Medicare and Medicaid spending) had significantly better subsequent health outcomes on seven key measures:<sup>14</sup>

- Adult obesity
- Asthma
- Mentally unhealthy days
- Days with activity limitations
- Mortality rates for lung cancer
- Mortality rates for acute myocardial infarction
- Mortality rates for type 2 diabetes

## II. Challenges

There are significant challenges for medical practitioners to address social determinants of health and they must be identified and considered when developing policy recommendations regarding the role of health care providers in addressing them.

First, social determinants, such as housing and heating assistance are non-medical and outside of the traditional purview of health care practices. In our research<sup>15</sup> we have found that providers recognize their importance, but are often reluctant to assume responsibility for resolving social determinants of health due to their limited ability to influence them.

Second and relatedly, health care funding may not provide necessary resources to the health care practice to identify non-medical social service needs and to provide services, such as care management and care coordination services, to facilitate patient access to social services.

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<sup>12</sup> Bradley EH, Canavan M, Rogan E, Talbert-Slagle K, Ndumele C, Taylor L, Curry LA.

“Variation in health outcomes: the role of spending on social services, public health, and health care, 2000-2009.” *Health Affairs* 35(6), 2016: 760-768.

<sup>13</sup> Bidwell A. “Early Childhood Education Boosts Health, Economic Outcomes.” US News and World Reports. March 28, 2014 and Heckman JJ. “Invest in Early Childhood Education: Reduce Deficits, Strengthen the Economy.” See <http://heckmanequation.org/content/resource/invest-early-childhood-development-reduce-deficits-strengthen-economy>.

<sup>14</sup> Bradley EH, Canavan M, Rogan E, Talbert-Slagle K, Ndumele C, Taylor L, Curry LA.

<sup>15</sup> Bailit M and Houy M. Value-Based Payment Models for Children’s Health Care. United Hospital Fund. July 12, 2016.

Third, for children, parents are an influential social determinant of health. A child's physician may have a limited ability to address parental health and non-health issues that are impacting the child because the parent has a different provider and possibly a different health care plan.

### **III. State Medicaid Models for Addressing Social Determinants of Health**

State initiatives to address social determinants of health in an integrated, holistic manner are relatively new and still evolving. They are all constrained by the challenges listed immediately above. There appear to be several distinct models that are evolving that focus on creating and funding infrastructure to link traditional health care services with social and behavioral health services.

Community Health Teams. Community Health Teams (CHTs) are locally-based, multi-disciplinary groups of care providers that address medical issues and the social determinants of health. CHTs assist with health management and provider-patient communications, assess social and non-clinical barriers to health and connect patients to treatment and social resources.<sup>16</sup>

Vermont is the most advanced in using community-based teams to support all primary care practices within a region by assuring that the highest-need patients are receiving wraparound clinical and social services. These teams are not located within a practice, but are often located within a local community hospital to serve the PCPs within the CHT regions.

The Vermont Community Health Teams include a part-time medical director, registered nurses serving as care coordinators in provider practices and medical facilities, social workers, administrative staff, and a pharmacist. Through the health teams, eligible individuals receive assistance with social service needs and medication management. The teams also manage transitions from emergency department visits and hospital stays to home and community settings. CHTs are funded by Medicare, Medicaid and state's largest commercial payers.

Maine and North Carolina have also implemented state-wide Community Health Teams that have similar structure and approach to that of Vermont. All three states require the CHTs to report data with which the states ensure performance accountability.

Several payment models are being used to support CHTs. Vermont and Maine support CHTs with a multi-payer per member per month (PMPM) payment.

Regional Service Integration Entities. Several states, including Oregon, Colorado, Washington and Utah are at various stages of implementing regionally-based

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<sup>16</sup> Thomas-Henkel, C and Heflin K. Community Care Teams: A Promising Strategy to Address Unmet Social Needs. Center for Health Care Strategies, March 3, 2016.

organizations that are charged with the responsibility for improving the health status of designated lives, which includes reducing health disparities, promoting health equity and improving overall population health. Connecticut's SIM initiative includes plans to promote Health Enhancement Communities that will address environmental and socioeconomic factors that contribute to an individual's ongoing health.

Oregon CCOs, which have been operational since 2012, are required to conduct an annual community health assessment (CHA) and a Community Health Improvement Plan (CHIP), both of which are submitted to the Oregon Health Authority. To meet these requirements, CCOs are encouraged "to explore partnerships that draw on the strengths of partner organizations that are skilled in conducting health assessments and knowledgeable about health disparities in their communities."<sup>17</sup> The Oregon Health Authority provides technical assistance to CCOs in the development of CHAs and CHIPs. A review of the Cascade Health Alliance CHIP for 2014, as an example of what the CCOs are doing to create partnership to address regional needs, reveals that Cascade identified three priorities based on health needs of their region (healthy eating and active living, social and mental well-being, and transportation).<sup>18</sup> In developing these priorities, Cascade worked collaboratively with local hospitals, public health officials and community health centers. To implement their plans to address each priority, Cascade has developed partnerships with such organizations as the YMCA and other fitness clubs, the Oregon State University extension service, county public health departments, developmental disabilities agencies, primary care providers, the Department of Human Services, community corrections entities, NAMI, local activist coalitions, transportation services and behavioral health providers. The Oregon Health Authority collects data from and reports on each CCO's success in reducing health disparities.

The global capitation payment made to CCOs is expected to cover the costs of doing the health assessment as well as developing and implementing the Community Health Improvement Plan. The global payment also provides the CCO providers with flexibility to provide traditionally non-reimbursed services, including care coordination and care management services, and transportation.

Washington State is in the early stages of implementing Accountable Communities of Health (ACHs), which are community-based entities with a core membership of local public health agencies, institutional and individual health care providers, behavioral health providers, social service agencies, and educational institutions. Some ACHs also include employer, labor, faith-based organization, criminal justice and consumer

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<sup>17</sup> Oregon Health Authority. Transformation Plan Element #4: Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP). See <https://cco.health.oregon.gov/Documents/transformation/TP-Guidance-item4-2012-12-18>.

<sup>18</sup> Cascade Health Alliance, LLC. Health Improvement Plan. 2014. See [www.oregon.gov/oha/OHPB/CCOCHIP/Cascade%20Health%20Alliance%20-%20CHIP.pdf](http://www.oregon.gov/oha/OHPB/CCOCHIP/Cascade%20Health%20Alliance%20-%20CHIP.pdf).

representatives. All ACHs are charged with the responsibility of assessing community needs, establishing priorities and implementing at least one project to address community priorities.

One example of a cross-agency initiative being implemented by one ACH is the Youth Behavioral Health Coordination Pilot, launched by Cascade Pacific Action Alliance (CPAA) in 2015. The Pilot project is designed to identify children with behavioral health challenges as early as possible and connect at-risk children with community-based intervention and treatment services. Six schools (including elementary, middle and high schools) in four counties were selected as pilot test sites. An initial work group consisting of representatives from school districts, social services organizations and health care providers selected behavioral health screening tools, identified treatment resources within the region, discussed the roles of school staff and treatment providers, and mapped how these roles would be coordinated on behalf of the children. Then multi-sector work groups in each of the four counties worked to customize project work flows to be responsive to local conditions. By January 2016, implementation had begun in one county and 25 students had been served by a cross-disciplinary intervention team led by a registered nurse care coordinator who works closely with various partners including school staff members, school district nurses, local pharmacies, county youth services, law enforcement, child protective services, and physical and oral health providers.<sup>19</sup>

New delivery system and payment models. Many states and public policy experts are promoting delivery system reform that creates *explicit* expectations for providers to assume formal responsibility for connecting with and making referrals to social service agencies for patients needing these services. Connecticut, among other states, has implemented a Health Home initiative for high risk individuals with chronic conditions. Health home services include comprehensive care management, care coordination, health promotion, comprehensive transitional care, patient and family support, as well as referrals to community and social support services.<sup>20</sup>

We recently authored a report for the United Hospital Fund that proposes a new value-based payment model for Medicaid-funded child health care that recognizes the need to fund infrastructure to address social determinants of health.<sup>21</sup> The model recommends a risk-adjusted capitated payment for most pediatric services plus a per-member-per

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<sup>19</sup> "Building the Foundation for Regional Health Improvement: Evaluating Washington's Accountable Communities of Health." Center for Community Health and Evaluation. January 2016

<sup>20</sup>Heiman HJ and Artiga S. "Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity." The Kaiser Family Foundation Issue Brief, November 5, 2015.

<sup>21</sup> Bailit Health Purchasing, LLC. "Value-based Payment Models for Medicaid Child Health Services: Report to the Schuyler Center for Analysis and Advocacy and the United Hospital Fund.

month payment to fund care coordination services for children within a practice with medical and social risk factors.

With the growing awareness of the importance of addressing homelessness to improve population health, states are utilizing CMS programs to fund referral, support services and case management services that help connect and retain individuals in stable housing. These services can be provided under a range of authorities, including 1915 home and community-based services (HCBS) waivers, the new 1915 HCBS option and Section 1115 waivers. Connecticut Medicaid in partnership with the Partnership for Strong Communities is participating in CMS' Innovation Accelerator Program on Housing Partnerships to implement a housing-support initiative that identifies homeless beneficiaries through a data match between Medicaid and Homeless Management Information System databases and then links high-cost, high-need beneficiaries with multidisciplinary health care and supportive housing services. Best practices for addressing homelessness among Medicaid beneficiaries have been cataloged and discussed by Carol Wilkins, a national expert in issues of homelessness.<sup>22</sup>

#### **IV. Other Approaches**

- “Health in All Policies.” This policy approach requires all decision-makers across different sectors to incorporate health considerations into decision-making regarding policy development and initiative implementation. This approach identifies the ways in which decisions in multiple sectors affect health and how better health can support the goals of these multiple sectors. In 2010, the Governor of California established by executive order the Health in All Policies Task Force with the goal of bringing together 22 state agencies, department and offices to address health-related issues in a coordinated manner. The task force has developed interagency initiatives focused on crime prevention, access to healthy food and active transportation.<sup>23</sup>
- Creating Cross-Agency Accountability. Oregon has pursued a coordinated approach to promoting child well-being. The state’s Early Learning Council and Oregon Health Policy Board have teamed to create a joint subcommittee in order

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<sup>22</sup> Wilkins C. “Improving Care for Medicaid Beneficiaries Experiencing Homelessness: Emerging Best Practices and Recommendations for State Purchasers. Robert Wood Johnson Foundation Issue Brief. September 2015. Available at: <http://statenetwork.org/wp-content/uploads/2015/10/Improving-Care-for-Medicaid-Beneficiaries-Experiencing-Homelessness.pdf>

<sup>23</sup> California Health in All Policies Task Force, California Strategic Growth Council. <http://sgc.ca.gov/Initiatives/Health-In-All-Policies.html>

to produce critical alignment and integration between health care system transformation and early learning system transformation. To that end, Oregon began an initiative to foster joint accountability across sectors with the formation of the Child and Family Well-being Measures Workgroup in 2014. The body was charged with defining a set of shared measures to create joint accountability across health, early learning and human services to improve child health and educational performance. In its 2015 final report the Child and Family Well-being Measures Workgroup adopted definitions of child and family well-being, adopted measure sets, including one for joint accountability across the states early learning centers and coordinated care organizations.<sup>24</sup>

Measure Name
Kindergarten assessment
Kindergarten attendance
Rate of follow-up to EI after referral
Percentage of children less than 4 years of age on Medicaid who received preventive dental services from a dental provider in the year
Well-child visits in the 3rd, 4th, 5th, and 6th years of life
Developmental screening by 36 months
Among CYSHCN who needed specialized services, the percentage who received all needed care

## V. Conclusion

States are pursuing a variety of strategies to better address social determinants of health in an effort to reduce health inequities. Expanding the stated responsibilities of the proposed CCOs is one way of enhancing the straw proposal. Other options, ranging from creating Community Health Teams to implementing episodes of care and other payment and delivery system transformation models to implementing a Health in All Policies initiative within state government are also available.

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<sup>24</sup> Child & Family Well-Being Measures Workgroup: Final Report and Recommendations. Prepared for: The Joint Subcommittee of the Early Learning Council and the Oregon Health Policy Board. September 11, 2015.