

Social Determinants of Health and the Healthcare System

A Business Case for Healthcare's Investment Outside of Clinic Walls

Key Takeaways:

Unmet social needs are associated with higher rates of emergency room use and increased hospital admissions and readmissions rates, factors which translate to high overall healthcare costs.

Healthcare entities that function on a value-based and capitated payment model have demonstrated an increasing interest in investing in social determinants of health as a population health and business strategy.

Community partnerships are key to understanding the needs of the population served and developing a strategy that will address the needs of high utilizer or frequent flyer.

Healthcare entities that invest in social determinants of health are willing to contribute significant financial resources as a sort of "down payment" to reduce healthcare costs and increase future margins.

More data are needed to evaluate the cost-benefit of these investments; however early indicators suggest that some initiatives are improving health and making a difference in patients' lives.

Building the Case for Social Determinants

There is compelling evidence that social determinants of health are linked to substantial use of healthcare resources. Research findings attribute as much as 40 percent of health outcomes to social and economic factors, whereas medical care is predicted to only account for 20% of health outcomes (Commonwealth Fund, Addressing Patients' Social Needs). This data has prompted several healthcare institutions to restructure their investments to address social factors. Four organizations, CareMore (an Anthem subsidiary), UnitedHealthcare, Humana, and Health Plan of San Mateo, are prime examples of entities that are funding efforts that expand beyond the traditional medical role of healthcare to treat unmet social needs that exist in communities. Healthcare organizations will assess the financial outcomes of these investments to determine whether addressing social factors can improve health while generating cost



savings, increasing margins, and improving business. This backgrounder will examine case-study examples of healthcare entities' engagement in efforts to address social determinants of health to demonstrate the successes and challenges of this work and shed light on whether healthcare's continued investment in this area is feasible.

Anthem's CareMore

CareMore identified loneliness caused by social isolation as an important factor impacting its elderly patient population. Loneliness was a condition affecting one in five of CareMore's senior patients; it was presenting itself as a risk factor for numerous serious conditions (Business Wire) and impairing elderly patients' ability to care for themselves, follow regimens and engage in timely and high-quality care (Commonwealth). Given the common nature of the experience of loneliness among CareMore's patient population, President (and Zetema panelist) Sachin Jain, MD, decided to prioritize addressing the physical, psychological and social wellbeing of seniors. He initiated the Togetherness Program, a first-of-its-kind effort that focused on loneliness as a social determinant of health in 2017. (BusinessWire)

The Togetherness Program aims to treat and mitigate loneliness by offering a variety of supportive services that counter social isolation that seniors tend to experience in their daily lives outside of medical facilities. The program involves a partnership with ridesharing companies to provide non-emergency medical transportation, a "Nifty After Fifty" physical fitness program, and a Togetherness Connections buddy system through which seniors receive weekly phone calls to encourage participation in social activities. (AJMC) The services and supports offered through the program are relatively inexpensive and are predicted to have a positive impact on increasing engagement among senior patients in activities that promote health and minimize social isolation. (Commonwealth)

As a prepaid healthcare system serving as a Medicare Advantage Plan and delivery system, CareMore manages expenditures within a fixed budget and therefore has the flexibility to deliver innovative solutions to meet the unique social needs of their aging patients. This flexibility allows the entity to address social determinants, needs that typically fall outside of the scope of the doctor's office. Further, the entity is incentivized to identify and provide cost-



effective care because it functions on a value-based model. (BusinessWire) CareMore's efforts to address loneliness among seniors, can therefore be assessed as an important strategy not only for improving health outcomes but also for reducing cost and maintaining strong business margins. The services and supports offered to seniors in the Togetherness Program are relatively inexpensive compared to more traditional clinical interventions that might be applied to address factors of early mortality and physical and psychiatric issues that often result from loneliness. (Commonwealth) A strong business case can be made for preventing and intervening early to address loneliness. , If interventions such as those employed by the Togetherness Program prove both less expensive and more effective in encouraging elderly patients to engage in activities that promote health and lessen social isolation, this could translate to reduced hospital admission rates, a significant expenditure for the overall delivery system.

The success of the Togetherness Program is being measured by CareMore's newly appointed Chief of Togetherness Officer, Robin Caruso, who is assessing it in terms of quality of life, clinical outcomes, and reduced patient admission rates and bed days. (BusinessWire) The Togetherness Program is due to be analyzed in 2018. Though it may be too early to determine whether the program has had significant impact on overall health costs for CareMore, early indicators show that the program has made a difference in the lives of patients served. (AJMC) It is already being described as a lifeline for some beneficiaries. Given the implications of the loneliness epidemic's effect on healthcare costs, with those who experience social isolation accounting for \$130 more per month in Medicare spending (AARP), healthcare's increasing role and investment in addressing loneliness seems like a promising strategy for reducing healthcare spending and consequently improving margins.

UnitedHealthcare

The shortage of affordable housing is a significant factor limiting individual's choices about where they can reside. This issue disproportionately subjects low-income families to substandard housing and unsafe neighborhood conditions that translate into worse health outcomes for certain demographics. Recognizing the clear connection between housing and

health, UnitedHealthcare has invested \$350 million in equity to finance and build affordable-housing communities in 14 states since 2011. (UnitedHealth Group) This investment has created over 2,700 new homes and support services for people in need. (UnitedHealth Group)

"Value-based payment is the foundation for any value-based care."

- UnitedHealthcare former Chief Medical Office Dr. Sam Ho

In Michigan, UnitedHealthcare engaged in a partnership with community leaders, project partners, housing advocates and equity funds, to leverage Low Income Tax Credits approved by the state Housing Development Authority to invest \$35 million in well-designed, high-quality affordable housing that in turn helped stabilize economic development and promote a vibrant and healthy community. (UnitedHealth Group) Investments made by UnitedHealthcare resulted in 236 new homes that were spread throughout four key Michigan neighborhoods, some of which were specifically reserved for individuals with special needs or challenges related to homelessness. (UnitedHealth Group)

UnitedHealthcare's investments in affordable housing reflect its recognition of homelessness and housing instability as social determinants of health that can be connected to significant healthcare expenditures. Homeless patients in the UnitedHealth Group were reported to have had 252 trips to the emergency room and 32 hospital admissions, costing the insurer and the U.S. healthcare system more than \$294,000 since 2015. (Forbes - UnitedHealth) Given the fiscal burden of this population on the overall system, a valid business case can be made for increasing efforts that help homeless individuals overcome housing instability. Particularly for entities like UnitedHealthcare, which estimates that by the end of 2020 it will have \$75 billion of its payments to care providers tied to value-based-care relationships (UHC report), addressing the unique housing needs of homeless individuals who tend to be high utilizers of expensive medical care can help avoid unnecessary, low-value emergency room readmissions and save money. UnitedHealthcare's engagement in coordinated efforts that may involve moving homeless patients into temporary housing, purchasing furniture, setting up their apartments, securing counseling for depression and assisting them with their applications for

Social Security Disability (Forbes - United Health), are considered by UnitedHealthcare as activities that represent the next frontier in serving the whole person. (Forbes)

"[O]ur own experience indicate[s] social investments reduce health costs, and addressing these social determinants is the next frontier in serving the whole person here in the U.S."

- UnitedHealthcare CEO Steve Nelson This alternative approach is viewed by many executive-level UnitedHealthcare employees as a worthwhile investment because as Jeffery Brenner, senior vice president of integrated health and social services describes, there is an upshot to investing in social determinants related to housing. (Forbes) Healthcare investing in housing helps provide a once-homeless individual the opportunity to take care of themselves,

which can help them not only live a better life but also spend less, and cost UnitedHealthcare and taxpayers less money. (Forbes) By investing in housing, UnitedHealth is making a down payment now, to reduce healthcare costs later, assuming that their high-risk members will make fewer expensive visits to the emergency room if they have a safe place to live. (Texas Tribune) If this assumption is incorrect and the investment is unsuccessful, UnitedHealthcare will have to pay out of its own pocket. (Texas Tribune)

UnitedHealth Group's vice president, Kate Rubin, and Community Plan's CEO, Dennis Mouras, argue that the bet that the company is making is evidenced-based, as the data support healthcare's increased role in addressing social determinants of health like housing. Rubin contends that "[s]tudies show that without stable homes people are sick more often" as "[t]here's more undiagnosed illness and people are more likely to seek care in emergency rooms," care that is not only expensive for insurance companies but for the rest of the population in terms of higher premiums and taxes. (Marketplace) Mouras argues that "the data really supports [the fact that] people who are connected with affordable housing have healthier lives than people who don't" (Benzinga); and the healthier United's patient base is, the more they are able to reduce costs associated with preventable illness and generate savings as an insurer. If UnitedHealthcare is basing its investment on valid quantitative data, one can argue a strong business case for the investment in housing as a social determinant of health as a strategy to advance health, reduce costs, and improve margins.



Humana

Humana has invested significant capital into its Bold Goal Initiative, a comprehensive business and population health strategy aimed at making the communities that Humana serves 20% healthier by the year 2020. (Humana News) The health insurance company is piloting several different programs in nine communities and employing efforts in partnership with locals and physicians to improve social determinants of health and chronic conditions faced by residents. (Humana News) In 2018, Humana planned to infuse a total of \$14 million into its identified communities. This represented a 20 percent increase compared to the amount allotted to this initiative in 2017. (Humana News) This increased investment was leveraged to fund a Community Mobile Market Food Insecurity Program in Kansas that offered a mobile grocery store that supplied fresh, healthy foods to neighborhoods in need. (Kansas Profile Population Health - Humana). The success of the programs will be measured by the reduction in the number of total unhealthy days, a measurement originally established by the Center for Disease Control and Prevention. (Humana Population Health)

In addition to the Bold Goal Initiative, Humana is engaging in a partnership program with Wal-Mart to provide financial incentives in the form of rewards to encourage health behavior while grocery shopping. (Washington Post) The program involves giving more than one million members of the Humana Vitality program a 5 percent discount on healthy groceries and offering compelling prize awards for healthy decision making. (Washington Post) This initiative represents the first time that a major retailer and major health entity have collaborated to apply a financial incentive for changing eating behaviors. (Washington Post)

The Bold Goal program has demonstrated success in reducing the number of unhealthy days: Humana estimates that overall, health plan members that participate in the Bold Goal communities decreased their healthy days by a margin of 3 percent from 2015 to 2016. (Forbes) However, a thorough analysis of the cost savings that have resulted from the Bold Goal Initiative and Humana's partnership with Wal-Mart, still need to be analyzed. Humana leadership is optimistic that these programs will be financially successful as they aim to address

TheZetemaProject

social determinants of health related to food insecurity and the high cost of food, resulting in unhealthy eating habits in impacted communities. Such habits have been shown by numerous studies to be connected to high-cost diseases such as diabetes. (HealthcareITNews)

Overall, reducing the number of unhealthy days experienced by residents in a community is likely a valuable business strategy for Humana to pursue. According to an American Journal of Managed Care Study, inpatient admissions and outpatient visits generally increased with increased total unhealthy days, even after results were adjusted for utilization and cost results. (AJMC) Humana calculated that every unhealthy day costs \$15.64 per member; therefore, if Humana failed to reduce unhealthy days, the per member per month cost would add up to a substantial amount for the company. On the other hand, reducing the number of unhealthy days by applying incentives for patients to engage in healthy behaviors while in their community settings is likely to have positive implications for preventing chronic disease, which can reduce spending by 34 percent. Eradicating unnecessary services can eliminate 14 percent of costs. (HealthcareITNews)

"It's a down payment on a new strategy being pursued by just about every health insurance company in America – investing in housing, medicine, and even food to reduce health care costs."

- Forbes Senior Contributor
Bruce Japsen

Beyond the goal of reducing unhealthy days, Humana leadership has addressed social determinants of health in ways that were beneficial for business. (Shared Value Interview with CEO) For example, investment in the Bold Goal initiative increased Humana's overall patient social engagement scores, which in turn improved clinical outcomes and improved the relevancy of the Humana brand, earnings growth and stock. (Shared Value Interview with CEO) The investment in social determinants of health and

the alignment of social efforts with business fostered what the CEO described as a multidimensional benefit for health outcomes as well as the financial bottom line.

Health Plan of San Mateo

The housing crisis in California has prompted a local, non-profit entity, Health Plan of San Mateo (HPSM), to bolster its efforts around providing supportive housing, particularly to its



elderly and homeless populations. HPSM collaboratively developed a program called the Community Care Settings Pilot in partnership with the Institute of Aging (IOA), an organization specializing in transitional care management, and Brilliant Corners (BC), a housing services specialty organization. This pilot program was designed to assist transitioning 192 patients from nursing home facilities into the community, with IOA taking leadership in providing transitional care to HPSM beneficiaries and BC working to deliver services and supports to improve housing retention among the most vulnerable members. (HealthPayer Intelligence)

Given that HPSM functions as a non-profit entity, the Community Care Settings Pilot program is funded primarily through existing funding streams such as the health plan reimbursement funds, Section 8 and Housing Choice Vouchers, and California Transitions waivers. (Innovation in Health Care Award) Additionally the health plan invested internal funding to support this initiative and the specific needs of its members. (Innovation in Health Care Award) A hybrid finance structure involving both fee-for-service and incentive program methods, which hold the Community Based Organization accountable for achieving annual targets, is leveraged to pay for the services provided by the Community Based Organizations involved in this program. (Innovation in Health Care Award) The outcomes of this initiative included: increases in member satisfaction, with 85 percent of reporting either maintained or improved quality of life; an increase in community-focused services that allowed 88 percent of members in the pilot program to remain in the community; and a decrease in costs, with 50 percent lower per member costs over a six-month period. (Innovation in Healthcare Award) The Community Care Settings Pilot began in April 2013 and ended in September 2013 with a surplus of \$854,412 and a year to date surplus of \$2,925,007 due to better than expected trends. (HPSM)

HPSM is described as an entity that is "mission-driven" not "margin driven," as it only needs to break even to achieve financial sustainability. (ITQA) However, plan management argues that the care model implemented through the Community Care Settings Pilot program could be implemented in any market and produce value system-wide. "The benefits of the plan's integration efforts extend beyond the healthcare system, and spill over into the region's criminal justice system, human services, and emergency services". (ITQA) This expansion into systems that tend to have a more direct impact on individuals within communities and



influence health as social determinants adds significant value. Such an approach can attract interest from venture capital and private equity firms. (ITQA) Given the surplus reported in the programs first year, one could make a strong business case for experimenting with the model implemented in the Community Care Settings Pilot in for-profit settings to reduce costs and improve margins.

The Future of Social Determinants of Health

Several themes related to payment model, partnerships and mission, emerge from case studies of healthcare entities investing in efforts to address the social determinants of health. Early financial results are promising. Investment in social determinants of health requires healthcare entities to assume risks and make financial bets based on quantitative and qualitative data that links unmet social needs to preventable, low-value healthcare expenditures. Studies should be conducted on the pilot programs and initiatives mentioned above to continue building upon this evidence base and to answer important questions that remain related to short term versus long-term return on investment; the real impact for patients versus the impact on the reputation of the healthcare entity; the appropriate role of healthcare versus the appropriate role of other sectors in addressing unmet social needs; and the impact of payment models such as fee-for-service, capitated payment and value-based incentives on healthcare's interest in engaging in these types of initiatives. The sector should continue to review the outcomes of innovative work around social determinants to inform future decisions about increased investment in addressing unmet needs.



Discussion Questions

- How involved should the healthcare system be in addressing social determinants of health? Are other sectors better positioned to engage in this work?
- How do for-profit entities effectively weigh long-term and short-term return on investment in social determinants of health? How might this be effectively explained to shareholders of for-profit healthcare entities?
- How do value-based payment models affect the likelihood that healthcare entities will invest in social determinants of health?
- Do for-profit and non-profit healthcare entities take different approaches to addressing social determinants of health? Is one type of entity better positioned to effectively address these issues?
- What are the key elements of return on investment in SDH for for-profit healthcare entities? (cost savings, reputation, patient satisfaction, patient retention, provider satisfaction, provider retention?)

References

- County Health Rankings and Roadmaps RWJF:
 http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank
- Washington Post:
 https://www.washingtonpost.com/news/wonk/wp/2012/09/19/humana-wants-to-change-what-you-buy-at-the-grocery-store/?utm_term=.b6428ff5ab45
- UnitedHealth Group:
 https://www.unitedhealthgroup.com/newsroom/2018/0124michiganaffordablehousing
 .html
- Forbes United Health: https://www.forbes.com/sites/brucejapsen/2018/08/14/to-keep-you-healthy-health-insurers-may-soon-pay-your-rent/#2bde5bba67ce
- UHC report:
 https://www.uhc.com/content/dam/uhcdotcom/en/ValueBasedCare/PDFs/Value-Based_Care_Report_SP_Web.4.11.18.pdf
- Texas Tribune: https://www.texastribune.org/2015/09/21/save-health-costs-onecompany-tries-spending-housi/
- Benzinga: https://www.benzinga.com/general/health-care/17/06/9660367/the-link-between-home-and-health-why-unitedhealth-is-investing-mil
- Marketplace: https://www.marketplace.org/2014/02/13/health-care/why-health-insurance-company-entered-housing-market
- Healthcare IT News: https://www.healthcareitnews.com/news/social-determinantshealth-and-17-trillion-opportunity-slash-spending
- Forbes Humana: https://www.forbes.com/sites/brucejapsen/2017/03/31/humana-slowly-reducing-unhealthy-days-in-population-health-effort/#18fb6faa7fbe



- Humana Company Backgrounder: https://www.humana.com/about/news/press-kit/corporate-press-kit
- Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey (Rockville, Md.: U.S. Department of Health and Human Services, 2011).
- Commonwealth Fund, Addressing Patients' Social Needs:
 https://www.commonwealthfund.org/sites/default/files/documents/___media_files_p
 ublications_fund_report_2014_may_1749_bachrach_addressing_patients_social_needs
 _v2.pdf
- CareMore:

https://www.commonwealthfund.org/publications/podcast/2018/aug/addressing-epidemic-loneliness

- NEJM Catalyst: https://catalyst.nejm.org/growing-imperative-address-senior-loneliness/
- STAT News: https://www.statnews.com/2017/05/08/loneliness-seniors-anthemcaremore/
- Humana CEO Interview: http://populationhealth.humana.com/media/
- Population Health Management A Bold Goal:
 https://www.liebertpub.com/doi/abs/10.1089/pop.2017.0142?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed
- Health Insurers Promote Member Wellness:
 https://www.medialogic.com/blog/healthcare-marketing/health-insurers-promote-member-wellness-weight-watchers-grocery-store-discounts/
- UnitedHealth Group:
 https://www.unitedhealthgroup.com/newsroom/2018/0124michiganaffordablehousing
 .html
- HealthPayer Intelligence: https://healthpayerintelligence.com/news/payer-housingprograms-address-social-determinants-of-health

- Innovation in Heath Care Award:
 https://www.thescanfoundation.org/sites/default/files/scan_innovationcasesummary_s
 anmateo.pdf
- ITQA: www.ltqa.org/wp-content/themes/ltqaMain/custom/images//HPSM-Case-Report.pdf
- HPSM: https://www.hpsm.org/docs/default-source/commission/commission/smhcmaterials---december-13-2017.pdf?sfvrsn=2823ae99 7
- Humana Population Health: http://populationhealth.humana.com/healthy-days/
- UnitedHealth Group:
 https://www.unitedhealthgroup.com/newsroom/2018/0124michiganaffordablehousing
 .html
- Forbes https://www.forbes.com/sites/brucejapsen/2018/08/14/to-keep-you-healthy-health-insurers-may-soon-pay-your-rent/
- Business Wire:
 https://www.businesswire.com/news/home/20170508005351/en/CareMore's-'Be-Circle-Connected'-Campaign-Tackles-Unmet
- AMJC: https://www.ajmc.com/focus-of-the-week/caremores-prescription-for-loneliness-removes-barriers-to-togetherness
- UN. Org: https://www.un.org/esa/socdev/documents/ageing/workshop/2015NewYork/Presentat ion Lynda%20Flowers.pdf