



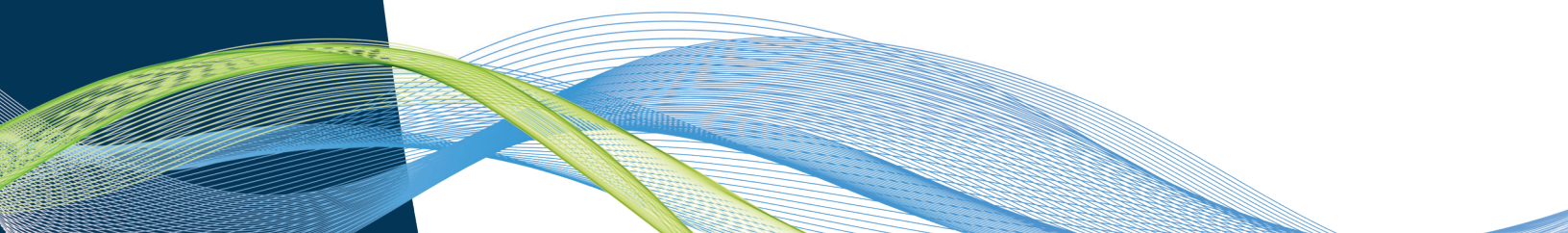
# DETERMINANTS OF HEALTH AND MANAGED CARE

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LEADING THE WAY IN CARE MANAGEMENT SOFTWARE



## Summary

While access to care and insurance coverage to pay for health care are important factors in the health of an individual or a population, other social factors and determinants are as, if not more, important in the ability to achieve the best health possible. In the absence of managing social and behavioral risk, medical care alone acts as symptom management for a large portion of the U.S. population, rather than as a cure. Managed care organizations have a unique role in pulling medical care and social care closer together, which is the most common sense approach to controlling healthcare costs and improving the health of our country one person at a time.

## Key Points

- **Despite above average national health and social expenditures and a renewed focus on quality and outcome metrics, the United States is still below average in achieving health outcomes.**
- **Medical care has a minor impact on health outcomes compared to social circumstances and individual behavior.**
- **Several federal programs have been developed to drive payers and providers to address determinants of health beyond medical care, but progress is slow.**
- **Managed care organizations are uniquely able to address social determinants within their program structures and data analytics frameworks.**
- **Organizations that are addressing social determinants experience significant benefits to member outcomes**

## Introduction

Despite spending more on health and social policy than the average reported for countries in the Organization for Economic Cooperation and Development (OECD) statistics, the United States still falls below its peers in achieving health outcomes (see Exhibit 1, Exhibit 2). As the U.S. tries to improve population health and also control costs, it is clear that healthcare is not the only factor to consider.

Exhibit 1. United States Compared to OECD Average Health and Social Expenditure <sup>1,2</sup>

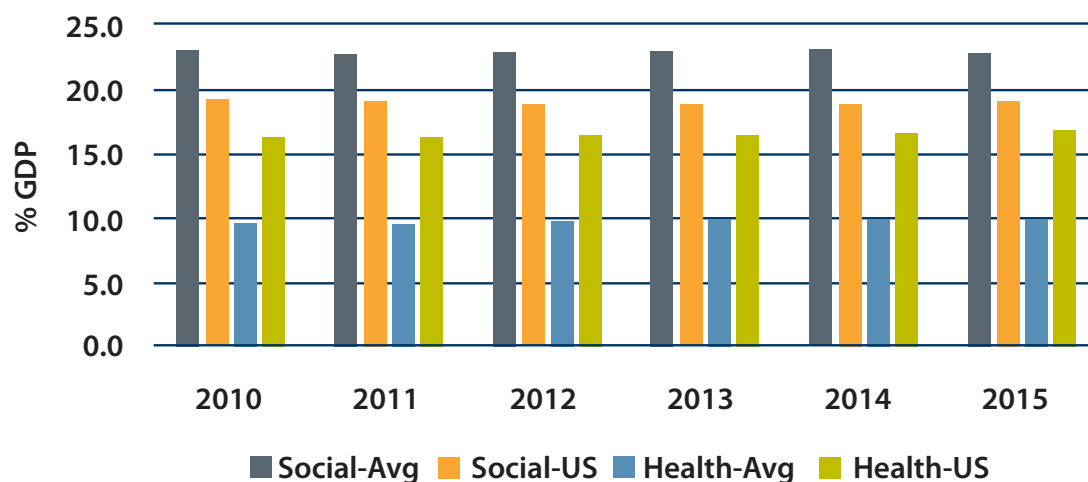
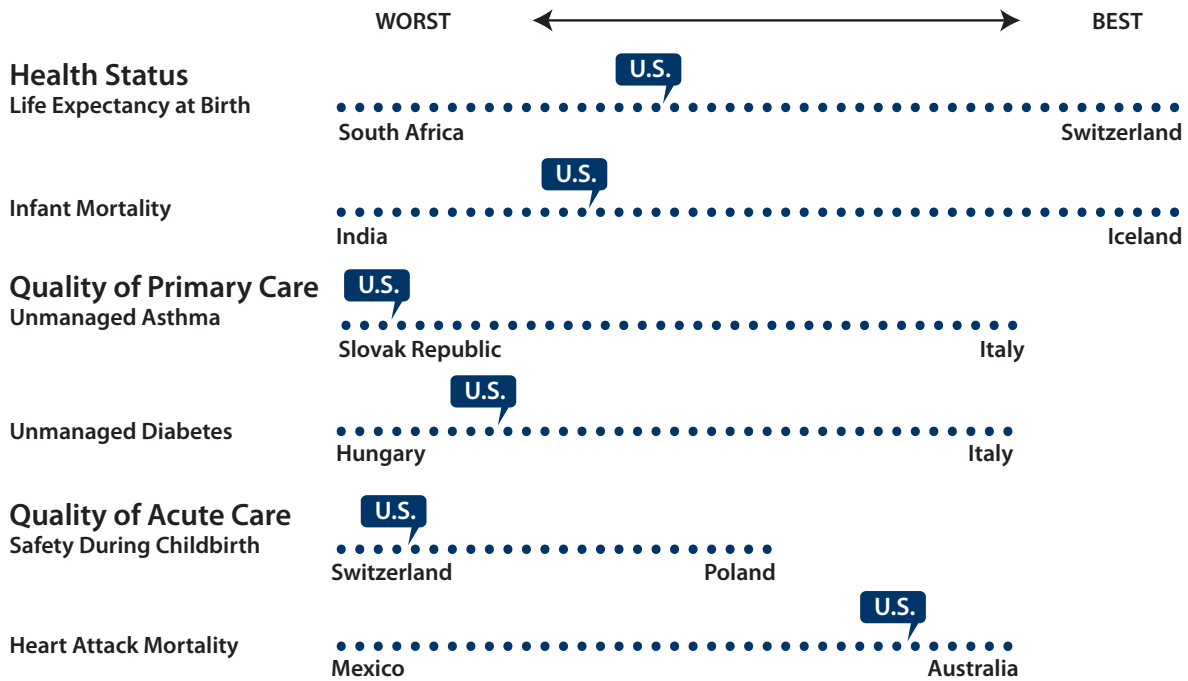


Exhibit 2. International Ranking – Health Outcomes<sup>3</sup>



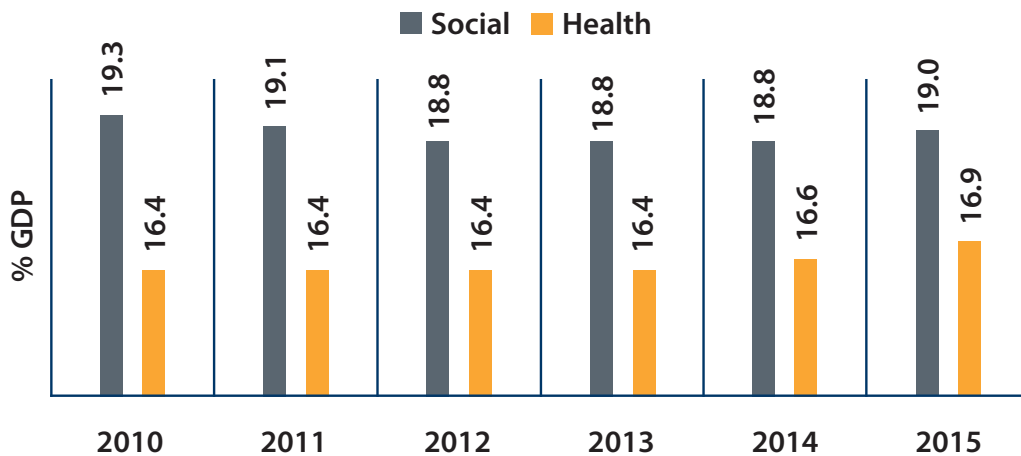
**Although the United States spends more on healthcare than other developed countries, its health outcomes are generally no better.**



SOURCE: Organization for Economic Cooperation and Development, *Health at a Glance 2015 OECD Indicators*, November 2015. Compiled by PGPF.  
 NOTE: Data are not available for all countries for all metrics; all published data are shown. Date are for 2013 or latest available.  
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Since the passage of the Affordable Care Act (ACA) in 2010, there has been no significant change to overall health and social expenditures as a percentage of GDP (Exhibit 3). By moving healthcare delivery from a fee for service model to a pay for performance model, the ACA has driven a renewed focus on healthcare quality and outcome metrics. However, in the absence of improved health coordination and social care, it is a commonly held opinion that the current national spending strategy does not correlate with the overall health of our society.

Exhibit 3. United States Health and Social Expenditure<sup>1,2</sup>

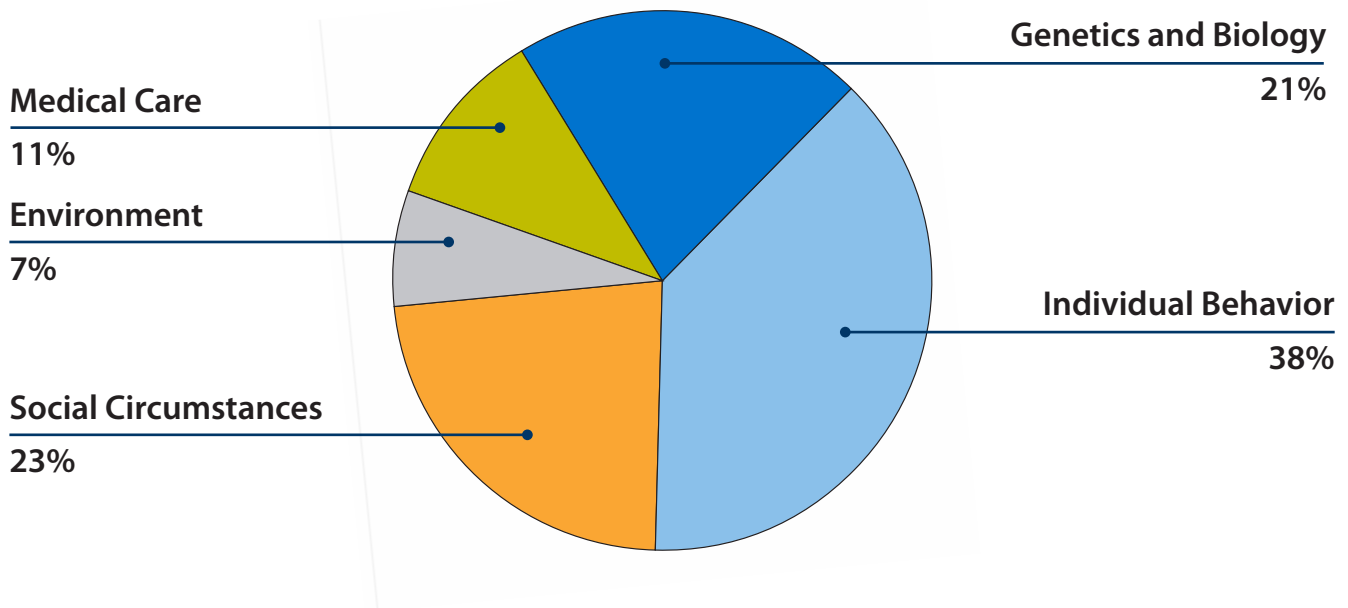


## Determinants of Health and Social Determinants of Health

Understanding the factors that impact health is the first step towards improving it. The Centers for Disease Control (CDC) defines determinants of health as “factors that contribute to a person’s current state of health. These factors may be biological, socioeconomic, psychosocial, behavioral, or social in nature.”<sup>4</sup> Clearly, some determinants of health can be impacted while others are not, such as age. Social determinants of health, a subset of the determinants of health, is defined by the World Health Organization (WHO) as “the conditions in which people are born, grow, live, work and age, including the health system.”<sup>5</sup>

Edwin Choi, a designer with Involution Studios created a visualization tool that offers an overview of the relationship between determinants of health and social determinants of health. Comprised of data analysis from the CDC, the WHO, Healthy People 2020, and thirteen other sources, the tool provides a weighted visual of the five broad factors impacting health, including environment, medical care, genetics and biology, individual behavior, and social circumstances. Of the 135 identified factors, medical care as category accounts for only 11% of health impact, while social circumstances and individual behavior account for a combined 61% (Exhibit 4). As noted by Robert Hill, RN, the Director of Care Management for Mount Auburn Cambridge Independent Practice Association, “I look at the chart and wonder why so many case managers are RNs with clinical backgrounds (rather than) social workers with relevant community based experience with an RN available for consultation.”<sup>6</sup>

Exhibit 4. Health Factors, Weighted by Impact<sup>7</sup>



## Government Programs Aimed at Positively Impacting Health

The federal government has already developed multiple programs to improve the health of our population, many of which encompass determinants of health beyond medical care alone. Each of the following programs are designed not only to improve the quality of healthcare but also to address other determinants of health such as behavior changes, education, and coordination of medical and behavioral health care.

### The National Quality Strategy

The National Quality Strategy (NQS) was published by the Agency for Healthcare Research & Quality in 2011 in order to respond to an ACA mandate requiring the Department of Health and Human Services (HHS) to develop a national strategy to improve the delivery of health care services, patient health outcomes, and population health. Developed in partnership with over 300 groups, organizations, and individuals, the NQS includes three broad aims:

- **Better Care:** Improve overall quality by making health care more patient centered, reliable, accessible, and safe.
- **Healthy People/Healthy Communities:** Improve the health of the U.S. population by supporting proven interventions to address behavioral, social, and environmental determinants of health, in addition to delivering higher-quality care.
- **Affordable Care:** Reduce the cost of quality health care for individuals, families, employers, and government.

*The NQS includes six priorities to support these three aims:*

1. Make care safer by reducing harm caused by the delivery of care.
2. Ensure that each person and family is engaged as partners in their care.
3. Promote effective communication and coordination of care.
4. Promote the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease.
5. Work with communities to promote wide use of best practices to enable healthy living.
6. Make quality care more affordable for individuals, families, employers, and governments by developing and spreading new health delivery models.<sup>8</sup>

## Healthy People 2020

Healthy People is a federal program overseen by the HHS that aims to improve the health of our population using 10-year objectives.<sup>9</sup> The latest version, Healthy People 2020, follows four previous initiatives, beginning with a ground-breaking 1979 report from the then Surgeon General, Julius Richmond that focused on disease prevention, national health metrics, and personal responsibility for health.<sup>10</sup> Later iterations, including Healthy People 1990, Healthy People 2000, and Healthy People 2010, continued to increase the program's focus on the social aspects of health. Healthy People 2020 includes objectives to improve health by striving to impact health across the following five key domains:

1. Economic Stability
2. Education
3. Health and Health Care
4. Neighborhood and Built Environment
5. Social and Community Context

Each of the five key domains are explained on the Healthy People 2020 website and include national, state, local, federal and private resources. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources><sup>11</sup>

## National Health Initiatives, Strategies, and Action Plans

The CDC provides a website which lists national health initiatives, strategies, and action plans developed in partnership with other government agencies. This site functions as a central location for resources geared to communities, organizations, healthcare providers, and individuals by covering topics such as Alzheimer's Disease, emergency preparedness, immunizations and vaccinations, infectious disease, and reproductive health. The site includes multi-layered coverage on social topics at the community level, such as pollution, as well as health concerns at the individual level, such as family support and the social stigmas associated with certain diseases.<sup>12</sup>

## Effect of Government Programs

These federal programs impact the focus of healthcare in the U.S. Yet, despite federal efforts to drive payers and providers to focus on the impact of social determinants of health, progress is slow.

“In my experience, the medical world rarely addresses social determinants of health; it's hard to do and many times we don't know how. From a primary care perspective, it is unusual to have a practice resource that can evaluate social needs and address them. Even in mature Patient Centered Medical Home practices with functioning care managers, the primary focus at the point of care remains medical.” says Dr. Jonathan Burke, Medical Director for Populytics, Inc.<sup>13</sup>

## Managed Care and Social Determinants of Health

### Program Structure

The managed care industry is becoming increasingly aware that there is a need to address more than just the delivery of and payment for healthcare. Audrey Spence, RN, BSN, MBA, CCM, Director of Integrated Care for Blue Cross Blue Shield of Vermont states, “The focus on social determinants of health and their significance in maximizing good health outcomes seems to be more of a mainstream topic in health care now, which is great, because without addressing barriers in the areas of basic human needs such as food, shelter, and transportation, we are unlikely to see vast improvement in quality of life and patient outcomes.”<sup>14</sup> As managed care organizations develop clinical programs to both control costs and improve the health outcomes of their members, balancing the additional work required to address social issues, both during and between points of care, can be a major challenge.

Payer-driven programs often rely on healthcare providers to perform tasks above and beyond the delivery of care, which causes a variation in compliance among providers. To address this challenge, many managed care organizations are changing their program structures and focusing resources to assess and support the social needs of their members directly. Tristan Diaz, RN, CCM, the Director of Case Management for CentMass Association of Physicians (CAP) managing Medicare Advantage members, describes the CAP case management program as “a more holistic approach to health than that of a disease management focus.” Diaz continues, “We include social determinants of health in our initial program assessment to increase healthcare outcomes and link patients to resources as needed. Currently, we assess health literacy, financial and social support, access to healthy food, transportation, cognitive decline, depression and social isolation as well as caregiver stress, depression and caregiver burnout.”<sup>15</sup>

In addition, an increasing number of managed care organizations are integrating case managers into facilities and provider offices as well as carrying out case management activities within the member's homes. Some Medicaid managed care organizations take advantage of ACA provisions that encourage the use of community health workers (CHWs) as allowed by their state.<sup>16</sup> One such example is Neighborhood Health Plan of Rhode Island (NHPRI), who integrated community care coordinators (CCCs) into their program five years ago. The CCCs help members manage non-clinical needs such as transportation for medical care, meals, and housing by working in conjunction with an interdisciplinary care team and leveraging their expertise in community resources. This approach has proven to be both cost efficient and effective for NHPRI.<sup>17</sup>

Medicare and Medicaid organizations are not the only ones developing programs to address both the medical and the social aspects of member needs. Jane Johnson, RN, BSN, Vice President of Medical Management for RGA Reinsurance Company says, "We have incorporated many psycho-social factors into the care plans for RGA's ROSEBUD program (a pregnancy program), including language, cultural and religious beliefs, educational background, available support system, vision and hearing limitations, and others. The case managers routinely assess how these factors impact the member's ability to access care and actively participate in her treatment plan. Care plans are adjusted accordingly and additional resources are tapped to help address the needs identified."<sup>18</sup>

## Data and Information

Even beyond a program's structure or the location of support activities, overall success is largely driven by the ability to accurately identify members for enrollment. Member health risk assessments (HRAs) are now moving forward to include social indicators that put the member at risk of poor health outcomes, such as homelessness and illiteracy. In addition, a member's HRA is now being updated much more frequently than the previous annual cycle, often driven by a health event such as an inpatient admission.

Organizations now rely heavily on data analytics not only to meet the needs of individual members identified at high social risk, but also to proactively manage the health of the entire member population. The sheer amount of member level data generated from a wide spectrum of sources including claims, points of care, lab, pharmacy, biometrics, and member provided data is enormous as indicated by the 135 factors identified in the Determinants of Health tool. Churning large amounts of disparate member data to identify both medical and social risk is not a small task for any organization. It is not surprising that, as a result, more managed care organizations are utilizing predictive modelers and stratification tools to handle these complex tasks. As the industry looks beyond medical risk, predictive modelers and stratification tools must evolve their weighting and member risk score algorithms to better account for risks caused by social circumstances. For example, a managed care organization may weigh homelessness as a higher risk factor than a recent diagnosis of a chronic condition.

## A Medicaid Member's Story

While the success or failure of a managed care program is typically measured in aggregate against pre-defined benchmarks and look-back periods, individual member cases can be the strongest evidence that a provider or a managed care organization is doing the right thing.

Yvonne Heredia, RN, MS, PhD PH CDOE, and Manager of Care Management for Neighborhood Health Plan of Rhode Island (NHPRI), was once a Medicaid member herself. After leaving home due to an abusive relationship, she was homeless with three children and pregnant with her fourth. She had no income and relied on food stamps to feed herself and her children. Obstetric visits were infrequent and did not address her social situation. Suffering premature labor, Yvonne presented to Women's and Infants Hospital in Rhode Island and delivered the baby at twenty-four weeks.

The baby, Xavier, survived but required intensive hospitalization for five months. As Xavier received all the care he needed, Yvonne and her other three children remained homeless within the hospital waiting room, which happened to be the warmest and most stable environment in their life. A social worker at the hospital managed Xavier's discharge, including his cardiac monitor and oxygen. When Xavier was discharged, the family home was the back of a record store. Looking back, Yvonne credits the persistence, support, and encouragement of the hospital's Neonatal Intensive Care Unit (NICU) nurses with helping her the most. "The NICU nurses — it was their support that really changed my life," she says. "They really gave me the most nonjudgmental care you could ever give anybody. I came in with so many issues and yet they treated me like anybody else. That was just deep for me."

Inspired by these nurses, Yvonne enrolled in nursing school, received her nursing degree and went on to spend fourteen years as an obstetrics nurse. Now holding a Masters, a PhD, and a leadership role in a Medicaid managed care organization, Yvonne strives to close the gaps between the medical and social needs of members in ways that did not exist when she and her children needed it the most.<sup>19</sup> ▲

### About the Author

**Deborah Keller, RN, BSN, CMCN** is a registered nurse with a clinical background in trauma and surgery. Upon transitioning to managed care, Deborah has served in leadership roles in small to very large managed care organizations across the United States. Presently, she serves as Chief Operating Officer for TCS Healthcare Technologies, a company which develops managed care software. She resides in Auburn, CA with her husband and two French bulldogs.



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