



NAVIGATING SOCIAL DETERMINANTS: A POPULATION HEALTH PERSPECTIVE



Factors that shape patient health are complex and can include any combination of genetic, environmental, economic, political, and social variables.

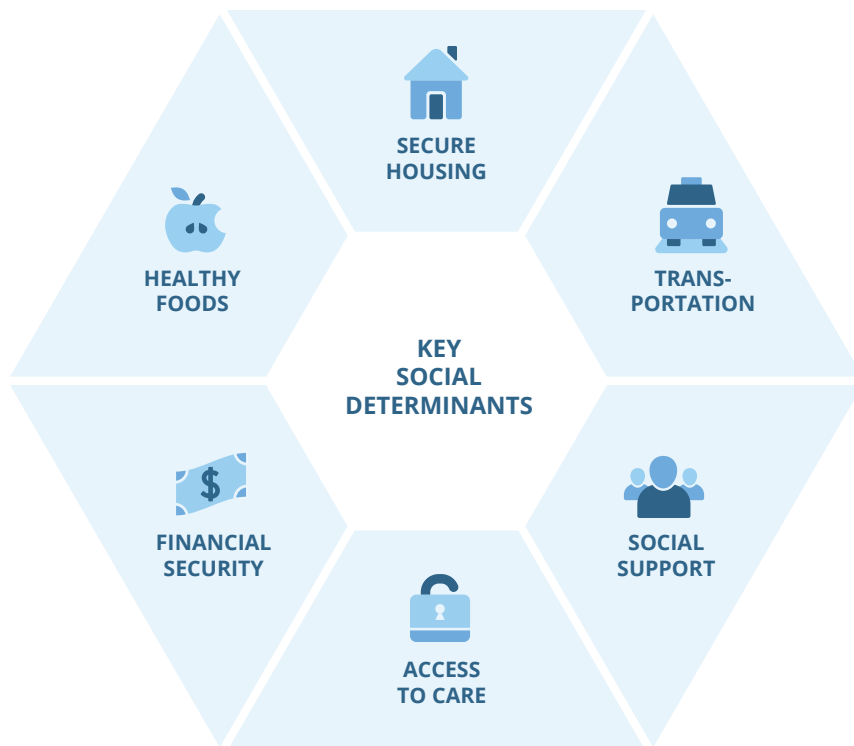
Studies have shown that social determinants are especially important to patient health. Behavioral and socioeconomic factors can determine up to 80% of an individual's overall health.¹ Vulnerable populations pose unique challenges and require comprehensive care that addresses clinical, behavioral, and social determinants of health at the individual level. Data-driven strategies that identify and address these variables can not only improve outcomes for underserved and at-risk health populations but can also significantly reduce health care spending.

1. Robert Wood Johnson Foundation



A Model for Data-Driven Population Health Management

One of VirtualHealth's clients, Community Care of North Carolina (CCNC), is the largest and longest-running primary care medical home system in the United States. Highly regarded nationwide for its successful efforts to improve outcomes and lower costs, CCNC's work has become a model for addressing all dimensions of health within a statewide primary care and case management program. As health care delivery has evolved from discrete disease management initiatives to whole-person models, CCNC has shifted toward addressing social determinants as part of chronic disease management. These determinants, which may include economic instability, poor social support, substandard housing, hunger, lack of transportation, and limited access to quality care, are widely recognized to be predictors of poor health outcomes.



Behavioral and socioeconomic factors determine



of an individual's overall health.¹

CCNC found that 88% of its “impactable” patients — those who can be positively affected by care management interventions — have at least one social risk factor in addition to medical conditions. About 58% of these impactable patients have at least two social risk factors, and 21% have four or more. Social determinants also create a cost burden on the health care system. According to CCNC, impactable patients visit about 14 different health care providers and are admitted to 2.5 different hospitals during any given year. CCNC works to overcome obstacles to care using predictive, actionable data. This approach enables CCNC’s community-embedded, multidisciplinary teams to consider social solutions early in the care management process when they can best influence outcomes. The state of North Carolina has seen a clear return on investment from CCNC’s targeted, data-driven strategy.

2. State of North Carolina, Office of the State Auditor. 2015. Department of Health and Human Services, Division of Medical Assistance: Community Care of North Carolina. Retrieved from <http://www.ncauditor.net/EPSSWeb/Reports/FiscalControl/FCA-2014-4445.pdf>

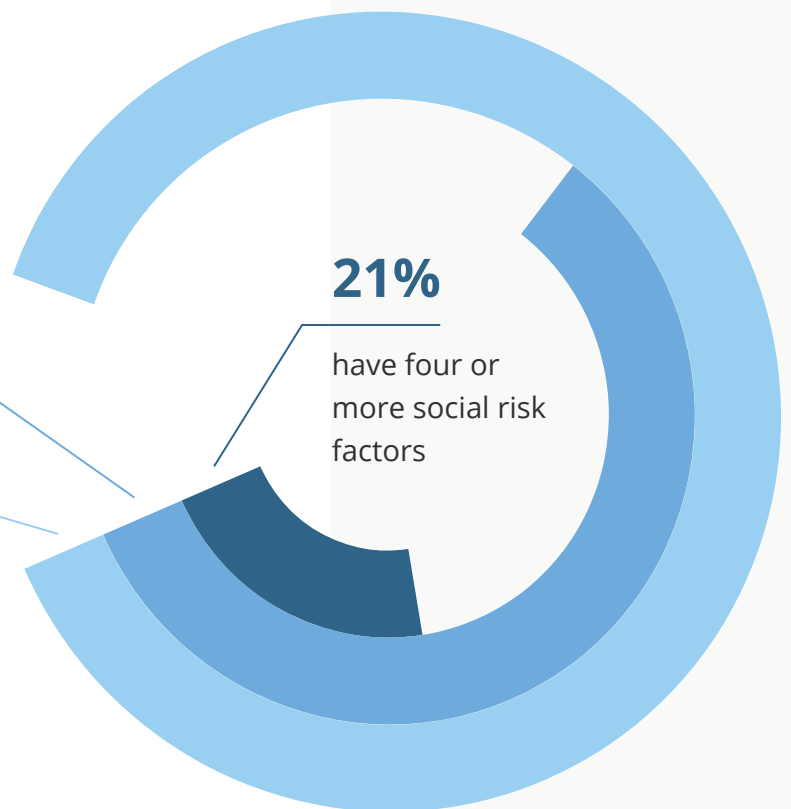
SOCIAL DETERMINANTS AMONG CCNC’S IMPACTABLE PATIENTS

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have at least two social risk factors

88%

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A report from the Office of the State Auditor demonstrated that addressing social determinants led to a

25% reduction

in inpatient admissions and total net savings of

\$ \$312 per member per year,

or 9% of Medicaid costs.² Every \$1 invested in CCNC has generated over \$3 in savings for the state.

Transportation: Influencing A Key Social Determinant

CCNC saw significant improvement in care compliance when it addressed transportation disparities in one of its communities. Prior to the intervention, county social services departments coordinated patient transportation. This approach often required advance scheduling and created extended wait times that posed barriers to care for many patients.

Through partnerships with various local vendors, CCNC was able to target patients in need of rides and begin offering on-demand, HIPAA-compliant scheduling with transportation providers. CCNC's care managers gained the ability to schedule same-day appointments for patients with high-priority, non-emergency care needs. This allowed patients and care coordinators to easily review, confirm, or cancel rides. The program established a convenient and reliable option to get patients to their medical appointments.

Another company focused on transportation disparities is the on-demand ride sharing company Lyft. When Lyft realized that care coordinators were already using the Lyft app to book rides for patients, company leaders sought to help remove the transportation barriers that many underserved patients face.

Subsequently, Lyft created Lyft Concierge, which allows case manager and other patient representatives to schedule on-demand or prescheduled rides for appointments. The program removes obstacles that some patients may face using the traditional app, including credit card and smartphone access.

Lyft Concierge partners with providers, payers, and other transportation vendors to map out entry points, send texts to the appropriate parties regarding the type of transportation, and coordinate other trip details. The service has reduced patient grievances and wait times, while ultimately increasing care compliance. Through its impactful programs, Lyft aimed to cut the number of people with limited access to health care due to transportation barriers in half by 2020.

Among the known social determinants of health, transportation to care may be one of the most important and easiest to address with the right data and technology.

Research suggests

 **3.6 million**

Americans miss or delay appointments due to lack of transportation.³

Altogether, missed appointments are believed to cost the US health care system over

 **\$150 billion annually.⁴**

3. Wallace, R., Hughes-Cromwick, P., Mull, H., Khasnabis, S. 2005. Access to health care and nonemergency medical transportation: two missing links. *Transportation Research Record: Journal of the Transportation Research Board*. 1924: 76-84.

4. Toland, B. 2013. No-shows cost health care system billions. *Pittsburgh Post-Gazette*. Retrieved 2018 from <http://www.post-gazette.com/business/business-news/2013/02/24/-No-shows-cost-health-care-system-billions/stories/201302240381>

Technology That Empowers Proactive Health Care

To improve patient outcomes and reduce health care costs, health care organizations must be able to provide support to populations with unmet needs. Incorporating social determinants into a whole-person approach to care requires both the identification of opportunities and the ability to deliver the necessary support.

A comprehensive representation of a patient's health comes from a multitude of sources. Organizations need a solution like VirtualHealth's HELIOS® that can aggregate and analyze this data to construct a single 360° view of each patient. The optimal technology solution needs to be cloud-based and capable of quick configuration to accommodate the latest social determinants, while still giving care teams the full breadth of capabilities they require to provide the best care for members.

These capabilities enable VirtualHealth clients, including Community Care of North Carolina, to effectively collaborate and deliver timely interventions that ultimately improve the health of populations, while reducing the cost of caring for them.

VirtualHealth's HELIOS® was purpose-built to provide a comprehensive view of each patient. It is the command-and-control center that empowers care managers with actionable intelligence and the right tools to address all aspects of a patient's health, including social determinants.

With its vast number of partnerships and integrations, VirtualHealth clients can further expand the HELIOS® platform so that care managers can always have the best data available. This includes partners such as Unite Us, Aunt Bertha and Continual Care Solutions, who are focused on identifying community resources to combat social needs and work closely with Community Based Organizations (CBOs), to provide real-time information regarding closed loop referrals. In addition, HELIOS® has the industry's most complete set of rule engines and end-to-end robotic process automation (RPA) workflows, automating tens of millions of decisions each



month. These intelligent automations enable care teams to spend more time focused on members and their individual barriers to health.

Some VirtualHealth clients have experienced ROIs of more than 80% within 6 months of going live due to the increases in efficiency and member outcomes. If you want to discuss how VirtualHealth can assist you, please connect with us by [clicking here](#).



HELIOS® by VirtualHealth is the first comprehensive care management platform purpose-built to power the entire ecosystem of value-based care. Utilized by some of the most innovative health plans in the country to manage millions of members, HELIOS® streamlines person-centered care with intelligent case, disease, and utilization management workflows, unmatched data integration, broad-spectrum collaboration, patient engagement, and configurable analytics and reporting. Named one of the fastest-growing companies in North America by Deloitte in 2018 and 2019 and a top-rated solution by KLAS Research, VirtualHealth empowers healthcare organizations to achieve enhanced outcomes while maximizing efficiency, improving transparency, and lowering costs. For more information, visit www.virtualhealth.com.

