BRAIN HEALTH DC:

The District of Columbia Plan on Alzheimer's Disease and Related Dementias 2024-2028











Table of Content

Figu	res and Tables listing	iii
Ack	nowledgments	. iv
Exe	cutive Summary	1
Intr	oduction	3
Den	nentia Burden	3
Sub	jective Cognitive Decline	5
Den	nentia Caregiving	9
Risk	Factors	9
Diag	gnosis and Early Detection	12
Soci	al and Structural Determinants of Health and Dementia	.13
The	District's Achievements	16
Α Ρι	ublic Health Approach to Address Dementia	.16
Dev	elopment of This Plan	. 17
Brai	n Health Needs Assessment Key Findings	17
Brai	n Health Advisory Coalition (BHAC)	.19
Stat	e Plan Outcomes	21
Stat	e Plan Goals and Recommended Strategies	.22
	Engage and Educate the Public	.22
	Strengthen Partnerships and Policies	24
	Build A Diverse and Skilled Workforce	26
	Measure, Evaluate and Utilize Data	. 28
Coll	aboration and Support	30
	Glossary	34
	References	36
	Appendix	38

Figures and Tables listing

(Per 100,000 U.S. Standard Population)	
Figure 2: 2020 Age-Adjusted Mortality Rate for Alzheimer's disease and related dementias (Per 100,000 U.S. Standard Population) By D.C. Wards	4
Figure 3: 2020 Age-Adjusted DC Mortality Rate for Alzheimer's disease and related dementias (Per 100,000 U.S. Standard Population) by Gender, Race, and Ethnicity	5
Figure 4: Prevalence of cognitive decline among DC residents aged 45 and older, based on BRFFS 2019–2021 data for DC by 2019-2021 Wards	6
Figure 5: Prevalence of Cognitive Decline Related Limitations of DC Adult (45+ years) residents with cognitive decline, BRFSS 2019 to 2022	7
Figure 6: Prevalence of chronic conditions among DC residents over age 45 by subjective cognitive decline status, BRFSS 2019 to 2022	8
Figure 7: Social and Structural Determinants of Health and Dementia	14
Figure 8: Conceptual Framework for the Healthy Brain Initiative Road Map	15
Figure 9: SWOT Analysis conducted by the BHAC on the Current State of Dementia Related Programs in the District	
Table 1: Chronic conditions among DC adults aged 45 years and older by Subjective Cognitive Decline (SCD) Status	10
Table 2: Modifiable risk and protective factors for cognitive decline and dementia by strength of evidence in DC	10
Table 3: DC Adults aged 45 years and older with chronic conditions by subjective cognitive decline status	11
Table 4: Outcome and Impact objective for DC's Alzheimer's and Related	21

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Executive Summary

Alzheimer's disease and related dementias (ADRD) disproportionately affect the District of Columbia's most vulnerable residents, creating a substantial emotional, physical, and financial burden on patients, families, caregivers, health care systems, and government. In 2020, ADRD ranked as the 6th leading cause of death in the District, with approximately 13% of residents 65 and older living with the disease (DC Mortality Data, 2010-2020; Power et al., 2020). The mortality rate for ADRD rose by 18% between 2010 and 2020, and this trend is continuing (DC Mortality Data, 2010-2020). Additionally, 11% of District residents aged 45 and older reported experiencing subjective cognitive decline (SCD), with 92% of those aged 65 and older with SCD also having one or more chronic health condition (DC BRFSS, 2019-2021). Unfortunately, only 42% of those experiencing SCD have discussed their symptoms with a healthcare provider (DC BRFSS, 2019-2021).

To address this public health problem, DC Health has established the Brain Health Initiative, hired a dementia services coordinator, conducted a needs assessment in collaboration with George Washington University Institute for Brain Health and Dementia, and formed and engaged a multisectoral coalition. In 2023, DC Health implemented a mass-media education campaign to raise awareness about Alzheimer's and related dementias, driving residents to the resource-rich website (brainhealth.dc.gov) for the latest information on improving brain health, dementia risk reduction and resources.

This state plan outlines recommended goals and strategies based on the results of the 2020 Brain Health Needs Assessment. Developed with the Brain Health Advisory Coalition partners and community members, this plan is designed to address the growing needs of Persons Living with Dementia (PLWD) and their caregivers in DC, and aims to:

- 1. Increase the proportion of older adults with subjective cognitive decline who have discussed their symptoms with a provider.
- 2. Increase the proportion of District residents diagnosed with Alzheimer's Disease and Related Dementias receiving social and other support services.

To achieve these outcomes, the plans objectives fall within four key domains:

- Educate and Empower
- Mobilize Partnerships
- Assure a Competent Workforce
- Monitor and Evaluate

The strategies include improving organizational and individual dementia literacy, fostering multisectoral partnerships, strengthening the workforce to treat persons with ADRD, enhancing data collection and surveillance, and promoting community-clinical linkages. The strategies outlined in this plan will be accomplished through the joint efforts of private organizations, non-profit entities, local government agencies, interested stakeholders, and individuals.

This state plan serves as a roadmap for stakeholders to make a meaningful impact on the lives of those affected by ADRD. The plan reflects the District's commitment to promote health equity and address the growing needs of individuals with ADRD and their caregivers. This plan is not a substitute for individualized

work or action plans developed by organizations or persons interested in addressing the needs of people impacted by Alzheimer's disease and related dementias. The recommendations can be used by individual stakeholders to formulate their own organization-specific goals, objectives, and strategies.

The plan is intended for use by the following primary audiences;

- Brain Health Advisory Coalition members
- Government agencies
- Health systems and health clinics
- Community organizations and advocates
- Private sector/Business
- Persons Living with Dementia (PLWD)
- Caregivers for those with Alzheimer's disease and related dementias
- Persons at risk of developing Alzheimer's disease and related dementias

Often, the most effective initiatives engage multi-sector partners. Collaborative effort has the potential to reach broader populations and more effectively leverage public and private investments already in place.



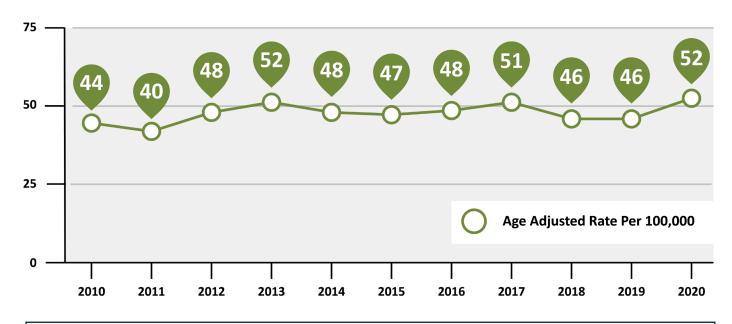
Introduction

Dementia is a general term for a decline in mental ability severe enough to interfere with daily life activities. The term "dementia" describes a wide range of symptoms associated with a decline in memory or other thinking skills ("What Is Dementia?", 2022). There are various types of dementia, such as Alzheimer's disease, vascular dementia, Lewy body dementia, frontotemporal dementia, alcohol-related dementia, and dementia resulting from a traumatic brain injury. Early-onset dementia is an uncommon form of dementia that affects people younger than age 65. Dementia starts slowly and gradually gets worse. Although dementia is associated with advanced aging and diagnosis becomes more prevalent as people get older, it is not a normal part of aging. While old age is the greatest risk factor for dementia, younger people can also be affected.

Dementia Burden

Alzheimer's disease and related dementias (ADRD) represent a significant and growing public health challenge that affects the aging population worldwide, with Alzheimer's disease being the most prevalent cause of dementia among older adults. In 2023, an estimated 6.7 million Americans aged 65 and older were living with Alzheimer's disease, an increase from 5.7 million in 2018 (2023 Alzheimer's Disease Facts and Figures, 2023). The risk of developing dementia increases with age. The population of Americans aged 65 and older is expected to grow from 58 million in 2022 to 88 million by 2050. Consequently, the number and proportion of Americans with ADRD are also expected to increase, with minorities disproportionately affected (U.S. Census Bureau, 2024). As the population ages and in the absence of an effective treatment or cure, the impact of these diseases will continue to grow.

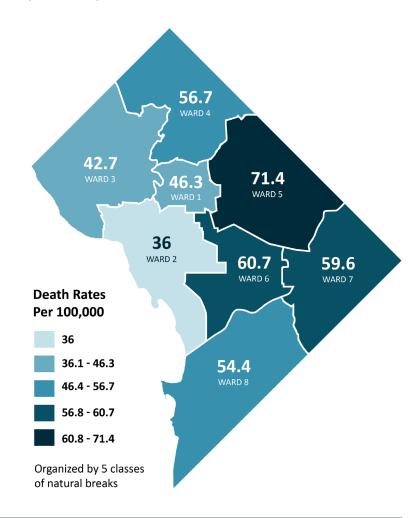
Figure 1: 2010-2020 Age-Adjusted DC Mortality Rate for Alzheimer's disease and related dementias (Per 100,000 U.S. Standard Population)



Date Source: (2010-2020) DC Mortality Data; Vital Records Division, Center for Policy, Planning and Evaluation, DC Health

Over the last decade, mortality rates for ADRD have increased by 18%, rising from an age-adjusted standardized rate of 44 per 100,000 individuals in 2010 to 52 per 100,000 individuals in 2020 (Figure 1). Figure 2 shows that in 2020, Wards 5, 6 and 7 had the highest mortality rates for Alzheimer's disease and related dementias in the District. Figure 3 illustrates that the same year, age-adjusted mortality rates for ADRD among non-Hispanic black residents were 1.6 times higher than non-Hispanic white residents. Age-adjusted mortality rates for ADRD were 1.25 times higher for female residents than male residents (2020 DC Mortality Data) (Figure 3). Dementia has wide-ranging adverse consequences, including functional limitations, complications of co-existing medical conditions, increased healthcare utilization, and substantial caregiver burden. Current District trends project a 1.1 % increase in the number of people living with Alzheimer's dementia by the year 2025 (Alzheimer's Association, 2022).

Figure 2: 2020 Age-Adjusted Mortality Rate for Alzheimer's disease and related dementias (Per 100,000 U.S. Standard Population) By D.C. Wards.



Date Source: (2010-2020) DC Mortality Data; Vital Records Division, Center for Policy, Planning and Evaluation, DC Health

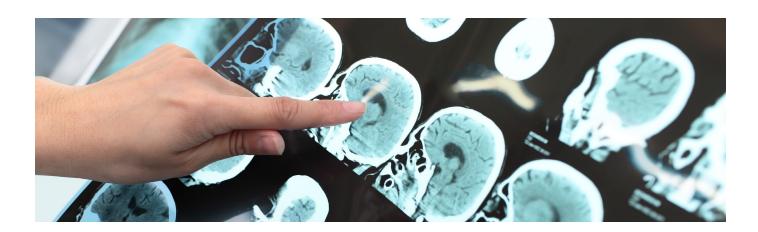


Figure 3: 2020 Age-Adjusted DC mortality rate for Alzheimer's disease and related dementias (Per 100,000 U.S. Standard Population) by Gender, Race, and Ethnicity

Rate Per 100,000 U.S. Standard Population by Gender



Rate Per 100,000 U.S. Standard Population by Race/ Ethnicity

62.54

Non-Hispanic, Black 45.42

Hispanic

38.89

Non-Hispanic, White

Data Source: (2010-2020) DC Mortality Data; Vital Records Division, Center for Policy, Planning and Evaluation, DC Health

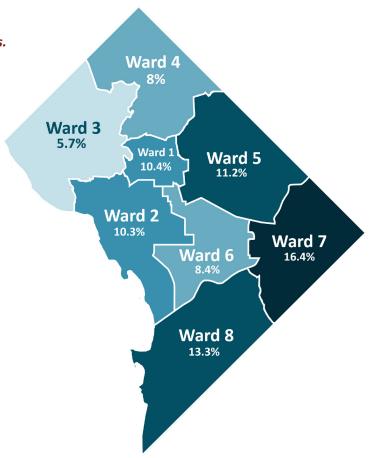
*Note: The available data is insufficient to analyze other race and ethnicity categories.

Subjective Cognitive Decline

Subjective Cognitive Decline (SCD) is a self-reported decline in cognitive function that may not necessarily be confirmed by formal testing (CDC, 2019). SCD is often an early sign of potential cognitive decline or dementia, and it is important to address and manage SCD to prevent or delay the onset of more serious cognitive problems. According to the most recent BRFSS data (2019–2021), 10% of District residents over the age of 45 experienced subjective cognitive decline, with Wards 7 and 8 experiencing the highest prevalences (13-16%), which was almost double or triple the prevalence observed in other wards (6-11%) (BRFSS 2019 - 2021) (Figure 4).

Figure 4: Prevalence of cognitive decline among DC residents aged 45 and older, based on BRFFS 2019–2021 data for DC by 2019-2021 Wards.

Prevalence (%)		
Ward 3	5.6	
Ward 4 Ward 6	5.7 - 8.2	
Ward 1 Ward 2	8.3 - 10.2	
Ward 5 Ward 8		
Ward 7	13.6 - 16	
Organized by 5 classes of natural breaks.		



Data Source: DC BRFSS (2019-2021), Analyzed by Cancer and Chronic Disease Prevention Bureau (CCDPB), Community Health Administration, DC Department of Health.

*NOTE: The annual numbers for this measure are low and require multiple combined years for a stable estimate. Combined years cannot span a change in ward boundaries (e.g. the difference in ward boundaries before 2022 and after 2022), as such, the prevalence numbers above will not be updated until Fall 2025.

As shown in Figure 5, among District residents who stated they were experiencing SCD, less than half (42%) discussed their symptoms with a healthcare provider. 40 % of those with SCD reported giving up day-to-day household activities such as cooking, cleaning, taking medications, driving, or paying bills. 40% reported needing help with household chores, and among those needing help, 18% reported being unable to get help with day-to-day activities. Additionally, among adults 65 years and older with SCD, only 10% had no other chronic condition, while 29% had one other chronic health condition, and 61% reported having two or more chronic conditions. Individuals with SCD may experience challenges in managing their comorbidities, which can increase the risk of preventable hospitalizations (Figure 5). However, effective public health interventions can provide essential support to manage comorbid conditions and reduce the burden of preventable hospitalizations, thus improving the quality of life for those with SCD.

Figure 5: Prevalence of Cognitive Decline Related Limitations of DC Adult (45+ years) residents with cognitive decline, BRFSS 2019 to 2022

Prevalence of Subjective Cognitive Decline among residents aged 45 and older. Washington, D.C. 2019-2022



of residents aged 45 years and older in D.C. reported subjective cognitive decline, memory problems that have been getting worse over 12 months.

Only 42% of those experiencing SCD discussed their symptoms with a healthcare provider.

Prevalence of Subjective Cognitive Decline by Gender among residents aged 45 and older



Female

of those experiencing SCD often give up day-to-day household activities such as cooking, cleaning, taking medications, driving, or paying bills.

92%

of those aged 65 years and older experiencing SCD also have at least one or other chronic health condition.

31%

40%

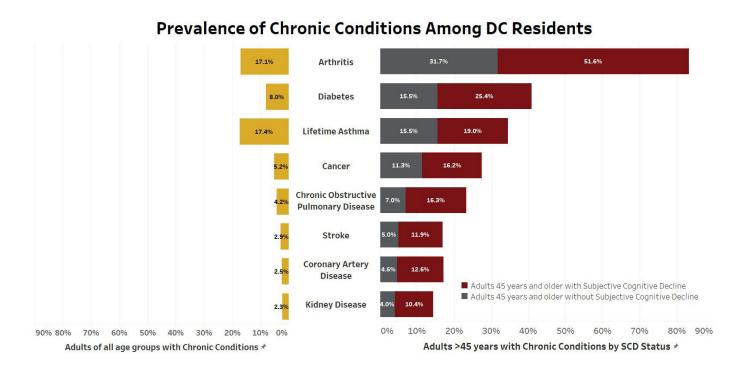


reported not being able to work, volunteer, or engage in social activities

Data Source: DC BRFSS (209-2021), Analyzed by Cancer and Chronic Disease Prevention Bureau (CCDPB), Community Health Administration, DC Department of Health.

Subjective cognitive decline (SCD) associated with comorbid physical chronic conditions increases the risk of poor health outcomes and high care costs. The overall health burden of having SCD with a chronic condition or conditions may also make managing daily activities of life more difficult because of the functional limitations associated with both. District residents 45 years and older who reported SCD have significantly higher rates of chronic health conditions compared to those without SCD (Figure 6). Coronary heart disease, chronic obstructive airway disease, diabetes, kidney disease and stroke were all higher among District residents with SCD compared to those without SCD. Among residents with SCD, the prevalence of multiple chronic conditions (one or more) was observed to be notably higher at 92%. In contrast, 65.5% of those without SCD reported having one or more chronic conditions (Table 1).

Figure 6: Prevalence of chronic conditions among DC residents over age 45 by subjective cognitive decline status, BRFSS 2019 to 2022

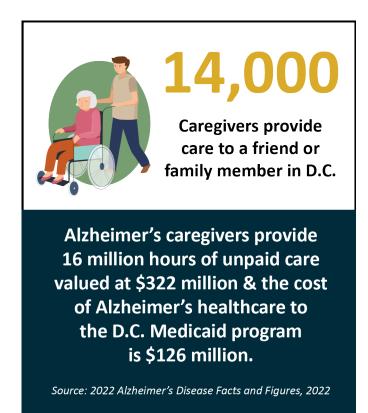


Data Source: DC BRFSS (2019-2022), Analyzed by Cancer and Chronic Disease Prevention Bureau (CCDPB), Community Health Administration, DC Department of Health



Dementia Caregiving

In the District of Columbia, there are an estimated 10,600 people with dementia who are supported by nearly 14,000 caregivers (Power et al., 2020; 2022 Alzheimer's Disease Facts and Figures, 2022). These caregivers are typically family or friends who provide support with everyday tasks for people living with dementia (PLWD). Informal or unpaid caregivers play a crucial role in providing longterm care in people's homes. In the Behavioral Risk Factor Surveillance System (BRFSS) survey data, it was found that 1 in 11 District residents are caregivers for someone with dementia (BRFSS 2022). Compared to other caregivers, those caring for individuals with dementia often take on additional responsibilities such as managing finances and serving as an advocate to service providers. While caregiving can be rewarding, it can also have negative health consequences for dementia caregivers. They may experience stress, depression, exhaustion, difficulty maintaining a healthy lifestyle, and challenges staying up to date on recommended clinical preventive services.



Risk Factors

Risk factors are aspects of an individual's lifestyle, environment, and genetic background that increase the likelihood of getting a disease. These risk factors, on their own, are not necessarily causes of diseases. Rather, risk factors represent an increased chance that diseases such as dementia can occur. Some risk factors cannot be modified. This includes age, family history, race/ethnicity, and gender. Modifiable risk factors are lifestyle and behavioral factors that, if changed, can reduce or increase a person's chances of developing a disease. Most modifiable risk factors for dementia are related to cardiovascular disease and other chronic health conditions ("Dementia Risk Reduction", 2022). These modifiable risk factors include vascular risk factors, such as diabetes, hypertension, high cholesterol and obesity among individuals between 45-65 years of age (Power et al., 2020) (Table 2).

Associated lifestyle risk factors such as smoking, excessive alcohol intake, poor diet, and lack of physical activity have also been linked to an increased risk of cognitive decline and dementia (Power et al., 2020). Maintaining a healthy lifestyle and effectively managing related chronic diseases are crucial for promoting brain health and may help reduce the risk of dementia or slow its progression. Additionally, severe head injuries and depression have been identified as contributing factors to elevated risks of cognitive decline and dementia. According to 2019–2022 BRFSS data, SCD prevalence in the District was highest among those who reported risk factors such as deafness, depression, inadequate sleep, no physical activity,

currently smoking, hypertension, diabetes and those not consuming at least one fruit and one vegetable per day (DC BRFSS 2019 and 2021) (Table 3). SCD cognitive decline did not differ between those who reported binge drinking, high cholesterol, and obesity compared to those without these risk factors.

In 2021, diabetes was the 7th leading cause of death in the District of Columbia (DC Mortality Data, 2021). Furthermore, DC residents aged 65 years and older had almost 2 times higher rates of diabetes compared to adults aged 40-64 (18.8% vs. 10.5%) (BRFSS 2021). Hypertension was also the 10th leading causes of death in the District of Columbia, with older adults (over 65 years old) having 5 times higher rates of hypertension compared to younger adults (under 40 years old) (61.5% vs. 11.8%) (BRFSS 2021). Additionally, the prevalence of hypertension was twice as high among non-Hispanic Black residents (41%) than non-Hispanic White residents (18%). In 2022, 10.6% of District Residents were current smokers, with higher proportions reporting currently smoking among non-Hispanic Black residents and residents of Wards 7 and 8. The high prevalence of vascular diseases and lifestyle risk factors in the District puts residents at increased risk for cognitive decline and dementia. DC Health's programs targeting smoking cessation, diabetes management, healthy food access and the promotion of physical activity may reduce the prevalence of SCD and dementia in the future (Appendix A). Additionally, it is important for healthcare providers to screen individuals with these risk factors for SCD to facilitate early diagnosis and management of ADRD.

Table 1: Chronic conditions among DC Adults aged 45 years and older by Subjective Cognitive Decline (SCD) Status

Percentage of Chronic Health Conditions Among Adults With and Without Subjective Cognitive Decline			
Number of Chronic Conditions	Adults aged 45 years and older with SCD	Adults 45 years and older without SCD	Overall Adult population (18 years and older)
No Chronic Conditions	10%	35%	48%
One Chronic Condition	29%	30%	29%
Two or more Chronic Conditions	61%	35%	23%

Data Source: DC BRFSS (2019-2022), Analyzed by Cancer and Chronic Disease Prevention Bureau (CCDPB), Community Health Administration, DC Department of Health.

Table 2: Modifiable risk and protective factors for cognitive decline and dementia by strength of evidence in DC

Moderate to Strong Evidence			
Risk Factors: Protective Factor			
Alcohol intake	Education		
Depression	Healthy Diet		
Diabetes	Physical Activity		
Midlife High Cholesterol			
Midlife Hypertension			
Midlife Obesity			
Severe head injury			
Smoking			
Weak or Emerging Evidence			
Risk Factors:	Protective Factors:		
Air pollution	Cognitive activities		
Mild head injury	Cognitive training		
	Sleep		
	Social engagement		
Source: District of Columbia: 2020 Brain Health Needs Assessment			

Table 3: DC Adults aged 45 years and older with chronic conditions by subjective cognitive decline status

Risk Factors	Prevalence of Subjective Cognitive Decline among those with and without risk factors		
	Yes	No	
Deafness	29.2%*	9.4%*	
Depression	22.4%*	7.8%*	
Inadequate sleep****	19.9%*	9.0%	
Currently Smoking vs. Non smokers	18.8%*	9.4%*	
Physical inactivity	17.9%*	8.8%*	
Diabetes	16.4%*	9.5%*	
Hypertension***	12.9%*	7.2%*	
Unhealthy Diet****	12.4%*	8.9%*	
Obesity vs. Normal weight	12.3%	11.4%	
Elevated Cholesterol***	11.3%	8.5%	
Binge drinking**	10.9%	10.1%	

Data Source: DC BRFSS 2019 to 2022, Analyzed by Cancer and Chronic Disease Prevention Bureau (CCDPB), Community Health Administration, DC Department of Health.

Numbers provided are weighted prevalence estimates.

* Indicates statistically significant differences.

*****Chronic conditions are listed from Chronic health conditions section in BRFSS codebook.

** Arthritis estimates were based on BRFSS datasets 2019, 2020 and 2022.

*** Cancer estimates were based on BRFSS datasets 2019, 2020 and 2021.

**** COPD estimates were based on BRFSS 2021 and 2022.



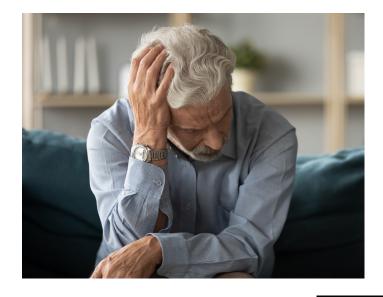
Diagnosis and Early Detection

To advance early detection, it is essential to raise awareness about the signs and symptoms while encouraging discussion of symptoms and concerns with healthcare providers. Increased public awareness of the early signs of dementia can dispel misperceptions and normalize the conversation about the disease with healthcare professionals (Centers for Disease Control and Prevention, 2021). In the District, only 43% of individuals with subjective cognitive decline have discussed their symptoms with a healthcare provider (BRFSS 2019-2021). This lack of communication may lead to delayed diagnosis and hinder individuals from receiving appropriate care. Early diagnosis enables the implementation of interventions that can slow the progression of cognitive decline and improve the quality of life for individuals with dementia. This can include medication, lifestyle changes, social and psychological interventions. Early diagnosis also allows for the identification and management of co-existing health conditions that may worsen dementia symptoms (Livingston et al., 2020).

It is also essential to enhance workforce competency and capacity. For instance, primary healthcare professionals play a pivotal role in recognizing individuals at risk and recommending changes to reduce the risk of dementia. Building workforce competency and capacity can ensure physicians are equipped with the skills to recognize signs of cognitive impairment, speak to their patients about dementia, disclose a diagnosis, and have access to education or training on dementia care. Healthcare professionals can work with individuals and their caregivers to develop a care plan to address these risk factors by promoting a healthy lifestyle through regular exercise, smoking cessation, maintaining a balanced diet, managing chronic diseases, and social engagement (Centers for Disease Control and Prevention, 2021). This care plan may help slow the progression of cognitive decline, improve the individual's quality of life, and delay the onset of dementia (Rasmussen & Langerman, 2019). Additionally, this allows for the possibility of starting medication treatments that can help manage symptoms, slow the rate of cognitive decline, and postpone the need for more intensive care (Livingston et al., 2020).

Furthermore, early diagnosis of dementia allows PLWD and their caregivers to adapt to the diagnosis, plan for future care, and make informed decisions about treatment and support (Livingston et al., 2020). With a formal diagnosis, patients will have access to available symptomatic treatments and interventions,

take advantage of support services, and possibly enroll in clinical trials (Centers for Disease Control and Prevention, 2021). This proactive approach helps manage the condition, maintain independence, and prepare for end-of-life care, while also allowing for necessary financial and legal planning. Furthermore, an early diagnosis reduces stigma, increases awareness, and promotes early intervention. It also helps caregivers adjust to changes in their loved one's mood and personality, facilitating a smoother transition into their caregiving roles. Overall, early diagnosis improves resilience, understanding, and quality of life for both PLWD and their caregivers.



Social and Structural Determinants of Health and Dementia

According to the Centers for Disease Control and Prevention (CDC), social determinants of health are a complex set of factors beyond an individual's control that can significantly impact health (CDC, 2020). Structural determinants of health are the broader political, economic, and social systems that shape these conditions. These systems include historical and contemporary culture, laws and policies, and social and economic norms and practices. Together, these factors shape the environment in which people live, influence their health, and can increase their risk of developing dementia. Lower income, lower education levels, and certain occupations have been linked to an increased risk of developing dementia (Van der Flier et al., 2012), and living in disadvantaged neighborhoods or lacking access to healthcare may also contribute to this risk (Gatz et al., 2006).

In 2018, DC Health released the Health Equity Report for the District of Columbia focusing on social and structural determinants of health in the District. DC Health identifies nine key social determinants of health operating in the District: education, employment, income, housing, transportation, food environment, medical care, outdoor environment and community safety. Differences in social determinants of health contribute to the stark and persistent chronic disease disparities in the District among racial, ethnic, and socioeconomic groups by systematically limiting opportunities for members of some groups to be healthy (Social Determinants of Health and Alzheimer's Disease and Related Dementias, 2022). While public health crises and economic uncertainty may focus attention on disparities, health inequities have persisted across generations because policies and practices have systematically limited access to health care and other opportunities.

Population health outcomes are driven by factors outside of the health care system, including health behaviors, social and economic factors and physical environment (DC Health, 2019). A deeper understanding of social and structural determinants of health in relation to dementia risk is vital as these are potentially modifiable factors at systemic, community, and individual levels (Majoka & Schimming, 2021). Figure 7 illustrates how these social and structural determinants of health can be applied to dementia. At the community level, social conditions such as education, income, employment, housing, transportation, safety, and access to nutritious food have a larger impact on population health than genetics, lifestyle choices, or access to health care services (DC Health, 2019). Furthermore, racial discrimination increases the risk of dementia through both direct and indirect effects, including lower socioeconomic status, educational attainment, unemployment, and residential segregation (Pohl et al., 2021).



Figure 7: Social and Structural Determinants of Health and Dementia

Neighborhood and Built Environment

The design of our communities (called "built environments") can impact overall community health and individual behaviors like physical activity and healthy eating. Built environments can have both positive and negative effects on health. For example, healthy community design can increase access to services, community support, and safe opportunities for physical activity, which can benefit both cognitive and physical health.

Economic Stability

People who are employed tend to have better health, and individuals and families with stable employment are more likely to use preventive healthcare services and adopt healthy behaviors. On the other hand, unemployment can increase health risks due to factors such as the loss of health insurance, depression, and unhealthy coping behaviors.



Health Care Access and Quality

Consistent access to health care services gives people the opportunity for regular preventive health services and early diagnosis of many health conditions, such as diabetes, heart disease, and dementia. Access to care can lead to successful chronic disease management and reduce hospitalization. Furthermore, access to care also increases the chances for early detection and care planning.

Education and Access Quality

Lower socioeconomic status (SES) and less education are associated with a higher incidence of dementia, whereas higher SES and education levels appear to be protective, leading to a deceleration of time to diagnosis. For instance, among adults aged 45 years or older in the District, the proportion experiencing subjective cognitive decline was lowest for college graduates and was nearly three times greater for those without a high school diploma.

Social and Community Context

People's relationships and interactions with family, friends, co-workers, and community members can have a major impact on their health and well-being. Maintaining strong social connections and keeping mentally active as a person gets older may lower the risk of cognitive decline and dementia. Although it's hard to precisely measure social isolation and loneliness, there is strong evidence that many adults aged 50 and older are socially isolated or lonely in ways that put their health at risk.

A Public Health Approach to Address Dementia

States across the nation are moving toward a public health approach to address cognitive health and dementia. To support this approach, the Alzheimer's Association and the Centers for Disease Control and Prevention (CDC) developed the Healthy Brain Initiative, State and Local Public Health Partnerships to Address Dementia: The 2018-2023 Road Map (Road Map). The Road Map outlines a comprehensive community-based public health framework for reducing risk, improving early detection and diagnosis, ensuring safety and quality care, improving health outcomes, promoting health and well-being, and increasing safety and quality of care (Figure 8).

Risk Reduction Strengthen Measure, **Partnerships** nmunity-Clinical Linkage **Evaluate** and Policies and Utilize Data **Health Equity Engage and Educate the Build a Diverse Public** and Skilled Workforce Caregiving

Figure 8: Conceptual Framework for the Healthy Brain Initiative Road Map

Source: Healthy Brain Initiative, State and Local Road Map for Public Health, 2023–2027

Guided by the Healthy Brain Initiative Road Map, this state plan describes DC Health's Brain Health Initiative and outlines recommended objectives and strategies for addressing the burden of ADRD in the District. The plan integrates the four primary domains of public health action, which include engaging and educating the public, enhancing partnerships and policies, cultivating a diverse and skilled workforce, and utilizing data for measurement, evaluation, and informing future actions aimed at achieving health equity. Through collaboration, priority alignment, and sustainability, the state plan aims to accelerate risk reduction, improve early diagnosis and detection, enhance safety and quality of care for PLWD, improve caregiver support, reduce the impact of the disease on individuals and families, and minimize the cost to the healthcare system in the District.

DC Health's Brain Health Initiative focuses on policy, system and environmental changes and promotes brain health, wellness, and equity for all District residents across the lifespan. As shown below, in the past few years, two pieces of legislation have been enacted creating a full-time Dementia Services Coordinator within DC Health (§7–744.01. Dementia Services Coordinator) and mandated dementia training for direct care workers (D.C. Law 23-201). DC Health's Brain Health Initiative collaborates with internal and external stakeholders to address the root causes of ADRD-related health inequities. The initiative aims to achieve long-term change and impact through the collective action of our partners. DC Health is committed to partnering with community based organizations to disseminate educational materials that empower at-risk residents with knowledge and resources necessary to reduce the risk of and manage ADRD.

The District's Achievements



- The District enacted into law § 7–744.01. Dementia Services Coordinator, creating a full-time Dementia Services Coordinator position within DC Health.
- DC Health established the <u>Brain Health Initiative</u> under the <u>Cancer</u> <u>and Chronic Disease Prevention Bureau</u> within the Community Health Administration.
- DC Health funded GW Institute for Brain Health and Dementia to conduct a Brain Health Needs Assessment for the District of Columbia.
- The DC council enacted bill § 7–744.02. Dementia Training for Direct Care Workers.
- DC Health mobilized statewide partnerships to convene DC's first Brain Health Advisory Coalition comprised of multi-sector stakeholders.
- DC Health launched the Brain Health Initiative website, a dementiafriendly and culturally appropriate online resource for cognitive health, dementia prevention, education, and services specifically tailored for District residents.
- DC Health is launched a media campaign to increase public awareness of Alzheimer's and related dementias and encourage residents to visit brainhealth.dc.gov.

Development of This Plan

In early 2019, DC Health funded George Washington University's Institute for Brain Health and Dementia to conduct a comprehensive brain health needs assessment in the District. The project estimated the prevalence of dementia and modifiable risk factors for cognitive decline, identified dementia-related challenges, and developed a dementia services guide for District residents. The findings from the study highlighted the dementia burden in the District and guided the strategic priorities of the plan.

Brain Health Needs Assessment Key Findings

Using the perspectives of primary caregivers and organizational stakeholders, the 2020 Brain Health Needs Assessment identified challenges and unmet needs for caregivers of persons living with dementia.

The following needs were highlighted:

- Community messaging and caregiver education about dementia.
- Increased messaging and awareness of available services.
- Help in navigating, identifying, and applying for resources and services.
- Reconsideration of service eligibility criteria, including lowering of income thresholds, and exclusion of caregiver income from consideration.
- Increased recognition of unique resource and service needs of persons with cognitive impairment across all stages of the disease.
- Increased access to qualified home health aides to provide regular caregiving support and caregiver relief.
- Increased training for those who interact with persons who have dementia, including law enforcement, emergency personnel, and home health aides.
- Address resource-specific challenges and unmet needs, especially around education of the community
 and home health aides about dementia, transportation, meal services, specific legal services, and
 availability/quality of nursing homes.
- Dedicated services to protect the safety and autonomy of persons living with dementia.
- Greater service availability and greater consistency of services across the District.
- Address disruption of centrally provided services due to the COVID-19 pandemic.



The following recommendations were made based on those needs:

- Efforts to promote brain health should focus on vascular risk factors and associated lifestyle factors (such as physical activity and smoking).
- The District should engage in public health messaging in the community to increase dementia literacy.
- Caregivers for persons living with dementia should have equal ability to access a care navigator
 through the District who can assist with identifying, navigating, and applying for resources and
 services that are appropriate to the circumstances of a caregiver or care recipient, independent of
 income.
- Access to qualified home health aides or other services that allow caregiver relief and increased social and physical activity for care recipients should be prioritized when considering resources and services to provide to caregivers of persons living with dementia.
- Un-befriended and isolated older adults living with dementia should be supported by an
 independent agency that will advocate for their needs, ensure and facilitate guardianship, protect
 property, prioritize autonomy, and enable trusts to allow for asset protection.
- The District should develop a certificate or training program for home health aides around caring for a person living with dementia and recognize individuals or organizations who have undergone this training.
- The District should develop a certificate or training program with dementia-specific education for first responders.
- Persons living with dementia and their caregivers should have greater awareness of and access to legal services around establishing wills, living trusts and advance directives, and powers of attorney for health and financial matters.
- If the COVID-19 pandemic continues to disrupt routines and access to resources and services, efforts
 to help caregivers compensate for lost support, particularly loss of access to adult day care programs,
 should be prioritized.



Brain Health Advisory Coalition (BHAC)

DC Health established the District's first Brain Health Advisory Coalition (BHAC) in the fall of 2021. The coalition engages multiple sectors and strategically leverages the expertise of diverse partners for collective impact. The coalition is comprised of persons living with dementia, caregivers, advocates, private, non-profit, and public organizations. The group aims to collaboratively strengthen infrastructures, build a strong evidence-based for policy and communication and create alignment across organizations to accelerate the implementation of effective interventions. Members of the coalition include Department of Aging and Community Living, DC Health, Age-Friendly DC, the Alzheimer's Association, people living with dementia (PLWD), caregivers, advocates, Department of Health Care Finance, George Washington University's (GW) Institute for Brain Health and Dementia, Howard University Hospital, representatives from primary care and health systems, long-term care providers, academic entities, and other relevant stakeholders.

The coalition serves as a collaborative platform and has played an integral role in determining and prioritizing key goals and objectives for the state plan. As part of its continuing effort to center the community in planning and implementing services for the District of Columbia, DC Health worked with coalition members to gain input on gaps and needs of community organizations and individuals to help set priorities for the state plan. BHAC members will continue be a part decision-making, implementation, and monitoring of state plan strategies to ensure the program serves the community and is impacting all District residents, especially those in the priority geographical areas such as Wards 5, 7, and 8. As one of the first steps, the coalition was charged with completing a SWOT analysis to identify the District's strengths and weaknesses, as well as broader opportunities and threats as it relates to dementia. See Figure 9 for a summary of the SWOT analysis.

DC Health will continue to collaborate with community partners to expand the coalition and ensure representation and inclusion of all stakeholders. These partnerships will leverage resources to implement interventions that address the burden of ADRD and reduce its impact on the District. While the state plan acts as a guide to promote synergy in ADRD-related efforts throughout the District, organizations and agencies should develop comprehensive individualized action plans that align with their unique expertise and capacities to maximize impact. This approach allows for the identification of priorities and more effective and efficient resource allocation. By promoting coordination and collaboration across sectors, duplication of efforts can be avoided, and stakeholders can better support PLWD and their caregivers in the District by improving service delivery.



Figure 9: SWOT Analysis conducted by the BHAC on the Current State of Dementia Related Programs in the District

Strengths

- Strong support from DC Council, government agencies, and key stakeholders through legislation support and funding.
- Evidence and data-based strategies.
- Community support and involvement in program development.
- Collaborative work with the Age-friendly DC effort in the District.
- The District has a relatively smaller population in comparison to other states.
- The District has many organizations working to address dementia and can provide technical assistance and partnerships.
- People are becoming more aware of dementia's prevalence and the resources that are required.

Weaknesses

- Insufficient PLWD and caregiver representation within the BHAC.
- Need for representatives from varied cultural experiences and varied socio-economic perspectives.
- Lack of collaboration or synergy among agencies/ organizations.
- Need policies to be aligned with other states.
- Need to reach communities of color to overcome distrust of health system workforce shortages.
- Lack of resources and support for caregivers.
- Lack of workforce competency and awareness of dementia, including caregivers.
- Need for a comprehensive plan.
- Lack of knowledge about Alzheimer's and dementia among primary care providers.
- Need for increased dementia training among the non-clinical workforce.

Opportunities

- Provide education related to brain health, prevention and early detection, caregiver training, and available support.
- Increase federal funding for home & communitybased services— to support caregivers.
- Increase/enhance dissemination of information to primary care providers, health systems, and community groups about Alzheimer's, dementia, and community resources.
- Engage with multisector stakeholders to support DC residents and caregivers related to home and community-based services.
- Lessons learned during COVID-19 regarding caregiver needs.
- Incentivizing primary care doctors and health systems through Medicaid to perform annual brain health assessments.
- Serve as a central starting point for the newly diagnosed.
- Building clinical and health system capacity to serve persons living with ADRD.
- Increase awareness and dispel the stigma that there isn't anything to extend the quality of life just because there isn't a cure.
- Offer transportation for our seniors to be able to reach the needed services.

Threats

- Inadequate workforce capacity in long-term care settings.
- Need to overcome the skepticism of the health care system, especially among minority groups.
- Streamline the healthcare reimbursement system for primary care providers and health systems to incentivize early detection, diagnosis, and care planning.
- If a cure is found, it could diminish interest in prevention.
- Brain health can result in victim blaming.
- Competing health priorities.
- The cost of caregiving continues to escalate.
- Lack of awareness/ understanding of what brain health is along with accurate information related to prevention strategies in the community (public knowledge).
- Funding.
- By 2050, the number of people aged 65 and older with Alzheimer's dementia may grow to a projected 12.7 million.
- Another pandemic can derail efforts in long-term care (LTC) facilities and access to support for those living alone.
- Keeping our coalition moving forward and not becoming stagnant as we may experience pulls and demands in other areas of our jobs/lives.

State Plan Outcomes

Table 4 outlines the outcome and impact objectives aimed at addressing the challenges posed by Alzheimer's and related dementias within the District. The objectives are designed to track the progress and impact of the DC's ADRD state plan.

Table 4: Outcome and Impact objective for DC's Alzheimer's and Related Dementia State Plan

Outcome/Impact Objectives	Baseline	Base Year	2028 Target*	Data Source
Increase the proportion of older adults with subjective cognitive decline who have discussed their symptoms with a provider. *Target set using minimal statistical significance.	42%	2022	52%	BFRSS
Increase the percent of residents with hypertension who have achieved blood pressure control. *Target set using minimal statistical significance for a 10% improvement	60%	2022	69%	Million Hearts Database
Reduce the proportion of adults with diabetes who have an A1c value above 9 percent. *Target set using minimal statistical significance for a 10% improvement	34%	2022	25%	Million Hearts Database
Increase the percent of residents with high blood cholesterol who are on (prescribed) statin therapy. *Target set using minimal statistical significance for a 20% improvement	81%	2022	88%	Million Hearts Database
Reduce smoking prevalence among adults.	11%	2022	6%	BFRSS
Increase the percent of adult residents who report eating vegetables at least one time per day.	83%	2021	90%	BFRSS
Establish a closed-loop referral system between physicians and community-based organizations for dementia-related services.	0	2023	1	DC Health
Increase the proportion of caregivers trained on supporting PLWD.	N/A	2023	TBD	DC Department of Aging and Community Living
Increase the proportion of healthcare professionals in DC who complete standardized dementia-specific training programs.	N/A	2023	30%	Alzheimer's Association, DC Health
Increase the proportion of direct care workers who complete standardized dementia-specific training programs.	0	2023	50%	Alzheimer's Disease Facts And Figures, Alzheimer's Association
Develop and/or coordinate use of a robust surveillance system of dementia-related data to accurately reflect the dementia burden in the District.	0	2023	1	Medicare/Medicaid Claims Data, Hospitalization Data, BRFFS, Vital Records
Develop a comprehensive evaluation plan for the state plan.	0	2023	1	DC Health

STATE PLAN GOALS AND RECOMMENDED STRATEGIES

Engage and Educate the Public

This domain focuses on strategies to increase dementia literacy among District residents, including brain health, risk factors for dementia, benefits of early detection and diagnosis, and raising public awareness and utilization of services for people living with dementia and their caregivers.

1.1 By 2024, develop and implement a media awareness campaign to educate the public about Alzheimer's and related dementias and encourage residents to visit brainhealth.dc.gov.

Recommended Strategies

- Develop and disseminate culturally and linguistically appropriate educational materials
 on dementia to enhance the health of persons living with dementia and their caregivers,
 reducing conflicting messages and decreasing stigma.
- Develop a toolkit for communicating effectively and sensitively with people living with dementia and their families.
- Identify champions within health systems to promote patient and caregiver education about brain health and cognitive aging and the benefits of primary, secondary, and tertiary prevention. Topics include:
 - Maintaining cognitive health.
 - Changes that should be discussed with a health professional.
 - Risk factors for cognitive decline and dementia.
 - Managing chronic diseases, including diabetes and hypertension, among people age 45 and older.
 - Traumatic brain injury (TBI) prevention and risk reduction.
 - Signs & symptoms of cognitive decline and dementia.
 - Benefits of early detection and diagnosis.
 - Support and services available in the District.
- Partner with federally qualified health centers (FQHCs), Medicaid/Medicare providers, nonprofit hospitals, and health systems to distribute education materials to at-risk community members.
- 1.2 By 2026, partner with internal and external programs to integrate the best available evidence about brain health and cognitive decline risk factors into existing health communications/programming.

- Integrate brain health and dementia awareness education language into existing communication about chronic conditions with similar risk and protective factors, including diabetes and hypertension.
- Promote chronic disease management tools and resources available in the District to encourage healthy lifestyle choices, (e.g., healthy diets, increased physical activity, smoking cessation and more).

1.3 By 2026, identify and disseminate resources, education materials and education programs on disaster preparedness for people with dementia and their caregivers.

Recommended Strategies

- Encourage persons living with dementia to enroll in safety programs.
- Promote development of personal disaster plans for persons living with dementia and their caregivers.
- Promote dissemination of educational resources on the importance of preparing an emergency evacuation kit that includes written instructions, emergency contacts, medical information, and a recent photograph of the person with dementia.
- 1.4 By 2025, leverage community partners to promote awareness of abuse/exploitation and support related prevention efforts as they relate to persons living with dementia.

Recommended Strategies

- Identify and disseminate training to caregivers to help reduce the caregiving burden, which can contribute to elder abuse.
- Disseminate information and training about money management for older adults vulnerable to financial exploitation.
- Promote resources such as helplines, adult protective services and emergency shelters for persons experiencing abuse.
- 1.5 By 2025, identify and promote available caregiver support services and resources across the District and use tailored messaging to educate the public and health care professionals.

- Increase messaging that emphasizes both the important role of caregivers in supporting people with dementia and the importance of maintaining caregivers' health and well-being.
- Leverage community partners and the Brain Health Initiative website (Brainhealth.dc.gov) to provide timely evidence-based information regarding tools and support such as:
 - Information and tools to help people with dementia and caregivers anticipate, avert, and respond to challenges that typically arise during the course of dementia.
 - Peer support groups and social gatherings for people affected by dementia.
 - Online support, information resource centers and referral services.
 - Support for mental and physical health and wellbeing of caregivers.
 - Evidence-based care for a person living with dementia.
 - Information and resources about transitioning to long-term care.

Strengthen Partnerships and Policies

This domain encompasses strategies designed to enhance partnerships across various sectors within the District, aiming to implement interventions and policies that provide support for PLWD and their caregivers.

2.1 By 2026, actively engage and mobilize community members to promote and support dementia-friendly strategies that foster a community-wide culture of awareness, acceptance, and inclusion for PLWD and caregivers.

- Foster partnerships between local governments, community groups, faith-based organizations, health systems and private-sector health care organizations to participate in the Brain Health Advisory Coalition and align strategic priorities.
 - Encourage District-based businesses to become dementia-friendly, such as offering training programs, certification programs, or DC Health issued dementia inclusive label.
 - Engage community stakeholders to identify and address social determinants of health and health disparities that impact individuals with dementia and their caregivers.
 - Collaborate to increase access to supportive and dementia-friendly environments that are accessible to all individuals with dementia, including those from marginalized populations.
 - Establish partnerships with healthcare providers who diagnose dementia to facilitate the sharing of health information, materials, and resources with patients and their families.
 - Inform District healthcare providers of the <u>CMS code for advance care planning</u> and reimbursement information for providing patients and families with care planning.
- Support evidence-based decisions by educating policymakers on the basics of cognitive health and impairment, the impact of dementia on caregivers and communities, and the role of public health in addressing this priority problem.
 - Invite people living with dementia and their caregivers to share their stories with decision-makers and to serve on committees or councils that make decisions for populations living with the disease.
 - Work with decision-makers to establish and fund a District-based dementia navigator to help families navigate the health care system after diagnosis.
 - Collaborate with planning and policy initiatives to integrate evidence-informed practices in response to needs and gaps identified in the 2020 Brain Health Needs Assessment for the District.

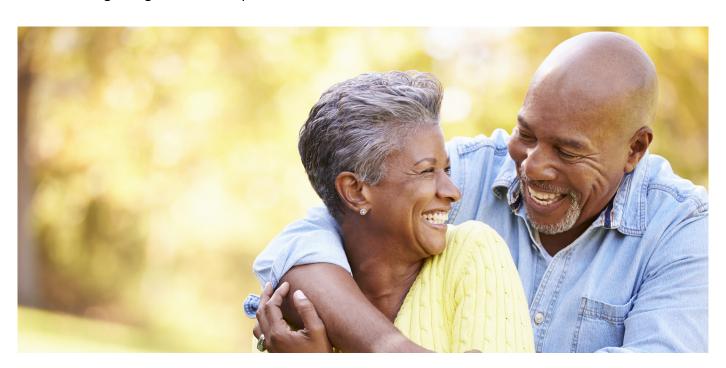
2.2 By 2026, engage public and private partners in ongoing planning efforts to establish services and policies that promote supportive communities and workplaces for people with dementia and their caregivers.

Recommended Strategies

- Implement hospital policies that support team-based care for the treatment of persons living with ADRD.
- Strengthen linkages between the public health, aging, and disability services networks at the community level to maximize efforts and strengthen resources and outreach capabilities.
- Collaborate with health systems to ensure with every diagnosis that is made in the District, family members receive information about resources such as the Brain Health Initiative website (Brainhealth.dc.gov).

2.3 By 2025, strengthen community-clinical linkages among healthcare systems and existing services, public agencies and community-based organizations in the District.

- Improve care coordination for individuals with cognitive impairment and their caregivers
 by integrating brain health resources into the LinkU platform (Linkudmv.org) to address
 social needs and developing referral networks, implementing care coordination programs,
 and improving communication and data sharing among organizations.
- Collaborate with LinkU, Federally Qualified Health Centers (FQHCs), government agencies, and community-based organizations to implement re-occurring trainings sessions regarding on the LinkU platform to healthcare workers.



Build A Diverse and Skilled Workforce

This domain includes strategies that assist providers in facilitating conversations with their patients to reduce stigma and bias surrounding cognitive decline and dementia while also enhancing the knowledge and skills of the current and future healthcare workforce.

3.1 By 2026, identify and disseminate training and materials to enhance healthcare professionals' capacity and competency to support early diagnoses and disclosure of dementia, provide effective care planning at all stages of dementia, utilize screening and referral tools, and engage caregivers, as appropriate, in care management.

Recommended Strategies

- Provide training opportunities for healthcare professionals covering assessment, care
 management, referral and support for PLWD and their caregivers, early detection and
 diagnosis, person-centered and culturally appropriate care, recognizing signs of abuse,
 conducting routine cognitive assessments, and addressing implicit bias in care.
- Collaborate with health systems, FQHCs, and private practices to encourage clinical staff training on treating co-morbidities, effective self-management strategies, and available resources for adults with chronic diseases, as well as preventing injury risks for patients with memory loss.
- Identify and disseminate a toolkit for ADRD, cognitive health and wellness to assist healthcare professionals in the District with navigating cognitive assessments, diagnoses, referrals, and community resources.
- Disseminate information to healthcare professionals on caregiver health risks, available information and tools, and referral to support programs and services.
- 3.2 By 2025, collaborate closely with academic institutions and subject matter experts to ensure comprehensive and current resources on brain health, cognitive impairment, and dementia caregiving to educate both current and future public health workforces.

- Enhance the education and training of healthcare and allied professionals, including community health and direct care workers, with a focus on brain health throughout the life course to improve equitable care and quality of life for PLWD and to support caregivers.
- Regularly review and update the Brainhealth.dc.gov website with the latest information, research, and resources related to brain health, cognitive impairment, and dementia caregiving.
- Develop toolkits and resources for public health professionals and students that cover topics related to brain health, cognitive impairment, and dementia caregiving.

3.3 By 2026, disseminate training to build the knowledge and skills of professionals who interact with people living with dementia and their caregivers.

Recommended Strategies

- Provide evidence-based dementia-specific training with competency requirements for direct care workers, such as nurse aides and home health aides.
- Provide training opportunities for indirect care workers, such as administration and security personnel.
- Provide dementia-specific training to professional first responders, financial services personnel, and the legal profession.

3.4 By 2026, collaborate with internal partners to integrate PLWD and caregiver needs into District emergency preparedness and response plans.

- Collaborate with lead agencies to ensure District emergency plans include support and access to critical health information during crises and prepare emergency professionals for situations involving people with dementia.
- Include people with dementia, their caregivers, and those with expertise in dementia in developing emergency preparedness plans for the District.
- Identify and disseminate tailored educational materials and programs on disaster preparedness for people with dementia and their caregivers.



Measure, Evaluate and Utilize Data

This domain includes strategies to increase data availability, quality, and utilization, as well as promote data-informed decision-making and action to support PLWD and caregivers.

4.1 By 2027, support national and local data collection on dementia and caregiving.

Recommended Strategies

- Coordinate with the DC Health Center for Policy, Planning and Evaluation to implement the Behavioral Risk Factor Surveillance System (BRFSS) for Cognitive Decline and the optional module for Caregiving in 2022-2027.
- Identify additional data sources, including Medicare, Medicaid, health systems, and community-based organizations' programs data, to inform public health programs and policies addressing cognitive health, impairment, and caregiving, with the goal of addressing disparities and improving healthcare equity.
- Identify recommended clinical quality improvement measures for ADRD and collect annual data from health systems partners.
- Share data findings with coalition members, community partners, policymakers, healthcare providers, and government agencies to inform and direct community outreach initiatives, resource allocation, program development, and policies.

4.2 By 2026, embed evaluation into training and caregiving support programs and resources to determine program accessibility, effectiveness, and impact.

- Develop and embed surveys on the Brain Health website (Brainhealth.dc.gov) to receive feedback regarding the website's content, usability, and better understand user needs.
- Collect and analyze post-training surveys to receive feedback and inform future planning.



4.3 By 2025, develop and track the implementation of the District's Alzheimer's disease and other related dementias state plan's priorities, activities, and goals and ensure the plan is effectively executed and regularly reviewed for progress.

Recommended Strategies

- Make the state plan a living, dynamic document that allows for adjustments based on updated data and needs of residents.
- Develop a communication plan to ensure that partners are informed of the plan's progress and any modifications that are made along the way.
- Identify metrics to evaluate the plan's effectiveness and make necessary adjustments to ensure that the plan is meeting its intended goals.
- Establish a data driven tracking and monitoring system to ensure the plan is effectively executed and regularly reviewed for progress.
- Identify champions and assign roles for coalition members interested in executing activities outlined in the state plan.
- Highlight prioritized populations and communities experiencing the greatest disparities in prevalence of ADRD or ADRD-associated risk factors, including addressing SDOH and health equity.

4.4 By 2025, estimate the gap between workforce capacity and anticipated demand for services to support people with dementia and their caregivers.

Recommended Strategies

 Collaborate with key stakeholders to identify ongoing data needs, surveillance gaps, workforce capacity, population trends, service needs for diverse populations and capacity of the health care system for Alzheimer's disease and related dementias.



Collaboration and Support

What Can Other Organizations Do to Support the District's Alzheimer's Disease and Related Dementias Plan?

The purpose of this state plan is to provide guidance for cognitive health promotion efforts in the District while acknowledging that individualized action plans developed by organizations or individuals are also necessary to address the needs of people impacted by Alzheimer's disease and related dementias. The recommendations in this plan can be used as a framework to develop specific goals, objectives, and strategies by stakeholders from different organizations, groups, and sectors to support the plan and reduce the burden of the disease in the District. While the strategies listed below are not exhaustive, they serve as a starting point for collaboration.

DC Health will:

- Develop and deliver multimedia messages to raise public awareness of Alzheimer's and related dementias, including risk factors, signs and symptoms, available services, and encourage residents to visit brainhealth.dc.gov.
- Promote policies that create a dementia-friendly and inclusive community.
- Integrate brain health resources into the LinkU platform to increase referrals to community-based organizations and healthcare providers serving individuals with cognitive impairment.
- Maintain stakeholder engagement in the Brain Health Advisory Coalition (BHAC) and ensure that diverse voices are represented.
- Collaborate with the BHAC to successfully implement the state plan.
- Enhance ADRD related surveillance in the District by collecting and analyzing data on the
 prevalence and incidence of dementia, as well as the use of services by individuals with dementia.
- Promote resources for ADRD risk reduction, diagnosis, and support in the District.
- Provide healthcare providers and community-based organizations with tools to support people living with dementia (PLWD) and caregivers.

Healthcare providers should:

- Identify individuals who are at risk of developing ADRD due to behavioral risk factors and offer education and counseling to address risk factors.
- Discuss the benefits of reducing modifiable risk factors and leverage brainhealth.dc.gov for tools and resources to help patients make these changes.
- Monitor patients' progress and provide ongoing resources that support healthy behaviors.
- Screen, counsel, and refer residents to lifestyle change services to address risk factors including smoking, unhealthy diet, physical inactivity, and alcohol use.
- Recognize the early signs of dementia for racial/ethnic groups through culturally appropriate strategies.
- Educate persons/caregivers about available services related to care, care planning and coordination of care.
- Listen for concerns about cognition, observe for signs and symptoms of cognitive impairment, and note changes in cognition that occur abruptly or over time.

- Develop and maintain routine procedures for detection of poor cognition and referral for diagnostic evaluation.
- Collaborate with the person living with dementia, the family, and the person's physician to create and implement a person-centered plan for possible medical and social crises.
- Engage family members and caregivers in the patient's care to provide additional support and promote healthy behaviors.
- Develop and provide culturally appropriate programs/plans that are easily adaptable to special populations.
- Identify characteristics of social and physical environment that trigger or exacerbate behavioral and psychological symptoms for the person living with dementia.
- Provide a thorough orientation and training program for new staff, as well as ongoing training.
- Develop systems for collecting and disseminating person-centered information.
- Evaluate systems and progress routinely for continuous improvement.

Public health professionals should:

- Collaboratively work with diverse community stakeholders to promote the concepts of dementia-friendly communities and better serve dementia patients and care partners in the District.
- Work with partners to develop, promote, and spread effective strategies to train healthcare workers about early signs of dementia using a culturally sensitive lens.
- Improve access to treatment and care management for persons living with dementia and caregivers.
- Educate the public about brain health and cognitive aging, changes that should be discussed with a health professional, and benefits of early detection and diagnosis.
- Educate persons living with dementia and caregivers about available services related to care, care planning and coordination of care.
- Normalize discussions about cognitive health in the routine delivery of health care to support early detection.
- Emphasize the many advantages to receiving a formal diagnosis, including access to treatments that help with symptoms, time to build a care team, and the opportunity to specify care and legal plans for the future.
- Develop and disseminate behavioral risk reduction tools, materials, and programs tailored for residents, community-based organizations, and clinicians.
- Develop strategies to address social determinants of health and cognitive decline.
- Reduce stigmas and myths surrounding dementia.

Government agencies should:

- Provide funding and resources for research, education, and outreach programs aimed at reducing the burden of dementia, particularly among racial/ethnic groups.
- Establish policies and guidelines for the early detection and diagnosis of dementia and provide training and support to healthcare providers to ensure culturally appropriate strategies are utilized.

- Develop and implement policies and programs that promote person-centered care planning and coordination of care for individuals living with dementia and their caregivers.
- Work with community-based organizations to develop and implement culturally appropriate
 programs that are easily adaptable to special populations, such as immigrants, refugees,
 LGBTQ+ individuals, and persons with disabilities.
- Collect and disseminate person-centered information to inform policy development, program planning, and service delivery for individuals living with dementia and their caregivers.

Other Stakeholders should:

- Develop partnerships with government agencies, healthcare providers, and community-based organizations to support research, education, and outreach programs aimed at reducing the burden of dementia.
- Provide education and training to staff on the early signs of dementia, culturally appropriate strategies, and person-centered care planning and coordination of care.
- Develop systems for detecting changes in cognition and refer individuals for diagnostic evaluation when necessary.
- Build culturally responsive programs programs/plans that are easily adaptable to special populations.
- Collect and disseminate person-centered information to inform program planning, service delivery and evaluation.

Caregivers should:

- Educate themselves about dementia and the available resources for care and support.
- Attend caregiver support groups or seek out counseling to manage stress and emotions.
- Create a daily routine and establish consistent communication and caregiving strategies.
- Take care of their own physical and mental health needs.
- Develop a crisis plan and emergency contacts in case of unexpected situations.
- Advocate for policies and resources that support caregivers and persons living with dementia.

Advocates should:

- Educate the public about dementia and the impact it has on individuals and families.
- Advocate for policies and programs that improve the quality of life for persons living with dementia, such as increased funding for research and support services.
- Work with healthcare providers and community organizations to develop and implement dementia-friendly programs and services.
- Raise awareness about the importance of early detection and diagnosis of dementia.

Persons living with dementia should:

- Seek out support services and resources, such as support groups and memory cafes.
- Stay engaged in meaningful activities and social interactions.
- Communicate their needs and preferences to their caregivers and healthcare providers.
- Advocate for their rights and preferences in their care and treatment.
- Participate in clinical trials and research studies to advance the understanding and treatment of dementia.

To ensure a sustainable impact, all stakeholders need to collaborate and communicate effectively. Stakeholders are encouraged to leverage the Brain Health Advisory Coalition as a space to build partnerships, promote effective collaborations that improve cognitive health, and support ADRD-related policies and programs in Washington, D.C. By working together, stakeholders can share resources, expertise, and ideas, implement the strategies outlined in the state plan and track the progress of the District's efforts.



Glossary

Alzheimer's Disease: an irreversible, progressive brain disorder that slowly destroys memory and thinking skills and, eventually, the ability to carry out the simplest tasks. Symptoms usually develop slowly and get worse over time, becoming severe enough to interfere with daily tasks.

Behavioral Risk Factor Surveillance System (BRFSS): the BRFSS is an annual survey of DC's adult population about individual behaviors that relate to chronic disease and injury. The BRFSS is the primary source of state-based information on health risk behaviors among adult populations. The BRFSS Cognitive Decline module measures subjective cognitive decline (SCD) and its associated effects on function and daily living. The BRFSS Caregiver module is designed to provide information about persons who self-identify as caregivers and provide some form of care to another person with a health problem or disability.

Brain Health: a concept that involves making the most of the brain's capacity and helping to reduce some risks that occur with aging. Brain health refers to the ability to draw on the strengths of the brain to remember, learn, play, concentrate, and maintain a clear, active mind.

Caregiver: the terms caregiver refers to anyone who supports another person who is, in some degree, incapacitated and needs help. Informal care partner/caregiver and family care partner/caregiver are terms that refer to unpaid individuals such as family members, friends and neighbors who provide support. These individuals can be primary or secondary care partners, full time, or part time, and can live with or apart from the person being supported.

Cognition: the mental functions involved in attention, thinking, understanding, learning, remembering, solving problems, and making decisions. Cognition is a fundamental aspect of an individual's ability to engage in activities, accomplish goals, and successfully negotiate the world. It can be viewed along a continuum—from optimal functioning to mild cognitive impairment to Alzheimer's and severe dementia.

Cognitive Impairment: trouble remembering, learning new things, concentrating, or making decisions that affect everyday life.

Dementia: the loss of cognitive functioning—thinking, remembering, and reasoning—and behavioral abilities to such an extent that it interferes with a person's daily life and activities. These functions include memory, language skills, visual perception, problem solving, self-management, and the ability to focus and pay attention. Alzheimer's is the most common cause of dementia. Other types include vascular dementia, dementia with Lewy bodies, and frontotemporal dementia.

Dementia Capable: Dementia capable means being skilled in identifying people with possible dementia and working effectively with them and their care partners, being knowledgeable about the kinds of services needed, and being able to inform or refer to agencies and individuals that provide such services. It typically includes increasing the knowledge and skills of those who care for or interact with people living with dementia and their supporters, identifying gaps in services and providing long-term services and supports to meet the needs of people living with dementia and their care partners.

Dementia Friendly: often used in the context of community, dementia friendly indicates a community that makes intentional changes to ensure their safety and accessibility for people living with dementia, as well as to support people living with dementia to remain engaged and participate in the life of the community.

First Responder: is a person who has completed a course and received certification in providing prehospital care for medical emergencies. They have more skill than someone who is trained in basic first aid, but they are not a substitute for advanced medical care rendered by emergency medical technicians (EMTs), emergency physicians, nurses, or paramedics.

Mild Cognitive Impairment: a slight but measurable decline in cognitive abilities that includes memory and thinking. A person with mild cognitive impairment is at an increased risk of developing ADRD.

Subjective Cognitive Decline: self-reported confusion or memory loss that is happening more often or is getting worse.



References

- Accelerating Risk Reduction and Promoting Brain Health. Alzheimer's Disease and Healthy Aging. (2022).

 Retrieved 19 September 2022, from

 https://www.cdc.gov/aging/healthybrain/issue-maps/risk-reduction.html.
- Advancing Early Detection to Make Alzheimer's Our Next Public Health Success Story. cdc.gov. (2022).

 Retrieved 19 September 2022, from

 https://www.cdc.gov/aging/healthybrain/issue-maps/early-detection.html.
- Alzheimer's Association and Centers for Disease Control and Prevention. Healthy Brain Initiative, State and Local Public Health Partnerships to Address Dementia: The 2018-2023 Road Map. Chicago, IL: Alzheimer's Association; 2018.
- Alzheimer's Association. (2021). 2021 Alzheimer's disease facts and figures. Alzheimer's & Dementia, 17(3), 327-406.
- Barriers to Equity in Alzheimer's and Dementia Care. cdc.gov. (2022). Retrieved 19 February 2022, from https://bit.ly/3NPcKrm.
- Centers for Disease Control and Prevention. (2019). Subjective Cognitive Decline A Public Health Issue.

 Centers for Disease Control and Prevention. Retrieved January 3, 2023, from

 https://www.cdc.gov/aging/data/subjective-cognitive-decline-brief.html
- Centers for Disease Control and Prevention. (2021). Advancing Early Detection. Retrieved from https://www.cdc.gov/aging/healthybrain/issue-maps/early-detection.html
- DC Mortality Data (2010-2020); Vital Records Division, Center for Policy, Planning and Evaluation, DC Health
- DC BRFSS (209-2021), Analyzed by Cancer and Chronic Disease Prevention Bureau (CCDPB), Community Health Administration, DC Department of Health.
- Gatz, M., Reynolds, C. A., & Fratiglioni, L. (2006). The role of social and lifestyle factors in the incidence of dementia. Current Opinion in Psychiatry, 19(1), 8-12
- Livingston, G., Huntley, J., Sommerlad, A., Ames, D., Ballard, C., Banerjee, S., Brayne, C., Burns, A., Cohen-Mansfield, J., Cooper, C., Costafreda, S. G., Dias, A., Fox, N., Gitlin, L. N., Howard, R., Kales, H. C., Kivimäki, M., Larson, E. B., Ogunniyi, A., Orgeta, V., ... Mukadam, N. (2020). Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. Lancet (London, England), 396(10248), 413–446. https://doi.org/10.1016/S0140-6736(20)30367-6

- Majoka, M. A., & Schimming, C. (2021). Effect of Social Determinants of Health on Cognition and Risk of Alzheimer Disease and Related Dementias. Clinical therapeutics, 43(6), 922–929. https://doi.org/10.1016/j.clinthera.2021.05.005
- Office of Health Equity. (2018). Health Equity Report for the District of Columbia.

 District of Columbia, Department of Health. Retrieved from

 https://app.box.com/s/yspij8v81cxqyebl7qj3uifjumb7ufsw
- Pohl, D. J., Seblova, D., Avila, J. F., Dorsman, K. A., Kulick, E. R., Casey, J. A., & Manly, J. (2021).

 Relationship between Residential Segregation, Later-Life Cognition, and Incident Dementia across Race/Ethnicity. International journal of environmental research and public health, 18(21), 11233.

 https://doi.org/10.3390/ijerph182111233
- Power, M., Prather, C., Lunsford, B., Turner II, R., Dowling, M., & Gianattasio, K. et al. (2020).

 District of Columbia: 2020 Brain Health Needs Assessment. D.C.: DC Health. Retrieved from https://bit.ly/3DeELU6
- Social Determinants of Health and Alzheimer's Disease and Related Dementias. cdc.gov. (2022). Retrieved 19 September 2022, from bit.ly/3PW3801
- Van der Flier, W. M., Verhey, F. R., Scheltens, P., Jolles, J., & Hofman, A. (2012). Risk factors for Alzheimer's disease. Nature Reviews Neurology, 8(12), 667-679.
- World Health Organization. (2014). Social determinants of health. Retrieved from https://www.who.int/social_determinants/en/



Appendix

DC Health Programs and Resources

Program	Resource Description	
Brain Health Initiative (BHI)	The Brain Health Initiative launched its website , an online resource for cognitive health, prevention, education, and services specifically tailored for District residents. The website hosts a searchable database of resources and services available in the District. This database provides up-to-date information and services, including adult day care, nutrition, legal services, assisted living, personal care aides, medication management, and more.	
Tobacco Control Programs	Tobacco Control Programs' <u>DCQuitNow</u> provides no-cost cessation support services to any DC resident who needs help quitting tobacco. <u>DCQuitNow</u> offers a broad range of options for participants including phone counseling, live text or chat sessions with a Quit Coach, online group video sessions, up to 12 weeks of nicotine replacement therapy (NRT), online courses, and artificial intelligence-based text messaging support. Services are offered in both English and Spanish.	
Living Well Self-Management Workshops	DC Health's <u>Living Well Self-Management Workshops</u> provides DC residents with the tools and confidence necessary to manage their chronic conditions such as cancer, diabetes, heart disease, chronic pain, and depression. It provides a safe space for individuals to discuss their fears and frustrations while working together to develop weekly action plans and strategies to solve problems they may encounter while managing their conditions.	
Supplemental Nutrition Assistance Program Education and the WIC Farmer's Market Nutrition Program	The District provides nutrition and food security programs such as the Supplemental Nutrition Assistance Program Education (SNAP-Ed), Commodity Supplemental Food Program, and the Senior Farmer's Market Nutrition Program. Through partnerships with the University of the District of Columbia's Center for Nutrition Diet & Health and Center for Urban Agriculture & Gardening Education, adults and seniors living in DC can participate in research-based nutrition and health programs as well as garden-based education with hands-on activities in community gardens.	

DC HEALTH

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