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Building Workforce Capacity

to Improve Detection and Diagnosis of Dementia

BY DIANE TY AND MAC MCDERMOTT

ALLIANCE
TO IMPROVE
DEMENTIA CARE

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The [Alliance to Improve Dementia Care](#) brings together a multi-sector coalition of leaders to advance timely detection, access to treatment and coordinated care, and health equity for people at risk of and living with dementia and their caregivers. Through expert workgroups, convenings, and collaborative initiatives, the Alliance amplifies and promotes the adoption of proven solutions and promising innovations. This report is informed by a consensus-building approach but may not reflect the views of all Alliance members.

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INTRODUCTION

In the United States, more than 7.2 million people currently live with dementia.¹ Comprising 60 to 80 percent of cases, Alzheimer’s disease is the most common type of dementia.² As the proportion of older adults continues to grow, the Milken Institute projects that the number of adults living with Alzheimer’s disease and related dementias (ADRD) will reach nearly 13 million by 2040.³ However, despite being a leading cause of death in the US, dementia is currently underdiagnosed or diagnosed in its later stages.⁴ Research reviews estimate that between 40 to 60 percent of adults with probable dementia are undiagnosed.⁵ Early detection, diagnosis, and treatment of dementia are critical to protecting individuals against risks from delayed or missed diagnosis and allow individuals, their families, and their caregivers to plan for the future as the condition progresses.

The Alliance to Improve Dementia Care (“Alliance”), part of the Milken Institute’s Center for the Future of Aging, utilizes a multi-sector approach to develop recommendations to improve care for individuals living with dementia across all stages. Building a dementia-capable workforce across the care continuum is a primary goal of the Alliance as we seek to close gaps in care through the coordination of individualized and integrated medical and social care. A dementia-capable workforce is well-trained and addresses the complex and highly variable needs of people living with dementia and their caregivers.⁶

The Alliance aims to address workforce capacity challenges in a systematic manner, starting with amplifying solutions to improve timely detection and diagnosis. In December 2020, the Alliance hosted an expert roundtable, “Building Workforce Capacity to Improve Detection and Diagnosis of Dementia.” Leaders across industry, government, research, advocacy, philanthropy, health systems, and community-based organizations convened to examine the issues and opportunity areas to build a dementia-capable workforce. This report captures the three major themes that emerged from our discussion: (1) promoting timely detection of cognitive impairment in primary care settings; (2) driving awareness and education of health-care professionals and consumers; and (3) broadening access and interprofessional coordination in detection, diagnosis, and care delivery.

To set the stage for the Alliance’s recommendations, this report opens with a discussion of the barriers to early detection and diagnosis of dementia among practitioners, health systems, long-term care and support services, and consumers, then highlights the benefits of timely detection of cognitive impairment. While the scope of the roundtable was designed to focus exclusively on detection and diagnosis, participants naturally discussed opportunities to scale care delivery solutions post-diagnosis to enhance workforce capacity at large. We incorporate this commentary into the report along with the six priority recommendations synthesized from the roundtable.



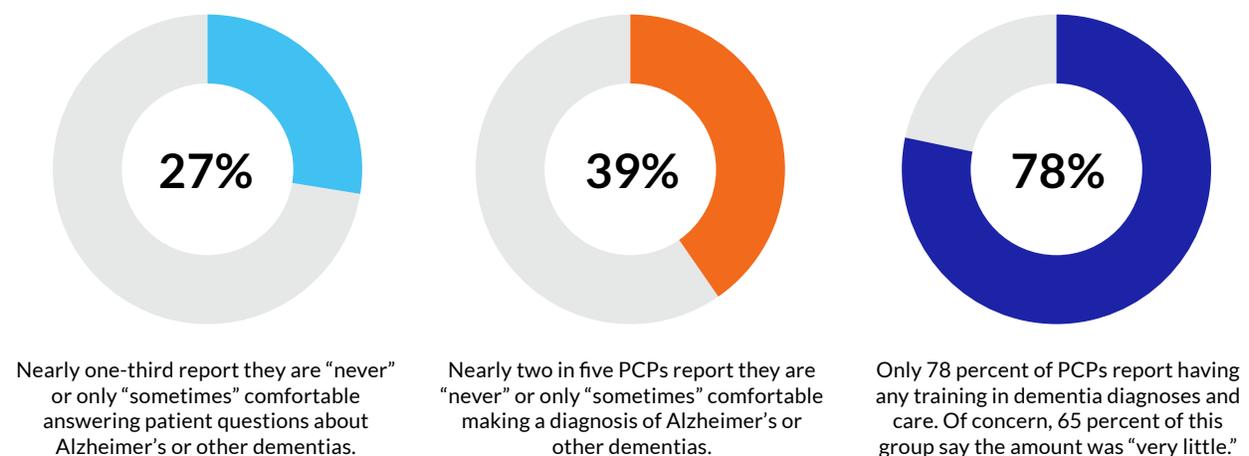
CURRENT BARRIERS TO TIMELY DETECTION AND DIAGNOSIS OF DEMENTIA

The Milken Institute estimates that the number of adults living with ADRD will nearly double over the next 20 years,⁷ disproportionately impacting women and diverse communities, especially African Americans and Latinos. As the demographic makeup of the US continues to grow older and more diverse, building strategies to augment timely detection and diagnosis is increasingly paramount. The Alliance believes the enormity of dementia's societal impact must be met by a workforce capable of improving identification and quality of care upon diagnosis.

PRIMARY CARE PHYSICIAN RELUCTANCE

Multiple factors create barriers that prevent detection and diagnosis of dementia in its early stages. Generally, a clinician's suspicion of dementia, due to patient symptoms of cognitive impairment or caregiver concerns, initiates the detection and diagnostic process.⁸ However, while roughly nine in ten primary care physicians (PCPs) expect to see an increase in people living with dementia over the next five years, half say the medical profession is not prepared to meet this demand.⁹ Some of the key drivers for this lack of preparedness are PCP reluctance and lack of confidence in diagnosing and providing care for patients with ADRD. A 2020 survey by the Alzheimer's Association found that 82 percent of PCPs say they are on the front lines of providing dementia care,¹⁰ yet:

Figure 1: Familiarity with Alzheimer's Disease and Other Dementias



Source: Adapted from Alzheimer's Association (2020)



Other factors contributing to PCPs' hesitance to diagnose dementia are concern about its potential stigmatizing effects, perception of limited treatment options, doubts about the usefulness or desirability of an early diagnosis, paucity of clinical education, shortage of accessible services for individuals with dementia, and communication challenges, including the perceived difficulty in explaining a diagnosis.¹¹

STRUCTURAL BARRIERS

Various structural barriers also inhibit timely detection and diagnosis. Visits with PCPs are historically brief; previous studies have estimated average primary care visits to last 17.4 minutes,¹² giving physicians little time to administer cognitive assessments on top of other services. Lack of widespread clarity in billing for cognitive assessment at the provider level also creates financial and workflow constraints among clinicians. Moreover, in February 2020, the US Preventive Services Task Force (USPSTF) concluded that more research is needed to make a recommendation for or against cognitive screening of older adults who are perceived as asymptomatic, maintaining its 2014 position that it is unclear whether interventions for patients or caregivers provide clinically important benefits to older adults with detected cognitive impairment.¹³ The update comes amid growing national concern over dementia, and Task Force members stated that clinicians should remain alert to early signs or symptoms of cognitive impairment and evaluate as appropriate.¹⁴ The concern with this "I" (insufficient) grade from USPSTF is that PCPs already have limited time with their patients, and this decision may provide justification for not including structured cognitive screening as part of their routine assessments.¹⁵

COMPLEX DIAGNOSTIC PROCESS

Once cognitive impairment is identified, the process for diagnostic evaluation is complex, costly, and capacity-constrained as there is no single test for dementia. Generally, PCPs will evaluate for conditions such as delirium, depression, sleep apnea, hearing loss, and vitamin B12 deficiency, among other factors,¹⁶ to identify modifiable or reversible causes of cognitive impairment and rule out mild cognitive impairment (MCI) or dementia. A PCP may suggest that a person with suspected dementia undergo magnetic resonance imaging (MRI) or a computed tomography (CT) scan to look for tumors, signs of a mild stroke, or brain shrinkage to explain the loss of function.¹⁷ The patient may be referred to a dementia specialist for neuropsychological or other diagnostic testing. In some cases, a positron emission tomography (PET) scan imaging or cerebrospinal fluid (CSF) analysis is conducted to make a diagnosis; however, these tests are expensive, invasive, and are not covered outside of clinical research.¹⁸



In addition to the intricate, time-intensive nature of the diagnostic process, accurate diagnosis of ADRD also proves challenging. Other causes of dementia, such as Lewy body disease and hippocampal sclerosis, often mimic Alzheimer’s disease symptoms.¹⁹ A 2016 study from the Keenan Research Center for Biomedical Science at St. Michael’s Hospital in Toronto, Canada, found that approximately one in five Alzheimer’s disease cases may be misdiagnosed.²⁰ Given the unique differences in disease progression and treatment options among the various causes of dementia, our workforce must be capable of differentiating between various forms of dementia and their associated characteristics.



In the beginning, we were initially told that [my symptoms were] attributed to stress. Then we were told it was depression. Then we were told maybe it’s Lyme disease. After all those things were ruled out, I then went through a battery of tests including MRIs, neuropsychological exams, PET scans, multiple spinal taps that finally led to the diagnosis [of early-onset Alzheimer’s disease] itself. And ironically, as crazy as it may sound, getting the diagnosis actually did offer a sense of relief, only in knowing that we finally knew what was wrong with me. However, three years after that diagnosis, we were actually told that I now have Lewy body dementia with parkinsonism.



Michael Belleville, Advocate living with Lewy body dementia, on his diagnosis experience

SHORTAGE OF DEMENTIA SPECIALISTS

Alliance member Soeren Mattke, DSc, of the University of Southern California Dornsife points to the shortage of dementia specialists such as geriatricians, neurologists, geriatric psychiatrists, and neuropsychologists as another barrier to timely evaluation and diagnosis.²¹ Contributing to this trend are reduced financial incentives compared to other specialties given Medicare’s historically low reimbursement rates and the lack of exposure to geriatrics in medical school, causing students to opt for alternative, more lucrative specialties.²² In 2012, the average wait time for a neurologist visit was 35 business days, up from 28 days in 2010,²³ with even longer wait times projected now given the increase in demand among the aging population. Time spent waiting for a specialist visit is precious as cognitive decline may continue during these weeks and months, and a lack of diagnosis means a delay in treatments, care delivery, and supportive services. This bottleneck in dementia



diagnosis and care has given rise to efforts such as [Age-Friendly Health Systems](#), established by the John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI), which promote the [4Ms Framework](#) (What Matters, Medications, Mentation, and Mobility) for all aspects of care transitions and coordination. The [Geriatric Workforce Enhancement Program](#) (GWEP), supported by the Health Resources and Services Administration (HRSA) and based primarily in schools of medicine, nursing, allied health, and social work as partnerships between educational institutions and clinical systems, is another major effort focused on preparing the health-care workforce to transform care for older adults.

STIGMA

Stigma of dementia takes many forms, including discrimination, stereotyping, pity, and false assumptions about an individual's mental health and functional abilities,²⁴ and misconceptions about dementia among the general public contribute to underdiagnosis. Research suggests that individuals at risk and their caregivers may refuse cognitive assessment or treatment even after screening positive, while some prefer not to know of their condition.²⁵ Moreover, there is often reluctance to diagnose a young adult with dementia because many associate the disease with aging. Alliance member Malaz Boustani, MD, of Indiana University School of Medicine describes the "3Ds" surrounding a dementia diagnosis: The loss of a *driver's license*, the loss of a home, therefore becoming *dependent*, and the loss of *dignity*. This may help explain why 50 to 70 percent of people in his studies who screened positive for cognitive impairment refused to receive a diagnostic assessment.²⁶ Another "D" that could be added to this list is the fear of *dismissal* by one's employer.



BENEFITS TO TIMELY DETECTION AND DIAGNOSIS OF DEMENTIA

Timely detection and diagnosis among adults at higher risk for dementia are critical for new treatments to have an impact and to reduce risks or delay onset. The Lancet Commission recently added three modifiable risk factors to the nine they identified and modeled in 2017. Together, these 12 modifiable risk factors, such as smoking, excess alcohol consumption, hearing loss, hypertension, obesity, and depression, collectively account for roughly 40 percent of worldwide dementias, which could “theoretically be prevented or delayed” if the risk factors were avoided.²⁷ These developments, along with consensus that changes to the brain can occur 10 to 20 years before signs of cognitive impairment are noticeable,²⁸ suggest that more routine screening could motivate individuals to modify their lifestyles to reduce risk.

PATIENT CARE AND ADVANCE CARE PLANNING

While cognitive and functional decline from dementia is progressive, patients aware of their diagnosis in its early stages can prioritize modifiable factors such as physical exercise to prolong strength, mobility, and function²⁹ and plan proactively for future care needs. Although current drug therapies cannot reverse the disease course, they may help alleviate some symptoms. Receiving a dementia diagnosis in its earlier stages also enables patients to participate in their own legal, financial, and future treatment and care options. At the same time, families and caregivers benefit from knowing and being able to administer their loved one’s advanced care preferences. Estimates show that diagnosis in the MCI stage could create cost savings of roughly \$7 trillion in US medical and long-term care expenditures by enabling better planning, management, and care.³⁰



Because of [my] diagnosis, I was able to start my medications, start my end of life planning and make plans to live life to the fullest in the short time I had left, [participate] in clinical trials, apply for disability, and focus my efforts on being an advocate for the disease which has now given me a new life’s purpose.



Michael Ellenbogen, Advocate living life to the fullest with dementia, on his diagnosis experience



DRUG THERAPIES AND DRUG INTERACTIONS

Although there is currently no drug treatment to slow or cure dementia, cholinesterase inhibitors (donepezil, rivastigmine, and galantamine) are commonly prescribed after an Alzheimer's diagnosis to treat symptoms. These medications have demonstrated improvements in cognition, behavior, activities of daily living, and global functioning among adults with mild to moderate Alzheimer's disease. In some cases, they have also reduced caregiver stress and delayed nursing home placement.³¹ Thus, early and accurate diagnosis of ADRD are critical for individuals to benefit from drug therapies. Moreover, most individuals with dementia have other chronic conditions requiring medication adherence. Being aware of the presence of dementia will help avoid medication mismanagement as the condition progresses by enabling better oversight and, given the risk of adverse drug-to-drug interactions that can accelerate cognitive decline, allow individuals with dementia and their doctors to modify prescriptions safely.³²

RECRUITMENT FOR CLINICAL TRIALS

Improving timely detection and diagnosis of dementia has the added benefit of increasing the pool of potential clinical trial participants given that recruitment, specifically among diverse racial and ethnic populations, has historically been a significant barrier in conducting clinical research.³³ According to the Alzheimer's Association, recruiting and retaining participants for clinical trials is one of the largest obstacles to developing the next generation of Alzheimer's disease treatments. Studies of Alzheimer's disease research participation have identified recruitment barriers such as PCPs' lack of capacity and resources to assess cognition and refer patients to research. Study criteria typically consider age, stage of dementia, gender, genetic profile, family history, and presence of a consistent care partner. Exclusionary factors may include chronic health conditions or medications that could interfere with the treatment being tested.³⁴ According to Nina Silverberg, director of the Alzheimer's Disease Research Centers Program at the National Institute on Aging (NIA), "most of the studies are being conducted earlier in the disease [process], so patients are still capable of understanding what's going to happen and what they're agreeing to."³⁵

Overall, timely detection and accurate diagnosis of dementia in its early stages can improve the application of modifiable factors that may slow disease progression and generate opportunities for treatment and better support for individuals and their caregivers. Yet, inadequate training among PCPs, the current shortage of specialists, and various health-care system limitations to meeting the growing need for dementia care contribute to the high incidence of missed or delayed diagnosis.³⁶ This results in lost opportunities for individuals with dementia and their families to seek community-based supports, long-term care options, and financial planning. Insights learned from expert participants at the December roundtable and the Alliance's workforce capacity working group helped shape the following themes and recommendations to address these limitations. This report aims to spread awareness of existing tools and resources,



showcase scalable case studies, and recommend potential new solutions to expand dementia-capable workforce capacity to improve timely detection and diagnosis.

THEME 1

Promoting Timely Detection of Cognitive Impairment in Primary Care Settings

A key theme that emerged from the December roundtable pointed to primary care practices as the most important setting for early detection of dementia. However, developing the business case is imperative to justify building capacity for dementia identification and care among primary care practices through training and clinical workflow enhancements. In addition to regular checkups, participants cited the Medicare Annual Wellness Visit (AWV) as a natural vehicle to conduct a structured cognitive assessment. The AWV is a reliable setting for Medicare patients to measure blood pressure, review medications, and perform preventive screenings. Although a screen for cognitive impairment during the visit is covered by Medicare, doctors are not required to use a test for screening. Rather, physicians are asked to rely on their observations or on reports from patients and their families. This screening should become a more intentional, structured component based on a cognitive assessment rather than observation. To make this shift among primary care practices, the Alliance offers the following recommendations.

RECOMMENDATION 1

Create the business case to demonstrate the return on investment (ROI) for timely detection and diagnosis of cognitive impairment within the primary care setting.

Quantifying the ROI for early and regular cognitive assessment is the umbrella initiative needed to justify enhanced clinician training and task shifting in detection and care planning, specifically within the primary care setting. A primary care practitioner is an individual's care hub and is therefore in the best position to train support staff to conduct routine cognitive assessments during regular patient visits, and notably, the AWV. In addition to detection processes, a PCP must also be trained on guidelines for diagnostic evaluation and/or referrals to specialists. We will discuss available trainings at greater length in Recommendation 3.

To bend the cost curve for the ecosystem of care, the economic case should consider cost benefits and savings to payers, health systems and clinicians, social services agencies, and notably, individuals with dementia and their families. The analysis should account for differences across diverse payment environments, including accountable care organizations, Medicare Advantage plans, and fee-for-service Medicare, including potential revenue-generation from AWVs. In addition to health-care utilization data (i.e., skilled nursing facility admissions, hospital admissions and



readmissions, emergency department visits, and other costs to payers and health systems), we should also consider social benefits, including reductions in isolation, loneliness, stress, and burnout, among individuals with dementia and their families.

Families are particularly burdened financially after a diagnosis because they bear about 70 percent of the total cost of Alzheimer’s disease care through direct expenses and the value of unpaid care.³⁷ Out-of-pocket costs to families for dementia care alone averaged \$10,697 annually in 2016.³⁸ Lower-income families, who are less likely to afford outside care or have paid leave benefits from work, disproportionately face this impact, resulting in disparities along socioeconomic and racial lines. And, Alzheimer’s disease caregivers are more likely to have higher health-care expenses of their own; even those who rated their health as “fair” or “poor” averaged annual expenses of \$4,766.³⁹ Thus, the analysis should consider these “hidden” costs borne by the caregiver and any potential cost savings from providing caregiver resources and support.



I think dementia is really in the wheelhouse of the primary care provider. And when I say primary care provider, I mean not just physicians. I mean nurse practitioners. I mean other individuals who are in the business of providing primary care.



Joshua Chodosh, MD, Michael L. Freedman Professor of Geriatric Research, NYU Grossman School of Medicine

As discussed previously, timely detection and diagnosis enable patients and their families to embrace lifestyle modifications that can reduce risk or slow disease progression, gain access to treatments to help manage symptoms, and proactively plan for future care. Terry Fulmer, PhD, RN, president of the John A. Hartford Foundation, noted during the roundtable discussion that components for increasing detection—effective screening tools, workflows, training, billing codes, and ROI analysis—already exist but have not coalesced and been brought to scale. The following examples showcase positive ROIs from implementation of Age-Friendly AWV initiatives in two different primary care settings, both led by nurses:

The Dartmouth Centers for Health & Aging utilized the [Geriatric Interprofessional Team Transformation in Primary Care](#) (GIT-PC) model to implement a nurse-run AWW program in 25 primary care clinics and six states, including Georgia through the Georgia Memory Network. This initiative identifies cognitive impairment among patients over age 65 and guides referrals to memory clinics upon positive screens.⁴⁰ Through Medicare billing codes G0438 (AWV initial visit) and G0439 (AWV subsequent visits), the implementation of the RN-led AWW program through the GIT-PC model generated over half a million dollars in one primary care practice alone, over five times the annual revenue generated by previous physician-led AWWs.⁴¹

Ascension St. Vincent Medical Group in Indiana utilized the Age-Friendly 4Ms Framework to create a template for the AWW, splitting approximately half of the visits between physicians and Medicare Wellness Nurses (MWNs) who exclusively conduct AWWs.⁴² [This report](#) from the Institute for Healthcare Improvement discusses the key components and program design resulting in improved patient care and a positive ROI.

Roundtable participants widely acknowledged ambiguity in payment procedures for providers conducting cognitive assessments, contributing to under-prioritization and tracking of patients' cognitive status. In February 2021, the Center to Advance Palliative Care (CAPC) released [guidance](#) on billing for dementia care, showcasing applicable services and documentation requirements for cognitive assessment and dementia care planning through, specifically, CPT code 99483. According to recommendations from the Alzheimer's Association, any practitioner eligible to report evaluation and management (E/M) services can bill for this code by completing its 10 required elements—such as cognition-focused evaluation, review for high-risk medications, identification of caregivers, and development or review of an advance care plan—typically lasting 50 minutes.⁴³ The Gerontological Society of America (GSA) also addresses ways PCPs and other clinicians can optimize reimbursement for assessment, evaluation, and care planning in their toolkit (See Recommendation 3).⁴⁴

RECOMMENDATION 2

Promote routine utilization of structured cognitive assessments during the Medicare Annual Wellness Visit.

The AWW offers older adults a reliable, consistent forum for health checkups year over year, but rates of detection for cognitive decline and mental status testing currently fall short. Fewer than one-third of beneficiaries having an AWW report receiving a structured cognitive screening during the visit.⁴⁵ A likely contributing factor is the lack of instruction within AWW guidelines to administer a specific cognitive assessment tool. Rather, the Centers for Medicaid & Medicare Services' (CMS) guidelines encourage providers to “detect any cognitive impairment” through direct observation or insight from the patient, family, and caregiver and recommend they “consider the use of a brief cognitive test” without noting any specific assessment.⁴⁶



Roundtable participants expressed concern that the ambiguity in current AWW language gives providers too much leeway in how or whether they conduct cognitive testing and results in inadequate screening for cognitive impairment. Alliance member Matthew Baumgart, vice president of health policy for the Alzheimer’s Association, noted that vague questions about changes in a person’s memory can most reliably be evaluated when the clinician has a healthy baseline and responses over time, so that even subtle changes year over year can begin to indicate possible cognitive decline. Baumgart described such early changes, especially if self-reported (subjective cognitive decline), as possibly being the “precursor to MCI” and that routinely asking about cognition can more quickly result in the identification of “the smoking gun to trigger the additional tests to follow.” To address these shortcomings, the Alzheimer’s Association published its [Medicare Annual Wellness Visit Algorithm for Assessment of Cognition](#) in 2013 to offer PCPs specific guidance on procedures to screen for cognitive impairment during the AWW and when to conduct or refer for further evaluation.⁴⁷ In place of more concrete language from CMS, the Alliance promotes widespread adoption of this algorithm across primary care practices as an effective tool to enhance the cognitive portion of the AWW.

Ultimately, however, members of the Alliance support revamping the AWW, reforming its written guidelines to incorporate a structured, routine cognitive assessment to establish a baseline, evaluate cognition over time against the individual’s benchmark, and identify cognitive impairment as soon as symptoms materialize. The Alliance recommends utilizing at least one of the four recognized cognitive assessments within the Gerontological Society of America (GSA) KAER Toolkit (See Recommendation 3; the Alzheimer’s Association Algorithm also recommends use of Mini-Cog[®]). This new component will compel clinicians to prioritize and adequately track patients’ memory and mental status each year and ensure that patients can receive a reliable screening when they visit their PCP.

Legislation could also improve policy affecting the AWW to augment the use of cognitive assessment tools. The bipartisan [Concentrating on High-value Alzheimer’s Needs to Get to an End \(CHANGE\) Act](#), introduced in the 115th and 116th Congresses, would, among other provisions, require detection of cognitive impairment during the AWW to be completed by using a specific cognitive impairment detection tool identified by the NIA.⁴⁸ In addition, Senators Patrick Toomey and Debbie Stabenow, then the chairman and ranking member of the Senate Finance Committee Subcommittee on Health Care, respectively, wrote to the secretary of Health and Human Services in October 2020, asking that CMS recommend the use of a cognitive assessment tool during the AWW rather than relying on direct observation.⁴⁹ Whether through legislation or administrative action, policy changes can substantially improve rates of cognitive impairment detection during the AWW.



THEME 2

Driving Awareness and Education for Health-Care Professionals and Consumers

Other key issues associated with inadequate early detection and diagnosis of dementia discussed during the December roundtable involve the lack of workforce training and mismatched expectations between patients and providers. According to the Alzheimer’s Association, 82 percent of older adults believe it is important to have their memory and thinking checked, while only 16 percent report actually having these evaluated. Of note, 93 percent of older adults say they trust their doctor to recommend testing for memory and thinking problems, but fewer than half of PCPs say it is their standard protocol to do so.⁵⁰ Strikingly, fewer than half of Medicare beneficiaries who have a diagnosis of dementia in some form in their billing records report being informed of their diagnosis by their doctor.⁵¹

Adequately trained primary care teams who are confident in and capable of detection and referral for or diagnosis of dementia must meet the demand of the aging population. However, more widespread training and adoption of best practices should not be limited to physicians; clinical practices should engage all levels of the primary care team—from physician assistants and nurse practitioners to non-clinical office staff—and coordinate externally with families, caregivers, and community resources to enhance the patient experience both pre- and post-diagnosis. To address these components of training for enhanced workforce capacity, the Alliance recommends the following:

RECOMMENDATION 3

Accelerate incorporation of available and recognized trainings and toolkits into primary care team clinical workflows to augment detection and diagnosis.

To help overcome provider reluctance and constraints to cognitive assessment and diagnosis, the Alliance recommends the following resources as trainings, toolkits, and models in dementia detection, diagnosis, and care delivery that primary care teams can operationalize within existing clinical workflows where appropriate.

The [GSA KAER Toolkit for Primary Care Teams](#), updated in fall 2020, aims to support primary care teams in delivering a coordinated approach to dementia care through four steps designed to improve awareness of brain health and cognition, augment detection of cognitive impairment, initiate early diagnostic evaluation, and make referrals upon diagnosis to support patients. The model advises clinicians to kickstart the brain health conversation, assess for cognitive impairment, evaluate for dementia, then refer to community resources. The toolkit includes several recognized brief cognitive assessments that the Alliance recommends for widespread utilization among clinicians during routine checkups, or specifically, Medicare AAVs as noted in Theme 1. These tests include:



- Mini-Cog® (3-5 minutes)⁵²
- The Montreal Cognitive Assessment (MoCA) questionnaire (10 minutes)
- The Saint Louis University Mental Status exam (SLUMS) (7 minutes)
- A Short Test of Mental Status (STMS) questionnaire (5 minutes)

The [Center to Advance Palliative Care \(CAPC\) Best Practices in Dementia Care and Caregiver Support](#) online curriculum offers free continuing education credits and internal medicine maintenance of certification points for CAPC members. The curriculum features seven courses rooted in a multidisciplinary approach to disclosing diagnosis, communicating disease symptoms and progression, supporting caregivers, and describing financial and legal planning considerations. Since this training begins at diagnosis disclosure, these best practices could be used in conjunction with the GSA KAER Model, beginning at its “Evaluate for Dementia” stage. Roundtable participant and executive director of CAPC, Brynn Bowman, noted that since its launch in 2018, roughly 14,600 clinicians have taken 50,000 separate courses of this dementia unit. Self-reported data from then-12,000 clinicians—from a range of specialties, including PCPs—on their familiarity with the content of these courses illustrates gaps in provider capacity to communicate and assist in disease diagnosis and progression. CAPC also offers a full online [quality improvement implementation guide](#) that provides clinicians a guide to improve identification, assessment, and support of individuals with dementia and their caregivers and highlights clinical tools, trusted cognitive assessments, and case studies of evidence-based care models.



Of these 12,000 [clinicians], 61 percent of learners said discussing a dementia diagnosis was completely new to them; 68 percent said supporting the caregivers of people living with dementia was new; 69 percent said communicating with patients about what to expect was new; 70 percent said helping patients plan for the future was new; and 73 percent said content around how to interpret the behaviors of people living with dementia was new.



Brynn Bowman, Executive Director, CAPC

The HRSA dementia [curriculum](#) aims to build workforce capacity among health-care professionals, including PCPs, and members of geriatric care teams to ensure timely and accurate detection and diagnosis, provide guidance through the complex diagnostic process, and identify high-quality dementia care guidelines and measures



across care settings. The 16 modules are designed as both stand-alone modules and as part of a unified curriculum. Notably, Module 2: [Diagnosing Dementia](#) offers validated tests to detect dementia, discusses the signs and symptoms of different types of dementia, introduces the use of biomarkers in studying the impact of Alzheimer's disease on the brain, and provides guidance on ordering neurocognitive testing and laboratory tests if the clinician suspects dementia. Module 3: [Recognizing the Role of Diversity in Dementia Care](#) discusses cultural competence, cultural humility, and the impact of sex, ethnicity, and race on dementia risk; presents factors to consider when diagnosing and treating dementia in diverse populations; explains barriers to optimal care among various groups; and provides techniques for effective communication with diverse populations.

Expanding the range of health-care professionals trained to notice symptoms, conduct structured cognitive assessments, refer and/or diagnose dementia, and communicate a care plan is also essential in this process. Physician assistants, nurse practitioners, social workers, and other care providers can play vital roles in specialized dementia care delivery, particularly for rural and underserved communities. However, according to self-reported data, less than 1 percent of registered nurses, physician assistants, and pharmacists specialize in geriatrics, and even fewer are trained to deal with the complexities of dementia.⁵³ Through task shifting, these members of the clinical team can help alleviate physicians' time constraints and administer the clinical assessments highlighted in the GSA and CAPC toolkits. The GSA KAER Model suggests that non-clinical office staff also participate in the primary care team's efforts to detect cognitive impairment.⁵⁴ Receptionists or schedulers, for example, can take note of unkept appointments or patients showing up at the wrong time, deferring to family members during paperwork or while answering questions, or having difficulty following care plans.⁵⁵ While primary care teams in private practices, academic medical centers, integrated delivery networks, and other settings have distinct procedures already in place, the Alliance recommends that care teams adapt these resources to fit, and enhance, their clinical workflows. By amplifying available trainings and toolkits for primary care settings, the Alliance hopes that physicians and primary care teams will feel equipped to proactively detect and accurately diagnose dementia in its early stages.



If we pursued task shifting, we might actually deliver a better customer experience and reduce cost. That's the holy grail.



*Phyllis Barkman Ferrell, Global Head, External Engagement,
Alzheimer's Disease and Neurodegeneration, Eli Lilly and Company*



RECOMMENDATION 4

Address stigma surrounding dementia by raising awareness of the benefits to early detection and diagnosis and creating consumer demand for and expectation of routine cognitive assessment.

Research reviews indicate that stigmatized attitudes and beliefs related to dementia are “pervasive, widespread, and universal” and exist among health professionals and the general public.⁵⁶ While systemic changes are needed to support dementia detection and diagnosis strategies among clinicians, roundtable participants acknowledged that these changes alone are insufficient. Although there is currently no cure for AD/DRD, clinicians and the general public can benefit from (1) understanding the benefits to earlier detection and diagnosis; (2) establishing the expectation of cognitive assessments as part of routine doctor’s office visits or the Medicare AWWV; and (3) knowing there are treatments and lifestyle modifications for those with dementia to live meaningfully and prolong quality of life.

Several roundtable participants discussed the need for a consumer awareness campaign to work in concert with enhanced training of PCPs and other care providers. In November 2020, the Alzheimer’s Prevention and Preparedness Task Force, led by Maria Shriver, released a [set of 10 recommendations](#) aimed at improving the path forward for California and its families affected by rising rates of Alzheimer’s disease. The report’s third recommendation promotes creating a multilingual and multicultural Alzheimer’s disease public awareness campaign, targeting diverse communities disproportionately impacted and focusing on debunking stigmas related to the disease, differentiating between normal aging and dementia, and informing the public about risk reduction in culturally sensitive ways. The Task Force’s efforts to improve education and care for dementia serve as a blueprint for future Alliance efforts. It is imperative that consumers know their options upon diagnosis of MCI or dementia, and the Alliance seeks to increase awareness of lifestyle modifications to manage brain health and sustain quality of life throughout all stages of dementia.



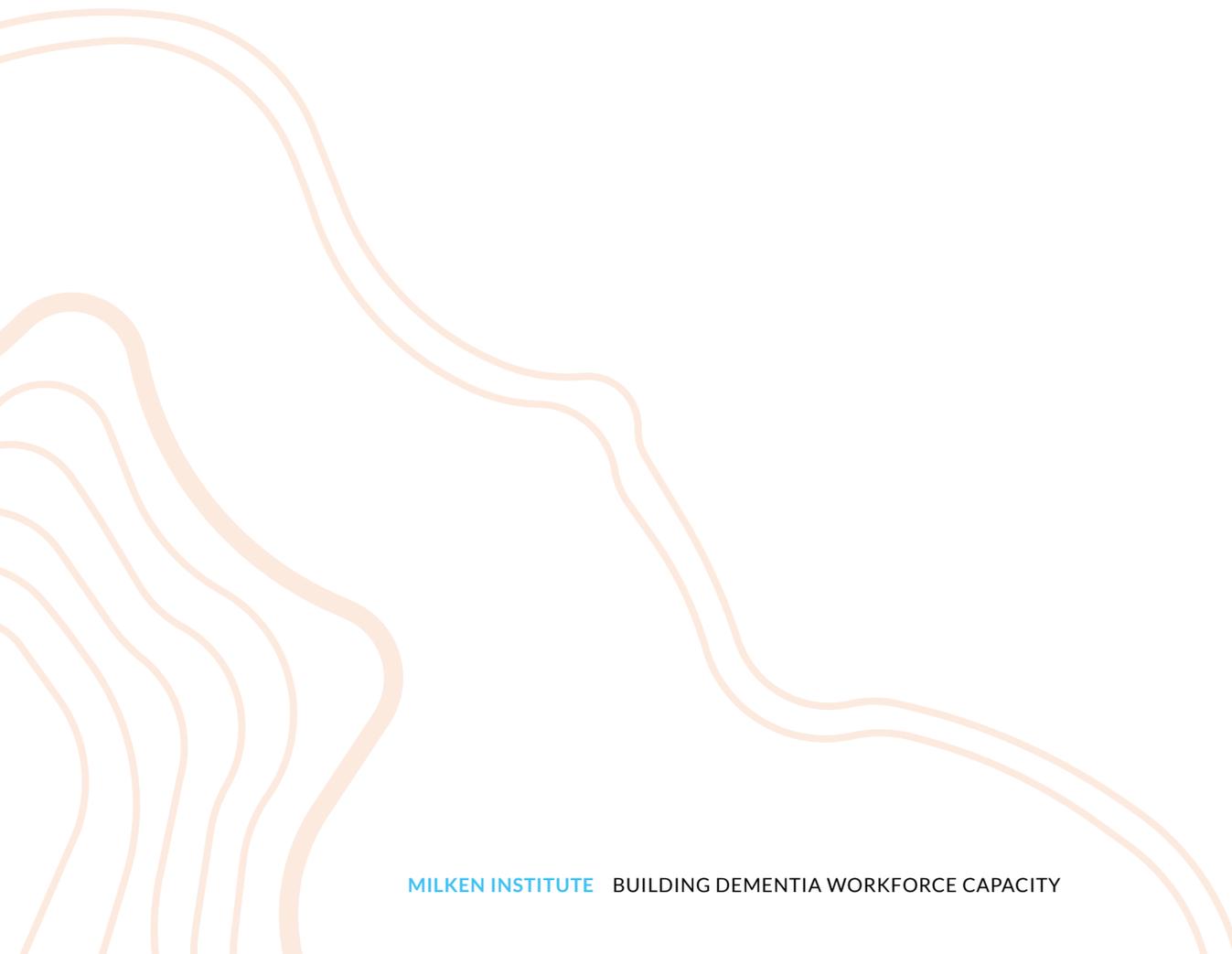
We need to demystify the conversation around Alzheimer’s and dementia and everything around brain health. We need to make sure that we can talk about it the way we can talk about other health-related topics.



Karin Hellsvik, Head of Patient Advocacy and External Communications, Alzheimer’s Disease, Biogen



Jennie Chin Hansen of Hirsch Philanthropies also expressed the need for an investment in consumer education of dementia, noting “even if they get screened and referred—if [people] don’t feel comfortable knowing [their diagnosis] or think there are resources for doing something, we are in a circular mode. We need to know there is something we can do about our brain health.” Elevating common knowledge of the differences between normal aging and cognitive impairment will help empower individuals with dementia and their caregivers to prioritize routine cognitive assessment as providers are also encouraged to meet this increasing demand. To that end, roundtable participants highlighted the need to shift consumer mindsets toward expecting cognitive assessments at a primary care visit as well as other entry points in the health-care system. Brynn Bowman of CAPC emphasized the mutually beneficial approach of enhancing workforce capacity while also elevating public awareness of dementia to adequately align provider and consumer actions.





THEME 3

Broadening Access and Interprofessional Coordination in Detection, Diagnosis, and Care Delivery

RECOMMENDATION 5

Facilitate expansion of and access to cognitive assessment strategies to include age-friendly clinical and non-clinical home- and community-based settings.

In 2011, the first year Medicare included coverage for an AWW, 6.2 percent to 8.1 percent of Medicare enrollees took advantage of this benefit. This rate increased to 25.2 percent and 17.7 percent among Medicare Advantage and fee-for-service beneficiaries, respectively, by 2015.⁵⁷ Another survey by the USC Schaeffer Center revealed that approximately one-half of beneficiaries in 2017 reported having an AWW, but only about one-quarter reported receiving a structured cognitive assessment.⁵⁸ Therefore, even as the Alliance supports making the primary care setting the main vehicle for structured cognitive assessments, increasing capacity in PCP offices alone is insufficient to meet the critical need for early and routine screening for cognitive impairment. Current shortages in the geriatric workforce necessitate elevating the roles of alternative entry points in the health-care system, including specialty care practices managing chronic conditions and home- and community-based settings. The Alliance recognizes the following promising settings for cognitive assessment.



The [emergency department] is the crossroads where many older patients end up. They might be in ... for falls, or a medication mishap, or something else ... and we in the ED need to change our attitudes about dementia to understand why it matters and may be related. Not only do we need to differentiate delirium from dementia, but if we do detect or suspect there's something going on with the patient's memory, we need to make it easy for us as clinicians to understand and assess.



Ula Hwang, MD, Professor, Emergency Medicine, Yale School of Medicine

Geriatric Emergency Departments and Specialty Care Practices

The American College of Emergency Physicians administers a Geriatric Emergency Department Accreditation program, offering three levels of accreditation to help standardize the quality of emergency care for the 20 million older adults who visit emergency departments annually. Roundtable participants Ula Hwang, MD, professor



of emergency medicine at Yale School of Medicine, and Nida Degeysys, medical director of the geriatric emergency department at the University of California San Francisco (UCSF), both spoke about the emergency department being well-suited to administer screenings for cognitive impairment because geriatric EDs focus on reviewing and flagging concerns that help reduce future hospital stays and assist with care transitions. Additionally, given that approximately 85 percent of older adults have at least one chronic disease, and 60 percent have at least two,⁵⁹ regular visits to specialists (e.g., cardiologists, endocrinologists, nephrologists) present a ripe opportunity for these practitioners to administer cognitive screenings as part of routine patient intake.⁶⁰

Community and Retail Health Clinics

Federally Qualified Health Centers (FQHC) are community-based health-care providers that offer comprehensive primary care services to underserved areas or populations.⁶¹ These health centers can receive funds from the HRSA Health Center Program, donations, private sector, and Medicare and Medicaid funding, and provide preventive and mental health services, specialty care, and transportation to patients in need.⁶² In 2016, the University of California, Irvine's Santa Ana FHQC implemented a family medicine resident- and nurse practitioner-run [geriatric clinic](#) for older patients experiencing memory impairments, conducting AWVs and other assessments of memory and cognitive impairment.⁶³

Another promising solution in age-friendly care and a supplement to primary care practices is retail health clinics. These clinics are generally located in brand name pharmacies, groceries, and large retailers, treat routine illnesses and provide preventive care, and offer basic health screenings and low-level acute care services.⁶⁴ During our December roundtable, Angela Patterson, DNP, chief nurse practitioner officer, MinuteClinic, and vice president, CVS Health, highlighted the company's success as it is currently implementing the Age-Friendly 4Ms Framework in 100 percent of its 1,100 MinuteClinic locations inside select CVS Pharmacy and Target stores across 35 states and Washington, DC. With the adoption of age-friendly care, MinuteClinic is well-positioned to become a leader in health-care delivery for older adults in the US. Staffed by more than 3,100 nurse practitioners and physician assistants, MinuteClinic provides age-friendly and convenient non-emergency treatment, chronic disease monitoring, and complementary care between doctors' visits.

Particularly notable is the integration of age-friendly care in all routine visits for patients age 65 and older, including assessing each of the 4Ms, the use of the Mini-Cog® to assess cognition, and the clinical workflow integration with major electronic health record (EHR) vendor, EPIC, for documentation. After completing the evaluation, providers will suggest that patients follow up with their PCP for further evaluation if concerns are noted and will also provide a [4Ms brochure](#) to educate patients on signs of cognitive impairment.



Direct Care Workers and Community Partnerships

Untapped opportunity exists with direct care workers—individuals on the front lines of care such as paid caregivers, home health and personal care aides, and certified nursing assistants. Roughly 4.5 million workers, including nearly 2.3 million home care workers who provide personal assistance and support to older adults and people with disabilities, make up the direct care workforce.⁶⁵ These are often trusted individuals with strong ties to their communities. While people of color make up one-third of the total US workforce, they comprise more than half of all home care workers. Given the stagnant wages for home care workers and the need to build a more culturally competent and diverse dementia-capable workforce to address gaps in health equity (a topic discussed at length in [“Better Brain Health through Equity: Addressing Health and Economic Disparities in Dementia for African Americans and Latinos”](#)), training and compensating direct care workers to conduct cognitive assessments could be a winning investment.

Jeff Huber, CEO of Home Instead, the world’s largest provider of home care services for older adults, noted during the roundtable that his network of 650 home care agencies, employing 70,000 to 90,000 professional caregivers, could be trained to administer cognitive screening tools. In another example, Don Smith, director of the Tarrant County Area Agency on Aging in Fort Worth, Texas, shared how his organization accomplished screening more than 4,000 people in their homes by going “downstream,” using community workers to conduct cognitive assessments. Smith also noted that “50 percent of [their] home-delivered meal recipients show some form of cognitive deficit. Half of those are living alone with dementia. And then we know from Alzheimer’s Association data that half of those living alone do not have an identifiable caregiver. So, how are we going to get these people to a doctor’s office for a diagnosis?” This observation suggests an opportunity to meet the needs of older adults living alone by elevating the role of direct care workers.

Nursing Homes

Dementia is prevalent and often underdiagnosed in nursing home residents. An estimated 37 percent of short-term or post-acute residents (fewer than 100 days) have dementia, and that percentage reaches almost 60 percent among long-term residents (over 100 days).⁶⁶ Alice Bonner, PhD, of IHI, advised that by the time an individual is referred for a long-term nursing home transfer, a dementia diagnosis is likely already recorded, but post-acute care residents more often experience undiagnosed dementia. However, since post-acute residents generally see short stays (10-14 days or less), screening for dementia will often not occur due to more pressing health issues; plus, quality dementia care cannot be provided in that time frame. In addition, less than 3 percent of advanced practice registered nurses and less than 1 percent of registered nurses are certified in geriatrics.⁶⁷ These barriers amid the large number of nursing home residents with dementia showcase the need for enhanced



workforce training in geriatrics as well as further research to develop sustainable solutions for individuals in these settings who are at risk or already diagnosed.

Financial Services Providers

Surya Kolluri, managing director of thought leadership, Retirement and Personal Wealth Solutions at Bank of America, highlighted how financial advisors are on the frontline with clients. In its research, Bank of America has identified that clients across all ages and genders cite Alzheimer's disease as their most feared condition in later life. Given this insight, Bank of America has created training programs for their financial advisors on both Alzheimer's disease and caregiving, highlighting to their clients the financial impacts of caregiving.

Computerized Cognitive Assessment Tools and Resources

David Dolby, CEO of Dolby Family Ventures, underscored the opportunity to conduct cognitive checkups at home using computerized or digital screening tools before and in between physician visits. Indeed, computerized cognitive assessment tests are available from technology companies such as Cogstate and Linus Health, which leverage technology to help screen and monitor cognitive impairment. The Cambridge Neuropsychological Test Automated Battery (CANTAB) test measures specific aspects of cognitive function in different therapeutic areas, and evidence suggests that it can be effectively administered at home among adults with MCI or mild Alzheimer's disease.⁶⁸ AARP's [Staying Sharp](#) digital program promotes a lifestyle-based approach to brain health, including incorporation of the six pillars of brain health, such as ongoing exercise and restorative sleep, into daily life and offers interactive videos, challenges, and a brain health assessment for AARP members. Additionally, [BrainGuide™](#), UsAgainstAlzheimer's comprehensive platform providing knowledge and resources on managing one's own or a loved one's brain health, offers a memory questionnaire to be self-administered or filled out by a caregiver as well as guidance on what to request or expect when talking to one's doctor about memory problems.

RECOMMENDATION 6

Promote long-term coordination and partnerships among medical and non-medical stakeholders to elevate detection, diagnosis, and care delivery strategies.

The Building Our Largest Dementia (BOLD) Infrastructure for Alzheimer's Act, which became law on December 31, 2018, directed the Centers for Disease Control and Prevention to establish the Alzheimer's and Related Dementias Public Health Centers of Excellence. Our December roundtable featured a presentation from Joshua Chodosh, MD, of New York University's (NYU) Grossman School of Medicine. NYU's BOLD Center of Excellence is one of three centers in the country promoting public health and health-care strategies, best evidence, and communication to improve earlier detection of ADRD.⁶⁹ Approaches include collecting and reviewing evidence-based



clinical and public health dementia detection practices, collaborating with state and county departments of health, and disseminating public health strategies, messages, and toolkits, such as the GSA KAER Toolkit discussed in Recommendation 3.⁷⁰

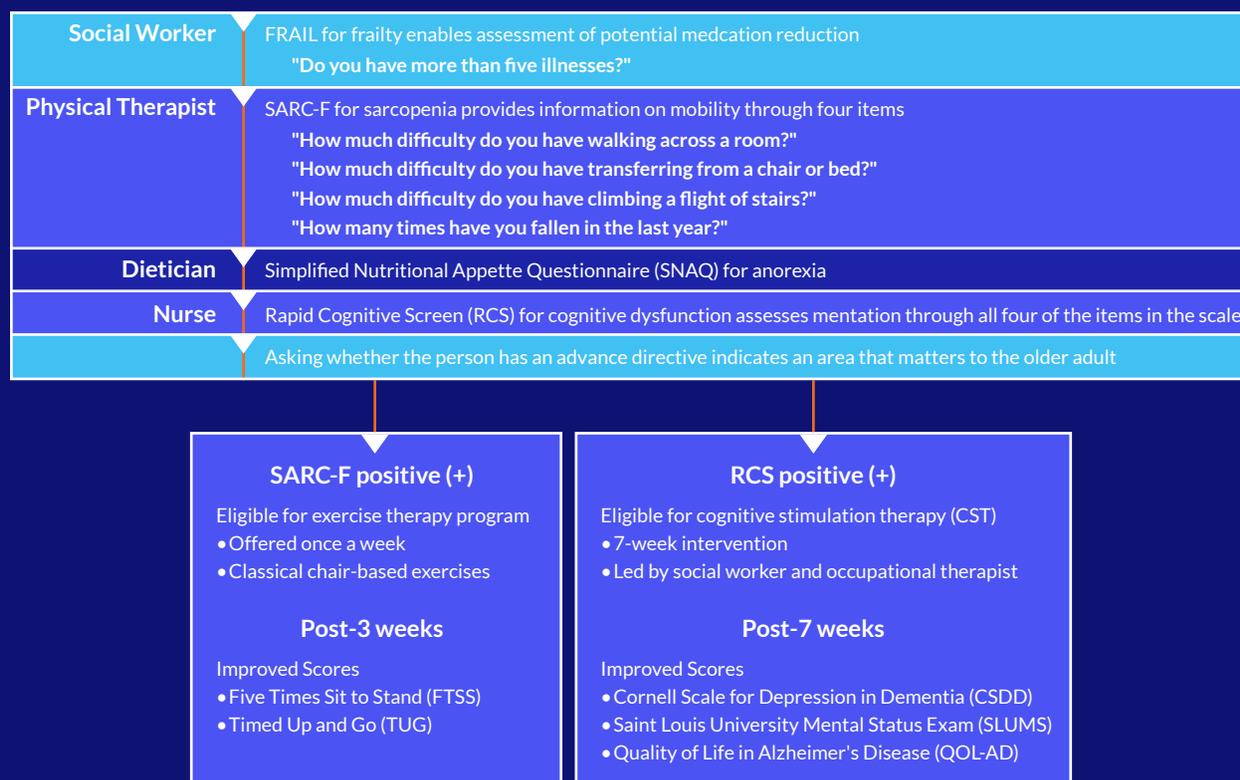
Detection and accurate diagnosis are the first steps in the care journey for individuals with dementia and their families. Roundtable participants were near unanimous in designating partnerships across clinical and non-clinical settings as key to expanding workforce capacity across all phases of dementia. Given the complex and diverse needs of an individual living with dementia, the ideal care team includes primary care practitioners, specialists, social workers, direct-care workers, community services and supports, families, and caregivers. Enhancing the interprofessional collaboration among these groups can improve care coordination and management.⁷¹ By equipping all care team members with up-to-date training and referral options and enhancing reciprocal partnerships, clinicians should feel more confident in detecting and diagnosing dementia as well as working with other members of the care team to avoid silos in patient care.

Section 4 of the KAER Toolkit, “Refer for Community Resources,” offers primary care teams practical approaches and a standardized [referral form](#) to accommodate the medical and psychosocial needs of individuals with dementia and their caregivers through extended care teams, trusted community organizations, and clinical trial participation opportunities.⁷² Courses 2-4 of CAPC’s Best Practices in Dementia Care and Caregiver Support help prepare clinicians to communicate disease progression and associated changes to the brain, make referrals to non-pharmacological community supports, and address caregiver needs by connecting them to respite care, support groups, and education programs.⁷³ Moreover, CAPC’s quality improvement implementation guide offers care teams a community-based resource locator to navigate organizations such as Aunt Bertha, a free online platform to locate social services, or Alzheimer’s Association local chapters to which they can refer patients and their caregivers.⁷⁴ With knowledge of all the opportunities available for adults living with dementia, clinicians can confidently detect and disclose a diagnosis, knowing they have trusted relationships with social workers and community resources to which they can steer patients. The Geriatric Workforce Enhancement Program (GWEP), administered by HRSA, awards program funding to develop a health-care workforce that engages patient and family caregivers, partners with community-based organizations (CBOs), promotes Age-Friendly Health Systems and dementia-friendly communities, and addresses social determinants of health.⁷⁸ These projects require reciprocal partnerships among academia, primary care sites and delivery systems, and CBOs.



A notable awarded program showcased at our December roundtable is an initiative between St. Louis University and Perry County Memorial Hospital to improve the health of older adults in Missouri by training primary care providers in geriatrics.⁷⁵ A team comprised of physicians, advance practice nurses, social workers, and occupational therapists administered this [initiative](#) in the hospital's outpatient clinic. Titled the "[Rapid Geriatric Assessment \(RGA\)](#) and Management Program," this 4Ms-based approach features a new 10- to 15-minute screening tool to identify four common geriatric syndromes, training of health-care providers to manage risk factors, and evidence-based programs conducted by an interprofessional team to treat sarcopenia and dementia.⁷⁶ Particularly notable is the integration of the RGA into the Medicare AWW, offered to patients at their visits, and EHR documentation through EPIC. We showcase the intervention below:

Figure 2: Rapid Geriatric Assessment and Management Program



Source: Adapted from Janie Lundy et al. (2020)

A total of 1,326 people (38 percent of the older adult population in Perry County) were screened with the RGA, 415 of which were completed as part of the Medicare AWW. While uptake among older adults was modest overall, those who completed the program did see positive outcomes because the study showed improvements in cognitive function for those with mild to moderate dementia as well as improvements in physical function after three months for those who screened positive for sarcopenia.⁷⁷ Since its inception, the RGA has now been administered to more than 15,000 adults across the US and more than 2,000 in Singapore. Given this program's emphasis on interprofessional coordination and care for adults facing cognitive decline and the study's positive results, the Alliance recommends emulating this intervention in other hospitals where age-friendly care is in demand.



As the Alliance prioritizes building workforce capacity to improve dementia detection, diagnosis, and care delivery through strengthened coordination, elevating the role of caregivers will be essential. As pivotal members of the care team, caregivers possess a uniquely intimate understanding of the needs of individuals living with dementia and provide care that complements the roles of PCPs, specialists, and community-based supports. All caregivers—employed, paid, and unpaid—play critical roles in navigating individuals’ dementia care journeys, especially as rates of ADRD continue to rise. In AARP’s [Caregiving in the U.S. 2020 Report](#), 11 percent of caregivers identified Alzheimer’s disease or dementia as their care recipient’s main problem or illness, while 26 percent of caregivers reported their care recipient lives with some form of dementia, such as Alzheimer’s disease, or other mental confusion, among other conditions, up from just 22 percent in 2015.

The Alliance recognizes the [Family Caregiving Advisory Council’s recommendations](#) to the secretary of Health and Human Services to address caregivers’ needs. These recommendations aim to establish a national approach to supporting caregivers as key partners in care delivery by improving engagement, community-based resources and supports, workplace and financial security, and training opportunities.⁷⁹ To assist health-care and community-based organizations in supporting family caregivers, the Alliance also recommends widespread utilization of the [Best Practice Caregiving](#) online database. A collaboration between Benjamin Rose Institute on Aging and the Family Caregiver Alliance, this resource offers more than 40 proven dementia programs for caregivers, such as group skills-training sessions, sleep and stress management, and emotional support.⁸⁰



CONCLUSION

Meeting the needs of a growing number of individuals and their families affected by dementia requires multifaceted awareness, training, coordination, and health-system and community infrastructure. This demand must be met by prioritizing timely detection, accurate diagnosis, and strategies to equip individuals and their caregivers with knowledge of dementia, adequate time to plan for their futures, and resources to sustain quality of life throughout disease progression. Building workforce capacity involves engaging and augmenting the roles of all stakeholders involved in the patient's care journey, including primary care practices, chronic disease specialists, emergency departments, direct care workers, community-based organizations and clinics, and caregivers.

Roundtable participants also acknowledged that the detection, diagnostic, and treatment landscape will shift. With potential disease-modifying therapies (DMT) on the horizon that are most effective when administered during the early stages of Alzheimer's disease, our health-care system must improve its capacity to detect and diagnose dementia and become better prepared to handle the caseload when a DMT might become available.⁸¹ Similarly, the possibility of a blood-based biomarker to diagnose ADRD would be a significant game-changer by enabling faster screening of a much larger population and identifying a more diverse group of patients eligible to enroll in studies. In collaboration with Apple's Apple Watch and iPhone products, Biogen recently launched a study to identify digital biomarkers to help monitor cognitive performance, including potentially detecting MCI.⁸² Other exciting developments include the prospects of retinal imaging to identify structural changes in the retina or using voice analysis of speech patterns, both biomarkers designed to detect subtle changes before any other signs of ADRD are present.⁸³

This report provides a starting point for clinicians, health-care systems, CBOs, and caregivers to adopt best practices, learn of existing solutions, and promote public awareness to change misconceptions of dementia. Providing enhancements to primary care teams' clinical workflows will enable physicians and clinical staff to assess for cognitive impairment routinely. This improved competence must work in tandem with greater consumer demand for routine cognitive assessment to normalize and increase testing rates. And, given the constraints of primary care practices amid rising numbers of older Americans at risk for dementia, other venues for individuals and their caregivers to address brain health should help broaden the availability of cognitive assessments within an age-friendly framework. Reducing patient, provider, and system-related limitations to cognitive detection strategies will help break down barriers to early and accurate diagnosis, providing individuals living with dementia and their families more opportunity to understand and direct their care journey.



In addition to elevating awareness and prioritization of detection and diagnosis, the Alliance continues to promote workforce capacity in later stages of dementia and through health-care system reform, all the while encouraging greater access to and quality of dementia care to reduce health and economic disparities. With each expert roundtable and related report, the Alliance aims to offer new insights, thoughtful recommendations, and scalable solutions to tackle all components of care delivery as we build momentum to improve the lives of adults living with dementia and their families.



APPENDIX

Alliance to Improve Dementia Care Workforce Capacity Working Group Participants

Amy Berman, RN, Senior Program Officer, The John A. Hartford Foundation

Alice Bonner, PhD, RN, Director of Strategic Partnerships, CAPABLE Program, Johns Hopkins University School of Nursing; Senior Advisor for Aging, Institute for Healthcare Improvement

Brynn Bowman, Executive Director, Center to Advance Palliative Care

Fiona Carragher, Chief Policy and Research Officer, Alzheimer's Society UK

Michael Ellenbogen, Advocate living life to the fullest with dementia

Phyllis Barkman Ferrell, Global Head, External Engagement, Alzheimer's Disease and Neurodegeneration, Lilly BioMedicines, Eli Lilly & Company

Rhonda Hartman, Director, Clinical Strategy & Practice, Chief Nursing Office, Humana

Karin Hellsvik, Head of Patient Advocacy and External Communications, Alzheimer's Disease, Biogen

Judit Illes, Director of Strategic Alliances, Gerontological Society of America

Melody Libby, Associate Director, Patient Advocacy, Alzheimer's Disease, Biogen

Erin Long, Team Lead, Alzheimer's Disease Programs Initiative, Administration for Community Living

Soeren Mattke, DSc, Research Professor of Economics and Director, Center for Improving Chronic Illness Care, University of Southern California Dornsife

Leslie Pelton, Senior Director, Innovation, Institute for Healthcare Improvement

Joan Weiss, PhD, RN, Deputy Director, Division of Medicine and Dentistry, Health Resources and Services Administration



Building Workforce Capacity to Improve Detection and Diagnosis of Dementia Roundtable Participants

Gretchen Alkema, Vice President of Policy and Communications, The SCAN Foundation

James Appleby, Executive Director and CEO, The Gerontological Society of America

Matthew Baumgart, Vice President of Health Policy, Alzheimer's Association

Orion Bell, President and CEO, Benjamin Rose Institute on Aging

Michael Belleville, Dementia Advocate; Advisory Board Member, Dementia Action Alliance

Christine Brand, MD, Medical Director—Americas Neurology/Molecular Imaging Care Area Lead, GE Healthcare

Katie Brandt, Director of Caregiver Support Services and Public Relations, Frontotemporal Disorders Unit, Massachusetts General Hospital

Reggie Carter, Senior Director, Alzheimer's Accounts, Biogen

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Teresa Cronin, Senior Director, Corporate Advocacy, Eisai US

Lenise Cummings-Vaughn, MD, Associate Professor of Medicine, Washington University in St. Louis

Ann Marie Dawidczyk, US Health Policy and Reimbursement Strategy, GE Healthcare

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David Dolby, CEO, Dolby Family Ventures

Allison Domicone, Associate Director, Hirsch Philanthropy Partners

Linda Elam, CEO and Plan President, District of Columbia Health Plan, Amerigroup

Molly French, Director, Healthy Brain Initiative, Alzheimer's Association



Terry Fulmer, PhD, RN, President, The John A. Hartford Foundation

Niles Godes, Chief Government Relations and Policy Officer, UsAgainstAlzheimer's

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Jeff Huber, CEO, Home Instead

Ula Hwang, MD, Professor, Clinician Scientist, Department of Emergency Medicine, Yale School of Medicine; Co-PI Geriatric Emergency Department Collaborative and PI Geriatric Emergency Care Applied Research Network

Mireille Jacobson, PhD, Associate Professor, Davis School of Gerontology, Schaeffer Center for Health Policy & Economics, University of Southern California

Surya Kolluri, Managing Director, Bank of America

Helen Lamont, PhD, Long-Term Care Policy Senior Analyst, Assistant Secretary for Planning and Evaluation, Department of Health and Human Services

Sarah Lenz Lock, JD, Senior Vice President, Policy and Brain Health and Executive Director, Global Council on Brain Health, AARP

Karen Love, President and CEO, Dementia Action Alliance

Nancy Lundebjerg, CEO, American Geriatrics Society

Nancy Lynn, Senior Vice President, Strategic Partnerships, BrightFocus Foundation

Katie Maslow, Visiting Scholar, The Gerontological Society of America

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Maria Ordonez, DNP, Associate Professor, Director, Louis and Anne Green Memory and Wellness Center, Florida Atlantic University

Angela Patterson, DNP, Chief Nursing Officer, CVS Minute Clinic



Katie Smith Sloan, President and CEO, Leading Age; Executive Director, The Global Ageing Network

Donald Smith, Vice President, Community Development Division and Director, Area Agency on Aging, United Way of Tarrant County

Deborah VanDommelen, MD, Vice President and Chief Medical Officer, Northwestern Mutual

C. Grace Whiting, President and CEO, National Alliance for Caregiving



ENDNOTES

1. Nora Super, Rajiv Ahuja, and Kevin Proff, “Reducing the Cost and Risk of Dementia,” Milken Institute, October 2019: 2, <https://milkeninstitute.org/reports/reducing-cost-and-risk-dementia>.
2. Alzheimer’s Association, “2020 Alzheimer’s Disease Facts and Figures,” *Alzheimer’s & Dementia* 16, no. 3 (March 2020): 18, <https://doi.org/10.1002/alz.12068>.
3. Nora Super, Rajiv Ahuja, and Kevin Proff, 4.
4. Linda Lang et al., “Prevalence and Determinants of Undetected Dementia in the Community: A Systematic Literature Review and a Meta-Analysis,” *BMJ Open* 7, no. 2 (2017): 3-4, <http://dx.doi.org/10.1136/bmjopen-2016-011146>.
5. Halima Amjad et al., “Underdiagnosis of Dementia: An Observational Study of Patterns in Diagnosis and Awareness in US Older Adults,” *Journal of General Internal Medicine* 33, no. 7 (2018): 1131-1138, <https://doi.org/10.1007/s11606-018-4377-y>; Linda Lang et al., 4.
6. Nora Super, Rajiv Ahuja, and Kevin Proff.
7. Nora Super, Rajiv Ahuja, and Kevin Proff, 2.
8. Andrea Bradford et al., “Missed and Delayed Diagnosis of Dementia in Primary Care: Prevalence and Contributing Factors,” *Alzheimer’s Disease & Associated Disorders* 23, no. 4 (October 2009): 6, https://journals.lww.com/alzheimerjournal/Abstract/2009/10000/Missed_and_Delayed_Diagnosis_of_Dementia_in.2.aspx.
9. Alzheimer’s Association, “2020 Alzheimer’s Disease Facts and Figures:” 67.
10. “Primary Care Physicians on the Front Lines of Diagnosing and Providing Alzheimer’s and Dementia Care: Half Say Medical Profession Not Prepared to Meet Expected Increase in Demands,” Alzheimer’s Association, March 11, 2020, <https://www.alz.org/news/2020/primary-care-physicians-on-the-front-lines-of-diag>.
11. Andrea Bradford et al., 2009.
12. Ming Tai-Seale, Thomas G. McGuire, and Weimin Zhang, “Time Allocation in Primary Care Office Visits,” *Health Services Research* 42, no. 5 (2007): 1871-1894, <https://pubmed.ncbi.nlm.nih.gov/17850524/>.
13. US Preventive Services Task Force, “Screening for Cognitive Impairment in Older Adults: US Preventive Services Task Force Recommendation Statement,” *JAMA* 323, no. 8 (2020): 757-763, <https://jamanetwork.com/journals/jama/fullarticle/2761651>.



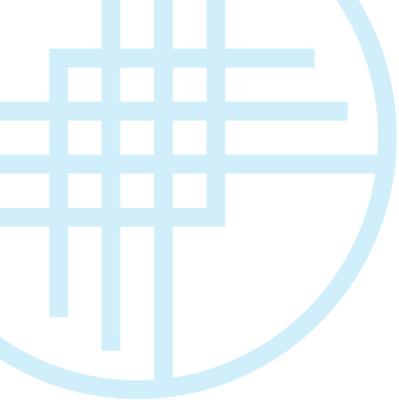
14. Zeena Nackerdien, "Screening for Cognitive Impairment in Older Adults: What Does the USPSTF Say?" *Medpage Today*, March 20, 2020, <https://www.medpagetoday.org/neurology/dementia/85532?vpass=1>.
15. Ibid.
16. John Morley, "Rapid Geriatric Assessment," presentation, Alliance to Improve Dementia Care: Roundtable on Building Workforce Capacity for Screening and Diagnosis of Dementia, December 8, 2020.
17. Soeren Mattke, verbal presentation, Alliance to Improve Dementia Care: Roundtable on Building Workforce Capacity for Screening and Diagnosis of Dementia, December 8, 2020.
18. Jenny Lam, Jakub Hlávka, and Soeren Mattke, "The Potential Emergence of Disease-Modifying Treatments for Alzheimer's Disease: The Role of Primary Care in Managing the Patient Journey," *Journal of the American Board of Family Medicine* 32, no. 6 (2019): 931-940, <https://pubmed.ncbi.nlm.nih.gov/31704763/>.
19. Alzheimer's Association, "2020 Alzheimer's Disease Facts and Figures," 6-7.
20. Leslie Shepherd, "Researchers from St. Michael's Hospital Presenting Work at the Alzheimer's Association International Conference 2016 in Toronto," St. Michael's Unity Health Toronto, July 28, 2016, https://www.stmichaelshospital.com/media/detail.php?source=hospital_news/2016/0728a.
21. Jodi L. Liu et al., "Assessing the Preparedness of the U.S. Health Care System Infrastructure for an Alzheimer's Treatment," RAND Corporation, (2017), https://www.rand.org/pubs/research_reports/RR2272.html.
22. Ariadne A. Meiboom, et al., "Raising Enthusiasm for the Medical Care of Elderly Patients: A Concept Mapping Study to Find Elements for an Elderly Friendly Medical Curriculum," *BMC Medical Education* 18, no. 238 (2018), <https://doi.org/10.1186/s12909-018-1344-6>.
23. American Academy of Neurology, "The Doctor Won't See You Now? Study: US Facing a Neurologist Shortage," April 17, 2013, <https://www.aan.com/PressRoom/Home/PressRelease/1178>.
24. Shana D. Stites, Jonathan D. Rubright, and Jason Karlawish, "What Features of Stigma Do the Public Most Commonly Attribute to Alzheimer's Disease Dementia? Results of a Survey of the U.S. General Public," *Alzheimer's & Dementia* 14, no. 7 (July 2018): 925-932, <https://doi.org/10.1016/j.jalz.2018.01.006>.
25. Nicole R. Fowler et al., "Traits of Patients Who Screen Positive for Dementia and Refuse Diagnostic Assessment," *Alzheimer's & Dementia: Diagnosis, Assessment, & Disease Monitoring* 1, no. 2 (2015): 236-241, <https://doi.org/10.1016/j.dadm.2015.01.002>.



26. Tanner Jensen, "Dr. Malaz Boustani: The Pros and Cons of Screening for Dementia," *Being Patient*, March 16, 2020, <https://www.beingpatient.com/dementia-screening-and-risks-of-not-knowing/>.
27. Gill Livingston et al., "Dementia Prevention, Intervention, and Care: 2020 Report of the Lancet Commission," *The Lancet* 396, no. 10248, (July 2020): 413-446, [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6).
28. "Brain Changes Detected 20 Years before Alzheimer's Symptoms," Fisher Center for Alzheimer's Research Foundation, accessed February 25, 2021, <https://www.alzinfo.org/articles/brain-detected-20-years-alzheimers-symptoms/>.
29. Lindsey Brett, Victoria Traynor, and Paul Stapley, "Effects of Physical Exercise on Health and Well-Being of Individuals Living with a Dementia in Nursing Homes: A Systematic Review," *Journal of the American Medical Directors Association* 17, no. 2 (2016): 104-116, <https://pubmed.ncbi.nlm.nih.gov/26432622/>.
30. Alzheimer's Association, "2020 Alzheimer's Disease Facts and Figures," 62.
31. Sarah Thompson, Krista L. Lanctôt, and Nathan Herrmann, "The Benefits and Risks Associated with Cholinesterase Inhibitor Therapy in Alzheimer's Disease," *National Library of Medicine* 3, no. 5 (September 2004): 425-440, <https://pubmed.ncbi.nlm.nih.gov/15335298/>.
32. Michele Bogetti-Salazar et al., "Severe Potential Drug-Drug Interactions in Older Adults with Dementia and Associated Factors," *Clinics (Sao Paulo)* 71, no. 1 (January 2016), 17-21, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4763155/#:~:text=Older%20people%20with%20dementia%20experience,severe%20potential%20drug%2Ddrug%20interactions>; Malaz Boustani and Laura Landro, "Why Dementia Goes Undiagnosed," *The Wall Street Journal*, February 25, 2013, <https://www.wsj.com/video/why-dementia-goes-undiagnosed/211B3FB8-40D7-4714-BB26-20DBAC35CB39.html>.
33. Jennifer L. Watson et al., "Obstacles and Opportunities in Alzheimer's Clinical Trial Recruitment," *Health Affairs* 33, no. 4 (April 2014): 574-579, <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2013.1314>.
34. Ibid.
35. Stacey Colino, "Dementia Patients Wanted for Clinical Trials," AARP, January 30, 2020, <https://www.aarp.org/health/dementia/info-2020/alzheimers-clinical-trials.html>.
36. Alzheimer's Association, "2020 Alzheimer's Disease Facts and Figures," 65-66.
37. Ibid.
38. Chuck Rainville, Laura Skufca, and Laura Mehegan, "Family Caregiving and Out-of-Pocket Costs: 2016 Report," *AARP Research*, November 2016, <https://doi.org/10.26419/res.00138.001>.



39. Ateequr Rahman, Rubeena Anjum, and Yelena Sahakian, "Impact of Caregiving for Dementia Patients on Healthcare Utilization of Caregivers," *Pharmacy* 7, no. 4 (2019): 138, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6958358/>.
40. Victor Tabbush et al., "The Business Case for Becoming an Age-Friendly Health System," Institute for Healthcare Improvement, 2019, http://www.ihl.org/Engage/Initiatives/Age-Friendly-Health-Systems/Documents/IHI_Business_Case_for_Becoming_Age_Friendly_Health_System.pdf.
41. Dartmouth Centers for Health & Aging, "Implementation Strategies: The Medicare Annual Wellness Visit," presentation.
42. Victor Tabbush et al., "The Business Case for Becoming an Age-Friendly Health System" (Institute for Healthcare Improvement, 2019), http://www.ihl.org/Engage/Initiatives/Age-Friendly-Health-Systems/Documents/IHI_Business_Case_for_Becoming_Age_Friendly_Health_System.pdf.
43. "Cognitive Assessment and Care Planning Services: Alzheimer's Association Expert Task Force Recommendations and Tools for Implementation," Alzheimer's Association, <https://www.alz.org/careplanning/downloads/cms-consensus.pdf>.
44. "The GSA KAER Toolkit for Primary Care Teams," The Gerontological Society of America, Fall 2020, 7, https://www.geron.org/images/gsa/Marketing/KAER/GSA_KAER-Toolkit_2020_Final.pdf.
45. Mireille Jacobson, Johanna Thunell, and Julie Zissimopoulos, "Cognitive Assessment at Medicare's Annual Wellness Visit in Fee-for-Service and Medicare Advantage Plans," *Health Affairs* 39, no. 11 (2020): 1935-1942, <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2019.01795>.
46. "Medicare Wellness Visits," CMS Medicare Learning Network, accessed February 25, 2021, <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/preventive-services/medicare-wellness-visits.html>.
47. Cyndy B. Cordell et al., "Alzheimer's Association Recommendations for Operationalizing the Detection of Cognitive Impairment during the Medicare Annual Wellness Visit in a Primary Care Setting," *Alzheimer's & Dementia* 9, no. 2 (March 2013): 141-150, <https://doi.org/10.1016/j.jalz.2012.09.011>.
48. US Senate, *Concentrating on High-value Alzheimer's Needs to Get to an End (CHANGE) Act of 2019*, S 1126, 116th Congress, Introduced in Senate April 10, 2019, <https://www.congress.gov/116/bills/s1126/BILLS-116s1126is.pdf>.
49. "Toomey and Stabenow Continue Fight against Alzheimer's Disease," Pat Toomey—United States Senator for Pennsylvania, December 14, 2020, <https://www.toomey.senate.gov/newsroom/press-releases/toomey-and-stabenow-continue-fight-against-alzheimers-disease>.



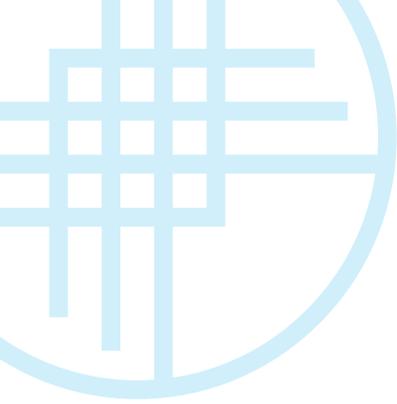
50. Alzheimer's Association, "2020 Alzheimer's Disease Facts and Figures," 19.
51. Ibid.
52. Alliance member Joshua Chodosh, MD, of New York University's Grossman School of Medicine cites the Mini-Cog as one of the best screening tools available. Not only can non-medical professionals administer the Mini-Cog but also the tool is easy to use (its duration is roughly three minutes), possesses a strong predictive accuracy, and has a large evidence base as a risk prediction tool.
53. Ibid, 43.
54. "The GSA KAER Toolkit for Primary Care Teams," 25.
55. Ibid, 17.
56. Sarang Kim et al., "Dementia Stigma Reduction (DESeRvE): Study Protocol for a Randomized Controlled Trial of an Online Intervention Program to Reduce Dementia-Related Public Stigma," *Contemporary Clinical Trials Community* 14 (2019), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6453665/>.
57. Elizabeth Carter, Keith Lind, and Claire-Noel Miller, "Annual Wellness Visits among Medicare Advantage Enrollees: Trends, Differences by Race and Ethnicity, and Association with Preventive Service Use" (AARP Public Policy Institute, May 2019), <https://www.aarp.org/content/dam/aarp/ppi/2019/05/annual-wellness-visits-among-medicare-advantage-enrollees.pdf>.
58. Mireille Jacobson, Johanna Thunell, and Julie Zissimopoulos, 1935.
59. "Supporting Older Patients with Chronic Conditions," National Institute on Aging, accessed February 11, 2021, <https://www.nia.nih.gov/health/supporting-older-patients-chronic-conditions>.
60. Ilse Wiechers, MD, geriatric psychiatrist, Office of Mental Health and Suicide Prevention, Department of Veterans Affairs, "Interview with Milken Institute Center for the Future of Aging," February 11, 2021.
61. "Federally Qualified Health Centers," Health Resources & Services Administration, May 2018, <https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fqhc/index.html>.
62. "What is an FQHC?" FQHC.org, accessed April 1, 2021, <https://www.fqhc.org/what-is-an-fqhc>.
63. "Geriatric Clinic at the FQHC," Department of Family Medicine, University of California, Irvine School of Medicine, accessed April 1, 2021, <http://www.familymed.uci.edu/geriatrics/GWEP/features/Geriatric%20Clinic%20at%20the%20FQHC.asp>.



64. Deborah Bachrach et al., “Building a Culture of Health: The Value Proposition of Retail Clinics” (Robert Wood Johnson Foundation, April 2015), https://www.thehertelreport.com/wp-content/uploads/2016/02/White-Paper-Retail_Clinic_RWJF-1.pdf.
65. “Understanding the Direct Care Workforce: Key Facts and FAQs,” PHI, accessed February 25, 2021, <https://phinational.org/policy-research/key-facts-faq/>.
66. Alzheimer’s Association, “2020 Alzheimer’s Disease Facts and Figures,” 52.
67. John W. Rowe et al., “Preparing for Better Health and Health Care for an Aging Population: A Vital Direction for Health and Health Care,” *NAM Perspectives* (National Academy of Medicine, 2016), <https://doi.org/10.31478/201609n>.
68. Vera Maljkovic et al., “P1-452: At Home Cognitive Testing (CANTAB Battery) in Healthy Controls and Cognitively Impaired Patients: A Feasibility Story,” *Alzheimer’s & Dementia* 15, no. 7S (July 2019): 404-459, <https://doi.org/10.1016/j.jalz.2019.06.1057>.
69. “Crain’s Health Pulse New York: NYU Grossman School of Medicine Named Center of Excellence in Dementia Detection by Centers for Disease Control & Prevention,” NYU Langone Health NewsHub, September 14, 2020, <https://nyulangone.org/news/crains-health-pulse-new-york-nyu-grossman-school-medicine-named-center-excellence-dementia-detection-centers-disease-control-prevention>.
70. Joshua Chodosh, “Changing Provider Attitudes about Dementia Screening and Diagnosis,” presentation, Alliance to Improve Dementia Care: Roundtable on Building Workforce Capacity for Screening and Diagnosis of Dementia, December 8, 2020.
71. Joan Weiss et al., “Critical Workforce Gaps in Dementia Education and Training,” *Journal of the American Geriatrics Society* 68, no. 3 (March 2020): 625-629, <https://doi.org/10.1111/jgs.16341>.
72. “The GSA KAER Toolkit for Primary Care Teams,” 34.
73. “Best Practices in Dementia Care and Caregiver Support,” Center to Advance Palliative Care, accessed February 21, 2021, <https://www.capc.org/training/best-practices-in-dementia-care-and-caregiver-support/>.
74. “Implementing Best Practices in Dementia Care,” Center to Advance Palliative Care, accessed February 21, 2021, <https://www.capc.org/toolkits/implementing-best-practices-in-dementia-care/>.
75. “The Gateway Geriatric Education Center,” Saint Louis University School of Medicine, accessed February 25, 2021, <https://www.slu.edu/medicine/internal-medicine/geriatric-medicine/aging-successfully/>.



76. Janie Lundy et al., “An Age-Friendly Health System,” *Journal of the American Geriatrics Society* (2020), <https://doi.org/10.1111/jgs.16959>.
77. Ibid.
78. “GWEP Coordinating Center,” AGS Geriatrics Healthcare Professionals, accessed February 21, 2021, <https://www.americangeriatrics.org/programs/gwep-coordinating-center>.
79. “Family Caregiving Advisory Council: Final Recommendations” (Administration for Community Living, 2020), https://acl.gov/sites/default/files/RAISE_SGRG/RAISE%20RECOMMENDATIONS%20FINAL%20WEB.pdf.
80. “Find Evidence-Based Programs,” Best Practice Caregiving, accessed February 25, 2021, <https://bpc.caregiver.org/#searchPrograms>.
81. Jodi L. Liu et al.
82. “Biogen to Launch Pioneering Study to Develop Digital Biomarkers of Cognitive Health Using Apple Watch and iPhone,” Biogen News Releases, January 11, 2021, <https://investors.biogen.com/news-releases/news-release-details/biogen-launch-pioneering-study-develop-digital-biomarkers>.
83. Bill Gates, “The Unexpected Way We Might One Day Diagnose Alzheimer’s,” Gates Notes, The Blog of Bill Gates, April 2, 2019, <https://www.gatesnotes.com/Health/The-unexpected-way-we-might-one-day-diagnose-Alzheimers>.



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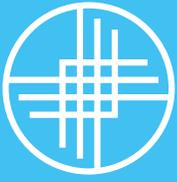
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