South Carolina Institute of
Medicine & Public Health

OCTOBER 2021

Health Outcomes Associated with Medicaid Expansion in Adults Reaching Retirement Age

Contents

South Carolina Institute of Medicine & Public Health

About the South Carolina Institute of Medicine and Public Health

The South Carolina Institute of Medicine & Public Health (IMPH) is an independent entity serving as an informed nonpartisan convener around the important health issues in our state, providing evidence-based information to inform health policy decisions.

Information

For questions or more information about this report, please email info@imph.org.

imph.org

Report Author

Brittney Sanderson, MSc., MPH
Research and Policy Analyst
South Carolina Institute of Medicine and Public Health

Report Editors

Teresa Arnold
State Director
AARP South Carolina

Sam Waldrep
Public Policy Volunteer
AARP South Carolina

Report Graphic Designer

Cait Maloney
Designer/Illustrator
Cait Maloney Creative

Introduction

Aging in South Carolina is a dream for many; the proximity to beaches, mountains and vibrant communities has encouraged countless people to settle in the Palmetto State as they reach retirement age. In fact, South Carolina is consistently ranked as one of the most rapidly aging states in the country.[1] Adults reaching retirement age are more likely to have chronic conditions and more complex health care needs compared to younger populations.[2] For the purpose of this report, "adults reaching retirement age" refers to all adults between the ages of 50 and 64 unless specified otherwise.

Many low-income older adults across the state struggle to afford health insurance necessary to access essential health services. In 2019 nearly half of adults aged 50 to 64 were faced with unaffordable health insurance coverage, defined by AARP as premium costs greater than 10% of their household income.[3] Also in 2019, nearly 118,000 South Carolinians reaching retirement age were uninsured.[4] This figure indicates that close to a quarter of South Carolina's total uninsured population is between the ages of 50 and 64.[5]

A lack of access to affordable health services prior to retirement and the corresponding challenges to self-manage chronic conditions are both associated with higher Medicare spending and decreased quality of life following retirement.[6] Expanding Medicaid eligibility to South Carolinians reaching retirement age who live in poverty and can not claim dependents is an opportunity for policy makers to improve health outcomes among older adults. Most American adults begin to qualify for Medicare when they reach 65 years old. However, as Americans live longer and the population of older adults increases, the availability of funds for Medicare services is expected to decrease.[7] As a result, states and localities can collectively work to decrease Medicare spending without disrupting service provision. The literature suggests that Medicaid expansion is an effective tool to decrease Medicare spending later in life.[8]

Recently, federal legislation has been introduced in response to the coronavirus pandemic to offer additional incentives to states that have not expanded Medicaid. This brief will survey the health outcomes associated with Medicaid expansion among adults reaching retirement age before briefly discussing the American Rescue Plan Act (ARPA), the federal legislation that offers additional federal dollars to states for Medicaid expansion.

Insurance and Adults Reaching Retirement Age

Without comprehensive insurance coverage, many Americans face significant barriers to accessing necessary health services. Since the inception of employer-sponsored health insurance in the 1940s, most Americans have received coverage through plans offered by their employer. However, the American College of Physicians explains that "employer-sponsored insurance is less prevalent and more expensive than in the past, and in response, deductibles have grown and benefits have been cut."[9]

The number of Americans with employer- or military-sponsored health insurance decreased by four percentage points nationwide between 2008 and 2019.[10] In South Carolina, the decrease is even more pronounced. Between 2008 and 2019, the number of South Carolinians with employer-sponsored or military-sponsored health insurance decreased from 60.4% to 47.6% – a significant decrease of 12.8 percentage points in eleven years.[11]

Private, non-group[a] health insurance is a third option for coverage in the United States. The Affordable Care Act (ACA) is an example of non-group, private health insurance offered with subsidies by the federal government to ensure affordability for low- and middle-income Americans. To qualify for subsidized health insurance coverage through the Affordable Care Act, an individual must make at least 100% of the federal poverty level – or $12,760 a year in 2021. The table below illustrates the income which corresponds to each federal poverty level.

TABLE 1

Federal Poverty Level Guidelines to qualify for ACA Subsidies, 2020 – 2021[12]

Percent of Federal Poverty Level (FPL)						
Household Size	**100%**	**138%**	**150%**	**200%**	**300%**	**400%**
1	$12,760	$17,609	$19,140	$25,520	$38,280	$51,040
2	$17,240	$23,791	$25,860	$34,480	$51,720	$68,960
3	$21,720	$29,974	$32,580	$43,440	$65,160	$86,880
4	$26,200	$36,156	$39,300	$52,400	$78,600	$104,800
5	$30,680	$42,338	$46,020	$61,360	$92,040	$122,720
6	$35,160	$48,521	$52,740	$70,320	$105,480	$140,640
For each additional person, add:	$4,480	$6,182	$6,720	$8,960	$13,440	$17,920

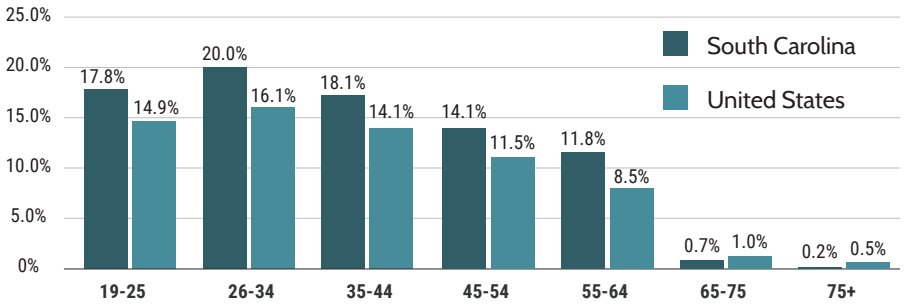
Source: Norris, 2021.

If an individual under 65 is unable to enroll in private-, military- or employer-sponsored health insurance due to cost they may pursue coverage through Medicaid. However, most South Carolinians do not qualify for Medicaid under the current eligibility criteria. The uninsurance rate across the country increased for the third year in a row in 2019 and was likely amplified further during the coronavirus pandemic as unemployment rose and associated health coverage benefits were lost.[13]

The Commonwealth Fund reports that an estimated 12.5% of American adults were uninsured in the first half of 2020, which is a significant increase from the year before when the national uninsurance rate was 9.2%.[14,15] Although stratified data on insurance rates for the entirety of 2020 and 2021 have not yet been released, Graph A illustrates the most recent data available.

GRAPH A

Percent of Population Uninsured by Age across South Carolina and the United States, 2019[16]



Source: United States Census Data, Table S2701, 2019.

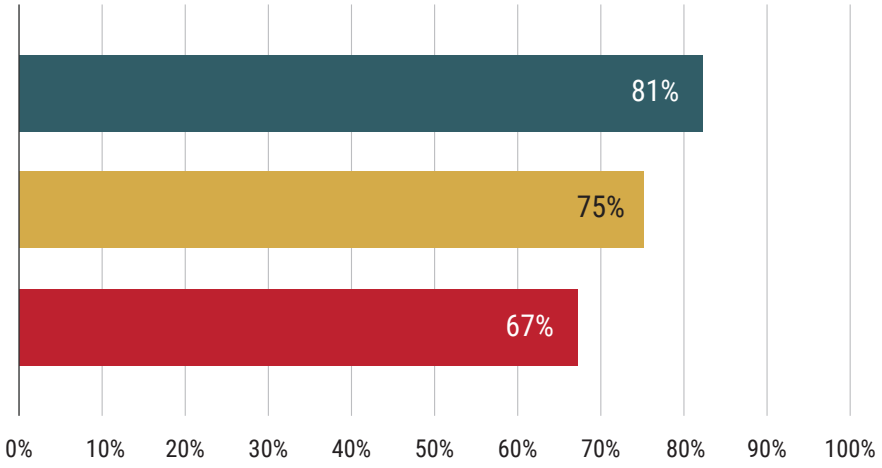
[a] The non-group market refers to a private insurance market for individuals who are not eligible for public programs and do not have the option to purchase adequate health insurance from their employer because they are unemployed, self-employed or their employer does not offer comprehensive plan options.

In South Carolina, the percent of uninsured adults aged 55 to 64 increased from 10.2% in 2015 to 11.8% in 2019.[17] Adults reaching retirement age without health insurance have been shown to require more, costlier care when they enroll in Medicare than those who have consistently been insured throughout adulthood.[18] In fact, research indicates that adults reaching retirement age with hypertension, diabetes, heart disease or stroke who are uninsured prior to enrolling in Medicare have up to 51% higher medical costs later in life compared to their consistently insured counterparts.[19] This figure suggests that investing in consistent health coverage is a cost-effective strategy to improve health outcomes and quality of care among older Americans.[20]

Dr. J. Michael McWilliams, M.D. of Harvard Medical School elaborates on this point:

> Uninsured adults who lacked regular care were probably undertreated before age 65 for often asymptomatic but poorly controlled conditions such as hypertension and hyperlipidemia [high cholesterol], and the undertreatment probably contributed to health declines and a greater need for services after age 65. The costs of expanding health insurance for uninsured adults before 65 may be partially offset by subsequent reductions in health care use and spending for these adults after they reach the age of 65.[21]

Adults approaching retirement age are more likely to be uninsured due to costs than younger adults. In fact, 66.8% of uninsured individuals aged 18 to 29 reported not being insured due to costs in 2019. That same year, 80.9% of uninsured individuals aged 50 to 64 reported being uninsured due to costs, illustrated below in graph B.[22] This statistic demonstrates a heightened need for affordable coverage for Americans approaching retirement age.[23]



GRAPH B

Percentage of Adults Uninsured Because Coverage Was Not Affordable by Age, 2019[24]

Source: National Center for Health Statistics, National Health Interview Survey, 2019.

- 50-64
- 30-49
- 18-29

Medicaid and the "Coverage Gap"

Medicaid, formally known as Title XIX of the Social Security Act, is a joint federal-state program designed to offer health insurance coverage to qualifying low-income parents and their dependents. Each state is given considerable authority within federal rules in the design and facilitation of their Medicaid packages, resulting in fifty-one distinctive Medicaid programs throughout the country.[25]

In South Carolina, the Medicaid program is known as "Healthy Connections" and is administered by the South Carolina Department of Health and Human Services, the designated state Medicaid agency. Healthy

Connections covers mandatory services, optional services and home- and community-based waivers for individuals in need of long-term care services. Examples of benefits offered by Healthy Connections include the following:

- Coverage for inpatient and outpatient hospital services
- Periodic screenings
- Some forms of mental and physical therapy
- Ambulance transportation
- Qualifying prescription drugs[26]

Eligibility for Medicaid in South Carolina is predicated on several factors including income, family composition and disability status. Because South Carolina has not fully expanded Medicaid as allowed under the Affordable Care Act (ACA), coverage is not available for adults without dependents in South Carolina unless they fall into one of the following categories:

- Are currently pregnant[27]
- Have been diagnosed with breast or cervical cancer[28]
- Are elderly, blind or disabled[29]
  - » Reside in a medical institution or receive home- and community-based waiver services for a period of thirty consecutive days[30]

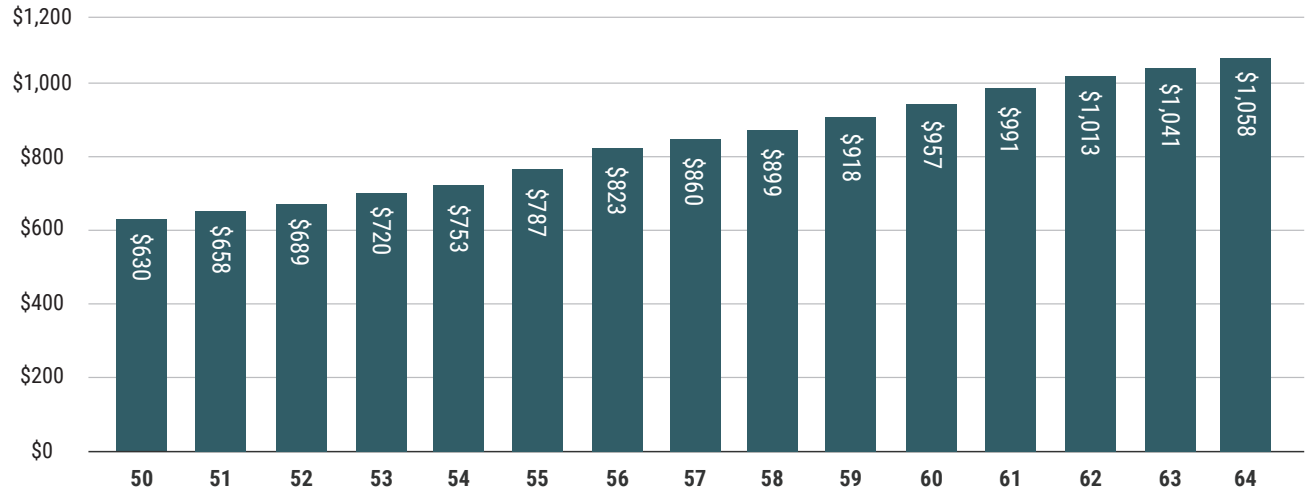
Americans who do not qualify for Medicaid in their state and earn too little to qualify for subsidized marketplace coverage through the ACA fall into what is referred to as the "coverage gap."[31] Research suggests that closing the coverage gap would result in a more equitable health care system and reduce health disparities, especially for adults nearing retirement age.[32]

Medicaid expansion is one of many tools to increase health equity both nationally and across the state. Non-Hispanic Black South Carolinians reaching retirement age are more likely to die from diabetes, stroke and cancer and are more likely to be diagnosed with Alzheimer's Disease and related Dementia.[33] These disparities are likely associated with the fact that non-Hispanic Black adults are less likely to report having insurance and are less likely to report having a primary care provider, which negatively impacts access to screenings and preventative care.[34]

Expanding insurance coverage was the central tenet of the ACA, which offers subsidies for certain low-income populations across the country. However, to qualify for subsidized insurance through the ACA's Health Care Marketplace, an adult living in the continental United States must make at least 100% of the federal poverty line, which is $12,760 a year for a single individual in 2021. Adults who make less than $12,760 annually do not currently qualify for subsidies and are therefore unable to access affordable coverage through the ACA. In South Carolina, unless they qualify for Medicaid, many of these people will go uninsured. To demonstrate the financial burden, Graph C illustrates the monthly cost of a silver plan offered by the federal Health Insurance Marketplace without a premium tax subsidy for a single, non-smoker without dependents in 2021.

GRAPH C

Unsubsidized Monthly Cost of Mid-Tier Marketplace Health Insurance Plan by Age, 2021[35]



Source: Kaiser Family Foundation, 2021.

The prices illustrated above are cost-prohibitive for many adults living below the federal poverty line. For example, under the current eligibility criteria, a 60-year-old South Carolinian living in poverty without dependents would be required to pay approximately $11,500 a year, or nearly 90% of their annual income, to receive mid-tier health insurance coverage through the federal marketplace. As of 2018, 34% of South Carolinians aged 50 to 64 did not qualify for subsidies through the Marketplace.[36]

The "age tax," which describes the phenomenon where older adults are often required to pay much higher premiums than younger consumers, negatively influences all older Americans but disproportionately affects those who are low-income.[37] The age tax compounds the negative effects of the coverage gap, and together the two create a significant barrier to insurance for many low-income adults reaching retirement age.

Many states have chosen to expand Medicaid eligibility to adults without dependents living in poverty to eliminate the coverage gap. Medicaid expansion in South Carolina would allow all households with incomes up to 138% of the federal poverty level to qualify for Medicaid coverage, regardless of household composition or disability status.

Survey of Medicaid Expansion and Health Outcomes among Older Americans

When Medicaid and Medicare were introduced in 1965, adults over the age of 64 represented only 9.5% of the total population of the United States.[38] Today, Americans over the age of 64 make up more than 16% of the population, and that percentage is expected to rise to 21% by 2030.[39] In South Carolina, adults aged 50 to 64 currently make up nearly a fifth of the state.[40] This rapid demographic shift calls attention to the increased need for health insurance coverage for adults reaching retirement age as state and federal costs associated with aging, including increased health expenditures, rise in tandem with this growing population of Americans.

American adults aged 50 to 64 experience unique challenges in managing their health. This group is significantly more likely to suffer from a chronic health condition or disability compared to younger Americans but are also more likely to delay health care due to cost compared to retired Americans.[41] In 2014, 50% of American adults aged 45 to 64 reported at least one chronic condition; that same year, 47% of men aged 45 to 64 and 54% of women aged 45 to 64 reported suffering from multiple chronic conditions.[42]

There is a growing body of evidence illustrating the positive health outcomes associated with Medicaid expansion. Using data from the 2010 – 2016 Health Retirement Study, researchers determined that states that chose to expand Medicaid eligibility witnessed significant improvements in physical health among American adults aged 50 to 64.[43] Specifically, using this national data, statisticians revealed that Medicaid expansion is associated with a 32% reduction in complications arising from metabolic conditions such as obesity, high blood pressure and diabetes among low-income adults reaching retirement age. The authors of this study speculate that increased health care utilization among older adults is the primary mechanism driving these significant improvements.[44]

Disabled adults are also poised to benefit from Medicaid expansion in South Carolina. Although individuals who are approved for disability are categorically eligible for Medicaid, the five-step process can be time intensive, taking anywhere from several months to years.[45] This leaves many people with complex health needs unable to access services while they wait for approval.[46,47] Across the country, the average processing time for Social Security Disability Insurance (SSDI) is 4.3 months for people who are awarded benefits during the first stage of the application process; however, for those who must appeal their decision, the process can take up to five years.[48]

Although people who receive disability benefits are deemed categorically eligible for Medicaid, 63.4% of people who apply for benefits are denied the first time.[49] In 2020, the average wait time for a first appeal increased to 122 days, and the average processing times for a hearing sat at slightly over a year.[50] Between 2018 and 2019, 20,961 Americans died while awaiting final decisions on disability appeals.[51] According to an article published in the American Journal of Health Economics, Medicaid expansion removes bureaucratic barriers for low-income disabled adults and would allow them to qualify for Medicaid coverage during the disability application process.[52]

In addition, Medicaid expansion has the potential to address behavioral health needs among adults reaching retirement age. Expanding access to behavioral health services to low-income older adults can help mitigate the increase in mental health concerns caused by the pandemic. The National Poll on Healthy Aging conducted by the University of Michigan found that the pandemic worsened older adults' mental health. This survey found that more than one-fifth of adults between ages 50 to 64 reported a decline in mental health after the coronavirus pandemic began. The same study found that nearly one-third of respondents reported feeling depressed or hopeless, and nearly half of respondents stated that they regularly felt stressed or isolated from others.[53]

Several states that have expanded Medicaid report positive results including greater improvements in access to services, greater financial security among beneficiaries, improved health outcomes in rural communities and increased contributions to state GDPs prior to the coronavirus pandemic.[54,55,56,57,58,59] The following sections will survey reported outcomes at the state level in Louisiana, West Virginia, Montana and Kentucky – four states with comparable cultural and demographic compositions to South Carolina.[60]

Health Outcomes Associated with Medicaid Expansion in Selected States

Medicaid Expansion in Louisiana

On January 12, 2016, Louisiana became one of the first states in the Deep South to adopt Medicaid expansion.[61] As of December 2020, more than 598,000 adults were enrolled in Medicaid in Louisiana under the expanded eligibility guidelines.[62] In addition to the improved health outcomes associated with Medicaid expansion and recorded reductions in racial health disparities, Louisiana has also reported positive financial outcomes for the state.[63,64,65] Louisiana is comparable in size and demographics to South Carolina and has a similar cultural heritage unique to the Deep South. Below, Table 2 illustrates the similar demographic makeup of the two states.

	LOUISIANA	SOUTH CAROLINA
Total Population	4,648,794	5,148,714
Population 50 – 64	871,909 **(18.8%)**	1,013,041 **(19.7%)**
Percent Below Poverty Level Aged 35 - 64	14.9%	11.1%
Percent with a Disability 35 - 64	16.7%	14.7%

TABLE 2

Louisiana and South Carolina Selected Demographics, 2019[66]

Source: Table S0101: Age and Sex, United States Census Bureau.

It can take decades to fully understand the health implications of a major policy shift; however, recent research has demonstrated that Medicaid expansion in Louisiana has led to a significant increase in early-stage breast cancer diagnoses and access to treatment. Louisiana has the second-highest breast cancer mortality rate in the nation, which health researchers in the state attribute to the high percentage of women who present with an advanced stage of the disease.[67] Increasing early detection of breast cancer is associated with decreased mortality and lower health expenditures associated with the disease.[68]

Research indicates that, following expansion, early identification of breast cancer among low-income Louisiana women increased.[69] Nearly three quarters of the cohort examined in this retrospective study, which focused on the impact of Medicaid expansion on breast cancer identification, were between 50 and 64 years old which indicates that expansion has a positive impact on outcomes associated with the disease among women reaching retirement age. The study authors also reported that expansion resulted in an increase in the number of women receiving appropriate radiotherapy.[70]

Medicaid expansion in Louisiana also resulted in improved access to care, reduction in travel times to and from health care providers, higher rates of preventative health care utilization, increased rates of medication adherence and improved overall health outcomes across the state.[71] Medication adherence is an important factor in improving health outcomes, but the costs associated with managing chronic conditions with medication can be challenging for low-income individuals. However, a study from Tulane University found that the number of adults in Louisiana who reported they were unable to afford their prescriptions decreased by nearly 7% as a result of Medicaid expansion.[72] The authors elaborate on this statement with a comparison to populations in non-expansion states, which they explain are more likely to report cost as a barrier to medication adherence.[73]

Medicaid Expansion in West Virginia

West Virginia is smaller than South Carolina, with a higher percentage of disabled residents, but a comparable proportion of adults living in poverty and older adults residing in the state. Below, Table 3 illustrates these statistics from 2019, the most recent figures available from the United States Census.

TABLE 3

West Virginia and South Carolina Selected Demographics, 2019[74]

Source: Table S0101: Age and Sex, United States Census Bureau.

	WEST VIRGINIA	SOUTH CAROLINA
Total Population	1,792,147	5,148,714
Population 50 – 64	370,367 **(20.7%)**	1,013,041 **(19.7%)**
Percent Below Poverty Level Aged 35 - 64	14.9%	11.1%
Percent with a Disability 35 - 64	21.1%	14.7%

West Virginia was one of the first twenty-five states (plus the District of Columbia) to expand Medicaid under the Affordable Care Act in 2014.[75] By December 2020 an excess of 193,000 West Virginians were insured under the expanded Medicaid eligibility guidelines.[76] The Center on Budget and Policy Priorities estimates that more than 300 West Virginians between 55 and 64 were saved from premature death as a direct result of Medicaid expansion between 2014 and 2017.[77]

In 2018, more than half of West Virginia's Medicaid enrollees diagnosed with an opioid use disorder gained health coverage through Medicaid expansion.[78] Substance use disorder treatment is a required benefit in Medicaid expansion programs and, in West Virginia, three-quarters of Medicaid spending on enrollees with opioid use disorder is for services other than direct treatment; indicating that Medicaid expansion also addresses many comorbid conditions, such as behavioral health disorders, that contribute to substance use disorders.[79]

The Center on Budget and Policy Priorities explains that the 2014 adoption of Medicaid expansion improved residents' access to both physical and behavioral health care, including medication-assisted treatment (MAT) for substance use disorders.[80,81,82] Also in 2014, The U.S. Government Accountability Office published a report which illustrated that newly eligible beneficiaries were able to access MAT services for the first time and, as a result, West Virginia reported a higher rate of MAT use among beneficiaries than other states surveyed in the report.[83]

Medicaid expansion also decreased the number of uncompensated health care services in West Virginia.[84,85] Between 2013 and 2014, West Virginia University Hospitals reported saving approximately fifty-one million dollars in uncompensated care costs.[86] The significant decrease in uncompensated care benefits all hospitals, but advantages are most notable in rural areas where hospitals are more likely to serve older, sicker populations who depend on public insurance.[87]

Medicaid Expansion in Montana

Montana first expanded Medicaid in 2016, and in 2019 Governor Steve Bullock signed a bill to extend the program until 2025. Policy makers in favor of the extension cited job creation, improved health outcomes and increased viability for rural hospitals as the primary factors in the decision to extend expansion guidelines.[88]

Formally titled the Montana Health and Economic Livelihood Partnership (HELP) Act, expansion has extended Medicaid coverage to over 90,000 low-income Montanans.[89,90,91] Although geographically distant and less populated, Montana and South Carolina share some distinct demographic similarities such as a comparable proportion of adults living below the poverty level and adults with a disability, illustrated in Table 4 below.

	MONTANA	SOUTH CAROLINA
Total Population	1,068,778	5,148,714
Population 50 – 64	210,342 **(19.7%)**	1,013,041 **(19.7%)**
Percent Below Poverty Level Aged 35 - 64	9.6%	11.1%
Percent with a Disability 35 - 64	12.3%	14.7%

TABLE 4

Montana and South Carolina Selected Demographics, 2019[92]

Source: Table S0101: Age and Sex, United States Census Bureau.

Nearly half of all Montanans live in rural areas, and 65% of Montanans covered by Medicaid live in rural communities.[93,94] The decision to expand Medicaid has been shown to improve access to health services for many of these residents. The Montana Healthcare Foundation released a report revealing that in 2019 alone, an excess of 60,000 rural Montanans insured through the expanded eligibility guidelines were able to receive previously inaccessible preventative health services.[95] Preventative and primary care services are often more difficult to deliver in rural communities, emphasizing the significance of this data.[96]

Researchers found that newly insured Montanans were highly satisfied with the program and reported increased peace of mind and improved perceptions of their own health.[97] In addition to improving health outcomes and increasing access to primary care the Montana HELP Act Oversight Committee, a bipartisan committee convened to study the impact of expansion in the state, found that between 2016 and 2018 expansion resulted in more than fifty-eight million dollars in state budget savings.[98]

The committee also reported that Montana hospitals saw a 49% decrease in uncompensated care costs and that approximately 5,000 new jobs have been created yearly since 2016 due to expansion.[99] The authors explained that the federal funding brought to Montana to support expansion has resulted in more than $270 million in new income for Montanans each year.[100]

Additionally, between 2015 and 2016, the Medicaid expansion workforce development program resulted in a 9% increase in non-disabled adults in the workforce and a 6% increase in adults with disabilities in the workforce. The committee noted that by offering low-income Montanans a path to Medicaid coverage based on income and not disability, people with disabilities can qualify for affordable coverage without leaving the workforce to meet the requirements.[101]

Medicaid Expansion in Kentucky

The Bluegrass State was one of the first states in the South to expand Medicaid in 2014. As of December 2020, 612,700 Kentucky residents gained health insurance coverage through the expanded eligibility guidelines.[102] Between 2013 and 2019 the percent of uninsured individuals in Kentucky decreased from 14.3% to 6.4%.[103] Kentucky is similar in the proportion of adults reaching retirement age and demographic composition to South Carolina, and the cultural climate is comparable to the Palmetto State. The pertinent demographic figures are illustrated in Table 5.

TABLE 5

Kentucky and South Carolina Selected Demographics, 2019[104]

Source: Table S0101: Age and Sex, United States Census Bureau.

	KENTUCKY	SOUTH CAROLINA
Total Population	1,792,147	5,148,714
Population 50 – 64	370,367 **(20.7%)**	1,013,041 **(19.7%)**
Percent Below Poverty Level Aged 35 - 64	14.9%	11.1%
Percent with a Disability 35 - 64	21.1%	14.7%

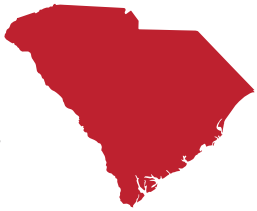
In the two years following expansion, the state saw a significant increase in the number of residents reporting access to a primary care provider and a significant decrease in the percentage of people reporting emergency department visits.[105] Research suggests that these figures are associated with higher insurance rates and that reductions in avoidable emergency room visits may be associated with greater access to preventive care.[106]

Medicaid expansion in Kentucky has been credited with reducing the number of residents experiencing unmet medical needs due to cost as well as a decrease in the number of residents without a regular source of primary care.[107] This figure is particularly relevant because, as mentioned in earlier sections, adults aged 50 to 64 are more likely to delay medical care due to cost compared to retired Americans regardless of need or medical complexity.[108]

Data from the Behavioral Risk Factor Surveillance System (BRFSS) indicates that the number of low-income Kentuckians with unmet medical needs due to cost decreased 40% between 2013 and 2014.[109] Addressing the burden of unmet medical needs is an important factor in improving health outcomes. The Center for Budget and Policy Priorities estimates that an excess of 700 Kentuckians between ages 55 and 64 have been saved from premature death due to Medicaid expansion.[110]

In addition to increasing access to care across the state, Medicaid expansion has also been associated with positive financial outcomes among the newly insured. Between 2012 and 2015, the number of adults reporting past-due medical debt decreased nearly 27% across Kentucky.[111] Uncompensated care costs as a share of hospital budgets in Kentucky also decreased 64% between 2013 and 2017 – from 6.6% to 2.4%. This figure reflects an excess of $580 million dollars in savings across the state.[112]

South Carolina



The burdens of chronic disease, uncompensated care costs, avoidable emergency room visits and substance use disorders have impacted states across the country. South Carolina has been similarly impacted by these factors, with chronic disease playing a substantial role in community and state health outcomes. Specifically; heart disease, cancer, chronic lower respiratory diseases, stroke, Alzheimer's disease and diabetes have been among the ten leading causes of death among older adults in South Carolina since 2013.[113]

Behavioral Health

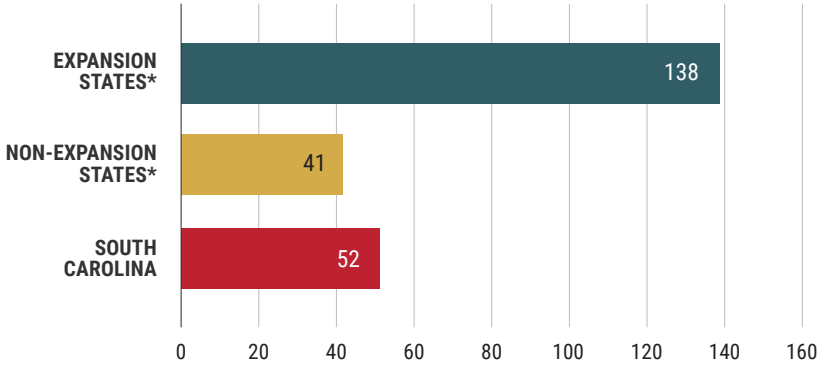
In 2020, 23,361 South Carolinians between the ages of 45 and 64 were served by the state mental health authority. This figure represents 23.4% of services provided that year, which is on par with the national average.[114] However, this number does not include individuals with behavioral health disorders who are unable to access care. Prior to the pandemic, nearly a fifth of South Carolinians reported living with a diagnosable mental, behavioral or emotional disorder, and 4.7% of South Carolinians reported suffering from a serious mental illness such as schizophrenia.[115] Many practitioners and researchers anticipate an increase in behavioral health disorders following the coronavirus pandemic.[116]

The National Alliance on Mental Illness (NAMI) explains that Medicaid is a lifeline for individuals suffering from behavioral health disorders. They report that states that have expanded Medicaid witness greater improvements in access to mental health services and medications compared to nonexpansion states.[117] In the states that have expanded Medicaid, the number of low-income adults with an unmet need for substance use disorder treatment decreased approximately 18% following expansion.[118]

States that have expanded Medicaid report increased access to MAT for opioid use disorder, including buprenorphine and Suboxone, which are pharmacological treatments for addiction that used in conjunction with counseling are FDA-approved to help facilitate recovery.[119] On average, Medicaid expansion states report higher rates of buprenorphine medicated treatment prescriptions (BMT) per 1,000 Medicaid beneficiaries than non-expansion states.[120] The specific figures are illustrated in Graph D.

GRAPH D

Prescriptions for Buprenorphine Medicated Treatment per 1,000 Medicaid Beneficiaries by Expansion Status, 2018[121,122]



Source: Clemons-Cope, 2019; Schwartz, 2019.
* Denotes an average of all states in each category

Nationally, individuals suffering from behavioral health disorders living in states that have expanded Medicaid reported improved mental health following their states expansion.[123] In fact, providing access to behavioral health care has been shown to be a cost-effective opportunity to improve quality of life and decrease health expenditures associated with self-harm, anxiety and suicidal ideation among all age groups.[124]

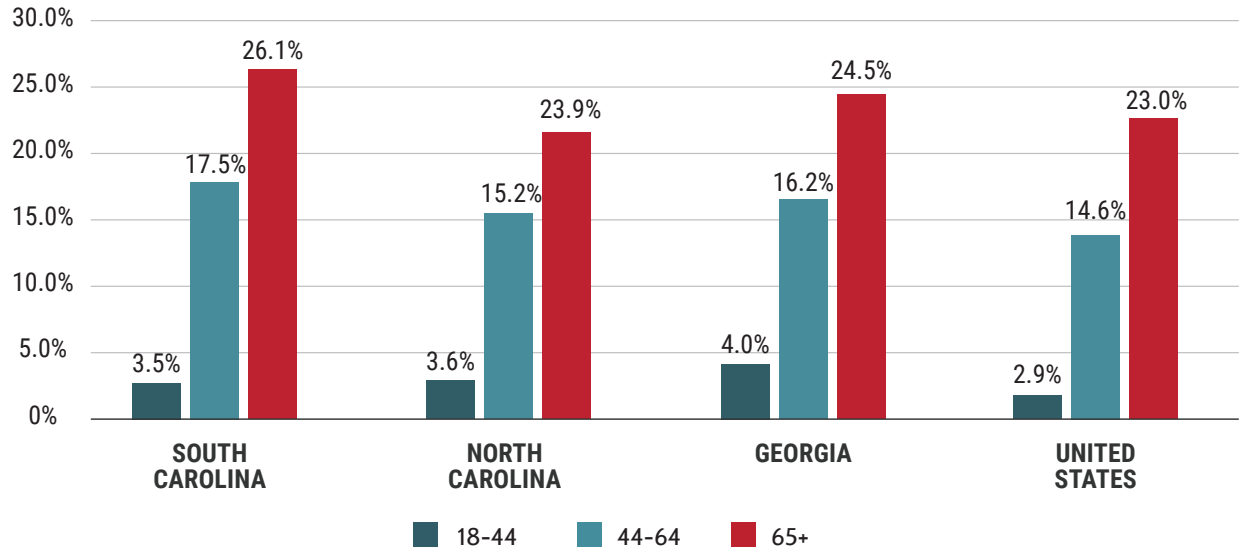
The suicide rate among adults reaching retirement age is consistently higher than that of younger adults. Across the country, women aged 45 to 64 have the highest rates of suicide compared to women of any other age and the rate has risen significantly since 1999.[125] Men aged 45 to 64 have the second highest rate of suicide compared to other age groups, eclipsed only by men aged 75 and older.[126] This figure has also increased significantly since 1999. The Pan American Health Association estimates that the number of older adults with a mental illness is expected to double by 2030.[127]

Diabetes

Pre-pandemic statistics estimate that 17.5% of South Carolinians aged 45 to 64 have been diagnosed with diabetes, giving the state a national ranking of 45 out of 50. That figure is significantly higher than the national prevalence of 14.6% for adults aged 45 to 64.[128] The graph below illustrates diabetes prevalence by age in South Carolina, North Carolina, Georgia and the United States.

GRAPH E

Diabetes Prevalence by Age and State, 2019[129]



Source: Americas Health Rankings, 2020.

Research shows that diabetes prevalence increases as income decreases, indicating that policies addressing individual poverty and access to health care can result in significant improvements in diabetes incidence.[130] In South Carolina, nearly 25% of adults with an annual income less than $25,000 have been diagnosed with diabetes – a rate significantly higher than the 9.5% of South Carolinians making $75,000 or more annually who have been diagnosed with diabetes.[131]

In a recent article published by the American Diabetes Association, researchers found that Medicaid expansion results in significant improvements in self-reported diabetes management.[132] A separate study published in the *American Journal of Preventative Medicine* found that, as of 2021, Medicaid expansion has resulted in an increase in the ability of enrollees to afford a physician, an increase in provider foot examinations and an increase in self-foot examinations.[133] These indicators are important components of more effectively managing the health of South Carolinians suffering from peripheral neuropathy or diabetic foot ulcerations.[134]

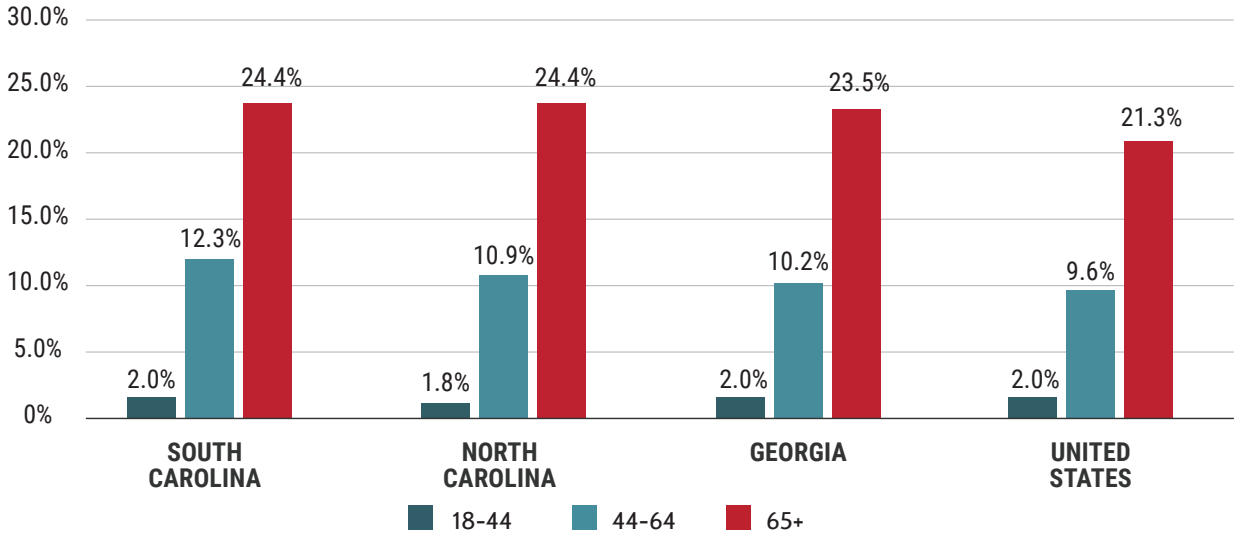
Peripheral neuropathy may also be referred to as diabetic peripheral neuropathy and, if left unmanaged, is the leading cause of end stage renal disease.[135] Luckily, interrupting the progression of diabetic kidney disease through medicine and management is possible. However, this requires continuity in care and access to medication. As a result, uninsured adults with chronic diabetic kidney disease have a higher risk of progression to end stage renal disease than the insured.[136] A recent study, released in June 2021, reported that Medicaid expansion is associated with an initial reduction in diabetic kidney failure among American adults.[137]

Heart Disease

Heart disease is the leading cause of death among South Carolinians.[138] The state is currently ranked 43 out of 50 states in terms of prevalence of cardiovascular disease. In fact, 12.3% of South Carolinians aged 45 to 64 have been diagnosed with heart disease, which is 2.7 percentage points higher than the national prevalence rate of cardiovascular disease.[139,140] Marlboro County, Darlington County, Cherokee County, Lee County and Dillon County have the highest mortality rates attributed to heart disease among individuals aged 45 to 64 in the state.[141] These data are illustrated in more detail in Appendix A. Graph F below illustrates the prevalence of heart disease by age in South Carolina, the surrounding states and the country as a whole.

GRAPH F

Prevalence of Heart Disease by Age and State, 2019[142]



Source: Americas Health Rankings, 2020.

Like diabetes, heart disease is also negatively correlated to income. In 2019, 19.5% of South Carolinians with an average annual income less than $25,000 reported a diagnosis of heart disease. This reveals a stark disparity mediated by income because, as of 2019, only 6.2% of South Carolinians making more than $75,000 annually were diagnosed with heart disease.[143] Expanding Medicaid to adults reaching retirement age presents an opportunity to reduce health disparities according to a study presented at the 2020 American Heart Association's Quality of Care and Outcomes Research Scientific Sessions.[144] The research found that Medicaid expansion is correlated with a reduction in disparities in heart failure treatment and outcomes.[145]

Additionally, data extrapolated from 48 states immediately prior to and following the passage of the ACA illustrate that counties in states that have expanded Medicaid witnessed a smaller increase in cardiovascular mortality rates after expansion compared to counties in states that did not expand Medicaid.[146]

A separate study published in the *Journal of the American Medical Association* found that states that have expanded Medicaid witnessed a significant and immediate reduction in uninsured hospitalizations attributed to complications arising from heart disease.[147] These results have positive implications for health outcomes and the burden of uncompensated care costs at both the county and state level.

Cancer

South Carolina has higher rates of new cancer cases annually among adults aged 50 and older compared to the United States as a whole – 1,372.9 compared to 1,351.4, respectively.[148] Cancer incidence rises in tandem with age, establishing an elevated sense of urgency to provide access to cancer screenings for older adults. Across the United States, nearly a quarter of cancer diagnoses occurred among adults aged 55 to 64 in 2020.[149] Expanding access to health care and preventive services is one strategy that can mitigate the financial costs and burden of morbidity associated with treating cancer among older adults.[150]

Recently, data has begun to emerge indicating that Medicaid expansion is associated with decreased mortality for breast, lung and colorectal cancers.[151,152,153,154] Researchers contend that this is likely due to earlier detection and response. The American Lung Association reports that the five-year lung cancer survival rate is 6% for individuals diagnosed at a later stage but increases to 60% for those who receive an early diagnosis.[155] In states that have expanded Medicaid, cancer mortality has declined an average of 29%, nearly twice the decrease of 15.5% documented in South Carolina over the past decade.[156,157]

Early-Onset Alzheimer's Disease

Early-onset Alzheimer's disease is a progressive disease that affects adults aged 30 to 64.[158] The diagnosis rate for early-onset Alzheimer's in the United States has risen dramatically over the past decade and has more than doubled among adults aged 55 to 64 between 2013 and 2017.[159] The 2020 South Carolina Alzheimer's disease registry reports that more than 4,000 South Carolinians were diagnosed with early-onset Alzheimer's disease in 2016.[160]

Among other modifiable risk factors, a growing body of evidence suggests that hospitalizations among older adults increase the risk of developing Alzheimer's disease or dementia through various complex pathways. The evidence suggests that decreasing the risk of cardiovascular disease through regular preventive health care, screenings and blood pressure management may also decrease the risk of dementia or Alzheimer's disease.[161] Protective factors such as managing hypertension and early detection and diagnosis are believed to have favorable impacts on both the financial and health outcomes associated with early-onset Alzheimer's disease.[162]

Although many people with early-onset Alzheimer's disease qualify for expedited disability coverage through the Social Security Administration's Compassionate Allowances initiative and are therefore categorically eligible for Medicaid, expanding the program would allow low-income individuals to qualify and receive coverage without having to wait for their disability application to be approved.[163] In addition, expanding eligibility to people experiencing poverty has been shown to decrease hospitalization and improve management of chronic cardiovascular disease, two of the modifiable risk factors reported by the Alzheimer's Association.[164,165,166]

Federal Coronavirus Recovery Funds and Medicaid Expansion: Implications for South Carolina

The American Rescue Plan Act (ARPA) was enacted on March 11, 2021 in response to the coronavirus pandemic. ARPA provides approximately $1.9 trillion dollars to states and individuals through funding and individual stimulus payments and includes several provisions related to Medicaid.[167] These provisions include providing mandatory coverage for COVID-19 vaccinations and a temporary increase in the federal medical assistance percentages (FMAP) for non-expansion populations in states that choose to expand Medicaid after the bill was signed.[168]

Medicaid is jointly funded by both the state and federal government and the federal governments' share of the cost is referred to as the federal medical assistance percentage (FMAP). FMAP rates reflect the percent of state spending on qualifying Medicaid expenditures that is eligible for federal matching funds.[169] Services for individuals covered by Medicaid under the non-expansion criteria receive a lower FMAP than services for individuals covered by the expanded Medicaid eligibility guidelines.

Currently, services rendered to non-expansion populations in South Carolina are eligible for a 70.6% FMAP, which means that the federal government pays for 70.6% of the cost associated with qualified Medicaid services for non-expansion populations and the state is responsible for the remaining charges.[170] The ACA requires that the federal government cover 90% of the costs of qualified Medicaid expenditures for individuals in expansion states who are insured by Medicaid under the expanded eligibility guidelines.[171] The temporary FMAP increases offered in ARPA were included, in part, as an incentive for states that have not yet expanded Medicaid and would provide a 5% FMAP increase to reimburse states for qualifying Medicaid services provided to the non-expansion population after expansion.[172]

This incentive aims to address health disparities by encouraging non-expansion states to eliminate the coverage gap while also providing additional financial support. Traditionally non-expansion populations such as children, seniors, people with disabilities and adults who are covered by Medicaid under the current eligibility guidelines account for the highest proportion of Medicaid spending. The 5% additional FMAP for the non-expansion populations would address a proportion of this cost for two years.[173] The ARPA provisions would also ensure that state investment in Medicaid expansion would be minimized by the influx of federal funds and, if South Carolina chose to expand Medicaid, the state would receive an estimated $790 million to $838 million in federal funds through the ARPA FMAP increase.[174,175,176]

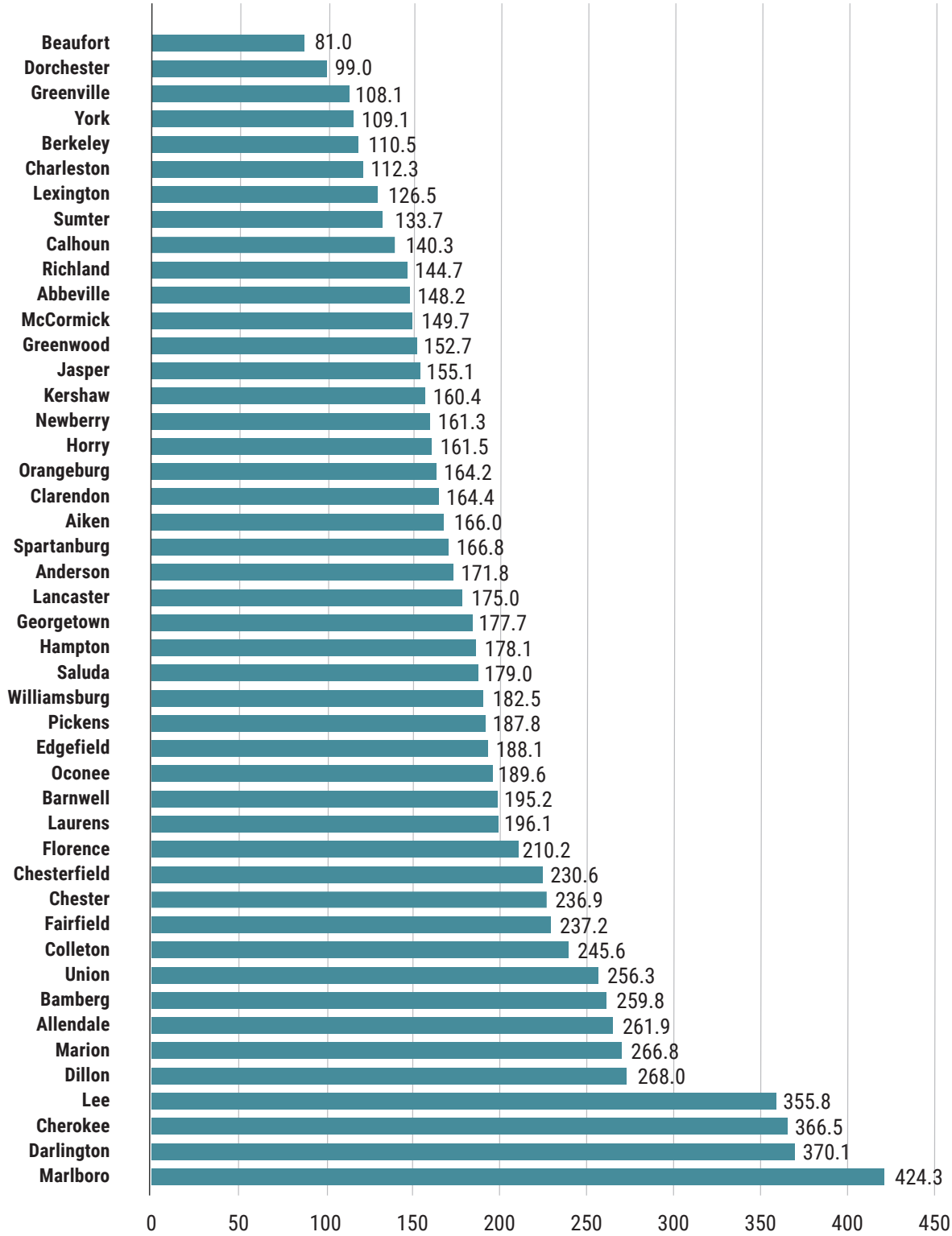
The additional federal funds could help mitigate the costs associated with providing coverage to a rapidly aging population. Between 2010 and 2019, the population of adults aged 50 to 64 in South Carolina grew 10.9% to 1,013,041 and currently makes up 19.7% of the state's population.[177,178] In an article published in the *American Journal of Preventative Medicine*, researchers explain that nearly a third of adults reaching retirement age spend 10% or more of their income on healthcare and the financial burden of health services is often higher among people who are already experiencing financial insecurity.[179]

Research shows that providing access to preventive health services to low-income South Carolinians reaching retirement age through Medicaid expansion has the potential to decrease Medicare spending later in life as well as greatly reduce morbidity associated with chronic conditions such as, but not limited to, heart disease, diabetes and behavioral health disorders.

Appendix

Appendix A:

Heart Disease Mortality Rate per 100,000 among South Carolinians Ages 45 – 64 by County, 2017 – 2019[180]



References

1 "The Silver Tsunami," South Carolina Department on Aging, accessed July 11, 2021, https://aging.sc.gov/about.

2 "Health Insurance Coverage for Americans with Pre-Existing Conditions: The Impact of the Affordable Care Act," ASPE, last modified January 5, 2017, https://aspe.hhs.gov/system/files/pdf/255396/Pre-ExistingConditions.pdf.

3 "AARP Analysis Shows that Nongroup Health Insurance was Unaffordable for Nearly Half of Adults Aged 50-64 in 2019," Health, AARP, last modified April 1, 2021, https://press.aarp.org/2021-4-1-AARP-Analysis-Shows-Nongroup-Health-Insurance-Unaffordable-Nearly-Half-Adults-Aged-50-64-2019.

4 "Poverty Status in the Past 12 Months – Table S1701." U.S. Census Bureau, accessed May 20, 2021, https://data.census.gov/.

5 "ASPE Uninsured Estimates by State and Eligibility Group [Raw Data File]," ASPE, United States Department of Health and Human Services, accessed July 29th, 2021, https://aspe.hhs.gov/reports/state-county-local-estimates-uninsured-population-prevalence-key-demographic-features.

6 McWilliams, J., Meara, E., Zaslavsky, A., Ayanian, J., "Use of Health Services by Previously Uninsured Medicare Beneficiaries," The New England Journal of Medicine 357 (2007):143-153, accessed June 5, 2021, Doi:10.1056/NEJMsa067712.

7 Muhlestein, D., "The Coming Crisis for the Medicare Trust Fund," Health Affairs, last modified December 15, 2020, https://www.healthaffairs.org/do/10.1377/hblog20201210.997063/full/.

8 McWilliams, J., Meara, E., "Medicare Spending for Previously Uninsured Adults," Annuals of Internal Medicine 151, no. 11 (2009): 757-766, doi:10.7326/0003-4819-151-11-200912010-00149.

9 Crowley, R., Daniel, H., Cooney, T., & Engel, L., "Envisioning a Better U.S. Health Care System for All: Coverage and Cost of Care," Annals of Internal Medicine 172, no. 2 (2020): S7-S32, accessed May 20, 2020, https://doi.org/10.7326/M19-2415.

10 "State Health Facts: Health Insurance Coverage of the Total Population," Kaiser Family Foundation, accessed May 19, 2021, https://www.kff.org/other/state-indicator/total-population/.

11 "State Health Facts: Health Insurance Coverage of the Total Population," Kaiser Family Foundation, accessed May 19, 2021, https://www.kff.org/other/state-indicator/total-population/.

12 Norris, L., "Will you receive an ACA premium subsidy?" HealthInsurance.org, last modified March 11, 2021, https://www.healthinsurance.org/obamacare/will-you-receive-an-aca-premium-subsidy/.

13 Tolbert, J., Orgera, K., "Key facts about the uninsured population," Kaiser Family Foundation, published November 6, 2020, https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/.

14 "Table S2701: Selected Characteristics of Health Insurance Coverage in the United States – 2019," American Community Survey, accessed May 20, 2020, https://data.census.gov/.

15 Collins, S., Gunja, M., Aboulafia, G., "U.S. Health Insurance Coverage in 2020: A Looming Crisis in Affordability," The Commonwealth Fund, published August 19, 2020, https://www.commonwealthfund.org/publications/issue-briefs/2020/aug/looming-crisis-health-coverage-2020-biennial.

16 "Table S2701: Selected Characteristics of Health Insurance Coverage in the United States – 2019," American Community Survey, accessed May 20, 2020, https://data.census.gov/.

17 "Table S2701: Selected Characteristics of Health Insurance Coverage in the United States – 2019," American Community Survey, accessed May 20, 2020, https://data.census.gov/.

18 McWilliams, J., Meara, E., "Medicare Spending for Previously Uninsured Adults," Annuals of Internal Medicine 151, no. 11 (2009): 757-766, doi:10.7326/0003-4819-151-11-200912010-00149.

19 McWilliams, J., Meara, E., Zaslavsky, A., Ayanian, J., "Use of Health Services by Previously Uninsured Medicare Beneficiaries," The New England Journal of Medicine 357 (2007):143-153, accessed June 5, 2021, Doi:10.1056/NEJMsa067712.

20 "Uninsured Older Adults Require More and Costlier Care When They Enter Medicare Than Do Those With Prior Health Insurance," The Commonwealth Fund, published July 12, 2007, https://www.commonwealthfund.org/press-release/2007/uninsured-older-adults-require-more-and-costlier-care-when-they-enter-medicare.

21 "Uninsured Older Adults Require More and Costlier Care When They Enter Medicare Than Do Those With Prior Health Insurance," The Commonwealth Fund, published July 12, 2007, https://www.commonwealthfund.org/press-release/2007/uninsured-older-adults-require-more-and-costlier-care-when-they-enter-medicare.

22 Cha, A. E., Cohen, R. A., "Reasons for Being Uninsured Among Adults Aged 18-64 in the United States, 2019," National Center for Health Statistics, last modified September 2020, https://www.cdc.gov/nchs/products/databriefs/db382.htm.

23 Sass, S. A., "How Medicaid Helps Older Americans," Center for Retirement Research at Boston College 18, no. 5. (2018): 1-7, accessed June 5, 2020, https://crr.bc.edu/wp-content/uploads/2018/02/IB_18-5.pdf.

24 Cha, A. E., Cohen, R. A., "Reasons for Being Uninsured Among Adults Aged 18-64 in the United States, 2019," National Center for Health Statistics, last modified September 2020, https://www.cdc.gov/nchs/products/databriefs/db382.htm.

25 Smith, G., Kennedy, C., Knipper, S., O'Brien, J. & O'Keeffe J., "Using Medicaid to Support Working Age Adults with Serious Mental Illnesses in the Community: A Handbook," U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation, (2005), accessed June 5, 2021, https://aspe.hhs.gov/report/using-medicaid-support-working-age-adults-serious-mental-illnesses-community-handbook.

26 "Medicaid Member Handbook," South Carolina Healthy Connections, last modified February 11, 2021, https://www.scdhhs.gov/sites/default/files/MedicaidHandbook%202.11.21.pdf.

27 "Pregnant Women and Infants," South Carolina Healthy Connections Medicaid, accessed May 20, 2021, https://www.scdhhs.gov/eligibility-groups/pregnant-women-and-infants.

28 "Breast and Cervical Cancer Program," South Carolina Healthy Connections Medicaid, South Carolina Department of Health and Human Services, accessed May 20, 2021, https://www.scdhhs.gov/eligibility-groups/breast-cervical-cancer-program.

29 "Aged, blind or disabled (ABD)," South Carolinas Healthy Connections Medicaid, South Carolina Department of Health and Human Services, accessed May 20, 2021, https://www.scdhhs.gov/eligibility-groups/aged-blind-or-disabled-abd.

30 "Individuals in Nursing Facilities And/Or Receiving Home and Community-Based (Waiver) Services," South Carolina Healthy Connections Medicaid, South Carolina Department of Health and Human Services, accessed May 20, 2021, https://www.scdhhs.gov/eligibility-groups/individuals-nursing-facilities-andor-receiving-home-and-community-based-waiver.

31 Garfield, R., Orgera, K., Damico, A., "The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid," Medicaid, Kaiser Family Foundation, last modified January 21, 2021, https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/.

32 Sass, S. A. "How Medicaid Helps Older Americans." Center for Retirement Research at Boston College 18, no. 5 (2018), https://crr.bc.edu/wp-content/uploads/2018/02/IB_18-5.pdf.

33 Dye, C., Vinson, K., "Health Disparities: South Carolina Non-Hispanic Blacks Aged 50+," Clemson University, last modified January 2021. https://states.aarp.org/south-carolina/disrupthealthdisparities.

34 Dye, C., Vinson, K., "Health Disparities: South Carolina Non-Hispanic Blacks Aged 50+," Clemson University, last modified January 2021. https://states.aarp.org/south-carolina/disrupthealthdisparities.

35 "Health Insurance Marketplace Calculator," Health Reform, Kaiser Family Foundation, accessed May 20, 2021, https://www.kff.org/interactive/subsidy-calculator/.

36 Dean, O., Sung, J., "South Carolina's Health Coverage Affordability Gap," AARP Public Policy Institute, last modified January 2021, https://www.aarp.org/content/dam/aarp/ppi/2021/affordability-state-fact-sheet/south-carolina.pdf.

37 "Don't Get Fooled: the Age Tax is a Real Thing," Politics and Society, AARP, last modified May 4, 2017, https://www.aarp.org/politics-society/advocacy/info-2017/older-adults-pay-more-with-age-tax-fd.html.

38 "Population ages 65 and above (% of total population) – United States," Data, World Bank Group, accessed July 9, 2021, https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS?locations=US.

39 Vespa, J., "The U.S. Joins Other Countries with Large Aging Populations." Population, United States Census, last modified October 18, 2019, https://www.census.gov/library/stories/2018/03/graying-america.html.

40 Table S0101: Age and Sex, 2019 1-year estimate" American Community Survey, United States Census Bureau, accessed July 2, 2021, https://data.census.gov/

41 Choi, Namkee G et al., "Unmet Healthcare Needs and Healthcare Access Gaps Among Uninsured U.S. Adults Aged 50-64," International journal of environmental research and public health vol. 17 no. 8 (2020): 1-12, doi:10.3390/ijerph17082711.

42 Buttorff, C., Ruder, T., & Bauman, M, "Multiple Chronic Conditions in the United States," Rand Corporation, 2017, https://www.rand.org/content/dam/rand/pubs/tools/TL200/TL221/RAND_TL221.pdf.

43 McInerney, M., Winecoff, R., Ayyagari, P., Simon, K., & Bundorf, M. K., "ACA Medicaid Expansion Associated With Increased Medicaid Participation and Improved Health Among Near-Elderly: Evidence From the Health and Retirement Study." Inquiry 57, no. 1 (2020), doi:10.1177/0046958020935229.

44 McInerney, M., Winecoff, R., Ayyagari, P., Simon, K., & Bundorf, M. K., "ACA Medicaid Expansion Associated With Increased Medicaid Participation and Improved Health Among Near-Elderly: Evidence From the Health and Retirement Study." Inquiry 57, no. 1 (2020), doi:10.1177/0046958020935229.

45 Curda, E., "Social Security Disability: Information on Wait Times, Bankruptcies, and Deaths among Applicants who Appealed Benefit Denials," U.S. Government Accountability Office, last modified August 13, 2020, https://www.gao.gov/assets/gao-20-641r.pdf.

46 "How long does it take to get a disability decision in South Carolina?" Social Security Disability Resource Center, accessed July 9, 2021, https://www.ssdrc.com/state-south-carolina-sc-21.html.

47 Coe, N., Lindner, S., Wong, K., Wu A., "How do people with disabilities cope while waiting for disability insurance benefits?" IZA Journal of Labor Policy 3, no. 1 (2014): 1-27, https://doi.org/10.1186/2193-9004-3-1.

48 Coe, N., Lindner, S., Wong, K., Wu A., "How do people with disabilities cope while waiting for disability insurance benefits?" IZA Journal of Labor Policy 3, no. 1 (2014): 1-27, https://doi.org/10.1186/2193-9004-3-1.

49 Diekneite, M., " Data shows backlog, long wait for social security disability hearings," WTOC, last modified February 8, 2021, https://www.wtoc.com/2021/02/08/data-shows-backlog-long-wait-social-security-disability-hearings/.

50 "Approval Rates for Social Security Disability Benefits Increased Nationwide in Fiscal Year 2020," Allsup, last modified April 27, 2021, https://www.globenewswire.com/en/news-release/2021/04/27/2218161/0/en/Approval-Rates-For-Social-Security-Disability-Benefits-Increased-Nationwide-In-Fiscal-Year-2020.html.

51 Curda, E., "Social Security Disability: Information on Wait Times, Bankruptcies, and Deaths among Applicants who Appealed Benefit Denials," U.S. Government Accountability Office, last modified August 13, 2020, https://www.gao.gov/assets/gao-20-641r.pdf.

52 Schmidt, L., Shore-Sheppard, L., Watson, T., "The Impact of the ACA Medicaid Expansion on Disability Program Applications," American Journal of Health Economics 6, no.4 (2020): 444-476, doi: 10.1086/710525.

53 "Mental Health Among Older Adults Before and During the COVID-19 Pandemic," National Poll on Healthy Aging, the University of Michigan, last modified May 2021, https://deepblue.lib.umich.edu/bitstream/handle/2027.42/167308/NPHA-Mental-Health-report.pdf?sequence=4&isAllowed=y.

54 "The Far-Reaching Benefits of the Affordable Care Act's Medicaid Expansion," The Center on Budget and Policy Priorities, last modified October 21, 2020, https://www.cbpp.org/research/health/chart-book-the-far-reaching-benefits-of-the-affordable-care-acts-medicaid-expansion.

55 Caswell, K., Waidmann, T., "The Affordable Care Act Medicaid Expansions and Personal Finance," Medical Care Research and Review 76, no. 5 (2017): 538-571, https://doi.org/10.1177%2F1077558717725164.

56 Ward, B., Bridge, B., "The Economic Impact of Medicaid Expansion in Montana," Bureau of Business and Economic Research at the University of Montana (2018): 1-34, https://mthcf.org/wp-content/uploads/2018/04/BBER-MT-Medicaid-Expansion-Report_4.11.18.pdf.

57 Richardson, J., Llorens, J., Heidelber, R., "Medicaid Expansion and the Louisiana Economy," E. J. Ourso College of Business Public Administration Institute (2018): 1-32, https://gov.louisiana.gov/assets/MedicaidExpansion/MedicaidExpansionStudy.pdf.

58 Sommers, B., Blendon, R., Orav, J., et al., "Changes in Utilization and Health Among Low-Income Adults After Medicaid Expansion or Expanded Private Insurance," Jama Intern Med. 176, no. 10 (2016): 1501-1509, doi:10.1001/jamainternmed.2016.4419.

59 Guth, M., Garfield, R., and Rudowitz, R. "The Effects of Medicaid Expansion under the ACA: Updated Findings from a Literature Review." Accessed May 20, 2020, https://www.kff.org/medicaid/report/the-effects-of-medicaid-expansion-under-the-aca-updated-findings-from-a-literature-review/.

60 "Status of State Medicaid Expansion: Interactive Map," Medicaid, Kaiser Family Foundation, last modified July 9, 2021, https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/.

61 Callison, K., Walker, B., Stoecker, C., Self, J., Diana, M., "Medicaid Expansion Reduced Uncompensated Care Costs at Louisiana Hospitals; May Be a Model for Other States," Health Affairs 40, no. 3 (2021), https://doi.org/10.1377/hlthaff.2020.01677.

62 "Medicaid Expansion Enrollment," Kaiser Family Foundation, accessed September 7, 2021, https://www.kff.org/health-reform/state-indicator/medicaid-expansion-enrollment/.

63 Richardson, J., Llorens, J., Heidelber, R., "Medicaid Expansion and the Louisiana Economy," E. J. Ourso College of Business Public Administration Institute (2018): 1-32, https://gov.louisiana.gov/assets/MedicaidExpansion/MedicaidExpansionStudy.pdf.

64 Woodruff, E., "Louisiana's Medicaid expansion reduced racial gap in health care coverage," The New Orleans Advocate, January 16, 2020, https://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-1.html.

65 Baumgartner, J., Collins, S., Radley, D., Hayes, S., "How the Affordable Care Act Has Narrowed Racial and Ethnic Disparities in Access to Health Care," Advancing Health Equity, The Commonwealth Fund, last modified January 16, 2020, https://www.commonwealthfund.org/publications/2020/jan/how-ACA-narrowed-racial-ethnic-disparities-access.

66 "Table S0101: Age and Sex, 2019 1-year estimate" American Community Survey, United States Census Bureau, accessed July 2, 2021, https://data.census.gov/.

67 Chu, Q., Li, T., Hsieh, M., Yi, Y., Gibbs, J., Lyons, J., Wu, X., "Positive Impact of the Patient Protection and Affordable Care Act Medicaid Expansion on Louisiana Women with Breast Cancer," Cancer 127, no. 5 (2020): 688-699, https://doi.org/10.1002/cncr.33265.

68 Ginsburg, O., et al., "Breast Cancer Early Detection: A Phased Approach to Implementation," Cancer 126, no. S10 (2020): 2379-2393, https://doi.org/10.1002/cncr.32887.

69 Chu, Q., Li, T., Hsieh, M., Yi, Y., Gibbs, J., Lyons, J., Wu, X., "Positive Impact of the Patient Protection and Affordable Care Act Medicaid Expansion on Louisiana Women with Breast Cancer," Cancer 127, no. 5 (2020): 688-699, https://doi.org/10.1002/cncr.33265.

70 Chu, Q., Li, T., Hsieh, M., Yi, Y., Gibbs, J., Lyons, J., Wu, X., "Positive Impact of the Patient Protection and Affordable Care Act Medicaid Expansion on Louisiana Women with Breast Cancer," Cancer 127, no. 5 (2020): 688-699, https://doi.org/10.1002/cncr.33265.

71 Diana, M., Callison, K., Cunliffe, C., Stoecker, C., Shi, L., Demosthenidy, M., Wisniewski, J., "Louisiana Medicaid Expansion and Access to Care," Tulane University School of Public Health and Tropical Medicine, July 2019, https://ldh.la.gov/assets/media/AccesstoCareReport20132018final.pdf.

72 Diana, M., Callison, K., Cunliffe, C., Stoecker, C., Shi, L., Demosthenidy, M., Wisniewski, J., "Louisiana Medicaid Expansion and Access to Care," Tulane University School of Public Health and Tropical Medicine, July 2019, https://ldh.la.gov/assets/media/AccesstoCareReport20132018final.pdf.

73 Diana, M., Callison, K., Cunliffe, C., Stoecker, C., Shi, L., Demosthenidy, M., Wisniewski, J., "Louisiana Medicaid Expansion and Access to Care," Tulane University School of Public Health and Tropical Medicine, July 2019, https://ldh.la.gov/assets/media/AccesstoCareReport20132018final.pdf.

74 Table S0101: Age and Sex, 2019 1-year estimate" American Community Survey, United States Census Bureau, accessed July 2, 2021, https://data.census.gov/.

75 Saloner, Brendan et al., "The Affordable Care Act in The Heart of the Opioid Crisis: Evidence from West Virginia," Health Affairs 38, no. 4 (2019): 633-642, doi:10.1377/hlthaff.2018.05049.

76 "Medicaid Expansion Enrollment," Kaiser Family Foundation, accessed September 7, 2021, https://www.kff.org/health-reform/state-indicator/medicaid-expansion-enrollment/.

77 Broadus, M., Aron-Dine, A., "Medicaid Expansion has Saved at Least 19,000 Lives, New Research Finds," Center on Budget and Policy Priorities, last modified November 6, 2019, https://www.cbpp.org/research/health/medicaid-expansion-has-saved-at-least-19000-lives-new-research-finds.

78 Manatt Health, "Medicaid: the Linchpin in State Strategies to Prevent and Address Opioid Use Disorders," Robert Wood Johnson Foundation, last modified March 2018, https://www.shvs.org/wp-content/uploads/2018/03/SHVS_Medicaid-Opioids_Final.pdf.

79 Manatt Health, "Medicaid: the Linchpin in State Strategies to Prevent and Address Opioid Use Disorders," Robert Wood Johnson Foundation, last modified March 2018, https://www.shvs.org/wp-content/uploads/2018/03/SHVS_Medicaid-Opioids_Final.pdf.

80 Bailey, A., "West Virginia's New Medicaid Waiver Promotes Medicaid Objectives," Off the Charts, Center on Budget and Policy Priorities, last modified October 24, 2017, https://www.cbpp.org/blog/west-virginias-new-medicaid-waiver-promotes-medicaid-objectives.

81 Bailey, A., "West Virginia's New Medicaid Waiver Promotes Medicaid Objectives," Off the Charts, Center on Budget and Policy Priorities, last modified October 24, 2017, https://www.cbpp.org/blog/west-virginias-new-medicaid-waiver-promotes-medicaid-objectives.

82 Katch, H., "Medicaid Expansion is Critical for States Fighting Opioid Epidemic," Off the Charts, Center on Budget and Policy Priorities, last modified October 4, 2017, https://www.cbpp.org/blog/medicaid-expansion-is-critical-for-states-fighting-opioid-epidemic.

83 "Medicaid Expansion: Behavioral Health Treatment Use in Selected States in 2014," United States Government Accountability Office, published June 2017, https://www.gao.gov/assets/gao-17-529.pdf.

84 Lagasse, J., "West Virginia hospitals see uncompensated care drop after Medicaid expansion, group says," Healthcare Finance News, January 7, 2016, https://www.healthcarefinancenews.com/news/west-virginia-hospitals-see-uncompensated-care-drop-after-medicaid-expansion-group-says.

85 "Opioid Use Disorder Treatment Under Threat: The Better Care Reconciliation Act (BCRA) Hurts Individuals Affected by the Opioid Epidemic," National Health Law Program, accessed June 25, 2020, https://healthlaw.org/storage/documents/BCRA_-_Opioids_Fact_Sheet_WV.pdf.

86 Lagasse, J., "West Virginia hospitals see uncompensated care drop after Medicaid expansion, group says," Healthcare Finance News, January 7, 2016, https://www.healthcarefinancenews.com/news/west-virginia-hospitals-see-uncompensated-care-drop-after-medicaid-expansion-group-says.

87 Kaufman, B., Reiter, K., Pink, G., Holmes, G., "Medicaid Expansion Affects Rural and Urban Hospitals Differently," Health Affairs 35, no. 9 (2016): 1665-1672, DOI: 10.1377/hlthaff.2016.0357.

88 Hanson, A., "Governor Signs Montana's Medicaid Expansion Bill," AP News, May 9, 2019, https://apnews.com/article/89007fd83f844cb5b0e89c1251563941.

89 Hanson, A., "Governor Signs Montana's Medicaid Expansion Bill," AP News, May 9, 2019, https://apnews.com/article/89007fd83f844cb5b0e89c1251563941.

90 HELP Act Oversight Committee, "2018 Report to the Governor and Legislative Finance Committee," Montana Department of Public Health and Human Services, August 2018, https://dphhs.mt.gov/Portals/85/Documents/healthcare/HELP-ActOversightCommitteeReport2018.pdf.

91 "Medicaid in Montana," Montana Healthcare Foundation, last modified January 2021, https://mthcf.org/wp-content/uploads/2021/02/Manatt-Medicaid-Report_2.17.21-FINAL-V2-UPDATE-COM.pdf.

92 Table S0101: Age and Sex, 2019 1-year estimate" American Community Survey, United States Census Bureau, accessed July 2, 2021, https://data.census.gov/.

93 "Montana Census 2020: Make it Count," Census 2020, Montana State Legislator, last modified February 2019, https://leg.mt.gov/information-legislators/census-2020/.

94 "Medicaid in Montana," Montana Healthcare Foundation, last modified January 2021, https://mthcf.org/wp-content/uploads/2021/02/Manatt-Medicaid-Report_2.17.21-FINAL-V2-UPDATE-COM.pdf.

95 "Medicaid in Montana," Montana Healthcare Foundation, last modified January 2021, https://mthcf.org/wp-content/uploads/2021/02/Manatt-Medicaid-Report_2.17.21-FINAL-V2-UPDATE-COM.pdf.

96 Harris, R., Leininger, L., "Preventive Care in Rural Primary Care Practice," Cancer 72, no. 1 (1993): 1113-1118, https://pubmed.ncbi.nlm.nih.gov/8334666/.

97 Coughlin, T., Burton, R., Hill, J., Fass, J., Marks, J., "Federal Evaluation: Montana Health and Economic Livelihood Partnership Plan – A Look at the Program a Year and Half into Implementation," Social & Scientific Systems, Inc., last modified December 14, 2018, https://www.medicaid.gov/medicaid/downloads/mt-help-focus-group-site-visit-rpt.pdf.

98 HELP Act Oversight Committee, "2018 Report to the Governor and Legislative Finance Committee," Montana Department of Public Health and Human Services, August 2018, https://dphhs.mt.gov/Portals/85/Documents/healthcare/HELP-ActOversightCommitteeReport2018.pdf.

99 HELP Act Oversight Committee, "2018 Report to the Governor and Legislative Finance Committee," Montana Department of Public Health and Human Services, August 2018, https://dphhs.mt.gov/Portals/85/Documents/healthcare/HELP-ActOversightCommitteeReport2018.pdf.

100 HELP Act Oversight Committee, "2018 Report to the Governor and Legislative Finance Committee," Montana Department of Public Health and Human Services, August 2018, https://dphhs.mt.gov/Portals/85/Documents/healthcare/HELP-ActOversightCommitteeReport2018.pdf.

101 HELP Act Oversight Committee, "2018 Report to the Governor and Legislative Finance Committee," Montana Department of Public Health and Human Services, August 2018, https://dphhs.mt.gov/Portals/85/Documents/healthcare/HELP-ActOversightCommitteeReport2018.pdf.

102 "Medicaid Expansion Enrollment," Kaiser Family Foundation, accessed September 7, 2021, https://www.kff.org/health-reform/state-indicator/medicaid-expansion-enrollment/.

103 "Uninsured in Kentucky," America's Health Rankings, accessed June 25, 2021, https://www.americashealthrankings.org/explore/annual/measure/HealthInsurance/state/KY.

104 Table S0101: Age and Sex, 2019 1-year estimate" American Community Survey, United States Census Bureau, accessed July 2, 2021, https://data.census.gov/.

105 Alcalde, M., "Tracking the Impact of the Affordable Care Act in Kentucky," Health Affairs Blog, Health Affairs, last modified April 6, 2016, 10.1377/hblog20160406.054333.

106 Tsai, M., Xirasagar, S., Carroll, S., Bryan, C., Gallagher, P., Davis, K., Jauch, E., "Reducing High-Users' Visits to the Emergency Department by a Primary Care Intervention for the Uninsured: a Retrospective Study," Inquiry 55, no. 1 (2018): 1-12, https://doi.org/10.1177/0046958018763917.

107 Benitez, J., Creel, L., Jennings, J., "Kentucky's Medicaid Expansion Showing Early Promise on Coverage and Access to Care," Health Affairs 35, no. 3 (2016): 528-534, https://doi.org/10.1377/hlthaff.2015.1294.

108 Choi, Namkee G et al. "Unmet Healthcare Needs and Healthcare Access Gaps Among Uninsured U.S. Adults Aged 50-64." International Journal of Environmental Research and Public Health 17, no. 8 (2020), doi:10.3390/ijerph17082711.

109 Benitez, J., Creel, L., Jennings, J., "Kentucky's Medicaid Expansion Showing Early Promise on Coverage and Access to Care," Health Affairs 35, no. 3 (2016): 528-534, https://doi.org/10.1377/hlthaff.2015.1294.

110 Broaddus, M., Aron-Dine, A., "Medicaid Expansion Has Saved at Least 19,000 Lives, New Research Finds," Center for Budget and Policy Priorities, last modified November 6, 2019, https://www.cbpp.org/research/health/medicaid-expansion-has-saved-at-least-19000-lives-new-research-finds.

111 Karpman, M., Caswell, K., "Past-Due Medical Debt among Nonelderly Adults, 2012-2015," The Urban Institute, last modified March 2017, https://www.urban.org/sites/default/files/publication/88586/past_due_medical_debt.pdf.

112 Broaddus, M., "Uncompensated Care Costs Well Down in ACA Medicaid Expansion States," Off the Charts: Policy Insight Beyond the Numbers, Center on Budget and Policy Priorities, last modified October 21, 2020, https://www.cbpp.org/blog/uncompensated-care-costs-well-down-in-aca-medicaid-expansion-states.

113 "Leading Causes of Death Reports, National, Regional and State, 1999 – 2019," WISQARS, accessed June 10, 2021, https://webappa.cdc.gov/cgi-bin/broker.exe.

114 "South Carolina 2020 Mental Health National Outcome Measures (NOMS): SAMHSA Uniform Reporting System," SAMHSA, accessed July 7, 2021, https://www.samhsa.gov/data/sites/default/files/reports/rpt35273/SouthCarolina.pdf.

115 Frazier, E., Sanderson, B., Loy, J., "South Carolina Behavioral Health 2021 Progress Report: Successes and Opportunities in Transforming Behavioral Health Care Systems across South Carolina," South Carolina Institute of Medicine and Public Health, last modified May 24, 2021, https://imph.org/wp-content/uploads/2021/05/IMPH_SCBHC_Behavioral-Health-Progress-Report-May_2021.pdf.

116 Gordon, J., "One Year In: COVID-19 and Mental Health," National Institute of Mental Health, last modified April 9, 2021, https://www.nimh.nih.gov/about/director/messages/2021/one-year-in-covid-19-and-mental-health.

117 Sommers BD, Blendon RJ, Orav EJ, Epstein AM., "Changes in Utilization and Health Among Low-Income Adults After Medicaid Expansion or Expanded Private Insurance," JAMA Intern Med. 176, no. 10 (2016):1501–1509. doi:10.1001/jamainternmed.2016.4419.

118 "Continuing Progress on the Opioid Epidemic: The Role of the Affordable Care Act," ASPE, last modified January 11, 2017, https://aspe.hhs.gov/system/files/pdf/255456/ACAOpioid.pdf.

119 Howell, E., Murphy, R., "Medication Assisted Treatment for Opioid Use Disorder, Part 1," University of Utah Health, last modified September 20, 2018, https://physicians.utah.edu/echo/pdfs/mat-for-oud,-part-12.pdf.

120 Schawrtz, R., "Urban Institute: Medicaid MAT Coverage Varies by State," America's Essential Hospitals, last modified September 16, 2019, https://essentialhospitals.org/policy/urban-institute-medicaid-mat-coverage-varies-state/.

121 Clemans-Cope, L., Lynch, V., Winiski, E., Epstein, M., "State Variation in Medicaid Prescriptions for Opioid Use Disorder from 2011 to 2018," Urban Institute, last modified August 2019, https://www.urban.org/sites/default/files/publication/100817/2019.08.19_av_state_medicaid_rx_oud_final_v3_4.pdf.

122 Schawrtz, R., "Urban Institute: Medicaid MAT Coverage Varies by State," America's Essential Hospitals, last modified September 16, 2019, https://essentialhospitals.org/policy/urban-institute-medicaid-mat-coverage-varies-state/.

123 Blazoski, Cameron and Maio, PharmD, MS, MSPH, Vittorio, "Medicaid Expansion's Importance to Mental Health Care," Thomas Jefferson University, last modified February 2021, https://jdc.jefferson.edu/si_hs_2023_phase1/9/.

124 McDaid, D., Park, A., Wahlbeck, K., "The Economic Case for the Prevention of Mental Illness," Annual Review of Public Health 40, no.1 (2019):373-389, https://doi.org/10.1146/annurev-publhealth-040617-013629.

125 Hedegaard, H., Curtin, S., Warner, M., "Increase in Suicide Mortality in the United States, 1999 – 2018," National Center for Health Statistics Data Brief No. 362, National Center for Health Statistics, accessed July 7, 2021, https://www.cdc.gov/nchs/products/databriefs/db362.htm.

126 Hedegaard, H., Curtin, S., Warner, M., "Increase in Suicide Mortality in the United States, 1999 – 2018," National Center for Health Statistics Data Brief No. 362, National Center for Health Statistics, accessed July 7, 2021, https://www.cdc.gov/nchs/products/databriefs/db362.htm.

127 "Seniors and Mental Health," Fact Sheets, Pan American Health Association, accessed July 7, 2021, https://www3.paho.org/hq/index.php?option=com_content&view=article&id=9877:seniors-mental-health&Itemid=40721&lang=en.

128 "Trend: Diabetes – Ages 45 – 64, South Carolina, United States," Annual Report, America's Health Rankings, accessed July 6, 2021, https://www.americashealthrankings.org/explore/annual/measure/Diabetes/population/Diabetes_45_64/state/SC.

129 "Public Health Impact: Diabetes," Annual Report, America's Health Rankings, accessed July 6, 2021, https://www.americashealthrankings.org/explore/annual/measure/Diabetes/state/SC.

130 Gaskin, D., Thorpe, R., McGinty, E., Bower, K., Rohde, C., Young, J., LaVeist, T., Dubay, L., "Disparities in Diabetes: The Nexus of Race, Poverty, and Place," American Journal of Public Health 104, no. 11 (2014): 2147-2155, doi:10.2105/AJPH.2013.301420.

131 "Trend: Diabetes – Ages 45 – 64, South Carolina, United States," Annual Report, America's Health Rankings, accessed July 6, 2021, https://www.americashealthrankings.org/explore/annual/measure/Diabetes/population/Diabetes_45_64/state/SC.

132 Lee, J., Callaghan, T., Ory, M., Zhao, H., Bolin, J., "The Impact of Medicaid Expansion on Diabetes Management," Journal of Diabetes Care 43, no. 5 (2020): 1094-1101, https://doi.org/10.2337/dc19-1173.

133 Yan, L., Ali, M., Strombotne, K., "Impact of Expanded Medicaid Eligibility on the Diabetes Continuum of Care Among Low-Income Adults: A Difference-in-Differences Analysis," American Journal of Preventative Medicine 60, no. 2 (2021): 189-197, https://doi.org/10.1016/j.amepre.2020.08.13.

134 Boulton, A., et al, "Comprehensive Foot Examination and Risk Assessment: A Report of the Task Force of the Foot Care Interest Group of the American Diabetes Association, with endorsement by the American Association of Clinical Endocrinologists," Journal of Diabetes Care 31, no. 8 (2008): 1679-1685, https://doi.org/10.2337/dc08-9021.

135 Pop-Busui, R., Robers, L., Pennathur, S., Kretzler, M., Brosius, F., Feldman, E., "The Management of Diabetic Neuropathy in CKD and Dialysis Patients," American Journal of Kidney Disease 55, no. 2 (2014): 265-385, doi:10.1053/j.ajkd.2009.10.050.

136 Hall, Y., Rodriguez, R., Boyko, E., Chertow, G., O'Hare, A., "Characteristics of Uninsured Americans with Chronic Kidney Disease," Journal of General Internal Medicine 24, no. 8 (2009): 917-922, doi:10.1007/s11606-009-1028-3.

137 Thorsness, R., et. al., "Medicaid Expansion and Incidence of Kidney Failure among Nonelderly Adults," Journal of the American Society of Nephrology 32, no. 6 (2021): 1425-1435, https://doi.org/10.1681/ASN.20202101511.

138 "South Carolina," National Center for Health Statistics, Centers for Disease Control and Prevention, accessed July 7, 2021, https://www.cdc.gov/nchs/pressroom/states/southcarolina/sc.htm.

139 "Cardiovascular Diseases in South Carolina," Annual Report, America's Health Rankings, accessed July 7, 2021, https://www.americashealthrankings.org/explore/annual/measure/CVD/state/SC.

140 "Cardiovascular Diseases in South Carolina," Annual Report, America's Health Rankings, accessed July 7, 2021, https://www.americashealthrankings.org/explore/annual/measure/CVD/state/SC.

141 "Interactive Atlas of Heart Disease and Stroke," Centers for Disease Control and Prevention, accessed July 7, 2021, https://www.cdc.gov/dhdsp/maps/atlas/index.htm.

142 "Cardiovascular Diseases in South Carolina," Annual Report, America's Health Rankings, accessed July 7, 2021, https://www.americashealthrankings.org/explore/annual/measure/CVD/state/SC.

143 "Cardiovascular Diseases in South Carolina," Annual Report, America's Health Rankings, accessed July 7, 2021, https://www.americashealthrankings.org/explore/annual/measure/CVD/state/SC.

144 Breathett KK, Xu H, Sweitzer NK, et al., "Affordable Care Act Medicaid expansion then and now: racial/ethnic differences in receipt of guideline-directed medical therapy during heart failure hospitalizations," Presented at: American Heart Association's Quality of Care & Outcomes Research Scientific Sessions 2020; May 15-16, 2020, Abstract 22, https://www.ahajournals.org/doi/10.1161/hcq.13.suppl_1.22.

145 Breathett KK, Xu H, Sweitzer NK, et al., "Affordable Care Act Medicaid expansion then and now: racial/ethnic differences in receipt of guideline-directed medical therapy during heart failure hospitalizations," Presented at: American Heart Association's Quality of Care & Outcomes Research Scientific Sessions 2020; May 15-16, 2020, Abstract 22, https://www.ahajournals.org/doi/10.1161/hcq.13.suppl_1.22.

146 Khatana, S., Bhatla, A., Nathan, A., et al., "Association of Medicaid Expansion with Cardiovascular Mortality," JAMA Cardiology 4, no. 7 (2019): 671-679, doi:10.1001/jamacardio.2019.1651.

147 Akhabue, E., Pool, L., Yancy, C., et al., "Association of State Medicaid Expansion with Rate of Uninsured Hospitalizations for Major Cardiovascular Events, 2009 – 2014," JAMA 1, no. 4 (2018): doi:10.1001/jamanetworkopen.2018.1296.

148 "Quick Profiles: South Carolina," State Cancer Profiles, National Cancer Institute, accessed July 7, 2021, https://statecancerprofiles.cancer.gov/quick-profiles/index.php?statename=southcarolina.

149 Martin, L., "Cancer Incidence Rates by Age," Cancer Center, WebMD, last modified June 20, 2020, https://www.webmd.com/cancer/guide/cancer-incidence-age.

150 Ory, M. G., Anderson, L. A., Friedman, D. B., Pulczinski, J. C., Eugene, N., & Satariano, W. A. (2014). Cancer prevention among adults aged 45-64 years: setting the stage. American journal of preventive medicine, 46(3 Suppl 1), S1–S6. https://doi.org/10.1016/j.amepre.2013.10.027.

151 Lam MB, Phelan J, Orav EJ, Jha AK, Keating NL. Medicaid Expansion and Mortality Among Patients With Breast, Lung, and Colorectal Cancer. JAMA Netw Open. 2020;3(11):e2024366. doi:10.1001/jamanetworkopen.2020.24366.

152 "Medicaid Expansion and Lung Cancer," American Lung Association, accessed July 7, 2021, https://www.lung.org/getmedia/13a5c27f-c3de-4b57-af22-bee6e578831c/medicaid-expansion-and-lcs-one-pager-2020-final(1).pdf.

153 Gan, T., Sinner, H., Walling, S., et al., "Impact of the Affordable Care Act on Colorectal Cancer Screening, Incidence and Survival in Kentucky," Journal of the American College of Surgeons 4, no. 1 (2019): 342-353.e1, https://doi.org/10.1016/j.jamcollsurg.2018.12.035.

154 Liu, Y., Colditz, G., Kozower, B., et al., "Association of Medicaid Expansion Under the Patient Protection and Affordable Care Act with Non-Small Cell Lung Cancer Survival," JAMA Oncology 6, no. 8 (2020):1289-1290, doi:10.1001/jamaoncol.2020.1040.

155 "Medicaid Expansion and Lung Cancer," American Lung Association, accessed July 7, 2021, https://www.lung.org/getmedia/13a5c27f-c3de-4b57-af22-bee6e578831c/medicaid-expansion-and-lcs-one-pager-2020-final(1).pdf.

156 Lee, A., Shah, K., Chino, J., Chino, F., "Changes in Cancer Mortality Rates after the Adoption of the Affordable Care Act," American Society of Clinical Oncology, 2020, https://meetinglibrary.asco.org/record/185990/abstract.

157 "SCAN Cancer Mortality Module," SCAN Cancer Incidence and Mortality, Department of Health and Environmental Control, accessed July 7, 2021, https://apps.dhec.sc.gov/Health/Scan/scan/index.aspx.

158 Alzheimer's Association, "2021 Alzheimer's Disease Facts and Figures: Special Report on Race, Ethnicity and Alzheimer's in America," Journal of Alzheimer's and Dementia 17, no. 3 (2021): 1-85, https://www.alz.org/media/documents/alzheimers-facts-and-figures.pdf.

159 "Early-Onset Dementia and Alzheimer's Diagnoses Spiked 373 Percent for Generation X and Millennials," Blue Cross Blue Shield Association, last modified February 27, 2020, https://globalalzplatform.org/2020/02/27/early-on-set-dementia-and-alzheimers-diagnoses-spiked-373-percent-for-generation-x-and-millennials/.

160 "2020 Annual Report South Carolina Alzheimer's Disease Registry," Arnold School of Public Health Office for the Study of Aging, accessed July 7, 2021, https://sc.edu/study/colleges_schools/public_health/documents/alzheimers_registry_report_2020.pdf.

161 Alzheimer's Association, "2021 Alzheimer's Disease Facts and Figures: Special Report on Race, Ethnicity and Alzheimer's in America," Journal of Alzheimer's and Dementia 17, no. 3 (2021): 1-85, https://www.alz.org/media/documents/alzheimers-facts-and-figures.pdf.

162 Rasmussen J, Langerman H., "Alzheimer's Disease - Why We Need Early Diagnosis," Degener Neurol Neuromuscul Dis., 9, no. 1 (2019):123-130, doi:10.2147/DNND.S228939.

163 "Social Security Disability," Financial and Legal Planning for Caregivers, Alzheimer's Association, accessed July 7, 2021, https://www.alz.org/help-support/caregiving/financial-legal-planning/social-security-disability.

164 "Medicaid Expansion Beneficial for Adults with Hypertension in the US," PharmacoEcon Outcomes News 834, no. 24 (2019: https://doi.org/10.1007/s40274-019-6124-y.

165 Wen, H., Johnston, K., Allen, L., Waters, T., "Medicaid Expansion Associated with Reductions in Preventable Hospitalizations," Health Affairs 38, no. 11 (2019): https://doi.org/10.1377/hlthaff.2019.00483.

166 Khatana, S., Bhatla, A., Nathan, A., et al., "Association of Medicaid Expansion with Cardiovascular Mortality," JAMA Cardiology 4, no. 7 (2019): 671-679, doi:10.1001/jamacardio.2019.1651.

167 Keith, K., "Final Coverage Provisions in the American Rescue Plan and What Comes Next," Following the ACA, Health Affairs Blog, last modified March 11, 2021, https://www.healthaffairs.org/do/10.1377/hblog20210311.725837/full/.

168 Mitchell, A., "American Rescue Plan Act of 2021 (P.L. 117-2): Private Health Insurance, Medicaid, Chip and Medicare Provisions," Congressional Research Service, last modified April 27, 2021, https://crsreports.congress.gov/product/pdf/R/R46777.

169 "Medicaid's Federal Medical Assistance Percentage (FMAP)," Congressional Research Service, last modified July 29, 2020, https://sgp.fas.org/crs/misc/R43847.pdf.

170 "Medicaid's Federal Medical Assistance Percentage (FMAP)," Congressional Research Service, last modified July 29, 2020, https://sgp.fas.org/crs/misc/R43847.pdf.

171 Keith, K., "Final Coverage Provisions in the American Rescue Plan and What Comes Next," Following the ACA, Health Affairs Blog, last modified March 11, 2021, https://www.healthaffairs.org/do/10.1377/hblog20210311.725837/full/.

172 Keith, K., "Final Coverage Provisions in the American Rescue Plan and What Comes Next," Following the ACA, Health Affairs Blog, last modified March 11, 2021, https://www.healthaffairs.org/do/10.1377/hblog20210311.725837/full/.

173 Rudowitz, R., Corallo, B., Garfield, R., "New Incentive for States to Adopt the ACA Medicaid Expansion: Implications for State Spending," Kaiser Family Foundation, last modified March 17, 2021, https://www.kff.org/coronavirus-covid-19/issue-brief/new-incentive-for-states-to-adopt-the-aca-medicaid-expansion-implications-for-state-spending/.

174 Rudowitz, R., Corallo, B., Garfield, R., "New Incentive for States to Adopt the ACA Medicaid Expansion: Implications for State Spending," Kaiser Family Foundation, last modified March 17, 2021, https://www.kff.org/coronavirus-covid-19/issue-brief/new-incentive-for-states-to-adopt-the-aca-medicaid-expansion-implications-for-state-spending/.

175 Manatt Health, "Accessing the Fiscal Impact of Medicaid Expansion Following the Enactment of the American Rescue Plan Act of 2021," Princeton University, last modified April 2021, https://www.shvs.org/wp-content/uploads/2021/04/ARP-Medicaid-Expansion.pdf.

176 Straw, T., Lueck, S., Katch, H., Solomon, J., Broaddus, M., Lukens, G., "Health Provisions in American Rescue Plan Act Improve Access to Health Coverage During COVID Crisis," Health, Center on Budget and Policy Priorities, last modified March 11, 2021, https://www.cbpp.org/research/health/health-provisions-in-american-rescue-plan-act-improve-access-to-health-coverage.

177 "Table S0101: Age and Sex, 2010 1-year estimate," American Community Survey, United States Census Bureau, accessed July 2, 2021, https://data.census.gov/.

178 "Table S0101: Age and Sex, 2019 1-year estimate" American Community Survey, United States Census Bureau, accessed July 2, 2021, https://data.census.gov/.

179 Ory, M. G., Anderson, L. A., Friedman, D. B., Pulczinski, J. C., Eugene, N., & Satariano, W. A. (2014). Cancer prevention among adults aged 45-64 years: setting the stage. American journal of preventive medicine, 46, (2013), https://doi.org/10.1016/j.amepre.2013.10.027.

180 "Interactive Atlas of Heart Disease and Stroke," Centers for Disease Control and Prevention, accessed July 7, 2021, https://www.cdc.gov/dhdsp/maps/atlas/index.htm.

South Carolina Institute of
Medicine & Public Health

The South Carolina Institute of Medicine & Public Health (IMPH) is a nonpartisan, nonprofit organization working to collectively inform policy to improve health and health care in South Carolina. In conducting its work, IMPH takes a comprehensive approach to advancing health issues through data analysis and translation and collaborative engagement. The work of IMPH is supported by a diverse array of public and private sources. This policy brief was produced with support from AARP. Please direct any questions to info@imph.org.

1301 Gervais Street, Suite 300
Columbia, SC 29201

imph.org