Sharecare's Community Well-Being Index 2019 State Rankings Report

As of August 2020

Community
Well-Being Index

COMPONENTS OF SHARECARE COMMUNITY WELL-BEING INDEX

Well-Being Index (WBI)

PHYSICAL

COMMUNITY

PURPOSE

SOCIAL

FINANCIAL

Social Determinants of Health Index (SDOHi)

HEALTHCARE ACCESS

FOOD ACCESS

RESOURCE ACCESS

ECONOMIC SECURITY

HOUSING & TRANSPORTATION

Vision

Over the past 10 years, Sharecare has measured the concept of well-being, including individual risk factors and perceptions spanning five interrelated health domains: physical, financial, community, social, and purpose.

With insights garnered from over 3 million surveys completed to date, well-being has been proven to carry significant relationships with health and performance outcomes, as well as diagnostic capability for intervention, lending to the largest and most robust view of well-being nationally.

After 10 years, however, Sharecare recognized the need to evolve.

Accordingly, in 2019, Sharecare partnered with the Boston University School of Public Health (BUSPH), to make a pivotal shift in well-being measurement by: 1) advancing how we collect and synthesize well-being data and 2) incorporating community-level social determinants of health (SDOH) measures to form new indices for contextualizing population health.

Data collection was accomplished this year using a multi-modal approach centered on digital collection through Sharecare's RealAge assessment, a validated predictor of five-year mortality based on inputs across 500+ published studies. With over 45 million surveys taken to date, RealAge captures well-being within the five domains of health, and further, expands data capture to include additional health behaviors, reported co-morbidities, and mortality risk. Data collection via RealAge also affords additional opportunities to assess the association between well-being and health outcomes, incorporating key risk factors, moderators of health, and user behaviors and motivation to change.

By integrating social determinants of health (SDOH), our next-generation index enables measurement across individual well-being *and* provides context for the environments in which individuals live, work, and play. These

insights empower Sharecare to more effectively target interventions related to critical SDOH domains across housing & transportation, access to healthcare, food and resources, and economic security.

This infrastructure established between early 2019 and early 2020 has enabled Sharecare and BUSPH to develop a baseline for well-being pre-pandemic, as well as dedicate the first half of this year to increasing our understanding of these data alongside the COVID-19 pandemic and systemic racism, providing community well-being context for critical external forces that are shaping our country and world. Additionally, the framework and methods established represent a scalable model that can readily pivot to capture the next generation of public health crises and opportunities, ensuring ongoing continuity in measurement for today's pandemic and whatever is next.

In keeping with prior years, this report provides state rankings for the year 2019, highlighting Well-Being Index (WBI) rankings across the United States, which we have measured since 2008.

In addition, and as part of our evolution, the report also highlights two new sets of rankings:

- Social Determinants of Health Index (SDOHi) – including five interrelated social determinants of health domains
- Community Well-Being Index (CWBI) – our integrated measure that combines individual risk from the WBI with community risk from the SDOHi

Embracing our future, these state results, as well as upcoming community results, are based on ranking 99.9% of all counties in the US (3,140 in total) and all 383 MSAs for the first time in our history of measuring well-being. This achievement reflects our commitment to improving health for all — particularly, underserved populations across both urban and rural areas.

As we move forward, we are committed to measuring and applying these data across the four tenets that define our partnership and vision around community-driven care, including:

- Continue to enhance the information captured in our SDOH data warehouse at various spatial and temporal resolutions, incorporating satellite datasets that measure green space, air pollution, and temperature, as well as other measures of inequity
- Refine and validate our measurement of well-being and SDOH indices using machine learning and other advanced statistical methods, including techniques that ensure comprehensive coverage
- Unify Sharecare's academic collaborator network, with BUSPH as the cornerstone, to augment thought leadership and develop insights into community well-being both locally and nationally
- Integrate Community Well-Being Index (CWBI) data, insights, and models across all aspects of Sharecare's unified virtual care and high touch platforms, enabling hyper-targeted interventions that help make the healthy choice the easy choice

We are honored to share these results as a collaboration between Sharecare and the Boston University School of Public Health (BUSPH), anchored in the Biostatistics and Epidemiology Data Analytics Center (BEDAC). It is our hope and mission that these findings unite us in a collective movement to improve our nation's well-being.

Let's create a future where we are all together better.

Jeff Arnold
Founder and CEO, Sharecare

Sandro Galea, MD, DrPH
Dean, Boston University School of Public Health

Approach & Evolution

Over the last 10 years, the Sharecare Well-Being Index (WBI) has benchmarked our nation's health, enabling states and communities to understand health risk and opportunity across physical and financial resilience, social and community context, and everyday purpose:

- Purpose: liking what you do each day and being motivated to achieve your goals

- Social: having supportive relationships and love in your life

- Financial: managing your economic life to increase security and reduce stress

- Community: liking where you live, feeling safe, and having pride in your community

- Physical: having good health and enough energy to get things done daily

For the 2019 rankings, Sharecare and BUSPH collected over 360,000 surveys across digital and mail modalities[1], targeting data collection efforts to capture census-based representation while increasing the number of surveys collected from the prior year.

The key differentiator for this year was the statistical approach. Through small area estimation (Wenjun Li, 2009) and multiple imputation (Peter Cummings, 2013), techniques widely used in similar applications and published in journals such as the Journal of the American Medical Association and Statistics in Medicine, Sharecare and BUSPH enabled visibility into scores and rankings for 99.9% of US counties and all 383 metropolitan statistical areas (MSAs) – for the first time in Well-Being Index history, including increased coverage in rural and underserved areas.

This important milestone is a first step in addressing inequities in health outcomes among sociodemographic clusters of individuals, and future iterations will continue to expand upon these methods to drive enhanced coverage across the most vulnerable and at-risk populations, within and across communities.

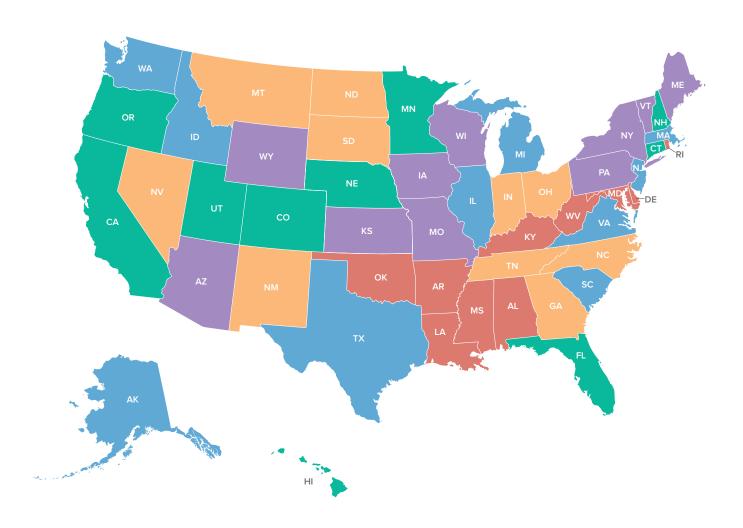For more information on the Well-Being Index, please visit **our methods page**.

Well-Being Index Domains

When asked to rate the validity of states such as 'I like what I do every day', and 'I learn or do something interesting every day', respondents who identify as Black or African American were roughly three times more likely than respondents who identify as White or Caucasian to strongly disagree with those statements – just one example of well-being inequity for individuals who identify as Black or African American.
CWBI Snapshot, June 2020

[1]364,025 surveys collected; 305,552 surveys with complete WBI, zip code and demographic characteristics included in rankings.

2019 Well-Being Index Results

Well-Being Index, 2019 State Rankings

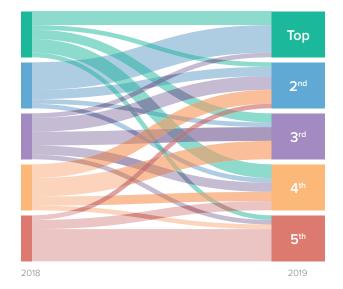| Top Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
1 New Hampshire	11 Massachusetts	21 Kansas	31 North Carolina	41 Rhode Island
2 Hawaii	12 New Jersey	22 New York	32 Montana	42 Maryland
3 Utah	13 Idaho	23 Wyoming	33 Nevada	43 Arkansas
4 Colorado	14 Alaska	24 Arizona	34 New Mexico	44 Oklahoma
5 Oregon	15 Illinois	25 Iowa	35 Tennessee	45 West Virginia
6 Nebraska	16 Washington	26 Wisconsin	36 South Dakota	46 Alabama
7 Florida	17 Michigan	27 Maine	37 Ohio	47 Delaware
8 Minnesota	18 Virginia	28 Pennsylvania	38 North Dakota	48 Louisiana
9 Connecticut	19 South Carolina	29 Missouri	39 Indiana	49 Kentucky
10 California	20 Texas	30 Vermont	40 Georgia	50 Mississippi

Impact of New Methods

The impact of achieving this level of comprehensive coverage was revealing as it relates to changes in state rankings, including broad impacts based on the inclusion of additional rural counties in this year's ranking:

- Only three states maintained their position in the top quintile, and of the seven states that fell out of the top 10 in 2019, six of these states included more rural counties compared to prior years – an important insight given on average, well-being scores in rural counties were over one point lower than their urban counterparts (rural mean WBI = 59.27; urban mean WBI = 60.34)[2].

- In the second quintile for 2018 rankings, states like Arizona and Nevada dropped to the third and fourth quintiles, respectively, due to the inclusion of additional rural counties.

States like Georgia saw a decline from 23rd in 2018 to 40th in 2019, largely due to the incorporation of additional rural counties – where on average, WBI scores were over two points lower than counties considered urban. In addition, and while metro areas included in prior rankings like Atlanta and Chattanooga remained consistent in their ranking, 50% of newly ranked metro areas in Georgia fell to the bottom quintile of well-being nationally, including Savannah, Hinesville, Warner Robbins, Columbus, Macon-Bibb, and Albany, ranging from 318th to 376th of 383 total U.S. metro areas.

Well-Being Index by Quintile, 2018 vs. 2019 State Rankings

2018   2019

Long-standing systemic health and social inequities have put some rural residents at increased risk of getting COVID-19 or having severe illness. In general, rural Americans tend to have higher rates of cigarette smoking, high blood pressure, and obesity as well as less access to healthcare which can negatively affect health outcomes.

Centers for Disease Control and Prevention

[2]Urban/rural designations are based on using tract-level Rural Urban Commuting Area (RUCA) codes developed by the Office of Rural Health Policy (ORHP) using Census guidelines.

Impact of New Methods

While many of our top ranked states, as well as examples like Georgia, saw significant changes due to new methods and incorporation of additional rural and metro area communities, it is important to note that compared to 2018, this year's rankings were not volatile:

- Of the bottom 10 states for 2018, seven remained in the bottom quintile for 2019.

- Over one-third of states shifted less than five rankings, and over half of states shifted less than 10 rankings.

- Only one state, Delaware, shifted more than 30 positions, which is based on the Diamond State ranking in the bottom quintile for four out of five well-being domains, including coming in 50th in purpose.

Accordingly, WBI rankings were consistent with prior years across several states based on new methods, including Hawaii, Utah, and Colorado remaining in the top quintile, ranking second, third, and fourth in 2019, respectively. In these states, counties considered urban still fared better than their rural counterparts; however, mean WBI scores for rural counties in these states were better than the mean WBI score for all counties nationally, lending to above average levels of well-being in both urban and rural contexts across these states. In addition, all three states ranked in the top 10 for our Social Determinants of Health Index (SDOHi), lending to potential connection points between rural and overall resilience in states with high levels of social determinants.

Well-Being Index State Rankings Comparison, 2018 vs. 2019

Results Overview

For the first time in WBI history, New Hampshire ranked first in well-being nationally, followed by "well-being elite states" like Hawaii, Utah, and Colorado. Oregon, which has typically fallen in a middle quintile for overall well-being, landed the fifth spot this year.

On the other end of the spectrum, Mississippi ranked 50th in overall well-being nationally, breaking West Virginia's 5+ years of ranking last in our nation's well-being. Other states falling in the bottom five for overall well-being include Alabama, Delaware, Louisiana, and Kentucky.

Top 10 and Bottom 10 States by Well-Being Index Ranking, 2019

Top States			Bottom States		
1.	New Hampshire	63.2	41.	Rhode Island	58.8
2.	Hawaii	62.1	42.	Maryland	58.8
3.	Utah	61.9	43.	Arkansas	58.6
4.	Colorado	61.5	44.	Oklahoma	58.5
5.	Oregon	61.5	45.	West Virginia	58.4
6.	Nebraska	61.2	46.	Alabama	58.3
7.	Florida	61.2	47.	Delaware	58.2
8.	Minnesota	61.2	48.	Louisiana	58.2
9.	Connecticut	61.2	49.	Kentucky	58.1
10.	California	61.1	50.	Mississippi	57.7

Tale of Three States

Based on retrospective data collected across Florida, Washington, and Massachusetts – states that saw resilience across 2019 rankings but have since experienced materially different COVID-19 realities across viral progression and pandemic control policies (e.g., mandates to wear face masks, closures, travel restrictions, etc.) – overall well-being is projected to decline across all three states, with the most notable declines projected in the financial well-being domain – regardless of when outbreaks occurred in the state or the local policies used to curb the pandemic.

CWBI Retrospective Snapshot, July 2020

Strengths and Weaknesses of the Highest and Lowest Ranking States

New Hampshire's top ranking in 2019 was secured by landing No. 1 positions across four of five well-being domains, including top spots across financial, purpose, physical, and community. The No. 1 ranking for the social domain was assumed by Utah, ranking third in overall well-being.

At the bottom, Mississippi assumed the lowest rank for financial and physical well-being. Delaware, ranked 46th in overall well-being, took the bottom ranking for purpose well-being, and Maryland, ranked 42nd, took the bottom ranking for community well-being. Lastly, and in spite of an overall well-being ranking

in the fourth quintile, South Dakota assumed the bottom spot for social well-being.

Top Five and Bottom Five States by Well-Being Index Domain Ranking, 2019

	Top	Bottom	
Purpose	1. New Hampshire 2. Utah 3. Wyoming 4. Vermont 5. Alaska	46. Ohio 47. Kentucky 48. West Virginia 49. Alabama 50. Delaware	
Social	1. Utah 2. Hawaii 3. New Hampshire 4. Idaho 5. Oregon	46. Louisiana 47. North Dakota 48. Mississippi 49. Alabama 50. South Dakota	
Financial	1. New Hampshire 2. Minnesota 3. Hawaii 4. Wisconsin 5. Illinois	46. Vermont 47. Louisiana 48. Georgia 49. Montana 50. Mississippi	
Community	1. New Hampshire 2. Idaho 3. Hawaii 4. Colorado 5. Utah	46. West Virginia 47. Rhode Island 48. Louisiana 49. Delaware 50. Maryland	
Physical	1. New Hampshire 2. Connecticut 3. New Jersey 4. Minnesota 5. Oregon	46. Alabama 47. Arkansas 48. Oklahoma 49. Kentucky 50. Mississippi	

Approach & Methods

The importance of the social determinants of health in shaping an individual's ability to achieve health and longevity has been well established in academia. Research from Dr. Sandro Galea, dean of BUSPH, has shown that education, income, racial segregation, and food access can be causally linked to death as readily as pathophysiologic and behavioral causes, highlighting the importance of including SDOH measures as a critical component in our estimation of health risk.

In 2019, Sharecare and BUSPH began collecting over 600 items measuring components of SDOH at various spatial and temporal scales, including sources across the American Community Survey (ACS), United States Department of Agriculture (USDA), Area Health Resources, National Park Service, United States Geological Survey, Centers for Disease Control and Prevention (CDC), National Aeronautics and Space Administration (NASA), and more.

Our first-generation SDOH indices mirrored the CDC Healthy People 2020 framework, including 59 items measuring five interrelated domains: neighborhood and built environment, health and health care, social and community context,

Rural parts of the United States with higher percentages of Black populations are associated with reduced access to healthcare, decreased economic stability, and worse health outcomes.
Sharecare-UNC Center for the Business of Health Hack-a-thon, April 2020

education and economic stability. For this generation, items were initially selected based on expert opinion and literature review. As domains were developed, measures were selected based on data quality, reliability, coverage, and item reduction procedures.

Our second-generation SDOH index (SDOHi), which is represented in 2019 results and rankings, then took this process a step further. Items were further parsed using iterative structural equation modelling techniques to find the simplest solution with the greatest explanatory power with respect to key outcomes, identifying 17 items from our first-generation and resulting in the following five domains:

- Healthcare access: Concentration of MDs, OBGYNs, and pediatric specialists per 1,000 residents

- Food access: Presence of grocery stores within one mile of underserved populations, including Black individuals, children, and seniors

- Resource access: Quantity of libraries and religious institutions per 10,000 residents, employment rates for people over 65, and presence of grocery stores within 20 miles

- Housing & transportation: Home values, ratio of home value to income, and public transit use

- Economic security: Rates of employment, labor force participation, individuals with health insurance coverage, and household income above poverty level

For more information on the Social Determinants of Health Index, please visit **our methods page**.

For the 14.3 million American households already experiencing food insecurity, COVID-19 shutdowns and restrictions have created new layers of hardship.
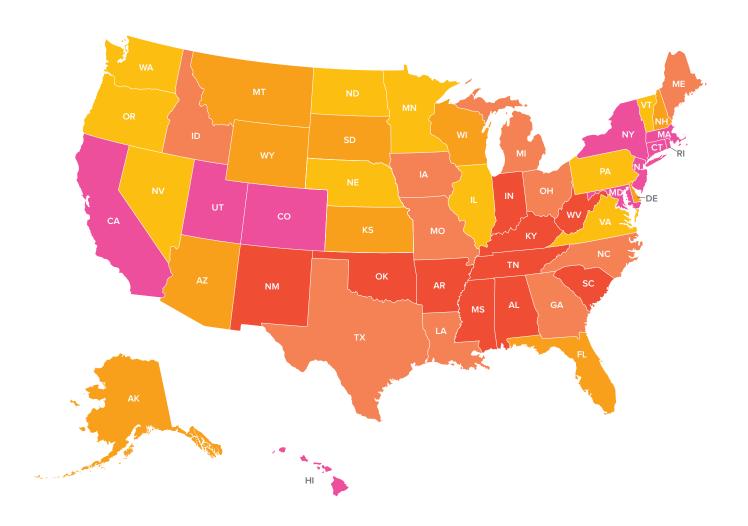RAND Corporation, March 2020

First Generation Index Domains

Second Generation Index (SDOHi) Domains

2019 Social Determinants of Health Index (SDOHi) Results

Social Determinants of Health Index, 2019 State Rankings

Top Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
1 Massachusetts	11 Washington	21 Delaware	31 Texas	41 Tennessee
2 New York	12 Illinois	22 New Hampshire	32 Missouri	42 Indiana
3 New Jersey	13 Virginia	23 Florida	33 Iowa	43 South Carolina
4 Maryland	14 Oregon	24 Alaska	34 Ohio	44 New Mexico
5 Hawaii	15 Nebraska	25 Wyoming	35 Maine	45 Oklahoma
6 California	16 Vermont	26 Wisconsin	36 Idaho	46 Alabama
7 Connecticut	17 Minnesota	27 Kansas	37 Louisiana	47 Kentucky
8 Rhode Island	18 Pennsylvania	28 Arizona	38 North Carolina	48 Arkansas
9 Colorado	19 North Dakota	29 Montana	39 Georgia	49 West Virginia
10 Utah	20 Nevada	30 South Dakota	40 Michigan	50 Mississippi

Results Overview

According to Sharecare's second-generation SDOHi, Massachusetts took the top ranking for our inaugural year, followed by New York, New Jersey, Maryland, and Hawaii.

States falling in the bottom were heavily concentrated in the South, including Mississippi taking the last position, followed by West Virginia, Arkansas, Kentucky, and Alabama.

Top 10 and Bottom 10 States by Social Determinants of Health Index Ranking, 2019

Top States			Bottom States		
1.	Massachusetts	61.1	41.	Tennessee	52.3
2.	New York	60.9	42.	Indiana	52.2
3.	New Jersey	60.4	43.	South Carolina	51.9
4.	Maryland	60.2	44.	New Mexico	51.5
5.	Hawaii	60.1	45.	Oklahoma	51.4
6.	California	59.2	46.	Alabama	51.0
7.	Connecticut	58.7	47.	Kentucky	50.8
8.	Rhode Island	57.9	48.	Arkansas	50.2
9.	Colorado	57.6	49.	West Virginia	49.5
10.	Utah	57.4	50.	Mississippi	48.9

Of the top 10 states based on social determinants, four also fell in the top quintile of well-being, including Hawaii, Connecticut, Colorado, and Utah. In the top quintile, Maryland had the lowest well-being ranking, assuming 42nd in the WBI, but taking fourth in our SDOHi. Rhode Island was close behind, ranking 41st in the WBI but eighth in the SDOHi.

Mississippi ranked last in both the WBI and the SDOHi, while Oklahoma, Alabama, Kentucky, Arkansas, and West Virginia also ranked in the bottom 10 in the WBI and the SDOHi.

Well-Being Rankings for Top 10 States on Social Determinants of Health Index

	SDOHi Ranking	WBI Ranking
Massachusetts	1	11
New York	2	22
New Jersey	3	12
Maryland	4	42
Hawaii	5	2
California	6	10
Connecticut	7	9
Rhode Island	8	41
Colorado	9	4
Utah	10	3

Strengths and Weaknesses of the Highest and Lowest Ranking States

Massachusetts's top ranking was secured through a No. 1 ranking in healthcare access, as well as a No. 2 ranking in housing and transportation. Fifth-ranked Hawaii took the top spot for housing and transportation, and sixth-ranked California took the top position for food access. States that fell outside the top quintile of the overall SDOHi rankings but assumed top positions

in SDOHi domains include Vermont, ranked 16th in SDOHi, which secured the top spot for resource access; and North Dakota, ranked 19th in SDOHi, which secured the top position for economic security.

At the bottom, Mississippi took the last position for food access, and landed in the fifth quintile for all other SDOHi domains besides resource access. West Virginia,

ranked 49th overall in the SDOHi, took the last position for economic security. Though Idaho ranked in the fourth quintile with its 36th rank in the SDOHi, it took 50th for healthcare access; Kansas, ranked 27th in the SDOHi, assumed 50th for housing & transportation; and California, ranked sixth on the overall SDOHi measure, took 50th for resource access.

Top 5 and Bottom 5 States by SDOHi Domain Ranking, 2019

	Top	Bottom	
Healthcare Access	1. Massachusetts 2. Rhode Island 3. Connecticut 4. Vermont 5. New York	46. Nevada 47. Montana 48. Oklahoma 49. Iowa 50. Idaho	
Food Access	1. California 2. New York 3. Nevada 4. New Jersey 5. Illinois	46. Maine 47. West Virginia 48. New Hampshire 49. Vermont 50. Mississippi	
Resource Access	1. Vermont 2. South Dakota 3. Maine 4. Wyoming 5. Montana	46. Georgia 47. Washington 48. Texas 49. Nevada 50. California	
Housing & Transportation	1. Hawaii 2. Massachusetts 3. New York 4. California 5. New Jersey	46. Mississippi 47. Arkansas 48. Oklahoma 49. Nebraska 50. Kansas	
Economic Security	1. North Dakota 2. Nebraska 3. Utah 4. New Hampshire 5. Wyoming	46. Arkansas 47. Kentucky 48. Mississippi 49. New Mexico 50. West Virginia	

Impact of COVID-19 on Food Access

COVID-19 has led to rapid changes in the retail food industry that could exacerbate existing food access inequalities. A recent report of business listed within Yelp identified that more than 26,000 restaurants have closed across the United States (News, n.d.). Additionally, business repositories such as Reference USA (Infogroup, Inc. Hershey Company, 2020) have identified verified food retail closures between 7% and 23% by industry categories with large spatial variations between and across our study areas, leveraging North American Industry Classification System (NAICS) codes that the CDC and USDA use to identify businesses in order to calculate the presence food deserts, respectively. The short and long-term impacts of such a rapid change in retail food access could have potential health implications.

Percentage of closed food retail businesses in 2020 by type of food retail based on the North American Industry Classification System (NAICS) codes. Data for table was obtained from Reference USA on 8/16/2020.

Food Retail (NAICS code)	Percent
Total Restaurants (72251117)	13.3%
Limited-Service Restaurants (722513)	16.7%
Supermarkets and Large Grocery Stores ≥ 50 employees (445110)	14.5%
Small Grocery Stores ≤ 4 employees (445110)	12.2%
Fruit and Vegetable Markets (445230)	10.2%
Warehouse Clubs (45231101)	15.8%
Convenience Stores (445120)	8.0%

Approach & Methods

In order to holistically measure health across and within communities, Sharecare and BUSPH then combined the Well-Being Index (WBI) with our second-generation Social Determinants of Health Index (SDOHi) to create a composite measure in the Community Well-Being Index (CWBI).
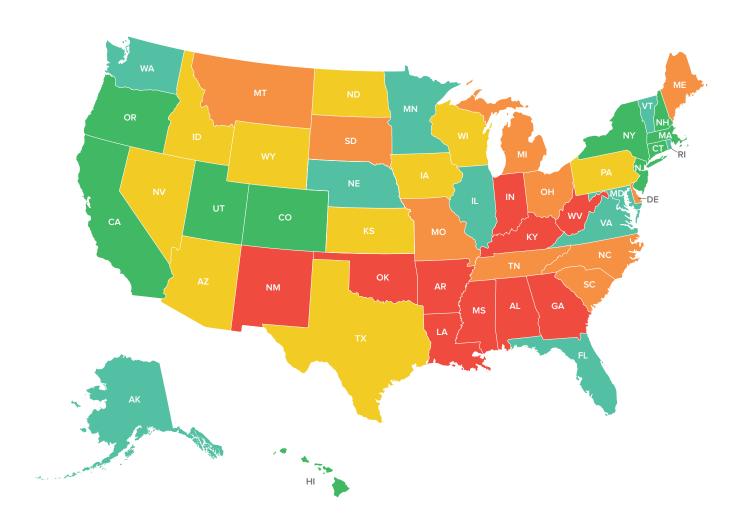
Through equal weighting across well-being and social determinants, CWBI delivers an overarching metric that provides insight for the next generation of community-driven care, affording the opportunity to evaluate health risk across multiple levels and viewpoints, and enabling new data-driven interventions across people, policy, and places.

For more information on the Community Well-Being Index, please visit **our methods page**.

Community
Well-Being Index

Well-Being Index (WBI)	**Social Determinants of Health Index (SDOHi)**
PHYSICAL	HEALTHCARE ACCESS
COMMUNITY	FOOD ACCESS
PURPOSE	RESOURCE ACCESS
SOCIAL	ECONOMIC SECURITY
FINANCIAL	HOUSING & TRANSPORTATION

2019 Community Well-Being Index Results

Community Well-Being Index, 2019 State Rankings

Top Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
1 Hawaii	11 Maryland	21 Pennsylvania	31 Michigan	41 Georgia
2 Massachusetts	12 Illinois	22 Wyoming	32 Montana	42 New Mexico
3 New Jersey	13 Washington	23 Kansas	33 Missouri	43 Indiana
4 New York	14 Virginia	24 Arizona	34 Maine	44 Louisiana
5 California	15 Nebraska	25 Texas	35 South Dakota	45 Oklahoma
6 Connecticut	16 Minnesota	26 Wisconsin	36 South Carolina	46 Alabama
7 Utah	17 Rhode Island	27 Idaho	37 North Carolina	47 Kentucky
8 Colorado	18 Florida	28 Nevada	38 Delaware	48 Arkansas
9 New Hampshire	19 Alaska	29 North Dakota	39 Ohio	49 West Virginia
10 Oregon	20 Vermont	30 Iowa	40 Tennessee	50 Mississippi

Results Overview

Scoring in the top quintile across five of 10 domain rankings, and in the top five for both WBI and SDOHi, Hawaii – also a veteran top contender in prior WBI rankings – continues to demonstrate why it is an "elite" state in health and well-being as it tops Sharecare's first Community Well-Being Index state rankings.

Other top states for 2019 include Massachusetts, ranked No. 1 on the SDOHi, New Jersey, New York, and California.

Conversely, Mississippi took the last position in the CWBI based on bottom positions in both the WBI and SDOHi, while also assuming the last position in three of 10 domains and landing in the bottom quintile for all but two of 10 domains: resource access and purpose well-being.

Other bottom states include West Virginia, which ranked last for more than five years prior to 2019, Arkansas, Kentucky, and Alabama. This continues the pattern of states

with the worst WBI scores being concentrated in the South.

Each of the five bottom states in the CWBI also are in the bottom five of the SDOHi, and three of five are in the bottom five of the WBI. In addition, four of five are in bottom five for both the physical well-being domain and the economic security social determinant domain, reinforcing the importance of physical and fiscal resilience in overarching community well-being.

Top 10 and Bottom 10 States by Community Well-Being Index Ranking, 2019

Top States		
1.	Hawaii	69.8
2.	Massachusetts	69.3
3.	New Jersey	68.1
4.	New York	67.7
5.	California	66.7
6.	Connecticut	66.1
7.	Utah	65.6
8.	Colorado	65.2
9.	New Hampshire	64.1
10.	Oregon	63.8

Bottom States		
41.	Georgia	53.2
42.	New Mexico	53.1
43.	Indiana	53.0
44.	Louisiana	52.2
45.	Oklahoma	50.9
46.	Alabama	50.1
47.	Kentucky	49.5
48.	Arkansas	49.4
49.	West Virginia	48.1
50.	Mississippi	45.9

Relationships in Rankings Between CWBI Measures

While recognizing that each of the domains being included in the CWBI measure creates an inherent connection, we note that of the 10 domains across well-being and social determinants, the strongest relationship with CWBI state scores is with the SDOHi domain scores in housing and transportation. Of the top 10 states in the CWBI, 70% also ranked in the top quintile for housing and transportation; and of the CWBI's bottom 10 states, 50% also ranked in the lowest quintile for housing and transportation.

This relationship between our combined measure and social determinants across home values and public transit only further reinforces the critical nature of location and place in promoting health, further demonstrating the importance of measuring social determinant circumstances and using them to contextualize health across and within communities.

CWBI and Housing & Transportation

$r = .83$

The same employee – the same person – doesn't smoke, doesn't drink, maybe a little overweight: one of them has to take public transportation to work and cannot stay at home. The other employee can stay at home or has their own car. For these two individuals, the risk of COVID-19 is dramatically different – which is just one example of why our community and the world around us determines our health much more than we tend to think.

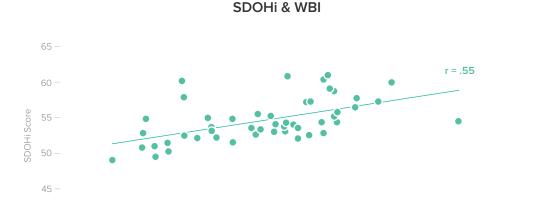Dr. Sandro Galea – Sharecare's Well-Being@Work Webinar, Aug. 2020

Rankings Relationships Between CWBI Measures

Equally as insightful, we observe a lesser but still strong relationship between state-level WBI and SDOHi scores – the pieces that comprise CWBI.

While further investigation is required to deduce the specific connection points across person and place, these relationships reinforce the critical connection between

individuals and their communities – the foundational premise of this year's inaugural Community Well-Being Index rankings.

SDOHi & WBI

r = .55

SDOHi Score / WBI Score

'Place' means simply our immediate, day-to-day surroundings. It is where factors like economics, our social environment, and the physical infrastructure of our surroundings coalesce into the space we navigate each day. Place can be a city, a town, a neighborhood, or the overlapping influence of all three. The common link is that place touches our lives daily; deciding what we see, hear, taste; shaping our health in good ways and bad. If our air is polluted, if our neighborhood is stressful and noisy, if our local market does not carry nutritious food, then it is less likely that we will be able to live a healthy life. If, however, our air is clean, our market supplies an abundance of quality food, if we live in a quiet, low-crime neighborhood, our chance of being healthy is much better. Taken together, the influence of these conditions suggests that our zip code is a better predictor of our health than is our genetic code.

Dr. Sandro Galea – *WELL*

Next Generation

The next generation of Community Well-Being Index rankings and social determinant indices will focus on evolving CWBI methods and weighting; incorporation of additional social determinants

of health, including SDOH data capture at the smallest available resolution; and continued research tied to the relationships between people and place, COVID-19, and equity.

To access ongoing research, including 2020 trends to date, please visit the Community Well-Being Index site.

Best Practices for Well-Being Impact

At Sharecare, we believe that health is a shared ecosystem, not a solo journey. We recognize the importance of measuring community well-being, and, more importantly, that the insights generated from our research are being leveraged to develop not only data-driven and evidence-based digital (high-tech) interventions, but also interventions that are community-based (high-touch) — all aimed at making the healthy choice the easy choice wherever we live, work, and play. As part of Sharecare's community-driven strategy, we are committed to ensuring that the Community Well-Being Index becomes an accessible hub of well-being insights, unifying all the elements of individual and collective health so everyone can live longer, better.

Below are best practices for employers, federal and state government, health plans, life sciences companies, providers, community leaders, and all population health stakeholders as they implement community well-being improvement programs. While differing healthcare verticals

play unique roles in healthcare experiences and outcomes, commonalities across best-in-class programs include: multi-modal individual and community interventions; environmental and technological investments that encourage healthier choices; cultural changes and inclusive policies that promote and celebrate well-being; and community well-being measurement to gauge progress.

Assess & Establish

The blueprint for well-being transformation starts with unifying multidisciplinary stakeholders across and beyond the healthcare continuum around a common vision tied to community well-being improvement. By understanding the individual and community risk factors most pervasive across and within communities, as well as the relationships between health risk factors and SDOH, key partners and population health stakeholders have the opportunity to leverage the CWBI measurement framework to support awareness, stakeholder engagement, and community investment in hyperlocal

interventions targeted at sustainably improving identified risks.

In responding to COVID-19, stakeholder alignment, sensitivity and understanding of the relationships between health risk across people and places, is paramount in identifying and supporting vulnerable populations, as well as maximizing the impact of investments made in overall well-being improvement.

Individual Transformation

Interventions to improve well-being across populations start with the individual. A holistic, ultra-personalized approach that goes beyond physical health to encompass purpose, social, financial, and community factors helps identify and mitigate the underlying root causes of poor health. By delivering a dynamic user experience that includes baseline and real-time measurement for identifying risks, clinically validated content for educating users on both individual risk and risk tied to their surroundings, and evidence-based lifestyle and disease management

Best Practices for Well-Being Impact

programs through digital and high-touch modalities, individuals become empowered in their journey toward well-being improvement.

During COVID-19, we know individual resilience is more important than ever. While preliminary data suggests that financial well-being plays a key role in physical behaviors, data also supports that individuals who possess higher levels of resilience are less vulnerable when it comes to COVID-19 hospitalization and mortality. In addition, individuals who exhibit higher levels of well-being are less likely to experience negative mental and behavioral health issues as a result of COVID-19, reinforcing the importance of individual interventions that maximize well-being. To minimize risk tied to COVID-19 transmission, delivery through integrated virtual care networks is paramount. Through offering a comprehensive suite of digital tools via an integrated member experience, individuals can safely engage in their health and well-being on a daily basis, as well as be connected to the appropriate point of care – no matter where they are in their healthcare journey.

Individual to Community Transformation

Recognizing the hyperlocal nature of health, it is critical to create environments that foster a culture of well-being and support individuals in better understanding their own community and how to navigate it for better health. Social determinant issues like limited access to healthy foods, limited access to healthcare, and high levels of air pollution have been proven to be highly predictive of whether or not individuals have the opportunity to achieve high levels of well-being; therefore, a successful blueprint

entails educating individuals on these risks, and, further, creating tech-enabled, geospatial user journeys that support identifying healthy, convenient, and affordable options for daily needs across food, healthcare, fitness, community resources, and beyond. By enhancing awareness tied to location and place, individuals are better equipped to create sustainable healthy habits.

Throughout COVID-19, our communities and cultural norms are constantly evolving, furthering the need to contextually connect individuals to their surroundings via high tech, enabling access to resources while adhering to social distancing guidelines.

Community Transformation

Communities that invest in active living, including bike paths, walkability, and public transit, have residents with better health and well-being outcomes. Research shows that residents in communities that are conducive to active lifestyles have significantly lower rates of smoking, obesity, diabetes, high blood pressure, high cholesterol and depression; and significantly higher rates of exercise, healthy eating, fresh produce consumption, and physical thriving. In addition, racial and socioeconomic well-being inequities require specific infrastructure and policies to mitigate against sustained differences in health outcomes. A best-practice community transformation approach calls for deploying interventions across people, policy and places to optimize the "life radius" – or the environments in which people live, work, and play. Informed by community input and driven by a representative local steering committee, an optimal community

blueprint is aimed toward neighborhood-level strategies to address risk across social determinants of health and to achieve health equity.

In addition, as we embrace a new normal in light of COVID-19, it is paramount that we realize "community" encompasses both physical and digital connection points to further promote well-being. Through a combined high-touch and high-tech approach to community transformation, individuals can engage in both their own health journeys and their communities' collective health journeys on a daily basis.

Measure Impact

Measurement should be the foundation of any well-being program. Benchmarking individual and community well-being to understand risks and opportunities, prioritizing interventions according to those risks, and then measuring the impact of those interventions is critical to contextualizing improvement. In addition, successful individual and community interventions enable blueprints that can be replicated in other communities, driving results at greater scale and bending the trend on our nation's health crisis.

The critical nature of measurement cannot be understated. As we continue to study and understand the impact COVID-19 is having on our physical and financial resiliency, our opportunities to connect socially, and our ability to live with purpose, community leaders can come together in new ways, unifying the powers of the collective to amplify benefits and, ultimately, better health for all.