



Why **virtual care is key**  
to overcoming  
social determinants

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## INTRODUCTION

America is grappling with its systemic inequities. Large, peer-reviewed studies of population health show time and again that social determinants of health profoundly impact a wide range of healthcare outcomes.<sup>1,2,3</sup> Commonly abbreviated SDoH, these are the economic and social conditions that affect individual and group differences in healthcare status. Even in commercially insured populations, factors like economic stability, food access, neighborhood and work environment, health literacy, and education create health inequalities.<sup>4</sup>

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**Virtual healthcare is well positioned to address these issues in three key ways.**

**First**, virtual care better enables the delivery of integrated mental and physical care. This approach is especially important given that chronic conditions never stand alone — and typically chronic physical conditions are accompanied by mental conditions. For instance, patients with obesity or type 2 diabetes are significantly more likely to suffer from depression, anxiety, and substance use disorders.<sup>5</sup>

**Second**, because virtual care can be delivered privately and on a flexible schedule — without the hassle and cost of transportation — it lends itself better to populations that face social determinants like cultural stigma, fewer nearby providers, and the need for education and behavior change on things like diet and exercise.

This **third** point is particularly important. The number one predictor of a patient's likelihood to achieve health outcomes is the relationship they have with their provider.<sup>6</sup> Through video calls and in-app messaging, virtual providers can play a more constant role in their patients' health journeys, providing both the support and accountability that leads to lasting change.

**Treating mental and physical chronic conditions requires resources, time, money, and access often not available to at-risk populations, so equitable care requires innovative methods.** The following sections highlight why chronic health conditions are socially determined, how virtual care can help correct social determinants, and what health leaders can do to improve access for these at-risk populations.

## Chronic health conditions are socially determined

Social determinants of health particularly impact chronic health conditions like obesity, type 2 diabetes, and mental health disorders. This means that rates of these conditions are significantly higher in people from underserved populations — even if they have commercial insurance. Because mental health disorders are typically intertwined with physical ones, care that treats both mental and physical conditions together is especially important to improving the health of those whose social determinants make it harder to get regular healthcare.

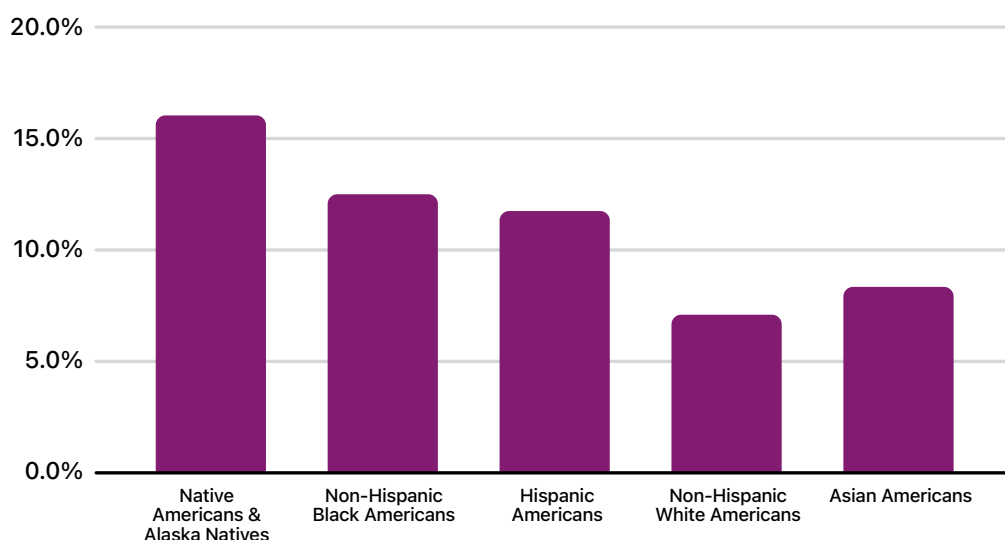
### Obesity

Minority and low-socioeconomic-status groups are disproportionately affected by obesity at all ages.<sup>5</sup> Latin-American and non-Hispanic black groups have 10% higher obesity rates than whites. This disparity is even greater for women of color: Rates of obesity in non-Hispanic black women are 20% higher than in

white women. Researchers recognize how socially determined obesity is, and work specifically to understand that relationship. One such team at the Johns Hopkins Bloomberg School of Public Health has called for programs and policies to specifically address obesity in these demographic groups.

### Type 2 Diabetes

#### Age-adjusted prevalence of diagnosed type 2 diabetes in adults



Age-adjusted prevalence of diagnosed type 2 diabetes in adults is several percentage points higher in Native Americans / Alaska Natives (16.1%), non-Hispanic blacks (12.6%), and Hispanic Americans (11.8%) than it is in non-Hispanic whites (7.1%) and Asian Americans (8.4%).<sup>7</sup> An estimated 7 million Americans have undiagnosed type 2 diabetes, and researchers estimate that these rates are significantly higher among certain populations.<sup>7,8</sup>

In the National Health and Nutrition Examination Survey (NHNES), over 40% of Mexican Americans and 24%

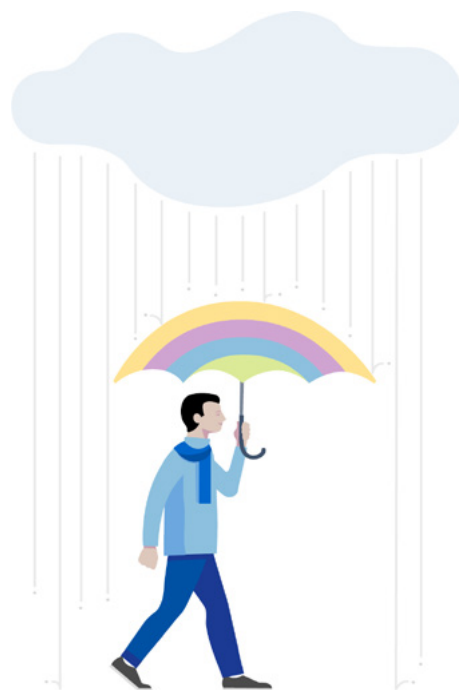
of non-Hispanic black Americans have undiagnosed type 2 diabetes.<sup>7</sup> This highlights the need for type 2 diabetes care in non-white populations, particularly given the risk of severe complications if left untreated. Diabetes education and prevention programs for these groups, too, would help to identify and aid high-risk patients in the pre-diabetic stages. For this reason, involving patients in weight, nutrition, and mental health support via an integrated mental-physical care program empowers patients to make meaningful and lasting lifestyle changes that prevent type 2 diabetes from developing.

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## Mental health disorders

Mental health disorders must be addressed in the discussion of socially determined health conditions — not merely due to their impact on minority populations, but also because of their impact on physical health.<sup>9</sup> In a study of more than 8,000 participants, researchers at the University of Michigan found a significant correlation between poverty and depression.<sup>10</sup> Although most studies find that Hispanic American and non-Hispanic black Americans have lower rates of depression than white Americans, these groups are significantly less likely to seek or to receive mental health care. This means that rates of undiagnosed depression may be higher in these groups, and that their depression more frequently goes untreated.<sup>10,11</sup> The experience of discrimination on the basis of race/ethnicity, immigration status, and/or sexual orientation has also been repeatedly demonstrated to negatively

impact mental health.<sup>13,14</sup> **Mental health and social determinants have a reciprocal impact on another**, which researchers in the field call the “social determinant and mental health cycle.”<sup>13</sup>





## Mental and physical conditions go hand-in-hand

Socially determined factors like adverse childhood experiences (e.g. abuse, neglect, parental separation or divorce, incarceration of a family member), poor education, food insecurity, poor housing quality, unemployment, and discrimination all impact mental as well as physical health.<sup>2</sup> **More specifically, housing insecurity and lack of access to healthy food have been linked to higher incidence of mental health disorders.**<sup>13</sup> One large study of overlapping health conditions found that black Americans who met criteria for major depression were significantly more likely to also meet criteria for generalized anxiety disorder or another chronic medical condition — an association that did not hold for white Americans.<sup>12</sup> This means that mental health conditions are more likely to be comorbid for black Americans.

## The intergenerational effects of social determinants

Socially determined health conditions do damage that is heritable, and thus intergenerational. Socially determined conditions create health challenges during fetal development, like prenatal undernutrition and stress, maternal stress, and maternal obesity during pregnancy.<sup>15</sup>

This modifies the developmental biology of offspring, leading to an increased risk of developing obesity and type 2 diabetes.<sup>15</sup> Socially determined risk of mental health conditions, too, has been shown to begin prenatally.<sup>13</sup>

## The language barrier as a social determinant

Populations with low English-language proficiency are at higher risk for mismanagement of chronic health conditions.<sup>16</sup> For instance, adverse reactions to medication are more frequent when prescription instructions are written in a language that patients don't read frequently.<sup>17</sup> Undocumented immigrants in particular struggle with this: 74% report not speaking English well, compared to half of documented immigrants and less than a quarter of U.S. citizens.<sup>18</sup> Non-English speakers in the U.S. most commonly speak Spanish: 64% of patients uncomfortable with English speak Spanish as their first language.<sup>19</sup> Additionally, fewer than 10% of health providers and fewer than 6% of clinical psychologists in the U.S. speak Spanish, further hindering access to care for low English-language proficiency populations.<sup>20,21</sup> And while digital therapeutics can play a powerful role in helping these groups, very few of these interventions are available in Spanish.



## Virtual care outcomes address social inequities

### Virtual care is clinically proven to improve physical health

Virtual care programs like Vida Health have had tremendous success in managing weight, blood pressure, and glycemic index. Continuous care frequency and accessibility makes it easier to build relationships with providers, which increases the likelihood that patients will continue on their treatment path, and results in strong outcomes. Treating mental and physical conditions together leads to sustained behavior change and both improved and lasting outcomes.

#### Weight management

Over a 12-month period of one-on-one virtual coaching, 363 initially overweight participants lost an average of 7.2% of body weight.<sup>22</sup> For context, this is 2.2% more than the industry standard for weight loss through in-person care. Over the same 12-month period, 320 initially obese participants lost an even larger average of 7.6% of body weight — 2.6% higher than the industry standard.

#### Glycemic control

When provided with one-on-one sessions with a health coach and a structured educational plan, participants considered high-risk (baseline HbA1c  $\geq 8$ ) saw an average reduction of 1.44 points.<sup>24</sup> Overall, 950 participants in Vida's diabetes management program saw an average HbA1c reduction of -0.81 points.

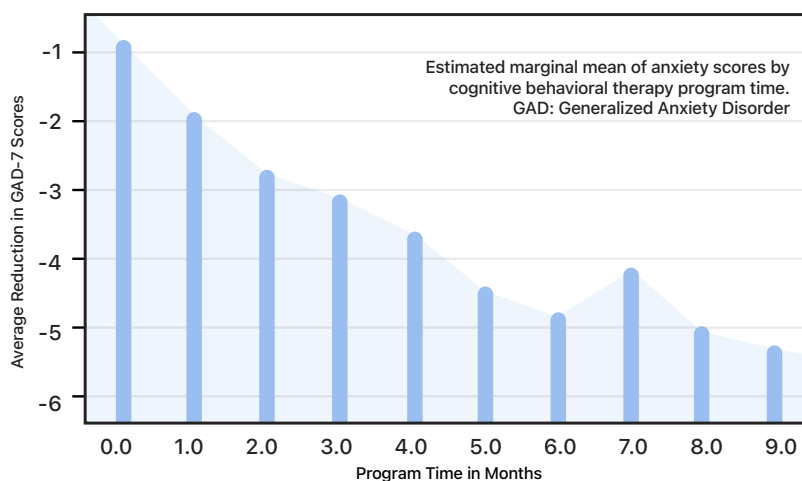
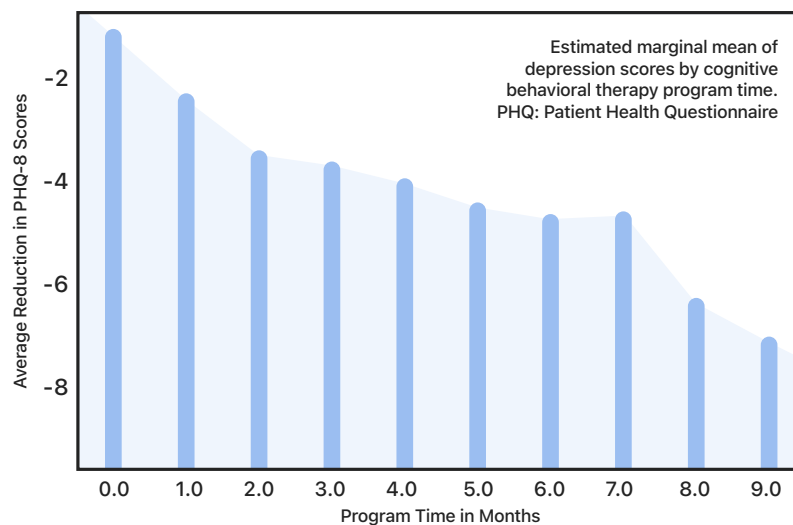
#### Blood-pressure management

In blood-pressure management over a period of four months, 49.1% of Vida participants improved their blood pressure by an entire hypertensive stage.<sup>23</sup>

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### Virtual care reduces stress, depression, and anxiety in clinical and subclinical populations

Immediately following a 12-week intervention involving cognitive behavior therapy in weekly, app-based sessions with a licensed counselor, participants saw a significant improvement in clinical measures of depression.<sup>25</sup> These results were not only lasting, but actually improved in the months following the intervention period.



App-based counseling is also effective in improving the mental health for those experiencing subclinical-level mental health issues. Following 10 weeks of a mindfulness-based stress reduction program through Vida, subclinical program participants saw a significant reduction in their reported stress levels.<sup>26</sup>

### Virtual care can eliminate the language barrier

Virtual healthcare with fully integrated language support empowers non-English-proficient patients to engage meaningfully with their healthcare. Vida is the only major virtual service that provides a complete Spanish language experience — allowing Spanish-speaking members to interact with the Vida app and with all of their providers (coaches, therapists, registered dietitians, and care navigators) entirely in Spanish. Vida’s NPS of 87 among Spanish-speakers is further confirmation of the eagerness of this population to embrace health support — if it’s available to them in a way they can use it.





## **Treating mind and body together achieves lasting outcomes for people within social determinants**

Social determinants of health present barriers for millions of people in the US, preventing them from achieving the meaningful mental and physical changes that lead to better health and lower care costs. Dismantling systemic inequity isn't easy and there are no silver bullets. But health leaders can prioritize innovative methods of bridging these access gaps. Human-centered virtual care can dramatically improve access for patients who wouldn't otherwise receive care due to their neighborhood, language, economic status, education level, or skin color.

**Improving population health begins with more equitable access — particularly access that overcomes the hurdles of social determinants.**

Virtual care isn't the only answer, of course, but it is a critical tool in creating, increasing, and improving access to the mental and physical care required to treat chronic conditions. And we must treat them together if we are to truly overcome social determinants.



Vida's virtual care platform uniquely treats mental and physical health together in one place, improving access to care, member engagement, and clinical outcomes across multiple conditions while reducing overall cost of care. Vida supports Spanish-speaking members with full program availability in Spanish, including digital therapeutics and providers. Learn more about Vida's programs and clinical outcomes.

[Contact Vida](#)



Virtual care for  
mental and physical health

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