

INTRODUCTION

Caregivers play an important role in the U.S. healthcare system. An often unpaid and invisible workforce, caregivers manage medications, administer care, assist with daily tasks and handle finances for their loved ones. The commitment of time, labor and emotional support this role requires can have a substantial impact on caregivers' physical, behavioral and emotional well-being.

This report examines the health impact* associated with caregiving among the Blue Cross and Blue Shield (BCBS) commercially insured population. Using our market-leading claims database, we find that caregiving is associated with higher rates of both physical and behavioral health conditions for caregivers—particularly for millennials and members of communities with a majority Black or Hispanic population. This effect is further exacerbated by the recent coronavirus pandemic.

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 CAREGIVERS
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KEY FINDINGS

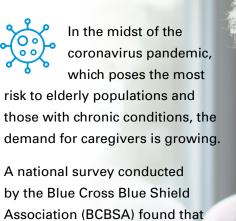
- There are at least 6.7
 million BCBS members
 acting as caregivers for
 their spouse or child(ren).
 Compared to a benchmark
 population, caregivers in
 our sample saw a 26%
 greater impact of health
 conditions that could
 lower their overall health,
 as measured by the
 BCBS Health Index.
- The health differences associated with caregiving are more pronounced for millennials than for Gen X and baby boomers. Similarly, the differences are larger for caregivers who live in communities with a majority Black or Hispanic population than it is for caregivers who live in communities with a majority white population.
- The coronavirus pandemic has increased the demand for and intensity of caregiving. Consequently, it has increased self-reported stress, isolation and loneliness among caregivers.

^{*}Throughout this report, the health impact of caregiving is defined as the differences in health between caregivers and the benchmark population—inclusive of both overall health, as measured by the BCBS Health Index, and prevalence rates for stress-related conditions.

PROFILING CAREGIVERS WITHIN A FAMILY UNIT

We identified 6.7 million adults among BCBS members who have a spouse or child needing caregiver support.1 Among the identified caregivers, 72% care for their spouse, 21% care for their child(ren) and 7% care for both spouse and child(ren).² Men and women are equally represented in this sample, and a majority are Gen Xers and baby boomers under 65 (see Exhibit 1).

	BABY BOOMERS (AGE 54-64)	GEN XERS (AGES 38-53)	MILLENNIALS (AGES 22-37)
Count (Share of all Caregivers)	2.6 million (38%)	3.1 million (45%)	0.76 million (11%)
Average Age	59	46	33
% Females	50%	50%	53%
Caring For	83% spouse/12% child 6% both	62% spouse/29% child 9% both	64% spouse/31% child 5% both



1 in 4 unpaid caregivers are feeling more stress trying to balance work and family due to COVID-19.4



or family member due to COVID-19.

OF CURRENT CAREGIVERS

ARCHANGELS SURVEY⁵

 $lac{1}{2}$ of americans

are worrying about, taking care of,

or looking out for a friend, neighbor,

would not have identified as caregivers before the COVID-19 pandemic.

CAREGIVERS REPORTED HIGH RATES OF COVID-19-RELATED LONELINESS OR ISOLATION:

56% MILLENNIALS 54% GEN XERS 42% BABY BOOMERS

Read

Florida Blue 👰 🦁 is exploring how new technology like artificial intelligence and virtual reality could address caregivers' needs across the country.

» READ MORE

CAREGIVERS HAVE HIGHER RATES OF SERIOUS HEALTH CONDITIONS

As measured by the BCBS Health Index, in 2018, caregivers had an average Health Index of 89.6. This score is 2.2 points lower than the benchmark population, which translates to a 26% greater impact of physical and behavioral health conditions that could lower their overall health.6

HEALTH INDEX FOR CAREGIVERS VS. BENCHMARK, 2018

Caregivers

TRANSLATES TO A **OF HEALTH CONDITIONS**

Benchmark

In addition to lower overall health, caregivers suffer from more stress-related physical and behavioral health conditions (see Exhibit 2). For example, tobacco use disorder is 42% more prevalent than the benchmark and hypertension is 64% more prevalent.

EXHIBIT 2: CONDITION PREVALANCE AMONG CAREGIVERS **VS. BENCHMARK, 2018 (PER 100)**

CONDITION PREVALENCE	CAREGIVERS	BENCHMARK	DIFFERENCE
Adjustment Disorder ⁷	6.1	4.5	+36%
Anxiety	18.0	13.5	+34%
Major Depression	7.4	5.4	+37%
Tobacco Use Disorder	9.9	7.0	+42%
Obesity	26.9	17.9	+50%
Hypertension	39.3	23.9	+64%



ARCHANGELS SURVEY⁵

Caregivers are under immense stress and pressure. As a result, many are turning to a variety of negative coping mechanisms:









report experiencing clinically significant levels of stress, anxiety or depression.





Regence Blue Cross and Blue Shield puts both patients and their caregivers at the center of their palliative care program to support the health of both. » READ MORE Although caregiving can lead to poorer health, caregivers have higher rates of preventive care: over half of identified caregivers had wellness visits in 2018, and more than a third had at least one cancer screening. Respectively, this is 26% and 48% higher than the benchmark population (see Exhibit 3).

EXHIBIT 3: HEALTH SCREENINGS OF CAREGIVERS VS. BENCHMARK, 2018

Utilization Metrics Health Utilization	CAREGIVERS	BENCHMARK	DIFFERENCE
% Who had an ER visit	5.6	5.2	+8%
% Who had a hospitalization	2.9	2.7	+7%
Preventive Health			
% Who had a wellness visit(s)8	51.0	40.4	+26%
% Who had a cancer screening(s)	36.6	24.8	+48%

HEALTH IMPACT OF CAREGIVING IS MORE PRONOUNCED FOR MILLENNIALS

Compared to the benchmark population,9 millennial caregivers are more likely to experience stress-related conditions. For example, adjustment disorder and hypertension are 82% more prevalent among millennials who are caregivers. They are also much more likely to have adverse health events, including ER visits and hospitalizations (see Exhibit 4). In addition, the increased rates of health conditions among millennial caregivers are more prominent when compared to Gen X and baby boomer caregivers.

EXHIBIT 4: HEALTH METRICS OF MILLENNIAL CAREGIVERS VS. BENCHMARK, 2018

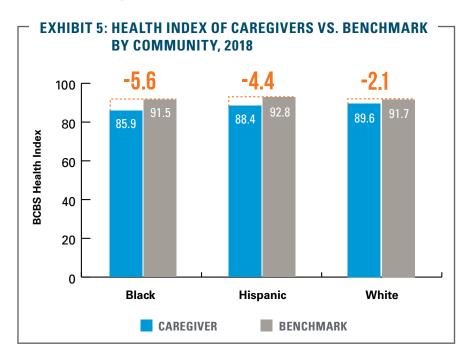
	MILLENNIAL CAREGIVERS	BENCHMARK	DIFFERENCE	
Health Index	94.0	95.9	-2%	
Condition Prevalence per 100				
Adjustment Disorder	8.5	4.7	+82%	
Anxiety	20.8	13.0	+60%	
Major Depression	8.2	5.0	+64%	
Tobacco Use Disorder	8.8	5.3	+66%	
Obesity	23.4	13.4	+74%	
Hypertension	15.7	8.6	+82%	
Health Utilization				
% Who had an ER visit	7.2	5.4	+33%	
% Who had a hospitalization	6.3	4.0	+59%	
Preventive Health				
% Who had a wellness visit ⁸	44.9	35.0	+28%	
% Who had a cancer screening	21.5	17.1	+25%	



The 2019 Health of Millennials report found that millennials are less healthy than previous generations were at the same age. When compared to the national population, millennials were more affected by behavioral health conditions. This impact is even more pronounced among millennial caregivers.

CAREGIVERS' HEALTH VARIES BASED ON RACE, ETHNICITY AND INCOME

Demographic factors like race, ethnicity and income are also associated with caregivers' health. (See Exhibit 5). As measured by the BCBS Health Index, the health impact of caregiving is much larger in communities with a majority Black population and, to a lesser degree, in communities with a majority Hispanic population when compared to communities with a majority white population. (See Methodology and Appendix for details).



Household income is associated with smaller differences in the health of caregivers. The BCBS Health Index difference between caregivers in low-income communities and the benchmark population in the same communities is only slightly higher than that of middle- and highincome communities. (See Methodology and Appendix for details).

EXHIBIT 6: HEALTH INDEX OF CAREGIVERS VS. BENCHMARK BY INCOME LEVEL, 2018

INCOME LEVEL	CAREGIVERS	BENCHMARK	DIFFERENCE
Low Income	88.8	91.6	-2.8 pts
Middle Income	89.4	91.6	-2.2 pts
High Income	90.0	92.0	-2.0 pts



A greater number of Hispanic and Black caregivers are providing care for loved ones in their homes:

CAREGIVERS

Feelings of isolation or loneliness are greater among White and Hispanic caregivers:

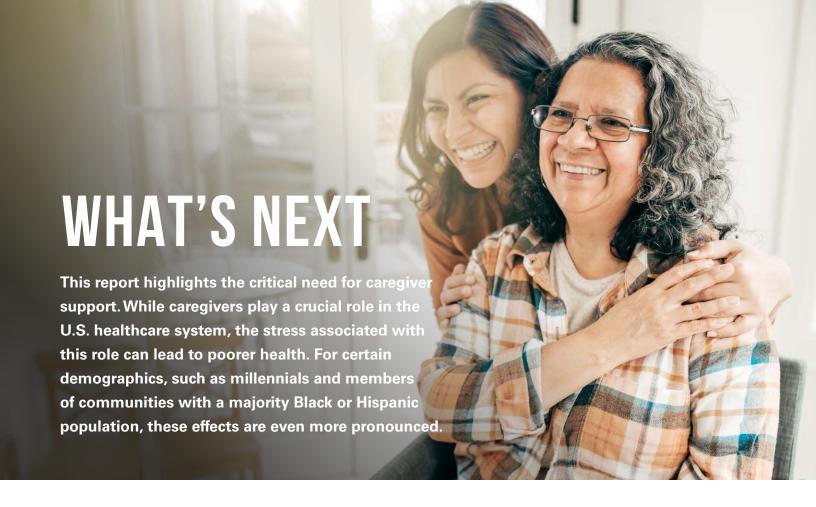
56% WHITE **CAREGIVERS CAREGIVERS**

Feelings of anxiety are higher among Hispanic and White caregivers:



Blue Cross Blue Shield of Massachusetts, Blue Cross Blue Shield of Michigan, Blue Cross and Blue Shield of Minnesota and Wellmark Blue Cross and Blue Shield are <u>helping caregivers tackle</u> common challenges like exhaustion, emotional stress and isolation.

» READ MORE



Recently, the coronavirus pandemic is exacerbating these challenges even further, as caregivers have to worry about taking care of their loved ones and themselves in a drastically altered social landscape.

BCBS companies are committed to addressing the unique health challenges that caregivers face. In collaboration with ARCHANGELS, a national movement recognizing and honoring caregivers, we are identifying caregivers across the country and connecting them to the care and support they need.

BCBS companies are also building and funding solutions that address caregivers' distinct needs, including education, transportation, care coordination and care management. To that end, with a focus on inspiring actionable solutions, we are convening employers, healthcare professionals, community leaders, caregivers and others in a virtual forum to bring awareness to and close the caregiver health gap.

HEALTH OF AMERICA VIRTUAL FORUM

OCTOBER 28 — 29. 2020

Join BCBSA and industry experts who will shed light on the unique health challenges faced by millennials and caregivers, and explore forward-thinking solutions to support these groups during the pandemic and beyond.

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ENDNOTES

- 1. Health criteria are applied to exclude people who have the following conditions that severely reduce one's ability to care for others: severe behavioral health disease including dementia, psychotic disorders and intellectual disabilities; severe physical conditions including heart failure, organ failure and all cancers (excluding non-Melanoma skin cancer); severe neurological conditions including Parkinson's, multiple sclerosis, stroke, epilepsy, cerebral palsy and coma.
- 2. The relationship between the caregiver and patient is identified based on the primary subscriber and dependent relationship. The spouse of a primary subscriber is assumed to be the parent of the primary subscriber's child(ren) in the analyses. Children might include adult children that stay on their parents' insurance. Caregivers supporting patients on Medicare are not included.
- 3. 489 Gen Z adults (18-21) are identified as caregivers, accounting for only 0.02% of the overall. Details are not reported given the small size. Details of elderly (65+) caregivers are not reported since 65+ among BCBS commercially insured population are not representative of the 65+ population nationally.
- 4. BCBSA COVID-19 National Pulse Survey, May 2020.
- 5. 2020 ARCHANGELS National Caregiver Survey. Survey insights are about caregiving in general unless COVID-19 is specified.
- 6. Benchmark population consists of all adults that meet the health criteria of caregivers, as described in endnote 1, but do not necessarily have a spouse or child in need of caregiving.
- 7. Adjustment disorders are stress-related conditions. Learn more.
- 8. Wellness visits include routine medical exams and/or immunizations/screenings.
- 9. Benchmark population consists of all millennials that meet the health criteria of caregivers, as described in endnote 1, but do not necessarily have a spouse or child in need of caregiver support.

METHODOLOGY

This is the 33rd study of the Blue Cross Blue Shield, The Health of America Report® series, a collaboration between Blue Cross Blue Shield Association and Blue Health Intelligence® (BHI®), which uses a marketleading claims database to uncover key trends and insights in healthcare affordability and access to care.

The report was also developed with the support of the following partners and resources:

ARCHANGELS

Caregiver survey insights are courtesy of the 2020 ARCHANGELS National Caregiver Survey.

- The National Opinion Research Center (NORC) at the University of Chicago Analysis to identify members needing care among the Medicare Fee-for-Service (FFS) population was performed by and includes data from NORC.
- The Centers for Disease Control and Prevention (CDC) and Center to Advance Palliative Care (CAPC) Selection of health conditions used to identify caregivers was informed by CDC and CAPC resources.

Acxiom and U.S. Census Data

Analysis of community types and household income levels was based on Acxiom and 2010 U.S. Census data.

PATIENT IDENTIFICATION

In order to assess the health of caregivers, we first identified patients who need caregiver support based on the following criteria (either one suffices):

- Have at least one highly disabling condition and a BCBS Health Index in the bottom 20th percentile.
- Or have at least one ICD10/CPT/HCPCS code indicating hospice care, palliative care or need for caregiving (Z codes).

In consult with clinical experts and referencing external resources including the CDC and CAPC, this report identifies 62 health conditions that have high disability impacts on patient health using the BCBS Health Index.

Conditions included are:

- · Severe behavioral health conditions, including psychotic disorders, intellectual disabilities, dementia, bipolar disorders and major depression
- Severe cardiovascular diseases like heart failure, arrhythmia and coronary artery disease
- · All cancers
- · Diabetes and its complications
- · Rheumatoid arthritis

- Severe injuries, such as abdominal/ pelvic injury, head/central nervous system injury, hip/upper leg injury and spine injury
- · Spine-, neck- and back-related musculoskeletal conditions
- · Severe neurological conditions, including stroke, coma, epilepsy, multiple sclerosis cerebral palsy and Parkinson's disease
- · Severe respiratory diseases, including chronic obstructive pulmonary disease (COPD) and asthma

- · Kidney and liver diseases, such as renal failures, hepatitis and cirrhosis
- · Other physical conditions like blindness, hearing loss and congenital abnormalities

For the commercially insured population, BCBS Health Index is used as the overall health measure. People with a Health Index lower than the 20th percentile (85.6) are considered as having poor health.

CAREGIVER IDENTIFICATION

For each BCBS commercially insured member that is identified as needing caregiving, this study used the member relationship file to identify other adult members on the same insurance policy. Member relationships include self (indicating primary subscriber), spouse, child and others (e.g., foster child, grandparent, grandchild, etc.). Health criteria were applied to exclude adults with the following conditions that impact their caregiving ability:

- Severe behavioral health disease, including dementia, psychotic disorders and intellectual disabilities
- Severe physical conditions, including heart failure, kidney failure and all cancers (excluding non-Melanoma skin cancer)
- Severe neurological conditions, including Parkinson's disease, multiple sclerosis, stroke, epilepsy, cerebral palsy and coma

Among the family members who meet the health criteria, we included: (1) primary subscribers and their spouses caring for child(ren); (2) primary subscribers caring for spouse; (3) dependent spouses caring for primary subscriber. Caregivers caring for people on Medicare are not included in the analysis. This method for selecting caregivers was the best approach available in the absence of caregiver status in the claims data. It identifies only a subset of all caregivers and may not be representative of the entire caregiver population.

DEMOGRAPHICS

Community types were defined at the ZIP code level using Acxiom and 2010 U.S. census data.

The race/ethnicity of a community is determined by the race/ethnicity of the majority of head of households within the community. For example, when over 50% of the household heads are Black in a ZIP code, it is classified as a community with a majority Black population.

The income level of each ZIP code was determined by the quartile into which its average household income falls in comparison to peers. Income levels for ZIP codes were adjusted by state and by urban vs. rural within state to account for variations in the cost of living. ZIP codes in the bottom quartile are categorized as low income, those in the top quartile are categorized as high income, and the remaining middle half are categorized as middle income.

APPENDIX

FIGURE A: CONDITION PREVALENCE OF CAREGIVERS VS. BENCHMARK OF SAME COMMUNITY

	BLACK			HISPANIC			WHITE		
CONDITION PREVALENCE PER 100	CAREGIVER	BENCHMARK	DIFFERENCE	CAREGIVER	BENCHMARK	DIFFERENCE	CAREGIVER	BENCHMARK	DIFFERENCE
Adjustment Disorder	4.8	3.5	+36%	3.0	2.1	+41%	6.3	4.6	+35%
Anxiety	12.5	8.6	+44%	11.2	7.4	+52%	18.4	14.0	+31%
Major Depression	5.1	3.5	+45%	4.1	2.7	+50%	7.6	5.6	+35%
Tobacco Use Disorder	10.0	7.4	+36%	5.9	3.8	+53%	10.1	7.1	+41%
Obesity	33.7	22.1	+52%	31.3	20.5	+53%	26.7	17.7	+51%
Hypertension	52.4	31.3	+68%	43.3	23.3	+86%	38.9	23.8	+63%

FIGURE B: CONDITION PREVALENCE OF CAREGIVERS VS. BENCHMARK OF SAME INCOME LEVEL

	LOW-INCOME COMMUNITY			MIDDLE-INCOME COMMUNITY			HIGH-INCOME COMMUNITY		
CONDITION PREVALENCE PER 100	CAREGIVER	BENCHMARK	DIFFERENCE	CAREGIVER	BENCHMARK	DIFFERENCE	CAREGIVER	BENCHMARK	DIFFERENCE
Adjustment Disorder	4.8	3.4	+42%	5.9	4.3	+35%	6.6	4.9	+35%
Anxiety	16.5	11.1	+48%	18.2	13.5	+35%	18.0	13.8	+30%
Major Depression	6.4	4.3	+48%	7.3	5.4	+36%	7.6	5.6	+35%
Tobacco Use Disorder	12.7	8.4	+50%	11.2	7.8	+44%	8.2	5.8	+41%
Obesity	29.9	19.8	+51%	28.4	18.8	+51%	25.1	16.6	+51%
Hypertension	45.7	27.0	+69%	41.3	25.1	+65%	36.3	22.1	+64%



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