THE ROOT OF THE ISSUE

Utah’s Social Determinants of Health

SYMPOSIUM PROCEEDINGS

August 17, 2018
The Root of the Issue: Utah’s Social Determinants of Health
Symposium Proceedings

By: Laura Summers, Senior Health Care Analyst | Kem C. Gardner Policy Institute

Table of Contents

Introduction .................................................................................................................. 1
What are Social Determinants of Health? ................................................................. 2
Why Is It Important to Understand Social Determinants of Health? ...................... 3
What is Being Done To Address Social Determinants of Health? ............................. 6
How Do Social Determinants of Health Align with the Movement to
Value-Based Health Care? ....................................................................................... 10
Key Observations and Next Steps ............................................................................. 10
Conclusion .................................................................................................................. 12
Introduction

On August 17, 2018, the Kem C. Gardner Policy Institute and the Hatch Center for Civility & Solutions jointly hosted the annual Kem C. Gardner Policy Symposium “The Root of the Issue: Utah’s Social Determinants of Health.” The symposium focused on strategies and innovations for addressing social determinants of health, which are the conditions in which people are born, live, work, and play that affect their health risks and outcomes.

The symposium was convened by Governor Mike Leavitt and Governor Mitt Romney, who assist in planning and executing the Gardner Policy Institute’s annual symposiums. This proceedings report summarizes information presented at the symposium, outlines key observations, and poses possible next steps for consideration. The goal of the report is to help local leaders better understand and make informed decisions about addressing Utah’s social determinants of health.

Symposium Speakers

Admiral Brett Giroir, M.D.
Key Note Speaker
United States Assistant Secretary for Health in the Department of Health and Human Services (HHS)

Adam Boehler
Centers for Medicare & Medicaid Services (CMS) Administrator and Director of the Center for Medicare and Medicaid Innovation (CMMI)

Karen DeSalvo, M.D.
Former Acting Assistant Secretary of Health at HHS and Co-Convener of The National Alliance to Impact the Social Determinants of Health

Michael Good, M.D.
Chief Executive Officer of University of Utah Health, Dean of the University of Utah School of Medicine, and the Senior Vice President of University of Utah Health Sciences

Marc Harrison, M.D.
President and Chief Executive Officer of Intermountain Healthcare
What are Social Determinants of Health?

A person’s health is predominantly impacted by factors outside of the health care system: their living and working conditions, social environment, economic situation, and healthy behaviors. Dr. Marc Harrison, CEO of Intermountain Healthcare, and Dr. Karen DeSalvo, co-convener of the National Alliance to Impact the Social Determinants of Health, presented research showing that these non-medical factors account for up to 60 percent of a person’s health outcomes, while genetics and the health care system comprise the remaining 40 percent (Figure 1).

These non-medical factors are known as social determinants of health (Figure 2). They are the conditions in which we are born, live, learn, work, play, worship, and age that affect our health risks and outcomes. Given the impact social determinants of health have on our personal health, Dr. DeSalvo pointed out that “our zip code affects our health more than our genetic code.”

**Figure 1: Non-Medical Factors Account for 60 Percent of a Person’s Health**
Presented by Karen DeSalvo, M.D.

<table>
<thead>
<tr>
<th>Health Care</th>
<th>Social, Environmental, Behavioral Factors</th>
<th>Genetics</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>60%</td>
<td>20%</td>
</tr>
</tbody>
</table>


**Figure 2: Social Determinants of Health**

"Our zip code affects our health more than our genetic code.”

Karen DeSalvo, M.D.
Why Is It Important to Understand Social Determinants of Health?

Lowering Costs and Improving Health Care Outcomes

Social determinants of health are key to improving people’s health and lowering health care system costs. For example, a demonstration conducted in 2016 found that simply connecting people to social services resulted in a 10 percent reduction in health care costs—equating to a decrease in mean expenditures of $2400 for the group who had their social needs met.2 A growing body of research mirrors these results and affirms that social determinants of health should be addressed in order to achieve large and sustained health care system improvements.3

To illustrate this point, Dr. DeSalvo presented data that shows the United States far outpaces other industrialized countries in health care spending, but that our country’s life expectancy has been rising at a much slower rate. She noted this is a surprising outcome given the significant progress the U.S. health care system has made with promoting quality and safety standards, improving the patient experience, increasing the use of technology, and bending the cost curve. That said, the United States has the lowest ratio of social service spending to health care spending among industrialized countries (Figure 3). Dr. DeSalvo noted that countries with a lower ratio of social service to health care spending have worse health outcomes even if a significant amount of dollars are spent on health care.4

Dr. DeSalvo also presented data showing 52 percent of adults with three or more chronic diseases and functional limitations have income below 200 percent of the federal poverty level (FPL). Given their economic situation, helping these individuals effectively manage their chronic diseases may extend beyond providing excellent clinical care to ensuring they have access to nutritious food, a safe environment, and tools or persons to help them navigate the complex health care system. She also noted that a small share of the U.S. population accounts for almost 50 percent of total health care spending. In order to reduce overall costs, it is critical to understand who these individuals are and why they are utilizing the health care system.

Preventing Public Health Care Problems

Focusing on Utah’s social determinants of health may also help the state address some of its public health care concerns such as opioid addiction, heroin use, and suicide.

Data presented at the symposium show there were 662 drug overdose deaths in Utah between January 2017 and January 2018. Nationally, there were more drug overdose deaths between 1999 and 2017 than there were combat deaths from World War I, World War II, the Korean War, and the Vietnam War combined (Figure 4). While Utah’s prescription opioid overdose deaths fell in recent years, the number of heroin-caused deaths increased.5 Recent data from the Centers for Disease Control and Prevention also show that one in every seven U.S. high school students report misusing opioids. This is an increase from previous years, even though youth’s engagement in other risky behaviors declined.6

* Examples include rent subsidies, job training programs, nutritional support, family assistance, and other non-health services.


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**Figure 3: Health and Social Care Spending as a Percent of GDP, 2005**
Presented by Karen DeSalvo, M.D.

```
Country  | Health Care | Social Care
FR       | 12         | 12
SWE      | 12         | 12
SWIZ     | 11         | 11
GER      | 11         | 11
NETH     | 12         | 12
US       | 15         | 16
NOR      | 9          | 8
UK       | 9          | 9
NZ       | 10         | 10
CAN      | 11         | 11
AUS      | 9          | 9
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Marc Harrison, M.D.

“To more effectively address rising costs, the health care system needs to look beyond clinical evidence to social determinants of health.”
The opioid crisis is a complex problem to fix, but it starts with addressing social determinants of health.

Admiral Brett Giroir, M.D.

The opioid epidemic impacts more than a person’s health. There are personal, local, and national economic implications as well. Admiral Brett Giroir, Assistant Secretary for Health at HHS, noted that the economic cost of the opioid crisis was $504 billion in 2015. He also noted that the nation is rapidly losing a key part of its workforce (the death rate is highest among adults age 25–34), children with parents who suffer from addiction are being moved to the foster care system or grandparents are taking over as the primary caregivers, and the rate of infectious diseases, such as HIV and Hepatitis B and C, is rising.

Many areas in the U.S. hit hardest by the opioid epidemic are in economic decline—like Utah’s Coal Country, which has an opioid death rate more than three times the rate of most other areas in the state (Figure 5). Economic deprivation and high unemployment create an environment that places individuals at risk for poor health and unhealthy behaviors.

As a result, Admiral Giroir believes that effective strategies for combating the opioid crisis should include addressing social determinants of health. Dr. DeSalvo experienced first-hand the importance of addressing social determinants of health when she

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**Figure 4: U.S. Overdose Deaths, 1999–2017, Compared to Combat Deaths**

Presented by Admiral Brett Giroir.

![Graph showing U.S. Overdose Deaths and Combat Deaths](image)


**Figure 5: Opioid Overdose Deaths per 100,000 Adults, Ages 18+, in Coal Country and Other Utah Counties, 2014–2016**

<table>
<thead>
<tr>
<th>County</th>
<th>Opioid Death Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah’s Coal Country</td>
<td>47.9</td>
</tr>
<tr>
<td>Duchesne</td>
<td>24.9</td>
</tr>
<tr>
<td>Sevier</td>
<td>18.2</td>
</tr>
<tr>
<td>Sanpete</td>
<td>12.7</td>
</tr>
<tr>
<td>Uintah</td>
<td>12.3</td>
</tr>
<tr>
<td>Kane</td>
<td>29.8</td>
</tr>
<tr>
<td>Tooele</td>
<td>20.8</td>
</tr>
<tr>
<td>Iron</td>
<td>18.4</td>
</tr>
<tr>
<td>Box Elder</td>
<td>16.1</td>
</tr>
<tr>
<td>Summit</td>
<td>14.8</td>
</tr>
<tr>
<td>Wasatch</td>
<td>13.6</td>
</tr>
<tr>
<td>Washington</td>
<td>13.0</td>
</tr>
<tr>
<td>Weber</td>
<td>23.9</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>18.8</td>
</tr>
<tr>
<td>Utah</td>
<td>16.4</td>
</tr>
<tr>
<td>Davis</td>
<td>15.3</td>
</tr>
<tr>
<td>Cache</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Note: The Gardner Policy Institute defines Utah’s Coal Country as Carbon and Emery counties. Some Utah counties are not included because the number of opioid deaths in that county is less than five. The opioid death rate includes deaths from prescription and illicit opioids such as heroin.

Source: Kem C. Gardner Policy Institute analysis of data from Utah Department of Health.
Finding solutions to address Utah’s social determinants of health is an “economic and humanitarian imperative.”

Governor Mike Leavitt

was the health commissioner of New Orleans. Dealing with the aftermath of Hurricane Katrina revealed how ineffective public health strategies can be if people’s social determinants of health are not addressed. The storm drove the city to reshape its health care system to become more community-based and responsive to people’s basic needs.

Additional federal efforts being implemented to counter the U.S. opioid epidemic that were presented at the symposium include:

1. Strengthening public health data reporting and collection.
2. Advancing the practice of pain management to decrease inappropriate use of opioids.
3. Improving access to prevention, treatment, and recovery services.
4. Enhancing the availability of overdose-reversing medications.
5. Supporting cutting-edge research on pain and addictions, which leads to new treatments and identifies effective public health interventions.

Several local initiatives are taking place that align with these national efforts. Intermountain Healthcare, for example, recognized the impact that opioid abuse has on people’s personal health and economic situation and set a specific goal of reducing opioid prescriptions by 40 percent by 2018 as a way to help mitigate these negative effects. Intermountain is also partnering with the community to raise suicide awareness, improve access to mental health treatment, and is engaged in systematic depression screening with a commitment to “Zero Suicides.”
What is Being Done To Address Social Determinants of Health?

Formal initiatives testing the effectiveness of social determinant of health interventions are beginning to emerge. An increasing number of states, hospitals, insurance companies, and provider groups are investing in systems and processes to address social determinants of health. This is building an evidence-base of experience, which is being cataloged and shared by research institutions. Dr. DeSalvo noted that technology is available to help health care entities assess community and individual health care needs, use predictive analytics to develop social risk scores, and automate resource connectivity and closed loop referrals. UBER’s ride share technology is being used to provide medical transportation and Amazon’s delivery network is being touted as a possible way to provide direct food assistance and better address food insecurity.

An important federal initiative is the Accountable Health Communities, which will actuarially assess the value of providing systematic screening, referrals, and community navigation services to address beneficiaries’ needs and promote community improvement.

While an increasing number of social determinant of health initiatives are being developed and tested, “more prospective studies with replicable outcome measures are needed.”

Karen DeSalvo, M.D.

Utah Alliance for the Determinants of Health

An example of a Utah initiative that includes a robust evaluation process with an aim to assess and produce replicable outcomes is the Utah Alliance for the Determinants of Health (the Alliance). The community collaborative, which Intermountain is engaged in as part of its commitment to “helping people live the healthiest lives possible,” seeks to improve health by focusing on non-medical factors such as housing instability, utility needs, food insecurity, interpersonal violence, and the lack of transportation.

Figure 6: Utah Alliance for the Determinants of Health
Presented by Marc Harrison, M.D.

Certain communities in these counties were identified as having lower than average life expectancy, higher rates of behavioral health concerns, and higher rates of emergency department visits for non-emergent needs. They were also identified as having strong community assets such as social resources and engaged community partners. The communities are committed to working with the Utah Alliance for the Determinants of Health to positively impact the social determinants of health.

The primary goals of the Alliance are to learn how to best improve health care outcome measures, reduce per member per month costs, and reduce ambulatory-care sensitive emergency visits. The Alliance’s work will begin with SelectHealth Medicaid members in Washington and Weber counties (Figure 6).

The two participating communities were identified through a rigorous data analysis, which revealed that 50 percent of the Medicaid members in these areas qualify as high risk and 30 percent of those members are determined to be in need of direct social determinant of health interventions.

The Alliance is working closely with community partners in each of the selected areas to ensure that the selected interventions align with the areas’ needs. The evaluation process will assess the effectiveness of the interventions and how to sustain this work over time with an intent to initiate similar work throughout Utah.

**Center for Medicare and Medicaid Innovation’s Role**

Adam Boehler, Director of CMMI and Senior Advisor to the Secretary, discussed the Innovation Center’s role in health care reform, its current priorities, and how these priorities relate to social determinants of health.

CMMI was created for the express purpose of testing “innovative payment and service delivery models to reduce program expenditures...while preserving or enhancing the quality of care.”12 CMMI has the authority to expand health care payment and delivery models through notice and comment rulemaking rather than Congressional approval, making it an important mechanism for testing new approaches to improving quality and lowering health care costs.

Director Boehler outlined CMMI’s four current priorities, which include:

1. **Promoting patients as consumers.** Director Boehler believes that a lack of data operability, transparency, and long-term incentives prevent patients from engaging in the health care system. For example, when patients reach their health insurance deductible, their incentive to continue making prudent health care spending decisions diminishes. Director Boehler also noted that most personal health care dollars are spent on health insurance premiums rather than direct medical care, which further removes the patient from his or her purchasing decisions. Director Boehler expressed a desire to help patients become better health care consumers through data transparency, improved market conditions, and financial incentives. He believes that both public and private payers should financially reward patients for being smart consumers by selecting low-cost, high-quality care.

2. **Creating markets that allow patients to act as consumers.** Director Boehler acknowledged that in order for patients to be better health care consumers, U.S. health care markets need to be reformed. In terms of payment and reimbursement, he provided the example that when Medicare patients call 911, responding Emergency Medical Services (EMS) providers may only be paid if they take the patient to the hospital (or a limited set of alternative locations)—even though a significant number of patients could be treated and released
at the scene. In terms of health insurance, he noted that many young people do not have insurance options that mirror their health care needs and preference for lower-cost, leaner coverage. His goal for CMMI is to test models that are simple, transparent, effective, promote accountability, and reward insurers, physicians, and other medical professionals for providing the highest quality and lowest-cost care.

3. Preventing disease before it occurs and addressing social determinants of health. When looking for international examples of successful health care models, Director Boehler noted that Singapore is often mentioned as a free-market system that the United States should seek to emulate. He discussed how Singapore focuses its resources on preventing illness and keeping people healthy, which in turn keeps health care costs low. Using Singapore as an example, it is Director Boehler’s objective to reduce U.S. health care spending by creating market conditions that allow health care systems to address social determinants of health.

He noted that the design of the current health care system poses barriers that prevent more wide-scale adoption of social determinant of health initiatives. Most public and private health insurers do not include food, housing, and other social interventions in their benefit packages. As a result, treating providers cannot be paid for these types of interventions.

Director Boehler recognized these challenges and noted that the current administration is committed to removing some of these barriers. A Congressional spending bill passed in 2018 authorized Medicare Advantage plans to expand coverage for non-medical items such as groceries, the installation of home-safety equipment, and medical transportation, among others. He believes changes like these provide clarity to the private sector and promote investments in social determinants of health, but do not directly dictate the types of investments that must be made. This maintains private sector innovation and accountability.

In terms of social determinants of health, CMMI is currently most interested in building on its existing Accountable Health Communities model and further addressing gaps in housing, food, and transportation. Director Boehler noted several health care systems are already engaged in similar efforts and investments in housing and food have demonstrated positive returns by lowering health care costs.
4. **Promoting value-based payments.** The concept of value-based health care is one in which providers are paid for the value, or outcomes, of care provided, rather than the volume of services. Value-based payments are structured to reward providers for keeping patients healthy at the lowest cost rather than incentivize over-utilizing services. Examples of value-based payment models include bundled payments, upside-only shared savings, downside risk sharing, capitation, and global payments.

The focus on value-based health care began under the Obama administration, but is a key priority of the current administration as well. Director Boehler noted that the Trump administration is taking an important step forward with value-based payments and aims to promote greater accountability for health outcomes. For example, proposed changes to CMS’ Medicare Shared Savings Program were made with the goal to more rapidly move participating Accountable Care Organizations (ACOs) to downside risk by eliminating the choice to engage in upside-only shared savings. Director Boehler believes it is better for the government to apply appropriate guardrails to help guide outcomes, but to allow the market to determine what inputs and processes to use to achieve the outcomes.

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**Dr. Harrison presented on an initiative taking place in Utah to address medical transportation needs.** A steering committee convened in 2016 found that gaps in patients’ ability to access transportation resulted in delayed medical care and avoidable health care costs. To address these gaps, Intermountain partnered with a company to build a HIPAA-compliant platform that connects with Lyft drivers to provide non-emergency medical transportation to patients with no other options. Rides are ordered by care management staff to transport patients to and from their medically necessary appointments free of charge.
Symposium presenters noted that value-based payments are a key driver in advancing health care systems’ interest in and ability to address social determinants of health. By moving to value and taking on greater levels of risk for their patients, providers are financially incentivized to address the non-medical factors that keep their patients unhealthy and result in inappropriate overuse of health care services.

Dr. DeSalvo suggested that moving to full risk is a possible solution for correcting the United States’ low ratio of social service to health care spending (Figure 3). Accepting full risk for both health care and social services would combine the two categories and allow health care systems to more easily purchase and provide the health care or social services that best address their patients’ needs.

Key Observations and Next Steps

As Dr. Michael Good, CEO of University of Utah Health, stated, “Utah has a unique opportunity to serve as a model for meaningful health care reform.” Utah not only ranks as one of the healthiest states in the nation, but also has the lowest per-capita health care expenditures (Figure 7). The state’s overall health ranking was fourth in 2017 compared to eighth in 2016 and this improvement is due to advances related to Utah’s social determinants of health, including better air quality, improved disparities in health status, and increases in physical activity.

That said, in order for Utah to maintain its position as a healthy, low-cost state, improvements will need to continue to be made. Dr. Good outlined four categories that he believes Utah should focus on to ensure continual improvements are made in the health care system: (1) clinical care; (2) research; (3) building a skilled workforce; and (4) holistic health. Holistic health includes physical health, behavioral health, oral health, and service to and engagement with the community to address social determinants of health.

To achieve this goal, Dr. Good recommended that team-based inventive and innovative approaches continued to be pursued. Dr. DeSalvo agreed, stating that improving health and bringing value to the health care system requires more than clinical excellence. It requires active public-private collaborations, like the

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**Figure 7: State Rankings by Health Care Costs and Health Care Outcomes**

Presented by Michael Good, M.D.

“Social determinants are upstream investments in health that lead to healthier and happier communities.”

Michael Good, M.D.
President Watkins, joined by Governors Leavitt and Romney, thank the symposium speakers, Dr. Marc Harrison, Dr. Karen DeSalvo, and Dr. Michael Good.

Utah Alliance for the Determinants of Health, to develop, test, scale, and disseminate initiatives that address Utah’s social determinants of health. She also noted that no one sector can do this alone. Addressing social determinants of health requires “health care, public health, and social services expertise, local community experience, community-convening competence, business and financial insight, technology innovation, data and analytics competencies, and policy and advocacy acumen to assess and address current regulatory frameworks, funding environments and opportunities, and practical challenges.”

Addressing social determinants of health in the long term may also require shifting the mindset of leaders, payers, patients, phy-

Figure 8: Who is primarily responsible for improving health from the perspective of patients, physicians, and employers?

![Circle charts showing opinions of patients, physicians, and employers on who is primarily responsible for improving health.]

Source: Bringing Value Into Focus: The State of Value in U.S. Health Care. (2017). University of Utah Health. Data from University of Utah Health Value in Health Care Survey. Conducted by Leavitt Partners between May 25 and July 14, 2017. Question response size: patients - 1,607; physicians - 345; employers - 216. Survey participants were asked this as a follow up question if they selected “My Health Improves” as one of the top five statements that best reflects what they value most when getting services from a health care provider.
sicians, and employers regarding who delivers what services to best address a person's health. A University of Utah Health survey conducted in 2017 revealed patients, physicians, and employers all have different perspectives when it comes to who is responsible for improving patients' health (Figure 8).

To help the state of Utah more systematically address social determinants of health, Dr. DeSalvo presented an example framework for integrating social services into broader care delivery and management processes (Figure 9). In addition to the great work taking place throughout the state, she suggested that groups interested in developing new initiatives should focus on health-related social needs first, such as food and social isolation, while maintaining a longer term focus on addressing social determinants of health that have a more sustained impact on a person's life, such as making positive changes to where people live, learn, work, and play. For example, a short-term objective could be providing food assistance, while a longer term objective would be finding ways to improve how food assistance is delivered in order to better target people's specific health care needs.

Conclusion

Health starts in our homes, schools, workplaces, neighborhoods, and communities. Even the best health care policies can become ineffective and costly if a person's social determinants of health are not addressed.

As Utah’s population grows and changes, so does the need to continue to understand Utahns’ social determinants of health as well as the tools and strategies that are available to address them. Speakers participating in the 2018 annual Kem C. Gardner Policy Symposium noted that Utah is and can continue to be a leader in addressing social determinants of health. The state has a unique opportunity to develop meaningful reform through shared dialogue, learnings, and action, however, the window of opportunity that is now open requires bold, strategic, and accelerated action.
References


10. The mission of the Social Interventions Research & Evaluation Network (SIREN) is to “catalyze and disseminate high quality research that advances efforts to identify and address social risks in health care settings.” For more information see https://sirenetwork.ucsf.edu/.

11. Intermountain is engaged in several efforts in support of this commitment, including addressing social isolation, suicide, rising prescription drug costs, transportation needs, and rural health care disparities.


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