

# THE MENTAL HEALTH LANDSCAPE FOR OLDER ADULTS IN THE US

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# **Executive summary**

Aging into older adulthood introduces many mental health stressors, such as physical decline, losses of loved ones, and reduced mental acuity. These stressors may lead to a diagnosable mental illness or result in frequent bouts of psychological distress that do not meet the criteria of a diagnosable illness. Regardless of clinical diagnosis, psychological distress can impair functioning for adults ages 65 and older. In "The mental health landscape for older adults in the U.S.," we extend the conception of the need for mental health care as stretching beyond using diagnosis as the principal indicator of need. We apply this perspective to analyze the need for mental health care and policy solutions to address the related sources of impairment faced by older adults.

This paper employs data from the National Survey on Drug Use and Health (NSDUH), the Health and Retirement Study (HRS), the HRS Consumption and Activities Mail Survey, and Wide-ranging Online Data for Epidemiologic Research. Together, these data sources allow us to describe the state of mental health of older adults in the United States. We examine rates of diagnosis of mental illness; indicators of isolation, loneliness, and suicidal behavior; interconnections between symptoms of depression and functional impairments, as identified by activities of daily living (ADLs) and instrumental ADLs (IADLs), referring to more complex tasks associated with living independently; the association between symptoms of depression and economic circumstances; and markers of access to care.

We first examine the prevalence of mental illness and suicide among older adults. Rates of mental illness vary by demographic group. Non-Hispanic Black and lower income older adults are most likely to experience mental illness and substance use disorder (SUD). Women are more likely to experience mental illness, but men are more likely to experience SUD. The prevalence of mental illness remained relatively consistent between 2010 and 2019. Those ages 85 and older are most likely to experience symptoms of depression, while adults between ages 65 and 74 are most likely to experience alcohol use disorder (AUD). Across all age groups, men have significantly higher suicide rates than women. The most striking difference is between men and women ages 85 and older: women in this age group have the lowest suicide rate among all older adults, while men have the highest by a significant margin. Non-Hispanic older white adults also tend to have the highest suicide rate within our sample. There has been an uptick in suicides since the mid-to-late 2000s, particularly pronounced for men 85 and older since 2018. The difference in prevalence between mental illness and suicide reinforces the complex causes of suicide, where mental illness is one among several risk factors. Additionally, although we highlight rates of any mental illness (AMI), serious mental illness (SMI), symptoms of depression, SUD, and AUD, we emphasize the heavy burden that sub-clinical levels of psychological distress, meaning the experience of symptoms of a mental health condition that do not rise to the level of a diagnosis, also place on older adults.

Social isolation, functional impairment, and financial insecurity appear to play a large role in the experience of poor mental health and psychological distress. Those with symptoms of depression are more likely to feel lonely often, are more likely to live alone, and have smaller social networks. Additionally, those with functional limitations, both ADLs and IADLs, are more likely to have symptoms of depression and AUD. Rates of symptoms of depression increase

as the degree of functional impairment increases. Prevalence of symptoms of depression is also highest among those in the lowest income and asset quintile. Those with symptoms of depression spend more of their income and save less. These patterns appear to be driven by the share of income spent on housing and food. We also examine the interaction between these stressors. Rates of symptoms of depression are highest among individuals with both lower income and functional limitation. Within levels of the income distribution, individuals with functional impairment have higher rates of symptoms of depression than those without. Yet, those at the top of the income distribution have lower rates of symptoms of depression than those with lower incomes regardless of disability level, indicating that higher levels of income likely afford greater access to supports which mitigate the negative effects of aging on autonomy and connection.

Access to health insurance and mental health care varies among older adults. Individuals with past year SMI were most likely to be covered by Medicare alone. This implies that a significant share of people with a serious mental illness who are only covered by Medicare are likely to experience financial pressure due to their high level of treatment need. There are also disparities in access to care by demographic characteristics and medical diagnosis. Conditional on past year mental illness, female, non-Hispanic white, and higher income older adults were most likely to use mental health care. A larger share of individuals with SMI received care than the share for individuals with AMI. However, among all older adults who received mental health care in the past year, over half did not meet diagnostic criteria for mental illness. We interpret the large share of treatment resources used by people with sub-clinical levels of distress as, in part, a reflection of the complex influences on the mental well-being

of older adults. The setting in which care is received also differs by markers of illness, severity, and complexity. Regardless of mental health status, care was accessed most heavily through telehealth services. Besides telehealth, private therapists are most often seen by older adults with depression or no diagnosis of a mental illness, compared to mental health clinics being utilized most by older adults with AMI, SMI, or depression with severe role impairment. In general, care for SUD is accessed at a significantly lower rate than care for mental illness. Among those with SUD that received treatment, the most common locations of care are inpatient or outpatient rehab facilities and self-help groups.

Overall, we find that the experience of mental health among older adults is wide-ranging. There are large racial, ethnic, gender, and income disparities in rates of mental illness, SUD, and suicide. Additionally, there is a significant connection between mental health, physical impairments, and economic disadvantage - all of which may exacerbate challenges related to aging. Many older adults with mental illness are not receiving treatment, suggesting barriers to accessing care such as underinsurance, financing, and stigma. In contrast, most older adults receiving care do not have a diagnosable mental health condition. Further attention must be paid to the disruptive effects of sub-clinical levels of psychological distress in older adults. Together, these observations suggest that mental health and the need for behavioral health services among older adults would benefit from a wider view than standards of care modeled for younger populations. Therefore, we recommend increased support to mitigate the stressors of aging and embedding flexibilities in insurance plans to address the mental health needs of older adults more adequately.

# Introduction

Mental illnesses are disruptive of functioning and well-being throughout the life cycle. Among younger adults, mental illnesses disrupt career development, the establishment of social relations, and the stability of family relations. The results of mental illnesses early in life are scars that last into middle age and beyond. Aging introduces a host of new sources of mental health stressors. These include physical decline, shrinking social networks, losses of friends and loved ones, and reduced mental acuity. In some cases, these stressors lead to diagnosable mental illnesses, most frequently anxiety and depression. In other cases, these stressors related to aging create frequent bouts of psychological distress that do not rise to the criteria of a diagnosable illness. Nevertheless, psychological distress can impair functioning such as selfcare, household maintenance, work, and the ability to remain engaged with friends and family.

In this paper, we analyze the state of mental health of older adults ages 65 and over in the United States. We do so through examining rates of diagnosis, in addition to indicators of isolation, loneliness, and suicidal behavior. Further, we examine the interconnections between symptoms of depression and activities of daily living (ADL) and instrumental activities of daily living (IADL) impairments. In this analysis, we extend the conception of need for mental health care beyond the meeting of criteria for a diagnosis as the principal indicator of need.

We also examine the association between symptoms of depression and economic circumstances as measured by income, assets, and spending patterns. This serves to shed light on how older adults with mental illnesses spend the money they have. Based on those analyses, we assess the degree to which this population can meet their basic needs with their existing resources. We also consider the financial protection provided by health insurance, and the consequences that has for addressing their mental health needs. Our view of mental illness and psychological distress among older adults is likewise applied to our interpretation of utilization patterns for mental health care.

Finally, we identify some implications for addressing unique policy challenges related to the mental health needs of older adults. We emphasize the importance of a multifaceted approach to improve mental health care for older adults.

# Data sources and analytical methods

We use both the National Survey on Drug Use and Health (NSDUH) and the Health and Retirement Study (HRS) to explore the mental health status of Americans ages 65 and older. Conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), the NSDUH is an annual survey providing nationally representative data on substance use, substance use disorders, mental health conditions, and the receipt of substance misuse and mental health treatment among the civilian, noninstitutionalized population aged 12 or older in the United States. The survey includes residents of households, people in noninstitutional group quarters, such as those living in shelters or boarding houses, and civilians living on military bases. People who are experiencing homelessness who do not use shelters, active military personnel, and residents of institutional group quarters, such as those living in nursing homes, jails, or long-term care hospitals, are not included in the survey. Prior to 2020, the NSDUH conducted face-to-face household interviews, transitioning to both face-to-face and webbased interviews in 2020. Due to this administrative change, survey data before and after 2020 are not comparable (SAMHSA, 2023a). Additionally, because of disruptions in data collection in 2020 due to the onset of the COVID-19 pandemic, estimates from 2020 are not comparable to estimates from 2021 or subsequent years. We utilize the 2021 analytic population weights included in the original data release in our analysis of the 2021 public use file.

In our analyses of NSDUH public use files from 2008 to 2019 and 2021, we include only survey respondents ages 65 and older. The 2021 public use file includes survey responses from nearly 5,500 older adults. We focus on variables measuring past year mental health,

such as the experience of past year mental illness, substance use disorder, receipt of mental health or substance use disorder care, and the role of insurance in relation to an individual's ability to access care. Many variables regarding mental health status in the NSDUH are imputed from data captured in the survey. All estimates reported using NSDUH data reflect the inclusion of person-level analysis weights.

The variables in the NSDUH for "any mental illness" (AMI) and "serious mental illness" (SMI) are constructed based upon survey respondent data on psychological distress, impairment from experiencing emotional distress, serious thoughts of suicide in the past year, past year major depressive episode (MDE), and age (SAMHSA, 2022). The algorithm used to construct these variables follows diagnostic criteria specified within the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV). AMI and SMI are differentiated by the level of functional impairment experienced from psychological distress. AMI among adults is defined by an individual at any time in the past year having a diagnosable mental, behavioral, or emotional disorder, regardless of the level of impairment in carrying out major life activities. SMI is characterized by a diagnosable disorder resulting in substantial impairment in carrying out major life activities. Major depressive episode (MDE) is based on the presence of 5 or more of 9 symptoms associated with MDE, with symptoms occurring nearly every day in the same 2-week period in most cases. Symptoms include depressed mood, diminished interest or pleasure, insomnia, fatigue, and thoughts of death. Finally, substance use disorder (SUD) was defined as meeting DSM, 5th edition (DSM-5) criteria for a disorder involving one or more drugs or alcohol.

In addition to the NSDUH, we also use data from the HRS. The HRS is a biannual, longitudinal panel survey conducted with a representative sample of nearly 20,000 Americans over the age of 50 (HRS, n.d.). The HRS provides a comprehensive perspective on aging within the United States. We use the cleaned and pro-

cessed RAND-HRS and RAND-HRS-Consumption and Activities Mail Survey (HRS-CAMS) files produced by the RAND Corporation. The RAND-HRS (herein referred to as the HRS) is a user-friendly subset of data from the HRS-core survey and includes information on demographics, employment, mental health, functional limitations, among other topics. It also includes imputed variables relating to wealth and income presented in this paper. We use the HRS-CAMS to understand patterns of spending among older adults with mental illness. The HRS-CAMS is a representative, sub-sample of the HRS-core population. This survey was first distributed in 2001 to 5,000 households and has since been distributed biannually (RAND, 2023). Again, the RAND-HRS-CAMS is simply a user-friendly version of the HRS-CAMS with cleaned and processed data.

For our analysis, we limit our sample to individuals 65 years of age or older and exclude those living in nursing homes. We only focus on data collected in 2018, thus, treating the dataset like a cross-sectional survey. Our analysis sample includes over 11,790 individuals surveyed by the HRS-core, and 2,289 individuals surveyed by the HRS-CAMS. Finally, the HRS only collects data on depression and drinking behaviors, so we impute two indicators of mental health status - clinically significant symptoms of depression and alcohol use disorder (AUD). The HRS includes responses to the Center for Epidemiologic Studies Depression Scale (CES-D), a questionnaire that asks respondents to identify the number of times they experienced eight symptoms of depression in the last week.2 We then classify an individual as having clinically significant symptoms of depression (hereby referred to as symptoms of depression) if they score 4 or higher on the scale (Steffick, 2000). We define AUD based on SAMHSA's definition of heavy alcohol use (NIAAA, 2023). Men who consume 5 or more drinks in a sitting at least 5 times per month and women who consume 4 or more drinks in a sitting at least 5 times per month are classified as having an alcohol use disorder. For the remainder of this analysis, we present data from both the NSDUH and HRS.

# The state of mental health of older adults

### RATES OF MENTAL AND BEHAVIORAL HEALTH DISORDERS

Using data from the NSDUH, Table 1 reports that in 2021, 11.5% of older adults were estimated to meet DSM criteria for AMI in the past year. Slightly over 1% were estimated to meet criteria for SMI in the past year, and 8% met criteria for a SUD in the past year. Benchmarking against the population ages 18-64 years old, in the past year, about a quarter of individuals experienced AMI, roughly 7% experienced SMI, and 20% experienced SUD, including AUD. Past year prevalence among those 65 and older varies by demographic group. Past year prevalence of AMI and SMI are higher among women than men.<sup>3</sup> In contrast, prevalence of past year SUD among men is nearly double that of women. By race and ethnicity, the prevalence rate of past year AMI and SUD is highest among non-Hispanic Black older adults and past year SMI is highest among non-Hispanic white adults. The prevalence of past year AMI, SMI, and SUD are highest among older adults with total family income of less than \$40,000.

### TABLE 1:

# Prevalence of Past Year Mental Health Among Adults Aged 65 and Older

	AMI	SMI	SUD					
Overall	11.5%	1.2%	7.8%					
Gender	Gender							
Female	13.9	1.7	5.7					
Male	8.6	0.6	10.5					
Race								
Black, non-Hispanic	13.0	1.0	10.4					
Hispanic	11.3	1.1	8.0					
Other Race	12.0	0.1	6.9					
White, non-Hispanic	11.3	1.4	7.6					
Income								
Less than \$20,000	15.6	2.6	8.7					
\$20,000 - \$39,999	12.8	0.9	8.8					
\$40,000 - \$74,999	7.0	0.2	6.1					
\$75,000 +	6.7	0.2	6.7					

**NOTE:** Authors' analysis of the 2021 NSDUH public use file. AMI: any mental illness; SMI: serious mental illness; SUD: substance use disorder.

Table 2 presents the overall prevalence of AUD and symptoms of depression across various demographic groups using data from the HRS. Table 2 shows that symptoms of depression are far more prevalent among older adults than AUD. In 2021, 8.3% of all Americans ages 18 and older and 2.8% of Americans ages 65 and older experienced an episode of major depression as measured by the NSDUH (SAMHSA, 2023b). However, as shown in Table 2, 11.8% of older adults are experiencing symptoms of depression. Both major depression and symptoms of depression require professional care and are associated with the adverse social and health outcomes of a depressive disorder. For the remainder of our analysis with the HRS, we focus on symptoms of depression. Additionally, 2.0% of older adults are experiencing AUD, compared to 13.1% of individuals 18-64 who have AUD. Finally, 0.3% of those 65 years and older experience both AUD and symptoms of depression. Because of low prevalence, it was not feasible to accurately report the rates of both AUD and symptoms of depression across demographic groups. For the remainder of this analysis, AUD and symptoms of depression are presented separately. It is important to note, however, that the low prevalence of AUD might

### TABLE 2:

# Prevalence of Past Year AUD, Symptoms of Depression, and Both Among Older Adults

	Symptoms of Depression	AUD	Both
Overall	11.8%	2.0%	0.3%
Race			
Black, non-Hispanic	17.8	2.6	
Hispanic	18.9	2.7	
White, non-Hispanic	10.0	1.9	
Age			
65-75	11.6	2.8	
75-85	11.2	1.5	
85+	13.4	0.6	
Gender			
Female	13.4	0.9	
Male	9.8	3.4	
Poverty Status			
Above FPL	10.2	1.9	
Below FPL	26.9	3.3	

**NOTES:** Authors' analysis of 2018 HRS. AUD: alcohol use disorder. Symptoms of depression indicates  $CES-D \ge 4$ .

be a definitional error rather than a true absence of AUD among the older population.<sup>4</sup>

Among those ages 65 and older, women are more likely to experience symptoms of depression while men are more likely to experience AUD.5 Black and Hispanic individuals are more likely to experience symptoms of depression and AUD compared to white individuals. Those 85 and older are the most likely to be experiencing symptoms of depression, but those 65-74 are the most likely to be experiencing AUD. As will be discussed further in this paper, symptoms of depression are strongly associated with functional limitations which are more likely to manifest as individuals get older. Finally, some of the largest differences in rates of mental illness are between those above and below the federal poverty level (FPL). Those below the FPL are 74% more likely to have AUD and 164% more likely to have symptoms of depression compared to those above the FPL.

According to SAMHSA, approximately 20% of adults 65 and older will experience mental health issues (SAMHSA, 2019). As explored in Tables 1 and 2, the likelihood of experiencing poor mental health varies by demographic group and life circumstance. The COVID-19 pandemic contributed to increasing psychological distress. About one in four older adults reported experiencing anxiety or depression in August 2020, with higher rates among those who are female, Hispanic, low-income, in relatively poor health, who live alone, or who had experienced a recent loss of employment income in their household (Koma et al., 2020). Although the period following the onset of the pandemic presented a unique set of mental health stressors, they tended to reflect patterns that existed before the pandemic began.

Mental health is associated with the presence of other personal care needs. The Centers for Disease Control and Prevention (CDC) estimates that roughly 13.5% of those who require home healthcare experience major depression (CDC, 2023a). It is important to consider such prevalence estimates in relation to the experience of older adults living in care facilities. A striking share of adults 85 and older live in nursing homes:

this share was about 12% of women and nearly 7% of men in 2020 (Caplan & Rabe, 2023). Various studies in Germany have found that roughly 30% of nursing home residents experience minor or major depression (Tesky et al., 2019; Kramer et al., 2009).

Suicidal ideation and acts may follow in the wake of compromised mental and physical well-being. Baby boomers born between 1946 and 1964 have had a relatively higher suicide rate at any given age compared to other birth cohorts (Tisdale, 2022). Given that by 2030, over 71 million Americans will be age 65 or older, historically high suicide rates among this cohort has implications for increased suicide rates among older adults in the future. However, not all older adults face the same risk of suicide. In the following section, we study the relationship between suicide among older adults and different demographic characteristics.

# RATES OF SUICIDE AND SUICIDAL IDE-ATION

Suicide rates among older Americans are striking and show persistent patterns by age group, gender, race, and ethnicity over time. We study trends using National Center for Health Statistics (NCHS) Underlying Cause of Death Mortality Data, sourced from the CDC Wide-ranging Online Data for Epidemiologic Research (WONDER) repository (CDC, 2023b). We report suicide rates over time for four groupings: non-Hispanic white, non-Hispanic Black, Hispanic, and individuals of other races.<sup>6</sup>

Striking differences emerge when comparing suicide rates over time between men and women over age 65 (Figure 1). For women of all age groups, the suicide rate has remained relatively flat, fluctuating between around 3 to 6 deaths per 100,000 every year, with only slight deviations since 2005. Women ages 85 and over have the lowest suicide rate. In contrast, men ages 85 and over have had the highest suicide rate over the period, reaching a peak of nearly 60 deaths per 100,000 in 2000 – only for that rate to follow a slightly downward trend until 2010, before following a slightly upward trend over the next decade, reaching a rate of roughly 56 deaths per 100,000 in 2021.

### FIGURE 1

### Crude Suicide Rate per 100,000 Older Adults, 1999-2021

By Gender and Age Groups

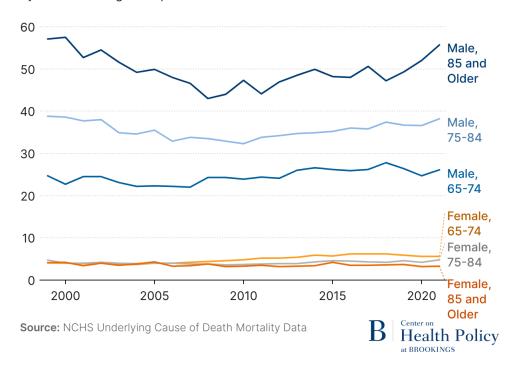


Figure 2 shows that non-Hispanic Black Americans ages 65 and older consistently have had the lowest suicide rate over the past two decades. In contrast, non-Hispanic older white Americans had the highest suicide rates since around 2007, with those ages 85 and over representing the highest rate at roughly 24 per 100,000 deaths in 2020. Hispanic older adults have also experienced lower suicide rates over time compared to older non-Hispanic white adults. Since 2010, the suicide rate among all Hispanic adults of each age group has converged to around 7 deaths per 100,000. It is important to note that the death rate from suicide among all American Indian or Alaska Native (AIAN) adults is significantly higher than all other racial groups (Stone et al., 2022). However, we were unable to study suicide rates among AIAN older adults at our age thresholds due to data limitations. Given the previously described data constraints, the estimates for other races are less precise, as seen by the larger fluctuation in suicide rate from year to year. However, around 2010, the suicide rate trends towards that of Hispanic older adults. Among individuals of other race, those 85 and older exhibited the highest suicide rate

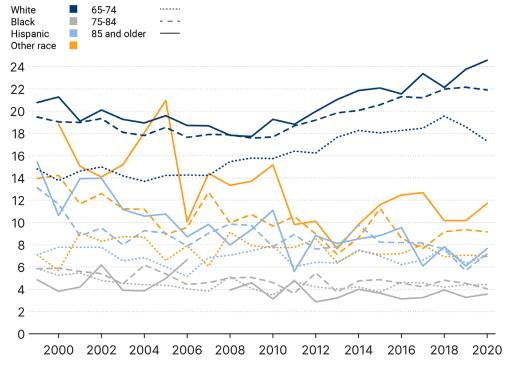
while those ages 65-74 experienced the lowest rate of suicide consistently over the period. These figures point to the high suicide rate among older adults in the United States being driven primarily by non-Hispanic white men, ages 85 and older.

While the specific factors driving these high suicide rates cannot be ascertained from these data alone, in later sections we present evidence on the possible role of loneliness and social isolation in the experience of mental illness and suicide risk among older adults. It is also relevant to note the growing body of research that suggests the importance of not relying primarily on depression as the greatest predictor of suicide risk. Evidence shows that effective suicide prevention treatments target suicidal thoughts and behaviors directly, as opposed to the traditional approach of treating the underlying mental health disorder alone (Hogan & Grumet, 2016). Understanding the biological, psychological, and social risk factors that older adults face can inform the most effective depression and suicide prevention efforts.

### FIGURE 2

### Crude Suicide Rate per 100,000 Older Adults, 1999-2020

By Race/Ethnicity and Age Groups



**Source:** NCHS Underlying Cause of Death Mortality Data

B | Health Policy

**Note:** Other race includes data when available for American Indian or Alaska Native, Asian or Pacific Islander, and Black and white individuals with unstated Hispanic origin. Data unavailable in 2007 for Black adults ages 85 and older.

### RATES OF MENTAL ILLNESS OVER TIME

We can view trends in past year mental illness among adults ages 65 and older using multiple years of data from the NSDUH. We construct a panel of data using NSDUH public use files from 2010 to 2019. Given that the NSDUH is not a longitudinal survey, the following figures identify trends of yearly point in time prevalence estimates.<sup>7</sup>

Prevalence of past year AMI among adults ages 65 and older has remained relatively consistent since 2010 (Figure 3). On average, 12% of this population has experienced any mental illness in any given year, while slightly more than 1% has experienced SMI in the past year on average.

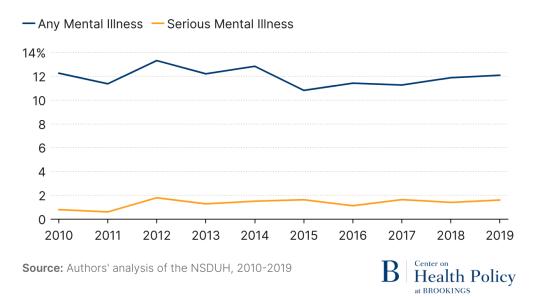
Women consistently experience a higher prevalence of AMI compared to men (Figure 4). While yearly prevalence of past year AMI has ranged between nearly 13% in 2010 and 16% in 2014 among women, past year prevalence of AMI among men over the period never surpassed 12%. The highest past year prevalence of AMI among men was 12% in 2010, compared to a low of 8% in 2018. Yet Figure 4 shows that rate of illness has increased for men at the end of the time series while it declined for women.

A similar pattern persists with the experience of past year SMI. Therefore, women face higher prevalence of mental illness, and definitionally, are more likely to experience greater impairment from mental illness than men. These gendered differences have implications for the population of older adults in the United States.

Given the previously reported higher suicide rates among men versus the higher prevalence of mental illness among women, this evidence suggests different mental health care needs between men and women. Furthermore, differential levels of mental health care need have implications for the accessibility and efficacy of other types of care for older adults, such as home and community-based services (HCBS).

### FIGURE 3

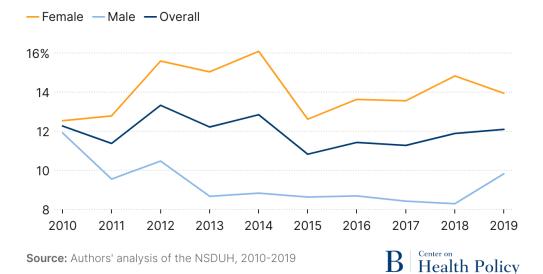
# Past Year Prevalence of Mental Illness Among Older Adults, 2010-2019



### FIGURE 4

# Past Year Prevalence of Any Mental Illness Among Older Adults, 2010-2019

By Gender



at BROOKINGS

### SOCIAL ISOLATION AND PSYCHOLOGI-CAL DISTRESS

Social isolation is prevalent among older adults. A recent review of research estimated that roughly 24% of community-living older adults are socially isolated (National Academies of Sciences, Engineering, and Medicine [NASEM], 2020).8 There is a substantial body of evidence showing that social isolation and related loneliness can have strong impacts on the health and well-being of older adults. The interrelation of social isolation and mental illnesses is both significant and complex. There is evidence of two-way causation between mental health and social isolation. This is especially the case for depression, which is evidenced by longitudinal analyses that make causal inferences from the sequential ordering of isolation and depression (McHugh Power et al., 2020; Domènech-Abella et al., 2019; NASEM, 2020). That body of research further highlights how social isolation, loneliness, and depression are also intertwined with elevated risks of dementia and suicide. For these reasons, we assess correlates of social isolation and loneliness as indicative of potentially compromised mental well-being and risk factors for mental illnesses.

An important reason for reporting on indicators of depression and social isolation together is that reviewed research suggests that declines in social contacts can have impacts on functioning like those associated with depression (NASEM, 2020). These include reduced executive function and slower processing speed, holding constant symptoms of depression, which also correlated with suicidal ideation. In Table 3, we report indicators of social isolation and loneliness according to the presence or absence of symptoms of depression and AUD. The panel on social networks highlights the prevalence of social interaction by the presence of symptoms of depression (CES-D ≥ 4). Those with symptoms of depression are 44% more likely to live alone, 25% more to have no children and live alone, and 46% more likely to be retired in addition to having no children and living alone as compared to those without symptoms of depression. Those with AUD are 23% more likely to live alone, 72% more likely to have no children and live alone, and 90% more likely to be retired, living alone, and have no children as compared to those without AUD.

We also examine the relationship between self-reported loneliness and symptoms of depression using the University of California, Los Angeles (UCLA) Loneliness Scale. The UCLA Loneliness Scale is a measure based on data from the HRS self-administered Leave Behind Psychological and Lifestyle (LB) survey. This questionnaire is "left-behind" for a rotating 50%

### TABLE 3

# Social Networks, Symptoms of Depression, and Loneliness

	CES-D < 4	CES-D ≥ 4	No AUD	AUD			
Social Networks							
Lives Alone	23.9%	34.4%	24.4%	30.0%			
Lives Alone, No Kids	5.2	6.5	5.0	8.6			
Lives Alone, No Kids, and Retired	3.9	5.7	3.9	7.4			
UCLA Loneliness Scale							
Not Lonely	16.0	2.9					
Often Lonely	11.3	36.8					

**NOTES:** Authors' analysis of the HRS and LB Questionnaire in 2018. UCLA Loneliness Scale columns add up to 100% with additional category, "sometimes lonely," which we excluded from the table for clarity. CES-D  $\geq$  4 indicates the presence of clinically significant symptoms of depression.

subsample of the HRS-core, and includes questions related to well-being, social connection, personality, and lifestyle (Smith et al., 2023). In 2018, over 4,300 individuals completed the survey. The survey produces an overall score ranging from 1-3 with lower scores indicating less loneliness. Since the LB survey is conducted on a subset of the HRS-core population, we focus on symptoms of depression only.

Thus, the second panel of Table 3 provides additional evidence for the connection between loneliness and symptoms of depression. Those with symptoms of depression are more than twice as likely to often be lonely. Those with symptoms of depression are also less likely to report being not lonely compared to those without symptoms of depression. Even among people not experiencing any significant symptoms of depression, loneliness and indicators of isolation remain common and likely compromise a sense of well-being. Yet, systems currently invested in the well-being of older adults do not adequately address loneliness as a social driver of poor health. Investment in social infrastructure, rather than clinical interventions, are likely to be highly effective in reducing loneliness and, therefore, symptoms of depression (Gardiner et al., 2018).

# MENTAL HEALTH AND FUNCTIONAL IM-PAIRMENT

Table 4 presents the joint occurrences of disability and symptoms of depression or AUD among older adults. The HRS collects data on 6 activities of daily living (ADLs) - walking, dressing, bathing, eating, toileting, and getting into bed - and 5 instrumental activities of daily living (IADLs) - using the phone, managing money, taking medications, grocery shopping, and preparing meals. In our sample, 16% of older adults have at least one ADL and 13% of older adults have at least one IADL, and the prevalence of functional limitations increases with age. However, the effect of functional limitations on mental health is not well understood, and therefore, remains unacknowledged by current policies and programs. The intersection of functional limitations and mental health will only grow in relevance as the population continues to age.

Table 4 shows that rates of symptoms of depression increase with functional impairment, while rates of AUD decrease. Compared to those with less than 2 ADLs, those with 2+ ADLs are more than 4.3 times as likely to have symptoms of depression but are 48% less likely to have an AUD. Likewise, individuals with 2+ IADLs have elevated rates of symptoms of depression compared to those with less than 2 IADLs. As individuals develop more ADLs or IADLs, rates of symptoms of depression continue to rise. Each additional ADL or IADL is associated with a 3-7 percentage point increase in rates of symptoms of depression. Finally, we report the rates of symptoms of depression among those with IADLs but no ADLs. We find that those with 2+ IADLs but no ADLs were over 4 times as likely to have symptoms of depression as those with less than two IADLs and no ADLs.

### TABLE 4

### Prevalence of Past Year AUD and Symptoms of Depression Among Older Adults with Functional Impairments

	Symptoms of Depression	AUD
ADLs		
<2 ADLs	9.3%	2.1%
2+ ADLs	40.8	1.1
3+ ADLs	47.7	
4+ ADLs	50.7	
IADLs		
<2 IADLs	9.8	
2+ IADLs	45.8	
3+ IADLs	50.4	
IADLs (Among Tho	se With 0 ADLs)	
<2 IADLs	7.4	
2+ IADLs	30.8	

**NOTES:** Authors' analysis of 2018 HRS. We exclude AUD with increased functional impairment due to low prevalence. Symptoms of depression indicates CES-D  $\geq$  4.

# The financial circumstances of older adults

# INCOME AND WEALTH BY MENTAL HEALTH STATUS

Rates of symptoms of depression and AUD also vary with income and wealth. Table 5 stratifies rates of symptoms of depression and AUD by income and asset quintiles demonstrating that lower income and lower wealth older adults are more likely to have mental health issues. Rates of symptoms of depression in the lowest income quintile are 5.3 times that of the highest income guintile. Rates of AUD are 47% higher in the lowest income quintile. Similarly, in the lowest asset quintile, rates of symptoms of depression are 5.1 times that of the highest asset quintile, and rates of AUD are 2.5 times that of the highest asset quintile. Those with symptoms of depression have incomes that are nearly \$30,000 less per year compared to those without symptoms of depression, and those with AUD report incomes that are about \$7,000 less per year compared to those without. 10 Similarly, those with symptoms of depression have \$225,000 less in assets compared to those without symptoms of depression,

and those with AUD have \$127,800 less in assets compared to those without the condition.

Cross sectional data such as these limit the ability to draw inferences about the drivers of these patterns. Nevertheless, research shows that depression in teenage years and early adulthood affects economic and social well-being at age 50 and beyond. Thus, the patterns reported here likely reflect the fact that depression is a chronic recurring condition and that many adults arrived at age 65 with the economic and social disadvantages created earlier in life (Wang et al., 2023). While treatment of depression and AUD while young can have important impacts on the long-run health and financial stability of older adults, effective treatment of illnesses as they occur in older age has been shown to produce substantial benefits (Reynolds et al., 2022).

We can extend this analysis to also examine the intersections between disability, symptoms of depression, and income. Evidence from other research indicates

TABLE 5

# Prevalence of Past Year AUD and Symptoms of Depression by Income and Asset Quintile

Quintiles	1	2	3	4	5		
Income							
Median Household Income	\$13,620	31,600	57,912	99,188	203,150		
Symptoms of Depression	23.7%	12.9	8.7	6.4	4.4		
AUD	2.2%	2.2	2.5	1.7	1.5		
Assets							
Median Household Wealth	\$300	76,500	226,000	567,982	1,690,000		
Symptoms of Depression	23.7%	15.3	10.9	7.2	4.6		
AUD	3.0%	2.4	1.9	2.0	1.2		

**NOTES:** Authors' analysis of 2018 HRS. Symptoms of depression indicates CES-D ≥ 4.

that low-income individuals are more likely to have functional limitations (Choi et al., 2020; Minkler et al., 2006), and in this analysis, we have shown that rates of symptoms of depression are higher among lower-income individuals and those with functional limitations. Thus, it is unsurprising that rates of symptoms of depression are highest for those with both lower levels of income and higher rates of disability. Table 6 shows that those in the bottom 40% of the income distribution, with 2+ ADLs, are 7.8 times as likely to have symptoms of depression as those in the bottom 40%, with 2+ IADLs, are nearly 8 times as likely to have symptoms of depression as those in the top 60% with less than 2 IADLs.

However, the most striking result is the differential associations of rates of symptoms of depression with functional limitations versus income. ADLs, regard-

### TABLE 6

Prevalence of Symptoms of Depression Among Those with Differences in Income and Functional Limitations

	Symptoms of Depression
ADLs	
Bottom 40%, 2+ ADLs	43.1%
Top 60%, 2+ ADLs	34.9
Bottom 40%, <2 ADLs	14.5
Top 60%, <2 ADLs	5.5
IADLs	
Bottom 40%, 2+ IADLs	46.2
Top 60%, 2+ IADLs	44.4
Bottom 40%, <2 IADLs	15.1
Top 60%, <2 IADLs	5.8

**NOTES:** Authors' analysis of 2018 HRS. We exclude AUD with increased functional impairment due to low prevalence. Symptoms of depression indicates CES-D  $\geq$  4.

less of income, are linked to rates of symptoms of depression that are about 30 percentage points higher. Similarly, those with 2+ IADLs are between 30 to 40 percentage points more likely to have symptoms of depression compared to those with less than 2 IADLs regardless of income. This suggests that functional limitations may be a strong predictor of symptoms of depression in all older adult populations. These results also show that income may attenuate the mental health effects of functional limitations - those in the top 60% always have lower rates of symptoms of depression than those in the bottom 40% within disability level. It is likely that those with higher levels of income can afford the necessary support and assistance to mitigate the effects of aging on autonomy and connection.

### SPENDING BY MENTAL HEALTH STATUS

We used the HRS-CAMS to evaluate the relationship between mental health and household spending. Table 7 demonstrates that individuals with symptoms of depression, in addition to having lower incomes and fewer financial assets, spend a larger share of their income compared to the overall population. They also spend a higher share of their income on necessities compared to those without symptoms of depression. Necessities here include housing, transportation, utilities, food, and healthcare. The difference in spending between those with and without symptoms of depression is driven by two factors. First, as demonstrated in Table 5, those with symptoms of depression have lower incomes on average compared to those without symptoms of depression. Second, individuals with depression spend a larger share of their already lower income on housing and food.

# TABLE 7

# Median Total Expenditures and Expenditures as a Share of Income by Mental Health Status

	All	CES-D < 4	CES-D ≥ 4			
Spending						
Total Spending as Share of Income	83.9%	81.7%	95.5%			
Necessities Spending as Share of Income	50.6%	49.3%	67.2%			
Median Necessities Spending	\$23,053	23,990	16,456			
Housing						
Housing Spending as Share of Income	14.8%	14.6%	17.8%			
Median Housing Spending	\$7,300	7,600	5,350			
Transportation						
Transportation Spending as Share of Income	9.1%	9.4%	7.9%			
Median Transport Spending	\$4,407	4,750	2,400			
Utilities						
Utilities Spending as Share of Income	9.9%	9.6%	13.1%			
Median Utilities Spending	\$4,644	4,764	3,600			
Healthcare						
Healthcare Spending as Share of Income	5.5%	5.6%	4.9%			
Median Healthcare Spending	\$2,880	3,119	1,576			
Food	Food					
Food Spending as a Share of Income	10.9%	10.6%	13.4%			
Median Food Spending	\$5,400	5,600	4,019			

**NOTES:** Authors' analysis of 2018 CAMS-HRS. We are unable to include AUD due to low prevalence. CES-D ≥ 4 indicates the presence of clinically significant symptoms of depression.

# Access to care and treatment

# INSURANCE COVERAGE AND MENTAL ILLNESS

While nearly all older adults have insurance coverage from Medicare, coverage arrangements vary considerably and have implications for out-of-pocket burdens of health care. Table 8 shows that among those with past year AMI or past year SUD, the most common form of coverage is a combination of Medicare and private insurance. This reflects the purchase of Medicare supplements in the private market. Among those with past year SMI, Medicare alone is the most common form of coverage. Relying on only Medicare for coverage places significant financial burden on individuals through large out of pocket obligations due to the deductible, 20% coinsurance in Part B, and the absence of catastrophic coverage. This is notable because it implies that these people are subject to meaningful cost sharing for services unless they are covered by a Medicare Advantage (MA) plan. The fact that a significant share of people with SMI are only covered by Medicare suggests that their high level of treatment needs may impose significant financial pressures on them.

# RATES OF CARE UTILIZATION BY MENTAL HEALTH STATUS

Older adults with mental illnesses face various potential difficulties in gaining access to treatment for those conditions. These include greater exposure to costs such as higher copayments and deductibles, the limited supply of clinicians with expertise in treating older adults with mental illnesses, and the frequent isolation of older adults. Many older adults do not attempt to seek mental health care in the first place; this may be due to stigma, the fallacy that depression is deemed to be a "normal" part of aging, or the notion that mental health is less deserving of treatment than physical health. These factors result in older adults generally having lower treated prevalence for any mental illness and SUD compared to adults ages 18-64 years old. In 2021, among adults 18-64, roughly 47% with past year AMI, 65% with past year SMI, and 7% with past year SUD received treatment for the experienced condition.11

Table 9 reports the rates of utilization of services for either mental health or SUD care, among older adults with past year mental illness or SUD, respectively.

### **TABLE 8**

# Rates of Insurance, by Past Year Mental Health Status

Past Year Health Status	Uninsured	Medicare Only	Medicare and Private	Medicare and Medicaid	Private Only	Other Insurance
No MI or SUD	0.7%	27.7%	47.3%	7.1%	4.6%	12.5%
AMI	0.5	30.5	38.5	18.0	2.5	10.0
SMI	0.0	39.1	13.2	28.6	0.1	19.0
SUD	0.1	28.1	39.0	13.1	4.8	15.0

**NOTES:** Authors' analysis of the 2021 NSDUH public use file. AMI: any mental illness; SMI: serious mental illness; SUD: substance use disorder.

# Rates of Mental Health Care Use Conditional on Past Year Mental Health, Across Demographic Groups

	AMI	SMI	SUD				
Overall	36.8%	66.5%	3.5%				
Gender							
Female	40.4	73.5					
Male	29.6	42.1					
Race							
Non-white or Hispanic	25.3	98.4					
White, non-Hispanic	40.8	60.3					
<b>Poverty Status</b>							
Above FPL	37.7	75.4					
Below FPL	31.9	47.8					
Income							
Less than \$20,000	31.1						
\$20,000 - \$39,999	38.1						
\$40,000 - \$74,999	46.9						
\$75,000 +	45.2						

**NOTES:** Authors' analysis of the 2021 NSDUH public use file. AMI: any mental illness; SMI: serious mental illness; SUD: substance use disorder.

Overall, among adults ages 65 and older, about 37% of those with past year AMI and 66% of those with past year SMI received inpatient, outpatient, prescription medication, or virtual mental health treatment in the past year. Among those with past year SUD, only about 4% received treatment at any location for illicit drug or alcohol use in the past year. White adults with AMI received care at a higher rate than adults of other races, however, the opposite is true for adults with past year SMI. The rate of treated illness varies according to poverty status as one might expect. However, the differential rates are striking with respect to older adults with SMI. Older adults with SMI that have incomes

above the poverty level are nearly 1.6 times as likely to receive treatment as those below the poverty level. Table 9 emphasizes the consequences of incomplete financial protection for lower income adults with SMI.

A sizable number of older adults make use of mental health services even though they do not meet criteria for a diagnosable mental illness (Table 10). The first column demonstrates that among all adults that do not meet diagnostic criteria for a past year mental illness, roughly 9% received inpatient, outpatient, prescription medication, or virtual mental health treatment in the past year. Women and white adults

### TABLE 10

# Mental Health Care Use by Older Adults Not Meeting Diagnostic Criteria for Past Year AMI, Across Demographic Groups

	Share Who Used Care Among Those Without AMI	Share Without AMI Among Those Who Used Care
Overall	8.7%	64.4%
Gender		
Female	9.7	62.8
Male	7.5	65.0
Race		
Black, non-Hispanic	1.4	23.1
Hispanic	6.3	62.5
Other Race	6.1	81.1
White, non-Hispanic	10.0	65.8
Income		
Less than \$20,000	9.0	60.9
\$20,000 - \$39,999	7.4	56.9
\$40,000 - \$74,999	9.1	71.9
\$75,000 +	9.7	74.9

NOTES: Authors' analysis of the 2021 NSDUH public use file.

exhibited the highest access of care among those not meeting diagnostic criteria, in addition to those with incomes of greater than \$40,000 per year. The second column highlights that about 64% of older adults receiving mental health care did not meet diagnostic criteria for mental illness. For example, nearly 63% of women who received mental health care did not meet diagnostic criteria for a mental illness. Only 23% of Black adults who utilized mental health care services in the past year did not meet diagnostic criteria, representing the only demographic group for which those with a mental illness represent a larger share of those receiving treatment. Literature from the early 2000s validates these findings, as about half of those be-

tween the ages of 18 to 54 who receive mental health treatment did not meet diagnostic criteria for a mental disorder (Kessler et al., 2005). Over time, there has been an increase in mental health service utilization across individuals with varying degrees of psychological distress experienced (Olfson et al., 2019).

We interpret the large share of treatment resources used by people not meeting diagnostic criteria for a DSM-defined condition as a reflection of the complex influences on the mental well-being and functional status stemming from mental and emotional challenges. Compared to younger adults, older adults are more likely to be isolated, suffer significant personal

losses, and struggle with diminished capacity, all of which may lead to demands for mental health care even if DSM diagnostic criteria are not met. Among the entire population, a large share of treatment resources support individuals without a diagnostic condition. The elevated use of mental health services among older adults without mental illness exemplifies the serious nature of stressors related to aging. The combination of cognitive decline and symptoms of depression and anxiety, alongside social isolation and reduced physical function can result in significant impairment while potentially not leading to a diagnosable illness. At the same time use of services is also tied to economic status and may also result in only some people that do not meet DSM criteria for an illness being able to access treatment.

# SETTINGS OF MENTAL HEALTHCARE DE-LIVERY

The setting where care is received varies by markers of illness severity and complexity (Table 11). Among all older adults, regardless of mental health status, care was utilized most heavily via virtual telehealth

services. Among those with past year AMI, SMI, or MDE with severe role impairment, besides virtually, care was most often received at a mental health clinic or center. Among those with no past year mental illness, or with past year MDE, excluding telehealth, care was typically received in a private therapist's office. Inpatient care was utilized most heavily by those with past year SMI or MDE with severe role impairment.

In Table 12, we again highlight the use of mental health care by setting and mental health status, but this time, only for older adults who have received mental health care in the past year. While Table 11 above tells us about the accessibility of care overall among the older population with mental health care needs, Table 12 allows us to gain a clearer understanding of the settings in which care is most frequently sought. Virtual care is a widely popular care option, being the most frequently used across all mental health statuses. Receiving care at a mental health clinic or center is popular among those with past year SMI or MDE with severe role impairment. For those with no past year mental illness but who utilized mental health care, aside from a virtual service, care was most likely to be received

### TABLE 11

# **Use of Mental Health Care by Setting and Mental Health Status**

Location of Care	No Past Year MI	Past Year AMI	Past Year SMI	Past Year MDE	MDE with Severe Role Impairment
Day Hospital or Treatment Program	0.0%	0.3%	0.3%	0.1%	0.3%
Inpatient	0.4	2.9	14.6	6.3	13.5
Medical Clinic	0.1	1.4	1.4	4.3	0.5
Mental Health Clinic or Center	0.4	5.0	28.7	9.7	17.8
Non-Clinic Doctor Office	0.8	3.8	18.5	9.5	15.7
Private Therapist Office	1.2	4.9	7.3	10.7	7.3
Virtual	3.0	18.0	39.9	32.5	39.7
Other Outpatient Location	0.0	0.6	1.2	0.6	1.3

**NOTES:** Authors' analysis of the 2021 NSDUH public use file. AMI: any mental illness; SMI: serious mental illness; MDE: major depressive episode.

# Use of Mental Health Care by Setting and Mental Health Status, Among Older Adults Who Received Mental Health Care in the Past Year

Location of Care	No Past Year MI	Past Year AMI	Past Year SMI	Past Year MDE	MDE with Severe Role Impairment
Day Hospital or Treatment Program	0.1%	0.7%	0.4%	0.2%	0.4%
Inpatient	4.9	8.0	22.0	10.6	22.2
Medical Clinic	1.6	3.8	2.1	7.2	0.8
Mental Health Clinic or Center	4.8	13.6	43.2	16.3	29.2
Non-Clinic Doctor Office	9.4	10.3	27.9	16.1	25.7
Private Therapist Office	13.7	13.3	11.0	18.2	12.0
Virtual	34.1	48.5	60.1	54.9	64.9
Other Outpatient Location	0.2	1.7	1.8	1.0	2.1

**NOTES:** Authors' analysis of the 2021 NSDUH public use file. AMI: any mental illness; SMI: serious mental illness; MDE: major depressive episode.

### TABLE 13

# Use of Substance Use Disorder Care by Setting Among Older Adults with Past Year Substance Use Disorder

Location of Care	Past Year SUD	Past Year SUD and Received Treatment
Doctor Office	0.9%	25.0%
Emergency Room	0.1	3.9
Hospital Inpatient	0.9	25.4
Mental Health Center	0.8	21.7
Prison or Jail	0.0	0.0
Rehab Facility, Inpatient	2.4	66.6
Rehab Facility, Outpatient	2.3	65.8
Self-Help Group	2.3	65.4
Virtual	0.8	22.1

**NOTES:** Authors' analysis of the 2021 NSDUH public use file. SUD: substance use disorder. Treatment was received in the past year.

in a private therapist's office. Among those with past year AMI or past year MDE, aside from virtual services, care was also often sought at a private therapist office or a mental health clinic or center. For older adults, virtual mental health services appear to be an accessible avenue to receive care, particularly for those with mental health conditions that result in severe functional impairment.

Treatment for SUD is often sought in different care locations than treatment for mental health conditions. In general, SUD care is received at a lower rate than mental health care. In 2021, only about 4% of older adults with past year SUD received treatment at any location for their disorder (Table 9). In contrast, about 7% of adults with past year SUD ages 18-64 years old received treatment. 12 In Table 13 below, we explore more specific locations of where care was received in the past year. Among all with past year SUD, indi-

viduals are about equally likely to receive treatment at an inpatient or outpatient rehab facility, or a self-help group such as Alcoholics Anonymous or Narcotics Anonymous. Low use of care among those with past year SUD indicates barriers to accessing treatment. Among those with past year SUD who also received treatment in the past year, care was most utilized at an inpatient rehab facility, outpatient rehab facility, or a self-help group as well.

Compared to those who utilized mental health care treatment in the past year, virtual services are much less utilized among those with SUD. The rate of hospital inpatient care among those with past year SUD who received treatment is comparable to that of those with MDE with severe role impairment.<sup>13</sup> The level of severity of mental illness or substance use disorder has implications for the appropriate setting for treatment to be received.

# **Conclusions and observations for policy**

In this paper, we have examined the patterns of mental illness, psychological distress, some of their consequences, and their treatment. We reported on many facets of prevalence, risk factors, and care utilization. Ultimately, we identify four observations that are especially salient in understanding the state of mental health in older adults in the U.S.

First, there are large demographic differences in the rates of psychological distress among older adults. We find large racial/ethnic differences in rates of mental illness among older adults as rates of AMI and SUD are highest among Black adults, rates of symptoms of depression are highest among Hispanic adults, and rates of SMI are highest among white adults. We also find stark income differences in rates of mental illness and behavioral health disorders. The lowest income and wealth adults are the most likely to struggle with AMI, SMI, symptoms of depression, AUD, or SUD. Finally, we observe differences by gender. The suicide rate of men ages 85 and older, and especially white men, is strikingly high. In comparison, women are more likely to experience AMI or SMI than men. These disparities demonstrate that older adults are a widely underserved population, although their specific needs differ on average across demographic groups.

The second key observation from the analyses is the disruptive effects of sub-clinical levels of psychological distress in older adults. This is evident from the interconnections of social isolation, loneliness, symptoms of depression, and suicide-related behaviors. This is also reflected by the high share of mental health treatment that is not associated with a diagnosable mental disorder. One policy implication of this is that it may be effective to create provisions in regulation of insurance plans (both in MA and traditional Medicare) that outline conditions under which treatment would be paid for without a diagnosis. This may be especially impactful for individuals experiencing functional impairments.

Third, there are important linkages between mental health and physical health, as increasing levels of functional impairment are strongly associated with increasing rates of symptoms of depression. While available long-term services and support (LTSS) often recognize the detrimental effects of ADLs, those who

only have IADL limitations often remain underserved. Our analysis finds that mental illness and psychological distress are equally linked to both ADLs and IADLs, meaning improved support for those with IADLs may promote longer periods of community living.

A fourth finding is that symptoms of depression at older ages are associated with significant economic disadvantages. Some of that disadvantage is due to the high rates of recurring depression over the lifecycle that disrupts employment and career development. One important consequence is that older adults with mental illness carry insurance coverage (Medicare only) that is less complete than those without a mental health condition. Underinsurance, in addition to stigma and misconceptions about mental health, is likely to discourage treatment as evidenced by lower rates of treatment among those with a diagnosed condition compared to the under 65-year-old population. One response might be to bolster incentives to make MA plans more "mental health friendly."

Together these observations paint a more complex picture of mental health in older adulthood. The analysis suggests a need for care that more adequately recognizes the range of risk factors and complications that are associated with psychological distress in old age. The standard model of care that is suitable for younger populations does not encompass the services and nuance that is required to effectively treat older adults. Policymakers must be willing to target not only the symptoms of mental health, but their social determinants as well, to truly combat the mental health epidemic among older adults in the United States.

# References

- **Caplan,** Z., & Rabe, M. (2023). The Older Population: 2020. https://www2.census.gov/library/publications/decennial/2020/census-briefs/c2020br-07. pdf
- **CDC.** (2023a, June). Depression and Aging. https://www.cdc.gov/aging/olderadultsandhealthyaging/depression-and-aging.html#:~:text=Depression%20is%20a%20true%20and,to%20be%20diagnosed%20and%20treated.
- **CDC.** (2023b, November 22). CDC Wonder FAQ. Centers for Disease Control and Prevention. https://wonder.cdc.gov/wonder/help/faq.html
- Choi, H., Steptoe, A., Heisler, M., Clarke, P., Schoeni, R. F., Jivraj, S., Cho, T., & Langa, K. M. (2020). Comparison of Health Outcomes Among Highand Low-Income Adults Aged 55 to 64 Years in the US vs England. JAMA Internal Medicine, 180(9), 1185. https://doi.org/10.1001/jamainternmed.2020.2802
- Domènech-Abella, J., Mundó, J., Haro, J. M., & Rubio-Valera, M. (2019). Anxiety, depression, lone-liness and social network in the elderly: Longitudinal associations from The Irish Longitudinal Study on Ageing (TILDA). Journal of Affective Disorders, 246, 82–88. https://doi.org/10.1016/j.jad.2018.12.043
- Gardiner, C., Geldenhuys, G., & Gott, M. (2018). Interventions to reduce social isolation and loneliness among older people: an integrative review. Health & social care in the community, 26(2), 147–157. https://doi.org/10.1111/hsc.12367
- **Health** and Retirement Study. (n.d.). https://hrs.isr. umich.edu/about
- **Hogan,** M. F., & Grumet, J. G. (2016). Suicide prevention: an emerging priority for health care. Health Affairs, 35(6), 1084–1090. https://doi.org/10.1377/hlthaff.2015.1672
- Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., Wang, P., Wells, K. B., & Zaslavsky, A. M. (2005). Prevalence and Treatment of Mental Disorders, 1990 to 2003. New England Journal of Medicine, 352(24), 2515–2523. https://doi.org/10.1056/nejmsa043266

- Koma, W., True, S., Biniek, J. F., Cubanski, J., Orgera, K., & Garfield, R. (2020, October 9). One in Four Older Adults Report Anxiety or Depression Amid the COVID-19 Pandemic. KFF. https://www.kff. org/mental-health/issue-brief/one-in-four-olderadults-report-anxiety-or-depression-amid-thecovid-19-pandemic/
- **Kramer,** D., Allgaier, A.-K., Fejtkova, S., Mergl, R., & Hegerl, U. (2009). Depression in Nursing Homes: Prevalence, Recognition, and Treatment. The International Journal of Psychiatry in Medicine, 39(4), 345–358. https://doi.org/10.2190/PM.39.4.a
- McHugh Power, J., Hannigan, C., Hyland, P., Brennan, S., Kee, F., & Lawlor, B. A. (2020). Depressive symptoms predict increased social and emotional loneliness in older adults. Aging & Mental Health, 24(1), 110–118. https://doi.org/10.1080/13607863.2018.1517728
- Minkler, M., Fuller-Thomson, E., & Guralnik, J. M. (2006). Gradient of Disability across the Socioeconomic Spectrum in the United States. New England Journal of Medicine, 355(7), 695–703. https://doi.org/10.1056/nejmsa044316
- The National Academies of Sciences, Engineering, and Medicine (NASEM). (2020). Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System. National Academies Press. https://doi.org/10.17226/25663
- National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2023). Drinking Levels Defined. https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking
- Olfson, M., Wang, S., Wall, M., Marcus, S. C., & Blanco, C. (2019). Trends in serious psychological distress and outpatient mental health care of US adults. JAMA Psychiatry, 76(2), 152. https://doi.org/10.1001/jamapsychiatry.2018.3550
- **RAND.** (2023, September). RAND CAMS Spending Data File 2001-2019 (V2).
- **Reynolds,** C. F., 3rd, Jeste, D. V., Sachdev, P. S., & Blazer, D. G. (2022). Mental health care for older adults: recent advances and new directions in

- clinical practice and research. World psychiatry: official journal of the World Psychiatric Association (WPA), 21(3), 336–363. https://doi.org/10.1002/wps.20996
- **Riecher-Rössler,** A. (2017). Sex and gender differences in mental disorders. The Lancet Psychiatry, 4(1), 8–9. https://doi.org/10.1016/s2215-0366(16)30348-0
- Salk, R. H., Hyde, J. S., & Abramson, L. Y. (2017). Gender differences in depression in representative national samples: Meta-analyses of diagnoses and symptoms. Psychological bulletin, 143(8), 783–822. https://doi.org/10.1037/bul0000102
- **SAMHSA.** (2019). Older Adults Living with Serious Mental Illness: The State of the Behavioral Health Workforce.
- SAMHSA. (2022, October). 2021 National Survey on Drug Use and Health (NSDUH): Methodological Summary and Definitions. https://www. samhsa.gov/data/sites/default/files/reports/ rpt39442/2021NSDUHMethodSummDefs100422. pdf
- SAMHSA. (2023a). How old is the NSDUH survey?

  How far back can trends be traced? | CBHSQ

  Data. Substance Abuse and Mental Health

  Services Administration (SAMHSA). https://

  www.samhsa.gov/data/faq/basic-information-about-nsduh/how-old-nsduh-survey-how-farback-can-trends-be-traced
- SAMHSA. (2023b, January 4). 2021 NSDUH Detailed Tables | CBHSQ Data. Substance Abuse and Mental Health Services Administration (SAMHSA). https://www.samhsa.gov/data/report/2021-ns-duh-detailed-tables
- Seedat, S., Scott, K. M., Angermeyer, M. C., Berglund, P., Bromet, E. J., Brugha, T. S., Demyttenaere, K., de Girolamo, G., Haro, J. M., Jin, R., Karam, E. G., Kovess-Masfety, V., Levinson, D., Medina Mora, M. E., Ono, Y., Ormel, J., Pennell, B. E., Posada-Villa, J., Sampson, N. A., Williams, D., ... Kessler, R. C. (2009). Cross-national associations between gender and mental disorders in the World Health Organization World Mental Health Surveys. Archives of general psychiatry, 66(7), 785–795. https://doi.org/10.1001/archgenpsychiatry.2009.36
- **Shi,** P., Yang, A., Zhao, Q., Chen, Z., Ren, X., & Dai, Q. (2021). A Hypothesis of Gender Differences in

- Self-Reporting Symptom of Depression: Implications to Solve Under-Diagnosis and Under-Treatment of Depression in Males. Frontiers in psychiatry, 12, 589687. https://doi.org/10.3389/fpsyt.2021.589687
- Smith, J., Ryan, L., Larkina, M., Sonnega, A., Weir, D., The HRS Psychosocial Working Group, Survey Research Center, Institute for Social Research, & University of Michigan. (2023). Psychosocial and lifestyle questionnaire. https://hrs.isr.umich.edu/ sites/default/files/biblio/HRS%202006-2022%20 SAQ%20User%20Guide.pdf
- **Steffick,** D. (2000). Documentation of Affective Functioning Measures in the Health and Retirement Study. Institute for Social Research, University of Michigan. https://doi.org/10.7826/ISR-UM.06.585031.001.05.0005.2000
- Stone, D., Trinh, E., Zhou, H., Welder, L., Horn, P. E. O., Fowler, K., & Ivey-Stephenson, A. (2022). Suicides among American Indian or Alaska native persons National Violent Death Reporting System, United States, 2015–2020. Morbidity and Mortality Weekly Report, 71(37), 1161–1168. https://doi.org/10.15585/mmwr.mm7137a1
- **Tesky,** V. A., Schall, A., Schulze, U., Stangier, U., Oswald, F., Knopf, M., König, J., Blettner, M., Arens, E., & Pantel, J. (2019). Depression in the nursing home: A cluster-randomized stepped-wedge study to probe the effectiveness of a novel case management approach to improve treatment (the DAVOS project). Trials, 20(1), 424. https://doi.org/10.1186/s13063-019-3534-x
- **Tisdale,** W. (2022, September 28). Suicide Warning Signs and Prevention Strategies for Older Adults. https://www.samhsa.gov/blog/suicide-warning-signs-prevention-strategies-older-adults
- Wang, B., Frank, R., & Glied, S. (2023). Lasting scars: The impact of depression in early adulthood on subsequent labor market outcomes. Health Economics, 32(12), 2694–2708. https://doi.org/10.1002/hec.4747

# **Endnotes**

- For further discussion of these issues, please see our previous work: Zilkha, Agarwal, and Frank, "Suicide Rates Are High And Rising Among Older Adults In The US," Health Affairs Forefront. March 4, 2024. https://www.healthaffairs.org/content/forefront/suicide-rates-high-and-rising-among-older-adults-us
- 2 These included feeling depressed, happy, lonely, sad, like everything was an effort, their sleep was restless, like they could not get going, and whether or not they enjoyed life.
- 3 Differential rates of AMI and SMI between men and women are hypothesized to be in part due to gender differences in stressors, coping, and opportunity to express psychological distress. Although there is no dominant theory as to why these gender differences persist, a growing body of literature seeks to illuminate potential drivers (Riecher-Rössler, 2017; Seedat et al., 2009).
- 4 Drinking behaviors likely look quite different among the older adult population as sensitivity to alcohol increases with age. Our imputed definition of AUD as 5 or more drinks in a sitting on 5 or more times per month might be too high a bar to accurately capture the biological and social effects of alcohol use on older adults.
- There is some discussion in the literature that men may be less likely to report self-report symptoms of depression than women which then contributes to gender differences in the prevalence of mental illness (Shi et al., 2021). Salk and co-authors find cross-national variation in the magnitude of gender differences in depression suggesting that social norms may impact how individuals perceive and therefore report their symptoms (Salk et al., 2017).
- To protect privacy, small data values are not available in some circumstances. Information was unavailable for various racial and ethnic groups. Due to this limitation, we create an "other races" category, which includes data when available for American Indian or Alaska Native (AIAN), Asian or Pacific Islander, and Black and white individuals with unstated Hispanic origin.
- As previously discussed, NSDUH data patterns were disrupted in 2020 due to the onset of COVID-19 and the introduction of web data collection, resulting in estimates from 2020 onwards being incomparable to those from 2019 or prior years. As such, only data up to 2019 is included in the figures.
- 8 It is worth noting the high variation in reported rates of social isolation and loneliness. For example, rates of social isolation have varied between about 20% and 30% of older adults while loneliness ranges from 18% to 34%.
- **9** The LB survey includes a revised 11-question survey based on the UCLA survey which asks for an individual to respond often, sometimes, or hardly ever to questions on companionship, isolation, and friendship.
- **10** Authors' analysis of the HRS.
- 11 Authors' analysis of 2021 NSDUH public use file.
- 12 Severe role impairment refers to past year MDE that interfered significantly with an individual's social life, close relationships, ability to work, and ability to engage in home management.
- 13 Authors' analysis of 2021 NSDUH public use file.

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