



# Enhancing Texas' Health Care Investments by Addressing Patients' Non-Medical Needs

# **Enhancing Texas' Health Care Investments by Addressing Patients' Non-Medical Needs**

Elena M. Marks, J.D., M.P.H., Senior Fellow in Health Policy

Charles W. Mathias, Ph.D., Director of the Texas Consortium for the Non-Medical Drivers of Health

This publication was produced in collaboration with Rice University's Baker Institute for Public Policy. Wherever feasible, this research was reviewed by outside experts before it was released. Any errors are the authors' alone.

This material may be quoted or reproduced without prior permission, provided appropriate credit is given to the author and Rice University's Baker Institute for Public Policy. The views expressed herein are those of the individual authors, and do not necessarily represent the views of Rice University's Baker Institute for Public Policy.

© 2024 Rice University's Baker Institute for Public Policy

# **Enhancing Texas' Health Care Investments by Addressing Patients' Non-Medical Needs**

Elena M. Marks and Charles W. Mathias

## **Executive Summary**

### **Rising Health Care Costs and Declining Outcomes: A Call to Action for Texas**

The unsustainable escalation of health care costs, coupled with declining health outcomes, is diminishing the value of our health care investments. With nearly \$50 billion in annual health care expenditures, Texas has a unique opportunity to enhance the value of its spending by increasing its investment in non-medical services that significantly impact health outcomes.

In recent years, the Texas Legislature and the Health and Human Services Commission (HHSC) have taken steps to advance the integration of health-impacting, non-medical services into health care delivery. However, several additional policy tools are available to the state that could further accelerate this integration, and both the Legislature and the HHSC should actively deploy them.

This report delves into Texas' investments in non-medical services, presents policy options for advancing this work, and provides examples from other states. It concludes with recommendations on pathways for Texas to consider, with the aim of maximizing the value of its health care expenditures.

### **Maximizing Texas' Health Care Investment: The Role of Non-Medical Services**

With an annual budget exceeding \$40 billion, Texas Medicaid represents the largest portion of the state's health care investment. The integration of non-medical services into this joint federal-state program has bipartisan support, highlighting its importance and potential impact.

Medicaid offers several policy tools to cover non-medical services, many of which are in use in other states. These tools, along with incentives for health insurance plans and health care providers, aim to improve beneficiaries' health outcomes by incorporating non-medical services.

Beyond Medicaid, Texas has significant opportunities to advance the integration of non-medical services into its behavioral health programs (\$1.3 billion), women's health

programs (\$150 million), and health programs for state employees and public school teachers (\$3.7 billion).

## Building on Success: Advancing Non-Medical Services in Texas

We recommend that Texas continue to build on its recent successes in integrating non-medical services into health care. Key opportunities within Medicaid include:

- Implementing the Non-Medical Drivers of Health Action Plan.
- Modifying the Directed Payment Programs.
- Expanding the non-medical services under HB 1575.

We also recommend that the state advance non-medical programs targeting priority populations, such as veterans and children, and address critical health conditions like obesity, asthma, and serious mental illness.

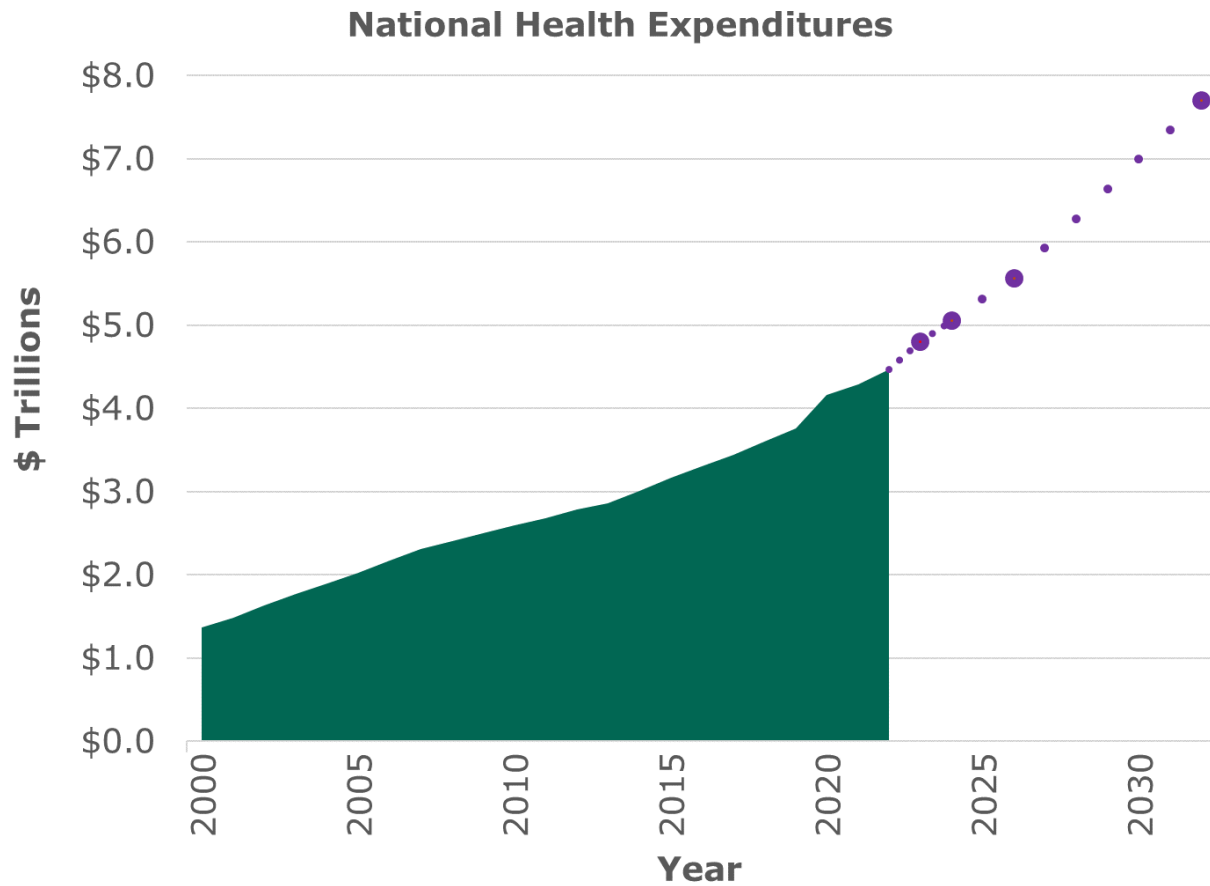
Texas has made significant progress in integrating non-medical services into its health care programs, though additional policy opportunities to further this work remain. By investing in health-impacting, non-medical services, Texas can improve health outcomes and maximize the value of its health care investments.

## Background

### Investing in Non-Medical Needs is Key to Effective Health Spending

The United States allocates a significant proportion of its wealth to health expenses. As of 2022, national health expenditures totaled \$4.5 trillion, representing 17.3% of U.S. gross domestic product (GDP).<sup>1</sup> These costs are expected to rise to \$7.7 trillion (19.7% of GDP) by 2032 (Figure 1).<sup>2</sup> This proportion of health expenditures is notably higher than in other high-income countries, where the average is 9.9% of GDP.<sup>3</sup> This disparity does not indicate an excess of U.S. health care services but rather reflects the United States' higher health care prices.<sup>4</sup>

**Figure 1 – National Health Expenditures**

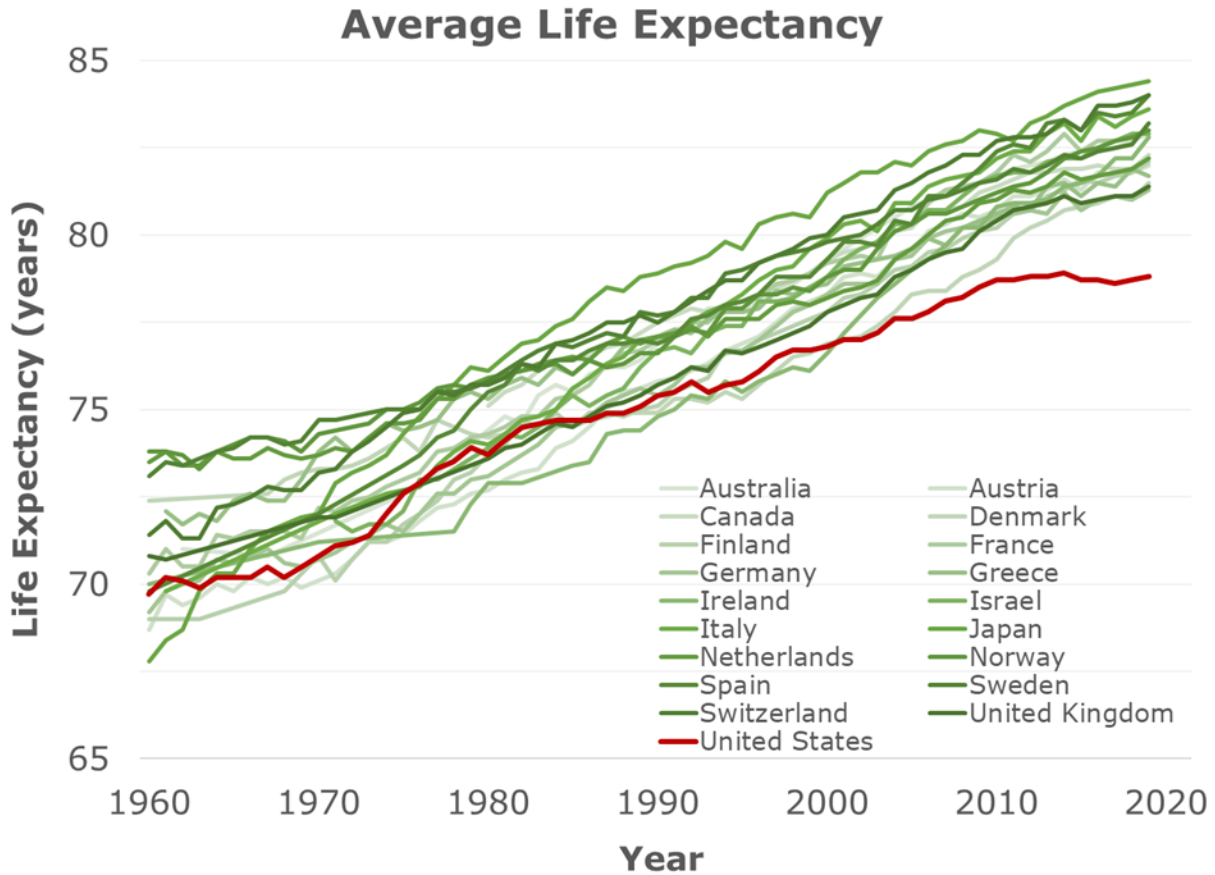


**Source:** Expenditures data come from the Centers for Medicare and Medicaid Services (CMS).<sup>5</sup> Projections data are from Health Affairs.<sup>6</sup>

**Note:** Expenditures are in green; projections are in purple.

The problem of unsustainable cost escalation is compounded by the marked decline in health outcomes. The United States has experienced significant declines in life expectancy (Figure 2) and has the highest rates of maternal and infant deaths, obesity, and comorbidity of multiple chronic conditions (e.g., diabetes, hypertension, or asthma) among high-income nations.<sup>7</sup>

**Figure 2 – Average Life Expectancy**



**Source:** Organisation for Economic Co-operation and Development (OECD).<sup>8</sup>

When considering mortality and health within the United States, Texas performs poorly in several key areas. It ranks 34th among states for deaths from preventable or treatable causes and 29th for maternal mortality.<sup>9</sup> In terms of health indicators and determinants, Texas also lags behind the rest of the United States, placing 39th in overall health rankings.<sup>10</sup> The state ranks particularly low in several other categories: child obesity (47th), adult obesity (40th), teen birth rates (42nd), avoided health care visits due to out-of-pocket costs (50th), food insecurity (49th), drinking water violations (46th), and severe housing problems (40th).

As medical costs continue to increase and U.S. health outcomes continue to lag behind those of other developed nations, both state and federal policymakers are urging the health care system to allocate its resources more effectively.

A key goal for spending money on health care (or anything else) should be to obtain value, which is realized when the cost paid is matched by the quality or outcomes received.<sup>11</sup> Texas, the federal

$$Value = \frac{Quality}{Cost}$$



government, and other purchasers of health care services are increasingly adopting value-based purchasing to rein in costs. This approach prioritizes the value of health care provided over the quantity of services delivered.<sup>12</sup> This is a positive development and has likely kept some health care costs in check. However, the ongoing focus on driving down costs in U.S. health care has not yet resulted in achieving true value for the dollars spent. Focusing on cost reduction alone addresses only half of the equation; the other half is ensuring high-quality or positive outcomes. One mechanism for improving quality is to reallocate some resources within the health care system toward strategies that enhance quality and outcomes. Improving quality and outcomes results in a proportionate increase in value, much like cost-cutting does.

Medical experts recognize that health outcomes are largely determined by factors outside the health care delivery system. While access to quality health care is vital, it accounts for only 10%–20% of overall health outcomes. Instead, the health of a population is largely determined by social and economic factors, health behaviors, and the physical environment rather than clinical care (Figure 3).<sup>13</sup> Consequently, professional health care organizations — including the National Academies of Science, Engineering, and Medicine, the American College of Physicians, the American Academy of Pediatrics, and the Society of General Internal Medicine — are prioritizing the integration of health care services that address health-related, non-medical needs.<sup>14</sup>

**One of the most promising opportunities to increase the value of our health care spending is to devote some of those resources to addressing the health-impacting, non-medical needs of patients.**

**Figure 3 — Accounting for Health Outcomes**



**Source:** Population Health Metrics.<sup>15</sup>

The Texas HHSC, Centers for Medicare and Medicaid Services (CMS), The Joint Commission, and the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS) now require many health care providers and health insurance plans to screen patients and members for health-impacting, non-medical needs such as food insecurity, lack of housing, and transportation issues. These screenings are a key part of quality improvement efforts. In some cases, policies also require providers and plans to directly address these and other identified needs. Providers and plans are often eager to develop sustainable ways to address their patients' and members' non-medical needs, recognizing the significant positive impact this can have on health outcomes and subsequent health care utilization.

The health care system has increasingly been integrating non-medical interventions into delivery and payment systems. These health-impacting, non-medical services address patient needs known in Texas as non-medical drivers of health (NMDOH). NMDOH are defined as "the conditions in the places where people live, learn, work and play that affect a wide range of health risks and outcomes."<sup>16</sup> A growing body of evidence demonstrates that for some populations, interventions addressing housing, nutrition, transportation, and other non-medical drivers can improve health outcomes and, in some cases, reduce medical care costs.<sup>17</sup> Incorporating services that address unmet NMDOH needs within the health care system presents an emerging opportunity to improve population health outcomes and increase the value of Texas' health care spending. It is essential to maintain a supportive policy environment to capitalize on this opportunity.

## Big Investments Mean Big Opportunities in Texas

Texas' substantial investment in health care creates multiple policy leverage points for improving quality and delivering better health outcomes. The Texas HHSC oversees dozens of health care programs with funds appropriated by the Legislature under Article II of the state budget, which received a biennial appropriation for 2022–23 in excess of \$98 billion, equating to \$49 billion per year.<sup>18</sup> Texas Medicaid is by far the largest program, with an appropriation of \$82.7 billion, or \$41.3 billion per year. Other significant health care programs administered through the HHSC include the Children's Health Insurance Program (CHIP) funded at \$500 million per year, women's health programs at \$150 million, and mental health and substance use disorder services totaling \$1.13 billion.

In addition, Texas invests in health care for active and retired employees of state agencies and school districts through the Employees Retirement System (ERS) and the Teachers Retirement System (TRS). ERS provides health care benefits to over 500,000 people each year — including state employees, retirees, and family members — at a cost of \$3.3 billion in 2023, with \$2.69 billion covered by the state.<sup>19</sup> TRS provides health care benefits to over 600,000 people each year, with a total cost of approximately \$4 billion in 2023. While most of these costs are borne by school districts and participating employees and retirees, the state of Texas will contribute over \$1 billion in 2024.<sup>20</sup> The



state’s role in overseeing health benefits for more than one million people at a cost of almost \$4 billion provides Texas with ample opportunities and incentives to ensure that its health care investments yield improved health outcomes.

These large-scale investments in health care programs (as shown in Table 1) create many opportunities for Texas to increase the value of its expenditures, particularly by integrating health-impacting, non-medical services into existing programs where appropriate.

**Table 1 – Selected Texas Health Care Programs**

Agency/Program	\$ in Millions	\$ in Millions
<b>HHS Programs</b>		\$43,078
Medicaid	\$41,300	
CHIP	\$500	
Mental Health and Substance Use Services	\$1,128	
Women's Health/Thriving Texas Families	\$150	
<b>ERS Health Benefits</b>		\$2,700
<b>TRS Health Benefits</b>		\$1,000
<b>Total</b>		<b>\$46,778</b>

**Source:** Texas HHSC; Employees Retirement System of Texas; and Teacher Retirement System of Texas.<sup>21</sup>

### Texas’ Current Use of Policy Tools to Integrate Non-Medical Services Into Health Care

Since the 1990s, Texas has sought and obtained waivers through section 1915 of the Social Security Act to cover non-medical services for priority health conditions and populations within its Medicaid program.<sup>22</sup> Today, these programs enable many Medicaid members with physical, behavioral, and intellectual disabilities to obtain services, including home meal delivery, transportation services, home modification, and employment assistance. The purpose of providing these cost-effective, non-medical services is to help the members live healthy and safe lives in their communities and avoid unnecessary hospitalization or institutionalization. Under the 1915(g) Medicaid State Plan Authority, targeted populations, such as those with chronic mental illness, can receive coverage for case management services that facilitate access to medical care, as well as “social, educational and other services.”<sup>23</sup>

Non-medical services for individuals with mental illness and intellectual disabilities have also been provided through Texas’ allocation of COVID-19 supplemental funds. Texas

directed this public health emergency funding toward housing initiatives (\$45.6 million) and a housing support line (\$3.9 million) to help Texans with serious mental illness, including those discharged from state mental health hospitals.<sup>24</sup> These non-medical investments were made to prevent the costs associated with patients becoming homeless, entering the criminal justice system, or returning to the hospital.

Non-medical services that promote healthy pregnancies and child development are covered in the Thriving Texas Families program.<sup>25</sup> This HHSC initiative offers multiple non-medical services to pregnant women and parents of very young children, including support for parenting skills, employment readiness, supplies and equipment for young children, housing services, and care management to connect enrollees with other non-medical services.

## **Texas' Strong Potential to Build Investments in Health-Impacting, Non-Medical Services**

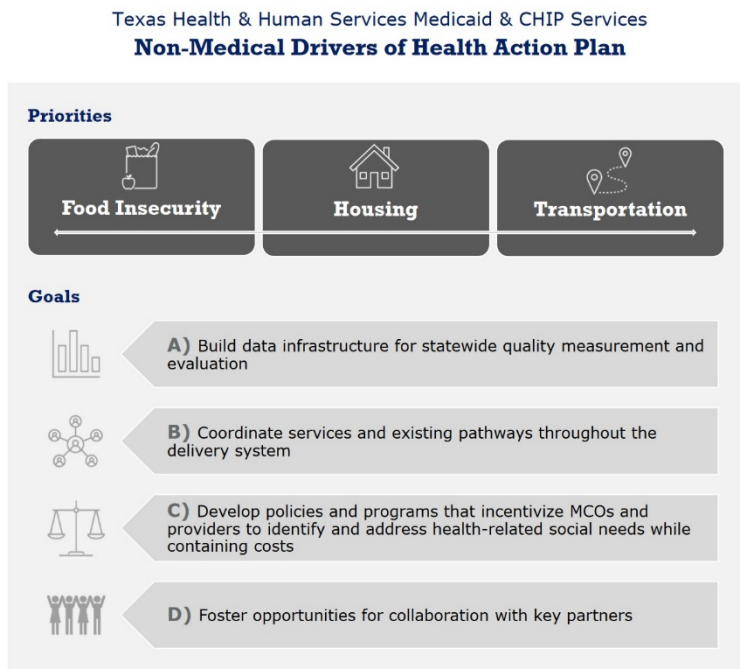
### Recent Action by the Texas Legislature and HHSC

#### *HHSC's Medicaid & CHIP Services NMDOH Action Plan*

In February 2023, the HHSC published its Medicaid & CHIP Services NMDOH Action Plan (Figure 4), outlining a strategy to address health-impacting, non-medical needs for Medicaid beneficiaries.<sup>26</sup> The plan focuses on food insecurity, housing, and transportation and outlines steps to integrate NMDOH services into the health care system and its payment structure through 2025.

First, the plan calls for measuring and evaluating existing NMDOH programs within Texas Medicaid. Next, the HHSC will design and implement payment strategies to incentivize health care providers and health insurance companies that cover Medicaid members (known as managed care organizations/MCOs) to screen for and address unmet NMDOH needs. This will be achieved using mechanisms such as "In Lieu of Services" authorities (discussed below), value-based purchasing models, and other quality measures. The primary goal of the action plan is to improve population health outcomes and reduce preventable medical spending. The HHSC will begin by focusing on food insecurity, followed by housing and transportation issues. Since the plan was released, key health care stakeholders have shared their enthusiasm and provided feedback to align on the next steps for Texas. The HHSC's recognition of the significance of addressing health-impacting, non-medical needs, as well as its acknowledgment of the state's role in paying for screening and service delivery, indicates the early stages of a transformative shift in health care spending in Texas.

**Figure 4 – Texas Health and Human Services NMDOH Action Plan**



**Source:** Texas HHSC Medicaid and CHIP Services.<sup>27</sup>

### *Directed Payment Programs*

Quality measures are increasingly being applied to support the provision of health-impacting, non-medical services. The HHSC has incorporated NMDOH requirements into the Directed Payment Programs (DPPs) under the Texas Healthcare Transformation and Quality Improvement Program, commonly referred to as “the 1115 Waiver.”<sup>28</sup> The DPPs allow participating providers to receive payments for meeting certain quality measures, with the potential to deliver over \$5 billion per year.

In partnership with the federal government and in accordance with its guidelines, the HHSC determines the measures providers must meet for each DPP to qualify for financial incentives. The largest DPP, the Comprehensive Hospital Increase Reimbursement Program (CHIRP), valued at more than \$4 billion per year, applies to hospitals participating in the STAR and STAR+Plus Medicaid programs. Participating hospitals are required to screen patients for needs related to food insecurity, housing, and transportation, develop follow-up plans when such needs are identified, and report these activities annually to the HHSC.

Similar requirements apply to Certified Community Behavioral Health Clinics, Rural Health Clinics, and physicians through provider-specific DPPs. These requirements have been incorporated into the DPPs as quality measures in recognition of how food, housing, and transportation significantly impact health status and outcomes.

## *House Bill 1575, 88th Regular Session*

The Texas Legislature has recognized the opportunity to address NMDOH within the Medicaid program. During the 88th legislative session, Texas lawmakers passed HB 1575 with bipartisan support to improve health outcomes for pregnant women by allowing Texas Medicaid to pay for non-medical case management services offered by community health workers, doulas, and others.<sup>29</sup> The bill specifically recognizes that non-medical factors contribute to health care costs and health outcomes, which served as the basis for its enactment. The legislation directs the state Medicaid agency to develop a uniform NMDOH screening tool and pay for case management services to help qualified beneficiaries access community resources that address non-medical needs, such as nutrition and housing assistance, parenting services, and support for victims of domestic violence. Additionally, the Legislature extended postpartum Medicaid coverage from two months to 12 months, enabling women to benefit from these new services for a full year after childbirth.<sup>30</sup> This will benefit many Texas families, as Medicaid covered 188,585 births (48% of all births) in 2022.<sup>31</sup>

## *Value-Based Payment and Quality Improvement Advisory Committee*

The Value-Based Payment and Quality Improvement Advisory Committee, authorized by the Legislature, supports initiatives to increase access to NMDOH services through Medicaid.<sup>32</sup> In its 2022 recommendations to the 88th Texas Legislature, the committee advised that the Legislature direct the HHSC to 1) approve at least one service under the “In Lieu of Services” provision to address asthma remediation, food interventions, and/or housing assistance; and 2) use “experience rebate” dollars to incentivize MCOs to partner with community organizations to address NMDOH via “In Lieu of Services” provisions.<sup>33</sup> In preparation for the 89th legislative session, the committee has voted to adopt additional recommendations to include in its upcoming 2024 legislative report.<sup>34</sup>

## **Current Actions of Health Plans and Providers to Incorporate Health-Impacting, Non-Medical Services**

Programs addressing health-related, non-medical needs are already being utilized within Texas’ health care system. Health care providers and plans recognize the significant impact of non-medical needs on their patients’ health and are actively involved in addressing these conditions. Across Texas, a great variety of approaches, delivery settings, and payment models are being used to advance NMDOH programming. A convenient way to review the breadth of NMDOH work is through the Program Index, hosted by the Texas Consortium for the Non-Medical Drivers of Health.<sup>35</sup> This searchable online database includes standardized abstracts with fields including program sponsor, drivers of health addressed, target populations, health conditions, location, program description, and evaluation status. As of August 2024, the Program Index features over 140 programs.

**Table 2 – Model NMDOH Program in Texas**

Program Sponsor	Description	Non-Medical Driver(s)	Health Condition	Location County
El Paso Health Plan	Low-income, elderly members receive food boxes and case management.	Nutrition	Aging	El Paso
Community First Health Plan	Pregnant members receive prepared, home-delivered meals and nutrition guidance.	Nutrition, health literacy.	Pregnancy	Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, Wilson
UT Health Houston	Patients experiencing obesity receive food, wellness classes, and case management.	Nutrition	Obesity; body mass index >30	Harris
Community Health Choice	Pregnant members receive job training, life coaching, and scholarships.	Employment	Pregnancy	Harris
Waco Family Medicine	Pregnant/ postpartum patient transportation to perinatal appointments.	Transportation	Pregnancy	Anderson, Andrews, McLennan
The Harris Center for Mental Health & IDD	Persons experiencing homelessness and serious mental illness receive intensive care coordination.	Housing	Mental Health Diagnosis	Harris County
Aetna/CVS Health	Housing-insecure patients connected with affordable housing resources.	Housing	Multiple	All Counties
CommUnity-Care Health Centers	Patients with health-harming legal needs receive legal counsel and representation.	Multiple	Multiple; general well-being	Travis, Bastrop
United Healthcare	Medicaid members receive closed-loop referrals for health-related social needs.	Multiple	Multiple	All Counties

**Source:** Texas Consortium for the Non-Medical Drivers of Health.<sup>36</sup>

Table 2 provides a sample of NMDOH programs included in the Program Index. In some cases, an NMDOH intervention targets a narrow health outcome, such as reducing body mass index, while others deliver a broad range non-medical services to improve multiple health outcomes. Funding sources vary from fee-for-service arrangements, operating budgets, philanthropy, and federal or state grants. Programs are delivered by health plans, hospitals, outpatient clinics, academic institutions, local mental health authorities, and federally qualified health centers. Common drivers of health addressed by these programs include food insecurity, housing, and transportation. Often, the

programs aim to improve overall health and well-being. However, the most common health conditions that are identified are diabetes, obesity, mental health diagnoses, and pregnancy.

**A supportive policy environment is needed to sustain and advance this work.**

## Federal Bipartisan Support for Investment in NMDOH

Investment in NMDOH has gained bipartisan support at the federal level. Efforts to address non-medical needs were included in the Affordable Care Act passed in 2010 and accelerated under both the Trump and Biden administrations. The bipartisan support for these investments stems from the urgency to improve health outcomes and rein in ever-increasing health care costs, which are not always justified by current outcomes. During the Trump administration, then-Secretary of Health and Human Services, Alex Azar, explained the urgency of investing in services that address non-medical needs in a powerful speech delivered in 2018.<sup>37</sup> Actions taken during his tenure included the rollout of the Accountable Health Communities model, which was piloted at three Texas sites, and the issuance of the agency's "Guidance to State Health Officials."<sup>38</sup> The Biden administration continued these efforts by issuing "In Lieu of Services Guidance" and publishing the "U.S. Playbook to Address Social Determinants of Health."<sup>39</sup>

The Medicare program has also increasingly provided non-medical services to members of Medicare Advantage plans, which serve more than 33 million Americans.<sup>40</sup> Services include food access, transportation, home modification, rental and utility assistance, and other social needs benefits.<sup>41</sup> This increasing federal investment in non-medical services within health care programs creates opportunities for Texas to expand its work in this area.

## Policy Options to Advance NMDOH Integration into Health Care Delivery in Texas

### Opportunities in Texas Medicaid

Several mechanisms within the Texas Medicaid program enable the coverage of services that address food delivery, transportation, and housing alongside traditional medical care. We discuss the primary mechanisms and provide examples of each below.

#### *1115 Waivers*

The federal laws and regulations that govern Medicaid provide the framework for state Medicaid programs. However, some of these federal requirements can limit innovation and variation. To overcome these barriers, most states, including Texas, request

approval from the CMS for waivers under section 1115 of the Social Security Act.<sup>42</sup> The “1115 waiver” is rapidly becoming a vital tool for states to include coverage of non-medical services for Medicaid enrollees.

**Table 3 – 1115 Waiver Authority for Non-Medical Services by State**

State	Housing	Food and Nutrition	Employment	Other Non-Medical Services
AZ	√			√
AR	√	√		√
CA	√			√
DE		√	√	√
FL	√			√
HW	√		√	
IL	√	√	√	√
MD	√			√
MA	√	√		√
MT	√			
NJ	√	√		√
NC	√	√		√
NM	√	√		√
NY	√	√		√
OR	√	√		√
RI	√			
TN			√	√
UT	√			√
VA	√		√	√
VT	√			
WA	√	√	√	√

**Source:** Kaiser Family Foundation, “Medicaid Waiver Tracker.”<sup>43</sup>

These waivers tend to be large-scale initiatives with multiple components, addressing diverse populations, health conditions, and delivery system enhancements. They may include experimental or pilot projects to demonstrate and evaluate state-specific policy approaches aimed at better serving Medicaid populations. One of the advantages of including non-medical services in 1115 waivers is the ability for states to begin on a smaller scale, tailoring programs to specific Medicaid members or parts of the state. This approach allows states to evaluate the effectiveness of the small-scale trials, modify them as needed, and expand successful initiatives over time, as supported by evidence.

Currently, 21 states use 1115 waivers to incorporate NMDOH services into their Medicaid delivery systems. Table 3 provides an overview of the states that have



included non-medical services, such as assistance for housing, food and nutrition, employment, and more, within their 1115 waivers.<sup>44</sup> The 1115 waiver programs of two states — North Carolina and California — are explored in more depth in the following subsections.

### *North Carolina Healthy Opportunities Pilots*

The North Carolina Healthy Opportunities program was approved as part of a section 1115 waiver in 2018 before the state expanded its Medicaid program under the Affordable Care Act.<sup>45</sup> The program aims to test and evaluate the impact of providing select evidence-based, non-medical interventions to high-needs Medicaid enrollees in three regions of the state. Non-medical services available to eligible members include housing-related support (such as navigation, safety inspection, move-in assistance, utility setup, and home remediation), interpersonal violence prevention and support (including case management, home visits, and dyadic therapy), food and nutrition services (such as food prescriptions, food pickup and delivery, and home-delivered meals), and transportation services.<sup>46</sup> Providers of these non-medical services are compensated with Medicaid funds.

### *California Advancing and Innovating Medi-Cal (CalAIM)*

The California Advancing and Innovating Medi-Cal (CalAIM) program builds on several previous initiatives to improve health outcomes and reduce health care costs through a comprehensive 1115 waiver.<sup>47</sup> The program targets high-cost, high-need populations, including individuals with serious mental illness and substance use disorders, seniors and people with disabilities, homeless people, people transitioning out of the criminal justice system, children with complex medical conditions, and children in foster care. These populations receive enhanced care management that addresses both medical and non-medical needs. Services include housing assistance (such as navigation services, resources for setup and move-in, housing deposits, personal care, homemaker services, and home modifications) and food and nutrition support, including medically tailored meals. This program enables a person-centered approach that addresses participants' comprehensive health-related needs.

### *In Lieu of Services*

Since 2016, states have had the option of covering **new** services under the “In Lieu of Services” (ILOS) provision, which allows Medicaid to fund nontraditional services that are clinically appropriate and evidence-based, particularly those that address health-related social needs.<sup>48</sup> In January 2023, the CMS provided new guidance to state Medicaid directors on incorporating health-impacting, non-medical services into Medicaid coverage. The guidance describes how ILOS can cover services addressing NMDOH if they “can be expected to reduce or obviate the future need to utilize state plan-covered services or settings.” Notably, the ILOS authority does not require the cost-

effectiveness of these services to be budget neutral, and the cost-effectiveness can be measured over years.

Texas has used the ILOS authority to provide alternative clinical services for individuals with mental health and substance use disorders, such as crisis respite, extended observation, partial hospitalization, and intensive outpatient services.<sup>49</sup> Other states have also begun to use ILOS authority to provide non-medical services for priority populations or specific health conditions (Table 4).

**Table 4 – In Lieu of Services Plans by State**

State	Non-Medical Services	Population
CA <sup>50</sup>	Housing support, food and medically tailored meals, asthma home remediation.	Complex needs.
FL <sup>51</sup>	Peer support promoting recovery, positive social networking, and independent living skills	Mental health and substance use disorder.
KS <sup>52</sup>	Connection with community services, training in daily living, home-delivered meals, and home and vehicle modification to support clients' functions.	Targeted, avoid institutionalization
NY <sup>53</sup>	Medically tailored meals.	Adults with severe illness.
NC <sup>54</sup>	Housing support and social service navigation	Intellectual disabilities, brain injury, or involved in >1 state system (welfare, justice, etc.)
OR <sup>55</sup>	Community health worker support for housing and social needs	Chronic conditions, behavioral health, or high social needs.

### *Section 1915 Waivers*

Section 1915 of the Social Security Act also permits Medicaid waivers that enable states to cover beneficiaries needing long-term care and support, including medical and non-medical services.<sup>56</sup> These waivers are commonly called home- and community-based services (HCBS) 1915 waivers. As noted above, Texas has utilized these waivers to provide some non-medical services to participating beneficiaries.

There are additional non-medical services that Texas could incorporate into its 1915 waivers, as other states have done. The range of opportunities includes assistive technologies, habilitative services, adult day services (including meals), respite care, and nutrition services (including home-delivered meals, case management, counseling, and food prescriptions) (Table 5).<sup>57</sup>

**Table 5 – Section 1915 Waivers**

State	Non-Medical Services	Waiver
MD	Employment support, social and spirituality support, safety and security, and healthy lifestyle services for individuals with developmental disabilities	1915(c)
MN	Housing stabilization services for individuals with disabilities	1915(i)

Source: CMS.<sup>58</sup>

*CHIP Health Services Initiatives Coverage*

The Children’s Health Insurance Program (CHIP) allows states to use a limited amount of their funding to implement health services initiatives (HSIs) focused on improving the health of children eligible for Medicaid and CHIP. These initiatives typically include preventive services and interventions.<sup>59</sup> Many states have used HSI funds to meet the non-medical needs of children (Table 6), and Texas could follow suit by developing its own HSI program. This would involve seeking CMS approval through a state plan amendment, a relatively straightforward administrative process compared to other waiver applications.

**Table 6 – CHIP Health Services Initiatives**

State	Non-Medical Driver	Program Description
NY <sup>60</sup>	Food/Nutrition	Program funds food banks and other food service providers to deliver emergency meals.
WI <sup>61</sup>	Asthma/Home remediation	Program covers up to \$5,000 in home repair for Medicaid and CHIP children with asthma.
MA <sup>62</sup>	Violence	Program covers after-school services.

**Incentives to Increase NMDOH Investments in Medicaid**

*Health Plan Incentives*

The preceding section described **coverage** mechanisms for incorporating non-medical services into Medicaid. While expanding coverage is the most effective way to advance NMDOH integration, states with managed care Medicaid programs, like Texas, have additional options to create **incentives** for providing NMDOH services to Medicaid beneficiaries. Specifically, Texas can build on existing programs to incentivize Medicaid MCOs and providers participating in Directed Payment Programs to invest in non-medical services for their members and patients.

One opportunity for Texas to advance NMDOH integration in its quality programs is by rewarding MCOs that use non-medical services to improve health outcomes. Texas

currently operates several quality programs, including Pay-for-Quality (P4Q) and Value-Based Care.<sup>63</sup> Texas’ P4Q program requires MCOs to report on a set list of measures that impact the plans’ quality ratings. Texas could include NMDOH-related items in the program, providing MCO plans with greater incentives to invest in non-medical services. For example, alongside the measure relating to diabetes control, the HHSC could introduce a measure related to non-medical services known to impact diabetes, such as a “food is medicine” program. Texas’ Value-Based Care initiatives are intended to shift from volume-based payments to new models that focus on and reward quality of care.

In addition to the quality programs, Texas could increase MCOs’ investments in NMDOH by prioritizing non-medical services as part of the plans’ value-added services. Value-added services are extra benefits MCOs offer beyond standard Medicaid-covered services.<sup>64</sup> The Texas HHSC determines which services can be included based on their potential to promote healthy lifestyles and improve health outcomes among members. By positioning NMDOH as a preferred value-added investment, Texas can accelerate its uptake within Medicaid.

Examples from other states that have used quality improvement measures, such as value-based payments and value-added services, are described in Table 7.<sup>65</sup>

**Table 7 – States’ Incentives to Increase NMDOH Investments in Medicaid**

State	Non-Medical Services
OH	As part of the state’s Population Health Management and Quality Improvement Requirements, Ohio MCOs are contractually required to partner with CBOs and help develop “solutions addressing [social determinants of health]-related needs, such as lack of access to nutritious food (food insecurity, food deserts, and food swamps).”
FL	As part of value-added services, MCOs can provide food assistance as expanded benefits under the Pathways to Prosperity Program, including supports for pregnant enrollees and enrollees raising infants and toddlers. The state has indicated that it may take this into account in future rate/profit-setting.
MN	As part of value-based care, the state allows “integrated health partnerships” to participate in an alternative payment model that includes a population-based payment adjusted for non-medical risk with the expectation that the partnerships will meet non-medical needs of patients, particularly food insecurity.

**Source:** Episcopal Health Foundation.<sup>66</sup>

### *Provider Incentives*

Texas can incentivize providers to invest in NMDOH services by expanding the emphasis on meeting patients’ non-medical needs within the existing 1115 waiver Directed Payment Programs. The current requirements for screening and follow-up provide a strong basis from which to move forward. With distinct DPPs for different provider types – such as hospitals, physicians, and behavioral health providers – Texas has the opportunity to experiment with NMDOH programs tailored to each group. As

many providers are already increasing their actions in this area, rewarding these efforts through DPPs can further support and advance these initiatives.

## Using Data and Evaluation to Expand NMDOH Investments in Medicaid

Requirements for reporting and evaluation offer critical insights into the status of NMDOH services and interventions, which can drive potential program changes. Building on the successes of the 88th legislative session, it is essential to monitor the progress of programs stemming from HB 113 and HB 1575 to identify any necessary adjustments in the next session. Additionally, the HHSC collects annual external quality reviews that could benefit from additional reporting on progress for follow-up.

HB 113 included a provision allowing for community health worker (CHW) services to be included in quality improvement costs rather than as administrative expenses. This change means MCOs can include these expenses in their medical loss ratio reporting.<sup>67</sup> While HB 113 did not add new reporting requirements, the Value-Based Payment and Quality Improvement Advisory Committee has emphasized the need to evaluate the impact of this change on STAR Medicaid services.<sup>68</sup>

The maternal health bill, HB 1575, includes several reporting provisions. MCOs are required to report NMDOH screening results to the HHSC, which, in turn, must submit a summary of the screening to the Legislature (in even-numbered years). Additionally, by December 2024, the HHSC is required to provide an implementation status report to the Legislature. Of these, the requirements for the implementation status report are the most thorough. The report must describe case management activities, numbers and types of referrals for NMDOH services, and birth outcomes. Beyond the initial implementation status report, ongoing program evaluation is important to assess the effectiveness of the screening and referral processes. This evaluation could involve tracking the number of women who 1) decline screenings, 2) have scores requiring comprehensive assessment, 3) complete a comprehensive assessment, 4) are eligible for service coordination benefits, 5) decline service coordination benefits, and 6) receive service coordination benefits (and type of services). Monitoring these metrics may help identify the most effective methods for delivering screenings and referrals and their impact on the health outcomes of pregnant women and their children.

The HHSC is federally required to have an external quality review. It has incorporated this review into the Texas Medicaid and Quality Improvement process. This process identifies key findings on quality of care, health plan performance measures, recommendations, and follow-up actions for addressing managed care quality strategies. These reports provide contemporaneous responses from the Texas HHSC within the fiscal year. However, in some instances, follow-up actions may require several years to address. Reporting on progress for priority follow-up items in subsequent years offers an opportunity to determine which actions were completed and identify carry-

over issues that remain targets for quality improvement. The most recent report included six provisions related to NMDOH screening and intervention (Table 8).<sup>69</sup>

**Table 8 – Evaluation and Reporting Recommended by External Review**

Evaluation and Reporting
<p><b>Finding:</b> Many MCOs lack procedures for aggregating NMDOH data.</p> <p><b>Recommendation:</b> Systemically collect NMDOH data to aggregate needs by populations to impact member health effectively.</p> <p><b>Follow-Up:</b> The HHSC and MCOs are collaborating on NMDOH screening.</p>
<p><b>Finding:</b> MCOs are not evaluating the direct/indirect effects of NMDOH interventions.</p> <p><b>Recommendation:</b> MCOs should evaluate the impact of NMDOH intervention and referrals on member health.</p> <p><b>Follow-Up:</b> The HHSC encourages the MCOs to use NMDOH interventions in performance improvement projects and other QI initiatives to clearly measure the direct and indirect effects.</p>
<p><b>Finding:</b> MCOs reported multiagency collaborations to address NMDOH.</p> <p><b>Recommendation:</b> The HHSC should encourage MCOs to share NMDOH interventions and best practices with other entities, including the HHSC.</p> <p><b>Follow-Up:</b> The HHSC encourages MCOs to share NMDOH-related interventions at quality forums and other venues throughout the year.</p>
<p><b>Finding:</b> There is a need for more in-depth analyses of quality-of-care disparities by focusing on specific populations.</p> <p><b>Recommendation:</b> The HHSC conducts additional analyses on quality-of-care disparities based on NMDOH needs and systematically collects NMDOH data to prioritize target solutions.</p> <p><b>Follow-Up:</b> Improvements to data reporting would need to be implemented prior to expanding to additional dimensions/variables.</p>
<p><b>Finding:</b> Significant disparities in quality-of-care results based on the social vulnerability index score and sociodemographic category.</p> <p><b>Recommendation:</b> The HHSC conducts analyses of NMDOH impact on access to health care. The HHSC identifies and shares MCOs and providers’ best practices for collecting NMDOH data, addressing NMDOH-related disparities and barriers to health care, and resources to facilitate health care management across the social vulnerability index spectrum.</p> <p><b>Follow-Up:</b> The HHSC has developed an NMDOH Action Plan to develop methods to identify and share best practices with MCO providers.</p>
<p><b>Finding:</b> Examine the <b>causal</b> relationships between NMDOH needs and health care quality to identify what to address; develop strategies to reduce NMDOH-related disparities.</p> <p><b>Recommendation:</b> Utilize methods that allow for causal inference in studies of NMDOH effects on health care quality.</p> <p><b>Follow-Up:</b> The HHSC continues to explore how we can work toward this goal in the future.</p>

**Source:** Texas HHSC.<sup>70</sup>

## Opportunities to Advance NMDOH in Other HHSC Programs

HHSC spends \$1.78 billion on other health care programs that present opportunities to improve outcomes and, in some cases, reduce costs by incorporating health-impacting,

non-medical services into these programs. One of the most promising opportunities to make cost-effective investments in non-medical services lies in increasing funding currently provided under Section 1915 waivers for disabled beneficiaries and expanding housing and housing-related assistance for individuals with serious mental illness and/or substance use disorders. While the state's increased investment in hospitals and other medical services is essential and should continue, it is equally important to invest in services that address the non-medical needs of these populations. Such investments can help prevent hospital admissions and reduce involvement in the criminal justice system. The state's allocation of funds for housing-related services is commendable, and increasing this investment could further improve health outcomes and reduce health care costs.

Texas has previously appropriated COVID-19 funds to provide housing and other non-medical assistance through the Local Mental Health Authorities for individuals with significant mental, behavioral, and intellectual disabilities.<sup>71</sup> Although these were one-time funds, the reasoning behind the appropriation remains valid and should be considered when allocating mental health resources in the future, whether using state general revenue funds or federal funds. These investments improve health outcomes by supporting severely ill Texans, allowing them to live in less restrictive environments. Such investments also save health care costs by reducing hospitalizations and institutionalizations.

Additionally, Texas' two largest women's health programs — Healthy Texas Women and Thriving Texas Families — offer opportunities to integrate NMDOH services. Healthy Texas Women, primarily a family planning services program for low-income women, serves a population that often faces non-medical challenges impacting their health. Texas should consider providing access to non-medical services through this program. Thriving Texas Families already requires that participating providers screen for NMDOH under HB 1575 and provide intensive care management if needed. Since many of these providers do not provide comprehensive medical care, they are well-positioned to support their clients in meeting their non-medical needs. Texas should consider deepening the NMDOH requirements for providers within the Thriving Texas Families program.

## **Opportunities to Advance NMDOH Investments for ERS and TRS Beneficiaries**

The state of Texas invests almost \$4 billion in health benefits for active and retired employees of state agencies and school districts through the Teachers Retirement System (TRS) and the Employers Retirement System (ERS). These programs are similar to the insurance plans offered by employers in the private sector. Each system offers its retirees the opportunity to enroll in Medicare Advantage plans, which are similar to those available to other Medicare beneficiaries and include coverage for some non-medical services. Both TRS and ERS have the opportunity to design plans that include non-medical services, such as food and nutrition assistance for people with diabetes.



The systems should be directed to investigate NMDOH opportunities and implement cost-effective programs that improve health outcomes.

Both ERS and TRS offer comprehensive health insurance options for their members, covering a broad range of medical services. For retirees over age 65, ERS and TRS offer Medicare Advantage (MA) plans (TRS offers Care-Medicare Advantage through United Healthcare, and ERS offers Health Select Medicare Advantage also through United Healthcare).<sup>72</sup> Both MA plans, like many MA plans across the country, cover non-medical services, including gym memberships, personal care (such as grocery shopping, meal preparation, and transportation), home-delivered meals, coaching for weight management, and more. These services help beneficiaries maintain their health and independence, reducing the need for more expensive medical interventions.

However, the health coverage for active employees under ERS and TRS, while medically robust, does not include the spectrum of non-medical services that may be needed, especially for those managing or at risk of chronic disease. Both programs serve populations that could benefit from non-medical services to improve their health and reduce the need for medical services. For example, 7% of active employees covered by TRS have diabetes (approximately 30,000 enrollees), and 5% have asthma.<sup>73</sup>

To address these needs, both ERS and TRS should develop non-medical programs — such as medically tailored meals for individuals with diabetes and home modifications for those with asthma — and evaluate the impact on members' health outcomes and medical care usage. If these programs prove to be cost-effective and improve health, they could be incorporated into the health plans for active employees who are in need.

## **Recommendations: A Framework for Moving Forward**

The information presented in this report covers a range of policy options and pathways for stakeholders and policymakers to consider as Texas advances the integration of NMDOH into health care delivery and payment systems. A two-fold approach is recommended. First, Texas should build on its current NMDOH investments, using examples from other states' approaches to coverage, incentives, reporting, and evaluation. Second, Texas should initiate or expand services for populations and health conditions that are most likely to benefit from NMDOH interventions.

### **Building on Recent NMDOH Investments**

In the past two years, Texas has taken action in the NMDOH space by releasing the HHSC's NMDOH Action Plan for Medicaid and CHIP, incorporating new NMDOH-related quality indicators in the 1115 waiver's Directed Payment Programs, and passing HB 1575 to improve health outcomes for pregnant women. There are opportunities to build on each of these initiatives further, as outlined below.

## *NMDOH Action Plan*

Goal C of the HHSC's NMDOH Action Plan calls for developing policies and/or programs to incentivize MCOs and providers to identify and address food insecurity, housing, and transportation for Medicaid beneficiaries while demonstrating cost containment.<sup>74</sup> One of the agency's suggestions is to use the ILOS coverage authority within Medicaid to achieve this goal. The "In Lieu of Services" section above identifies examples of states using ILOS to cover health-impacting, non-medical service costs for priority populations and health conditions. For example, one state provides home delivery of medically-tailored meals to individuals with severe illnesses. Another state provides medically-tailored meals to high-cost, high-need patients, including those with serious mental illnesses or substance use disorders. Following the Action Plan, Texas should identify appropriate populations for food interventions using the ILOS authority to improve health outcomes without increasing health care costs. This is consistent with the Value-Based Payment and Quality Improvement Advisory Committee's recommendations.<sup>75</sup>

### *Directed Payment Programs*

Texas should expand the use of the quality measure provisions in the Directed Payment Programs (DPPs) to incentivize hospitals, physicians, rural health clinics, and community mental health centers to advance NMDOH integration into their service delivery models. Currently, these health care entities are required to screen patients for NMDOH needs and develop follow-up plans when needs are identified. The next logical step is for the DPPs to incentivize providers to partner with community-based organizations or other appropriate entities to address the NMDOH needs identified through screening. These partnerships should include financial arrangements that allow health care providers to invest in building the capacity of partners to meet these needs. Although some providers are already doing this, it should be included as part of DPP quality requirements to provide stronger incentives for providers to help patients meet their health-impacting, non-medical needs.

### *HB 1575*

This bill recognizes the critical importance of addressing the non-medical needs of pregnant women to ensure healthy pregnancies and postpartum recovery. Under HB 1575, MCOs are required to assess NMDOH needs using a screening tool approved by the HHSC and, importantly, provide care management to ensure that the women are connected with the resources they need. Community health workers and doulas are authorized to provide care management under HB 1575, enabling eligible women to receive services from professionals who understand the unique needs of their communities. The value of care management services cannot be overstated: Even if there is an ample supply of community-based organizations to meet NMDOH needs, navigating these services can be difficult, particularly during vulnerable periods such as pregnancy. Texas can build on HB 1575 by extending care management services to additional populations in need of similar support or by providing additional NMDOH services to pregnant and postpartum women.

## Services for Priority Populations

As Texas develops health policies for priority populations, incorporating tools that address their health-impacting, non-medical needs can improve outcomes. This approach has already been taken with HB 1575, where legislators prioritized the health outcomes of pregnant women and developed non-medical screening and care management programs to improve those outcomes. The state has also shown a strong interest in supporting veterans, who generally have a worse health status than non-veterans, even when controlling for other factors.<sup>76</sup> Many health-impacting, non-medical services – such as nutrition and housing assistance – could be made available to veterans. Additionally, children remain a priority population for Texas, and non-medical services should be seriously considered, as discussed below.

## Services for Priority Health Conditions

Another approach to designing NMDOH programs is to identify and focus on health conditions that impact a significant percentage of Texans and for which there is evidence supporting the benefits of non-medical interventions. A potential starting point is childhood obesity, a major contributor to chronic conditions. Texas has one of the highest rates of childhood obesity in the United States (ranked No. 7), with over 600,000 children ages 10–17 affected.<sup>77</sup> More than 3 million Texas children are enrolled in Medicaid and CHIP, and those who are obese or at risk for obesity could benefit from nutrition and physical activity programs, potentially reducing long-term medical expenses.

Similar opportunities exist for adults with obesity in Medicaid, ERS, and TRS. According to the Department of State Health Services, heart disease was the leading cause of death among adult Texans in 2020, with contributing factors including high blood pressure, high cholesterol, diabetes, obesity, poor diet, and lack of exercise.<sup>78</sup> Addressing non-medical services such as nutrition and physical activity could improve the health status of individuals with heart disease.

Asthma is another leading cause of emergency room visits, hospitalizations, and disability. In Texas, nearly 7% of children (over 492,000) have asthma, and nearly half of these children are CHIP or Medicaid beneficiaries.<sup>79</sup> The Texas Strategic Plan for Asthma Control covers home visits to identify asthma triggers and educate families about exposures.<sup>80</sup> However, other states like Wisconsin have used flexibilities within the CHIP Health Services Initiative to fund interventions (up to \$5,000), such as the removal of asthma triggers in the home through mold cleanup, carpet removal, pest control, and repairs including fixing plumbing, roofs, drafty windows, and door sealings.<sup>81</sup> In 2022, the Value-Based Payment and Quality Improvement Advisory Committee recommended using the ILOS authority to address asthma.<sup>82</sup> Both mechanisms should be considered.

Texans with serious mental illness (SMI) are another priority population that is especially likely to benefit from NMDOH policy solutions. SMI is a chronic condition affecting nearly 800,000 Texans and presents significant challenges to local communities due to the involvement of multiple public systems (e.g., jails, public hospitals, and homeless shelters).<sup>83</sup> As a result, the 88th legislative session increased funding for mental health infrastructure (\$1.2 billion for state mental health hospitals) and community mental health services (\$902 million).<sup>84</sup> In addition to accessing medical care, managing SMI requires addressing NMDOH needs, as the condition often causes impairment in major life activities. Because of the intensive, long-term need for community-based services, the 1915 waiver options are particularly valuable for supporting community transitions (post-hospitalization), non-medical transportation, nutritional support, and supported employment programs for those with SMI.<sup>85</sup>

## **Conclusion: The Critical Importance of Investing in Non-Medical Services**

Texas has taken significant strides to improve health outcomes and reduce medical costs by investing in health-impacting, non-medical services. As the state continues to move toward value-based health care payment models, there is an opportunity to incorporate non-medical services that are both health-improving and cost-effective. There is increasing momentum for this work, including bipartisan federal support. The mechanisms for incorporating access to non-medical services into Texas Medicaid have expanded, and Texas is well-positioned to leverage these mechanisms. Programs developed in other states can be adapted to meet the state's unique needs. For state-funded programs outside of Medicaid, the Legislature and/or relevant agencies can incorporate non-medical services into health care programs to address specific populations or health conditions. Investing in non-medical services is one way to use our health care dollars more effectively to prevent and manage chronic diseases, leading to better health outcomes without increasing overall health care spending. This is a critical opportunity that should be embraced by all Texans.

## Appendix A

### About the Texas Consortium for the Non-Medical Drivers of Health

The Texas Consortium for the Non-Medical Drivers of Health (Texas Consortium) was founded in 2023 to improve health in Texas by accelerating the integration of non-medical services into the health care delivery system. The Texas Consortium is hosted at Rice University's Baker Institute for Public Policy and was co-founded with the UT Health Houston Center for Health Care Data.

The Texas Consortium is a dedicated space for all stakeholders to come together to share, learn, and support what is working to build a field of practice for NMDOH in Texas. It serves researchers, practitioners, and policymakers through events, including an annual conference.<sup>86</sup> The Texas Consortium serves as a learning hub for health care professionals by producing webinars and other content on topics such as screening tools, workflow patterns, program development, evaluation methods, and compliance with new requirements.<sup>87</sup>

The Texas Consortium, with the support of Rice University's Kinder Institute for Urban Research, has created a Program Index, which is an online, searchable database of NMDOH patient-centered interventions in Texas.<sup>88</sup> Health care organizations across the state are offering non-medical interventions, but until now, there has been no single repository to catalog this diverse work. This tool supports the establishment of NMDOH as a field of practice through knowledge sharing and stakeholders connecting with others who share their interests. The aim of the Program Index is to understand who, where, and how health care organizations are addressing their patients' non-medical needs. Health system entities are invited to collaborate with the Texas Consortium to create complete, accurate abstracts of the NMDOH programs in Texas.

## Appendix B

### Report Methodology

The Texas Consortium produces original content in analyses of NMDOH policies. The current report was informed by a multilevel analysis strategy designed to identify policy options for Texas to consider in supporting health care integration of NMDOH interventions. The content for this report was derived from several sources and activities, including participating in a state health care working group, developing the design strategy of an NMDOH policy report for the state, hosting policy generation workshops, and conducting a literature review. The scope of this report is defined by the identification of policy options. For an analysis of the effectiveness and costs of NMDOH interventions in health care, see relevant reviews.<sup>89</sup>

### Health Care Working Group

At the request of the Texas HHSC, the Texas Consortium presented guidance to the legislatively created Value-Based Payment and Quality Improvement Advisory Committee. This guidance was intended to inform the committee's recommendations to the Texas Legislature.<sup>90</sup> The focus was on framing the conversation about NMDOH in health care, specifically by considering key drivers of health, examining model Medicaid NMDOH programs in other states, and exploring implementation mechanisms.<sup>91</sup> Over a series of meetings occurring during the biennium, the committee formulated recommendations for the 89th Legislature. These recommendations aimed to advance HHSC's Medicaid and CHIP Services NMDOH Action Plan and identify opportunities to enhance NMDOH initiatives through Medicaid coverage and other mechanisms – with an emphasis on food and nutrition and community health workers. The recommendations also sought to support the implementation and evaluation of HB 1575 to improve health outcomes of pregnant women.

### Report Design

The Texas Consortium provided strategic input for the design of a policy report prepared by the Center for Health Care Strategies (CHCS). This report, commissioned by the Episcopal Health Foundation, was intended for the NMDOH Subcommittee of the Texas Value-Based Payment and Quality Improvement Advisory Committee.<sup>92</sup> The scope of the report focused on MCO-led interventions related to food and nutritional services, community health workers, and case management for pregnant women, including social risk screening. The Texas Consortium provided guidance on the report's framing, model programs, and a range of funding approaches. The final report was delivered to the Texas Value-Based Payment and Quality Improvement Advisory Committee to inform their recommendations to the 89th Legislature.

## Policy Generation Workshops

The Texas Consortium hosted two workshops to solicit input from members on potential strategies for integrating NMDOH services in the health care delivery system in Texas. These online, interactive sessions highlighted the core functions of NMDOH service delivery in Texas, solicited policy proposals, and facilitated voting on the most promising proposals. Across the two sessions, participants generated 95 ideas for NMDOH policy change. Similar ideas were combined into themes, with the most popular themes discussed in further detail during breakout sessions to explore their potential implementation in Texas. A total of 124 participants from eight types of organizations – primarily health care/hospital, academic, and social services entities – contributed to the workshops.

## Review of Literature

Academic literature and health policy media were reviewed to identify policy options for NMDOH in health care settings. Findings from each of the methodologies described above were used to refine search terms and guide the selection of sources.



## Appendix C

### Additional Resources

The resources in the following list provide further descriptions of policy options, analyses, and example programs.

“Addressing Social Needs in the Medicaid Program.” National Alliance to Impact the Social Determinants of Health, October 6, 2021.

[https://nasdoh.org/wp-content/uploads/2021/10/10-21-NASDOH-Medicaid-and-Social-Needs-Issue-Brief\\_FINAL.pdf](https://nasdoh.org/wp-content/uploads/2021/10/10-21-NASDOH-Medicaid-and-Social-Needs-Issue-Brief_FINAL.pdf).

Bachrach, Deborah, Jocelyn Guyer, Sarah Meier, John Meerschaert, and Shelly Brandel.

“Enabling Sustainable Investment in Social Interventions: A Review of Medicaid Managed Care Rate-Setting Tools.” The Commonwealth Fund, January 2018.

[https://www.commonwealthfund.org/sites/default/files/documents/\\_\\_\\_media\\_files\\_publications\\_fund\\_report\\_2018\\_jan\\_bachrach\\_investment\\_social\\_interventions\\_medicaid\\_rate\\_setting.pdf](https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_fund_report_2018_jan_bachrach_investment_social_interventions_medicaid_rate_setting.pdf).

Centers for Medicare & Medicaid Services (CMS). “Coverage of Health-Related Social Needs (HRSN) Services in Medicaid and the Children’s Health Insurance Program (CHIP).” November 2023.

<https://www.medicaid.gov/sites/default/files/2023-11/hrsn-coverage-table.pdf>.

“Financing Strategies to Address the Social Determinants of Health in Medicaid.” MACPAC, May, 2022.

[https://www.macpac.gov/wp-content/uploads/2022/05/SDOH-Issue-Brief\\_May-2022.pdf](https://www.macpac.gov/wp-content/uploads/2022/05/SDOH-Issue-Brief_May-2022.pdf).

Layman, Kate. “Texas Medicaid Waivers.” Texas Health and Human Services, August 17, 2023.

<https://www.hhs.texas.gov/sites/default/files/documents/aug-2023-smmcac-agenda-item-5d.pdf>.

“Medicaid Waiver Tracker: Approved and Pending Section 1115 Waivers by State.” Kaiser Family Foundation, August 2, 2024.

<https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/>.

Sim, Shao-Chee, Anne Smithey, and Diana Crumley. “Moving Upstream – How Medicaid in Texas Could Use In Lieu of Services to Address Non-Medical Drivers of Health: Three Potential Interventions and Related Evidence.” Episcopal Health Foundation, December 2022.

<https://www.episcopalhealth.org/wp-content/uploads/2022/12/Moving-Upstream-Addressing-Non-Medical-Drivers-of-Health-in-Texas-report.pdf>.

Spencer, Anna and Diana Crumley. "Opportunities to Address the Non-Medical Drivers of Health in Texas: A Review of Food, Community Health Worker and Non-Medical Perinatal Interventions, and Alternative Payment Models." Episcopal Health Foundation, August 8, 2024.

[https://www.episcopalhealth.org/research\\_report/opportunities-to-address-the-non-medical-drivers-of-health-in-texas/](https://www.episcopalhealth.org/research_report/opportunities-to-address-the-non-medical-drivers-of-health-in-texas/).

Texas Health and Human Services Commission. "Texas Value Value-Based Payment and Quality Improvement Advisory Committee Recommendations to the 88th Texas Legislature." December 2022.

<https://www.hhs.texas.gov/sites/default/files/documents/value-based-payment-quality-improvement-recommendations-dec-2022.pdf>.

## Notes

- <sup>1</sup> Centers for Medicare & Medicaid Services (CMS), “National Health Expenditure Data: Historical,” accessed August 9, 2024, <https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical>.
- <sup>2</sup> Jacqueline A. Fiore et al., “National Health Expenditure Projections, 2023–32: Payer Trends Diverge as Pandemic-Related Policies Fade,” *Health Affairs* 43, no. 1 (2024): 10–1377, <https://doi.org/10.1377/hlthaff.2024.00469>.
- <sup>3</sup> Munira Z. Gunja, Evan D. Gumas, and Reginald D. Williams II, “U.S. Health Care from a Global Perspective, 2022: Accelerating Spending, Worsening Outcomes,” The Commonwealth Fund, January 2023, <https://www.commonwealthfund.org/publications/issue-briefs/2023/jan/us-health-care-global-perspective-2022>.
- <sup>4</sup> Irene Papanicolas, Liana R. Woskie, and Ashish K. Jha, “Health Care Spending in the United States and Other High-Income Countries,” *Health Affairs* 37, no. 3 (2018): 411–19, <https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.05144>.
- <sup>5</sup> CMS, “National Health Expenditure Data: Historical.”
- <sup>6</sup> Fiore et al.
- <sup>7</sup> Gunja, Gumas, and Williams.
- <sup>8</sup> Organisation for Economic Co-operation and Development (OECD), “OECD Data Explorer: Life Expectancy,” [https://data-explorer.oecd.org/vis?df\[ds\]=dsDisseminateFinalDMZ&df\[id\]=DSD\\_HEALTH\\_STAT%40D\\_F\\_LE&df\[ag\]=OECD.ELS.HD&df\[vs\]=1.0&dq=PRT%2BGRC%2BAUT%2BDNK%2BFIN%2BIRL%2BISR%2BITA%2BNOR%2BESP%2BMEX%2BUSA%2BGBR%2BNLD%2BCAN%2BDEU%2BFRA%2BSWE%2BCHE%2BAUS%2BJPN.A...Y0.....&pd=1960%2C2023&to\[TIME\\_PERIOD\]=false&vw=tb&lb=bt](https://data-explorer.oecd.org/vis?df[ds]=dsDisseminateFinalDMZ&df[id]=DSD_HEALTH_STAT%40D_F_LE&df[ag]=OECD.ELS.HD&df[vs]=1.0&dq=PRT%2BGRC%2BAUT%2BDNK%2BFIN%2BIRL%2BISR%2BITA%2BNOR%2BESP%2BMEX%2BUSA%2BGBR%2BNLD%2BCAN%2BDEU%2BFRA%2BSWE%2BCHE%2BAUS%2BJPN.A...Y0.....&pd=1960%2C2023&to[TIME_PERIOD]=false&vw=tb&lb=bt).
- <sup>9</sup> “2023 Scorecard on State Health System Performance,” The Commonwealth Fund, June 22, 2023, <https://www.commonwealthfund.org/publications/scorecard/2023/jun/2023-scorecard-state-health-system-performance>.
- <sup>10</sup> United Health Foundation, “2023 Annual Report: America’s Health Rankings,” 2023, [https://assets.americashealthrankings.org/app/uploads/ahr\\_2023annual\\_comprehensive\\_report\\_final2-web.pdf](https://assets.americashealthrankings.org/app/uploads/ahr_2023annual_comprehensive_report_final2-web.pdf).
- <sup>11</sup> Sarah N. Landon, Jaya Padikkala, and Leora I. Horwitz, “Defining Value in Health Care: A Scoping Review of the Literature,” *International Journal for Quality in Health Care* 33, no. 4 (November 12, 2021), <https://doi.org/10.1093/intqhc/mzab140>.
- <sup>12</sup> CMS, “Value-Based Purchasing Programs: What Are the Value-Based Programs?” September 2023, <https://www.cms.gov/medicare/quality/value-based-programs>.
- <sup>13</sup> Patrick L. Remington, Bridget B. Catlin, and Keith P. Gennuso, “The County Health Rankings: Rationale and Methods,” *Population Health Metrics* 13 (2015): 1–12, <https://pophealthmetrics.biomedcentral.com/counter/pdf/10.1186/s12963-015-0044-2.pdf>.
- <sup>14</sup> National Academies of Sciences, Engineering, and Medicine, “Integrating Social Care Into the Delivery of Health Care: Moving Upstream to Improve the Nation’s Health” (Washington, DC: The National Academies Press, 2019),

<https://doi.org/10.17226/25467>; Hillary Daniel, Sue S. Bornstein, and Gregory C. Kane, “Addressing Social Determinants to Improve Patient Care and Promote Health Equity: An American College of Physicians Position Paper,” *Annals of Internal Medicine* 168, no. 8 (2018): 577–8, <https://www.acpjournals.org/doi/full/10.7326/M17-2441>; Council on Community Pediatrics, “Poverty and Child Health in the United States,” *Pediatrics* 137, no. 4 (2016),

<https://publications.aap.org/pediatrics/article/137/4/e20160339/81482/Poverty-and-Child-Health-in-the-United-States>; and Erica Byhoff et al., “A Society of General Internal Medicine Position Statement on the Internists’ Role in Social Determinants of Health,” *Journal of General Internal Medicine* 35 (2020): 2721–27, [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7459005/pdf/11606\\_2020\\_Article\\_5934.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7459005/pdf/11606_2020_Article_5934.pdf).

<sup>15</sup> Patrick L. Remington, Bridget B. Catlin, and Keith P. Genusso, “The County Health Rankings: Rationale and Methods,” *Population Health Metrics* 13, no. 11 (April 17, 2015), <https://doi.org/10.1186/s12963-015-0044-2>.

<sup>16</sup> Texas Health and Human Services, “Non-Medical Drivers of Health,” accessed August 9, 2024, <https://www.hhs.texas.gov/about/process-improvement/improving-services-texans/medicaid-chip-quality-efficiency-improvement/non-medical-drivers-health>.

<sup>17</sup> Douglas McCarthy et al., “Guide to Evidence for Health-Related Social Needs Interventions: 2022 Update,” The Commonwealth Fund, September 2022, [https://www.commonwealthfund.org/sites/default/files/2022-09/ROI\\_calculator\\_evidence\\_review\\_2022\\_update.pdf](https://www.commonwealthfund.org/sites/default/files/2022-09/ROI_calculator_evidence_review_2022_update.pdf); Giridhar Mohan and Sajal Chattopadhyay, “Cost-Effectiveness of Leveraging Social Determinants of Health to Improve Breast, Cervical, and Colorectal Cancer Screening: A Systematic Review,” *JAMA Oncology* 6, no. 9 (2020): 1434–44,

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7857975/pdf/nihms-1633933.pdf>; Maria J. Federico et al., “The Impact of Social Determinants of Health on Children with Asthma,” *Journal of Allergy and Clinical Immunology: In Practice* 8, no. 6 (2020): 1808–14, [https://www.jaci-inpractice.org/article/S2213-2198\(20\)30326-3/abstract](https://www.jaci-inpractice.org/article/S2213-2198(20)30326-3/abstract); and Amelia Whitman et al., “Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts,” U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, April 1, 2022, <https://aspe.hhs.gov/sites/default/files/documents/6ba4bbb2e9c9551355a6926f023f1585/SDOH-Evidence-Review.pdf>.

<sup>18</sup> Texas Health and Human Services, “Legislative Appropriations Request for Fiscal Years 2024-2025, Volume 1,” September 9, 2022, <https://www.hhs.texas.gov/sites/default/files/documents/hhsc-legislative-appropriations-request-2024-2025.pdf>.

<sup>19</sup> Employees Retirement System of Texas, “Texas Employees Group Benefits Program Annual Report FY23,” February 2024, 96, 99, <https://www.ers.texas.gov/about-ers/reports-and-studies/reports-and-studies-on-ers-administered-benefit-pr/fy23-gbp-annual-report>.

<sup>20</sup> Teacher Retirement System of Texas, “Operating Budget: Fiscal Year 2024,” December 1, 2023, <https://www.trs.texas.gov/TRS%20Documents/fy2024-trs-operating-budget.pdf>.

<sup>21</sup> Texas Health and Human Services, “Legislative Appropriations Request for Fiscal Years 2024-2025, Volume 1”; Employees Retirement System of Texas, “Texas Employees Group Benefits Program Annual Report FY23”; and Teacher Retirement System of Texas, “Operating Budget: Fiscal Year 2024.”

<sup>22</sup> Kate Layman, “State Medicaid Waivers,” Texas Health and Human Services, August 17, 2023, <https://www.hhs.texas.gov/sites/default/files/documents/aug-2023-smmcac-agenda-item-5d.pdf>; Social Security Act, Title XIX, Sec. 1915, 42 U.S.C. 1396n, accessed August 9, 2024, [https://www.ssa.gov/OP\\_Home/ssact/title19/1915.htm](https://www.ssa.gov/OP_Home/ssact/title19/1915.htm).

<sup>23</sup> CMS, “Texas State Plan Amendment (SPA) 22-0027,” October 3, 2023, <https://www.hhs.texas.gov/sites/default/files/documents/22-0027.pdf>.

<sup>24</sup> Texas Health and Human Services, “COVID-19 Supplemental Funding Primer: Intellectual and Developmental Disability and Behavioral Health Services,” January, 2022, <https://www.hhs.texas.gov/sites/default/files/documents/covid-19-federal-supplemental-funding-primer-jan-2022.pdf>.

<sup>25</sup> Texas Health and Human Services, “Thriving Texas Families,” accessed August 9, 2024, <https://www.hhs.texas.gov/services/health/women-children/thriving-texas-families>.

<sup>26</sup> Texas Health and Human Services, “Texas Health and Human Services Medicaid & Chip Services Non-Medical Drivers of Health Action Plan,” February, 2023, <https://www.hhs.texas.gov/sites/default/files/documents/nmdoh-action-plan.pdf>.

<sup>27</sup> Texas Health and Human Services, “Texas Health and Human Services Medicaid & Chip Services Non-Medical Drivers of Health Action Plan.”

<sup>28</sup> Texas Health and Human Services, “Directed Payment Programs,” accessed August 9, 2024, <https://www.hhs.texas.gov/providers/medicaid-business-resources/medicaid-supplemental-payment-directed-payment-programs/directed-payment-programs>; Texas Health and Human Services, “Medicaid 1115 Waiver,” accessed August 9, 2024, <https://www.hhs.texas.gov/regulations/policies-rules/waivers/medicaid-1115-waiver>.

<sup>29</sup> H.B. 1575, 88th Leg., Reg. Sess. (Tx. 2023), <https://capitol.texas.gov/tlodocs/88R/billtext/pdf/HB01575F.pdf#navpanes=0>.

<sup>30</sup> H.B. 12, 88th Leg., Reg. Sess. (Tx. 2023), <https://capitol.texas.gov/tlodocs/88R/billtext/pdf/HB00012F.pdf#navpanes=0>.

<sup>31</sup> Kaiser Family Foundation (KFF), “Births Financed by Medicaid, 2022,” accessed August 9, 2024, <https://www.kff.org/medicaid/state-indicator/births-financed-by-medicaid/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>.

<sup>32</sup> Texas Health and Human Services, “Value-Based Payment and Quality Improvement Advisory Committee,” accessed August 9, 2024, <https://www.hhs.texas.gov/about/leadership/advisory-committees/value-based-payment-quality-improvement-advisory-committee>.

<sup>33</sup> Texas Health and Human Services, “Texas Value-Based Payment and Quality Improvement Advisory Committee Recommendations to the 88th Texas Legislature,” December 2022, <https://www.hhs.texas.gov/sites/default/files/documents/value-based-payment-qual-improvement-recommendations-dec-2022.pdf>.

<sup>34</sup> Texas Health and Human Services, “Value-Based Payment and Quality Improvement Advisory Committee,” August 14, 2024, 2:26:04, meeting video archive starting at 2:16, <https://texashhsc.v3.swagit.com/videos/312417>.

- <sup>35</sup> Texas Consortium for the Non-Medical Drivers of Health, “Program Index,” accessed August 9, 2024, <https://index.driversofhealthtx.org/>.
- <sup>36</sup> Texas Consortium for the Non-Medical Drivers of Health, “Program Index.”
- <sup>37</sup> Alex Azar, “The Root of the Problem: America’s Social Determinants of Health” (speech, Hatch Foundation for Civility and Solutions, November 14, 2018), U.S. Department of Health and Human Services, <https://library.vbcexhibithall.com/wp-content/uploads/2024/02/Americas-Social-Determinants-of-Health-Speech-by-Alex-Azar-2018.pdf>.
- <sup>38</sup> CMS, “Accountable Health Communities Model,” accessed August 9, 2024, <https://www.cms.gov/priorities/innovation/innovation-models/ahcm>; CMS, “SHO #21-001 Re: Opportunities in Medicaid and CHIP to Address Social Determinants of Health (SDOH),” January 7, 2021, <https://www.medicaid.gov/federal-policy-guidance/downloads/sho21001.pdf>.
- <sup>39</sup> CMS, “SMD #23-001: Additional Guidance on Use of In Lieu of Services and Settings in Medicaid Managed Care, January 2023,” January 6, 2023., <https://www.medicaid.gov/federal-policy-guidance/downloads/smd23001.pdf>; The White House, “The U.S. Playbook to Address Social Determinants of Health,” Domestic Policy Council, Office of Science and Technology Policy, November, 2023, <https://www.whitehouse.gov/wp-content/uploads/2023/11/SDOH-Playbook-3.pdf>.
- <sup>40</sup> CMS, “Medicare Monthly Enrollment,” April, 2024, <https://data.cms.gov/summary-statistics-on-beneficiary-enrollment/medicare-and-medicaid-reports/medicare-monthly-enrollment>.
- <sup>41</sup> ATI Advisory, “New Non-Medical Supplemental Benefits in Medicare Advantage in 2023,” updated February 21, 2023, <https://atiadvisory.com/resources/wp-content/uploads/2023/02/2023-New-Non-Medical-Supplemental-Benefits.pdf>.
- <sup>42</sup> CMS, “About Section 1115 Demonstrations,” accessed August 9, 2024, <https://www.medicaid.gov/medicaid/section-1115-demonstrations/about-section-1115-demonstrations/index.html>.
- <sup>43</sup> KFF, “Medicaid Waiver Tracker.”
- <sup>44</sup> KFF, “Medicaid Waiver Tracker: Approved and Pending Section 1115 Waivers by State,” August 2, 2024, <https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/>.
- <sup>45</sup> North Carolina Department of Health and Human Services, “Healthy Opportunities Pilots,” July 2024, <https://www.ncdhhs.gov/about/department-initiatives/healthy-opportunities/healthy-opportunities-pilots>.
- <sup>46</sup> North Carolina Department of Health and Human Services, “Updated Healthy Opportunities Pilots Fee Schedule,” July 2024, <https://www.ncdhhs.gov/healthy-opportunities-pilot-fee-schedule-and-service-definitions/open>.
- <sup>47</sup> California Department of Health Care Services, “CalAIM: Medi-Cal Transformation,” accessed August 10, 2024, <https://www.dhcs.ca.gov/CalAIM/Pages/calaim.aspx>.
- <sup>48</sup> 42 CFR 438.3(e)(2) (last amended August 28, 2024), <https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-C/part-438/subpart-A/section-438.3>; 42 CFR 438.16 (last amended August 28, 2024), <https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-C/part-438/subpart-A/section-438.16>.



- <sup>49</sup> Texas Health and Human Services, “Medicaid Behavioral Health In Lieu of Services Annual Report,” November 2023, <https://www.hhs.texas.gov/sites/default/files/documents/medicaid-bh-lieu-services-annual-report-nov-2023.pdf>.
- <sup>50</sup> California Department of Health Care Services, “In Lieu of Services in CalAIM: A Summary of the Evidence-Base on Cost-Effectiveness and Medical Appropriateness of ILOS,” August 2021, <https://www.dhcs.ca.gov/Documents/MCQMD/CA-ILOS-Evidence-Library-Executive-Summary-August-2021.pdf>.
- <sup>51</sup> Sunshine Health, “In Lieu of Services Resource Guide,” October 2021, <https://www.sunshinehealth.com/providers/Behavioral-health/in-lieu-of-services-resource-guide.html>.
- <sup>52</sup> Kansas Department of Health and Environment, “KanCare Comprehensive Quality Strategy Report - KanCare In Lieu of Service,” July 2024, <https://www.kancare.ks.gov/home/showpublisheddocument/1402/638576006967370000>.
- <sup>53</sup> New York State Department of Health, “New York State Medicaid Managed Care Alternative Services and Settings - In Lieu of Services (ILS),” June 2023, [https://www.health.ny.gov/health\\_care/managed\\_care/app\\_in\\_lieu\\_of\\_svs\\_mmc.htm](https://www.health.ny.gov/health_care/managed_care/app_in_lieu_of_svs_mmc.htm).
- <sup>54</sup> Trillium Health Resources, “In Lieu of Services (ILOS),” May 2024, <https://www.trilliumhealthresources.org/members-recipients/member-benefit-plans-service-definitions/in-lieu-of-services-ilos>.
- <sup>55</sup> Oregon Health Authority, “In-Lieu-of Services (ILOS) Program Overview,” May 2024, <https://www.oregon.gov/oha/HSD/OHP/CCO/ILOS%20Program%20Overview.pdf>.
- <sup>56</sup> Social Security Act, Title XIX, Sec. 1915., 42 U.S.C. 1396n.
- <sup>57</sup> CMS, “Opportunities to Address Social Determinants of Health (SDOH) in 1915(c) and 1915(i) Medicaid Home and Community-Based Services (HCBS) Programs,” accessed August 9, 2024, <https://www.medicare.gov/home-community-based-services/downloads/sdoh-1915i-1915c-hcbs.pdf>.
- <sup>58</sup> CMS, “Opportunities to Address Social Determinants of Health.”
- <sup>59</sup> CMS, “Frequently Asked Questions (FAQs): Health Services Initiative,” January 12, 2017, <https://www.medicare.gov/federal-policy-guidance/downloads/faq11217.pdf>.
- <sup>60</sup> CMS, “New York State Child Health Insurance Program (CHIP) Amendment,” NY-17-0023-CA, November 17, 2017, <https://www.medicare.gov/sites/default/files/CHIP/Downloads/NY/NY-17-0023-CA.pdf>.
- <sup>61</sup> Wisconsin Department of Health Services, “Asthma-Safe Homes Program,” December 2023, <https://www.dhs.wisconsin.gov/asthma/ashp.htm>.
- <sup>62</sup> CMS, “Frequently Asked Questions (FAQs): Health Services Initiative.”
- <sup>63</sup> Texas Health and Human Services, “Medicaid and CHIP Quality and Efficiency Improvement,” accessed August 11, 2024, <https://www.hhs.texas.gov/about/process-improvement/improving-services-texans/medicaid-chip-quality-efficiency-improvement>.
- <sup>64</sup> Texas Health and Human Services, “Community Living Assistance and Support Services (CLASS) Provider Manual: Appendix XVI, Value-Added Services,” November 2019, <https://www.hhs.texas.gov/handbooks/community-living-assistance-support-services-class-provider-manual/appendix-xvi-value-added-services>.
- <sup>65</sup> Anna Spencer and Diana Crumley, “Opportunities to Address the Non-Medical Drivers of Health in Texas: A Review of Food, Community Health Worker and Non-Medical

Perinatal Interventions, and Alternative Payment Models,” Episcopal Health Foundation, August 8, 2024, [https://www.episcopalhealth.org/research\\_report/opportunities-to-address-the-non-medical-drivers-of-health-in-texas/](https://www.episcopalhealth.org/research_report/opportunities-to-address-the-non-medical-drivers-of-health-in-texas/).

<sup>66</sup> Spencer and Crumley.

<sup>67</sup> KFF, “Explaining Health Care Reform: Medical Loss Ratio (MLR),” August 12, 2024, <https://www.kff.org/affordable-care-act/fact-sheet/explaining-health-care-reform-medical-loss-ratio-mlr/>.

<sup>68</sup> Texas Health and Human Services, “VBPQIAC NMDOH Subcommittee Meeting: Draft Recommendation Language,” VBPQIAC Agenda Item 5A, Slide 23, May 20, 2024, <https://www.hhs.texas.gov/sites/default/files/documents/may-2024-vbpqiac-agenda-item-5a.pdf>.

<sup>69</sup> Texas Health and Human Services, “External Quality Review of Texas Medicaid CHIP Managed Care: Annual Technical Report State Fiscal Year 2023,” Texas External Quality Review Organization, August 2023, <https://www.hhs.texas.gov/sites/default/files/documents/eqro-annual-technical-report-contract-sfy-2023.pdf>.

<sup>70</sup> Texas Health and Human Services, “External Quality Review of Texas Medicaid CHIP Managed Care.”

<sup>71</sup> Texas Health and Human Services, “COVID-19 Supplemental Funding Primer.”

<sup>72</sup> UnitedHealthcare, “TRS-Care Medicare Advantage,” June 2024, <https://retiree.uhc.com/trs-carema>; UnitedHealthcare, “ERS Medicare Advantage,” July 2024, <https://retiree.uhc.com/ers-ma>.

<sup>73</sup> Teacher Retirement System of Texas, “2023 Annual TRS Health Report,” accessed August 9, 2024, <https://www.trs.texas.gov/TRS%20Documents/2023-annual-trs-health-report.pdf>.

<sup>74</sup> Texas Health and Human Services, “Texas Health and Human Services Medicaid & Chip Services Non-Medical Drivers of Health Action Plan.”

<sup>75</sup> Texas Health and Human Services, “Texas Value-Based Payment and Quality Improvement Advisory Committee Recommendations to the 88th Texas Legislature.”

<sup>76</sup> Jose A. Betancourt et al., “The Health Status of the US Veterans: A Longitudinal Analysis of Surveillance Data Prior to and during the COVID-19 Pandemic,” *Healthcare* 11, no. 14 (July 17, 2023),

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10378995/pdf/health\\_care-11-02049.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10378995/pdf/health_care-11-02049.pdf).

<sup>77</sup> University of Texas Health Science Center at Houston School of Public Health, “Healthy State: The Child Obesity Crisis in Texas,” Michael & Susan Dell Center for Healthy Living, accessed August 9, 2024, <https://sph.uth.edu/research/centers/dell/resources/new/child+obesity+crisis+final.pdf>.

<sup>78</sup> Texas Department of State Health Services, “Texas Health Data: Deaths,” accessed August 9, 2024, <https://healthdata.dshs.texas.gov/dashboard/births-and-deaths/deaths>; Texas Health and Human Services, “What Are Heart Disease and Stroke?” accessed August 9, 2024, <https://www.dshs.texas.gov/heart-disease-stroke/what-are-heart-disease-stroke>.

<sup>79</sup> Texas Department of State Health Services, “Asthma Program,” accessed August 12, 2024, <https://www.dshs.texas.gov/asthma>; National Center for Healthy Housing, “Technical Brief: Health Services Initiatives—Using a CHIP State Plan Option to Address



Asthma,” accessed August 10, 2024, [https://nchh.org/resource-library/technical-brief\\_health-services-initiatives\\_using-a-chip-state-plan-option-to-address-asthma.pdf](https://nchh.org/resource-library/technical-brief_health-services-initiatives_using-a-chip-state-plan-option-to-address-asthma.pdf).

<sup>80</sup> Texas Department of State Health Services, “Strategic Plan for Asthma Control in Texas, 2021-2024 – Priority Area 3,” accessed August 10, 2024.

<https://www.dshs.texas.gov/sites/default/files/asthma/Documents/Asthma-Control-Strategic-Plan-2021-2024.pdf>.

<sup>81</sup> Wisconsin Department of Health Services, “Asthma-Safe Homes Program (ASHP) - Component Two: Environmental Home Repair Services,” accessed August 10, 2024, <https://www.dhs.wisconsin.gov/asthma/ashp.htm>.

<sup>82</sup> Texas Health and Human Services, “Texas Value-Based Payment and Quality Improvement Advisory Committee Recommendations to the 88th Texas Legislature.”

<sup>83</sup> National Alliance on Mental Illness (NAMI), “Mental Health Texas Fact Sheet,” February 2021, <https://www.nami.org/NAMI/media/NAMI-Media/StateFactSheets/TexasStateFactSheet.pdf>.

<sup>84</sup> Greg Hansch, Lysette Galvan, and Hannah Gill, “88th Legislative Session: Rapid Recap,” NAMI Texas, August 2023, <https://namitexas.org/wp-content/uploads/sites/332/2023/08/Rapid-Recap-88th-Legislative-Session.pdf>.

<sup>85</sup> Medicaid and CHIP Payment and Access Commission (MACPAC), “Behavioral Health Services Covered under HCBS Waivers and 1915(i) SPAs,” March 2020, <https://www.macpac.gov/subtopic/behavioral-health-services-covered-under-hcbs-waivers-and-spas/>.

<sup>86</sup> Texas Consortium for the Non-Medical Drivers of Health, “Annual Conference,” accessed August 9, 2024, <https://www.driversofhealthtx.org/annual-conference/>.

<sup>87</sup> Texas Consortium for the Non-Medical Drivers of Health, “Events,” accessed August 9, 2024, <https://www.driversofhealthtx.org/events/>.

<sup>88</sup> Texas Consortium for the Non-Medical Drivers of Health, “Program Index.”

<sup>89</sup> McCarthy et al.; Mohan and Chattopadhyay; Federico et al.; and Whitman et al.

<sup>90</sup> Texas Health and Human Services, “Value-Based Payment and Quality Improvement Advisory Committee.”

<sup>91</sup> Elena M. Marks, “Opportunities to Advance NMDOH Within Texas Medicaid,” presented at Value-Based Payment and Quality Improvement Advisory Committee meeting, Slide 10, April 16, 2024,

<https://www.hhs.texas.gov/sites/default/files/documents/may-2024-vbpqiac-agenda-item-5a.pdf>.

<sup>92</sup> Spencer and Crumley.

