



Alzheimer's  
Awareness

# Choosing a Memory Care Facility

A memory care, or Alzheimer's care, facility is a specially designed senior care facility that houses and provides round-the-clock care for those with Alzheimer's disease or other kinds of dementia.

These facilities are designed with safety as a priority, but also aim to improve residents' quality of life. If you are looking for a facility for a loved one, here are some tips about what to expect during your search.

## SAFETY IS KEY

Memory care facilities are designed with unique layouts to help reduce confusion. Many are designed with a concept called "human-centered design," which "considers how the interior space of a structure affects a person's thinking, behavior, and emotions," according to APlaceforMom.com.

This means the architecture of the building is designed to address issues such as wandering. In addition, themed wings of the building might help patients associate the certain imagery with a certain place to help find their way, and design elements are meant to increase sensory stimulation, according to DesignKit.org.



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Some facilities are secured or locked, meaning residents' movements are restricted in order to keep them safe, and there may be sensors built in throughout the community to help keep track of patients' movements and ensure safety.

Memory care facilities also typically have a low staff-to-resident ratio, to allow staff to devote maximum attention to residents' safety and needs.

## SERVICES

The staff are specially trained to work with dementia

patients, and the facilities typically offer memory-enhancing therapies and activities, as well as services such as medication management, laundry, transportation, healthy meals, incontinence care and toileting, housekeeping, help with personal care and mobility assistance, according to APlaceforMom.com.

## QUESTIONS TO ASK

When you visit a memory care facility, there are some essential questions to ask. Here are some suggestions from the Alzheimer's

Association. Read more at <https://bit.ly/3BQ14iP>.

- Are families encouraged to participate in care planning and communicate with staff?
- How are families informed of changes in resident's condition and care needs?
- How often are physicians and nurses or nurse practitioners on premises? Is there a registered nurse on site at all times?
- Are staff trained in dementia care? Is it required by the state? How long is the training and what topics are covered?
- What is the ratio of resi-

dents to staff?

- How does staff handle challenging behaviors?
- Which therapies (physical, occupational, speech, recreational) are offered?
- What is the rate of falls?
- Does staff have a plan for monitoring adequate nutrition?
- Is continuing care available as a resident's needs change?
- Is there an "aging in place" policy where residents can remain in the community — even the same room — throughout the course of the disease?



# COVID and Dementia

As the COVID-19 pandemic has ravaged the world, those who study dementia have become worried that a knock-on effect of the disease will be a spike in dementia cases.

The Alzheimer's Disease International has urged the World Health Organization and governments around the world to "urgently fast track research on the potential impact of COVID-19 on increasing dementia rates," according to CNBC.

The World Health Organization estimates that around 50 million people have dementia globally, with nearly 10 million new cases every year, according to CNBC. Cases were already on the rise before COVID-19, with the number expected to rise to 78 million by 2030, according to ADI.

## NEW RESEARCH

Research presented at the Alzheimer's Association International Conference in 2021 found associations between COVID-19 and persistent cognitive deficits, including the acceleration of Alzheimer's disease pathology and symptoms, according to the Alzheimer's Association. Of particular concern is "long COVID," or the syndrome of symptoms such as loss of taste and smell, "brain fog,"



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and difficulties with concentration, memory and thinking, that persist long after the initial infection.

Dr. Alireza Atri, a cognitive neurologist and chair of the Alzheimer's Disease International's Medical and Scientific Advisory Panel, told CNBC that COVID can "damage and clot micro vessels in the brain, hurt the body's immunity and cause inflammation."

Research shows that biological markers of brain injury,

neuroinflammation and Alzheimer's correlate strongly with the presence of neurological symptoms in COVID-19 patients, and that people experiencing cognitive decline after a COVID-19 infection were more likely to have low blood oxygen following brief physical exertion as well as poor overall physical condition, according to the Alzheimer's Association.

In one study, patients were evaluated at three and six months after COVID-19 infec-

tion. More than half reported persistent problems with forgetfulness, and about one in four had additional problems with cognition including language and executive dysfunction, according to the Alzheimer's Association.

## A PATH FORWARD

An international consortium of researchers from 40 countries are working with the World Health Organization to understand the long-term consequences

of COVID on the brain and central nervous system, including blood-brain barrier integrity and the brain's immune response. Researchers believe that better understanding the link between COVID and dementia can help identify new dementia cases as early as possible. The consortium continues its work to study the connection between the two diseases but needs the help of governments around the world.



# Deep Learning Research

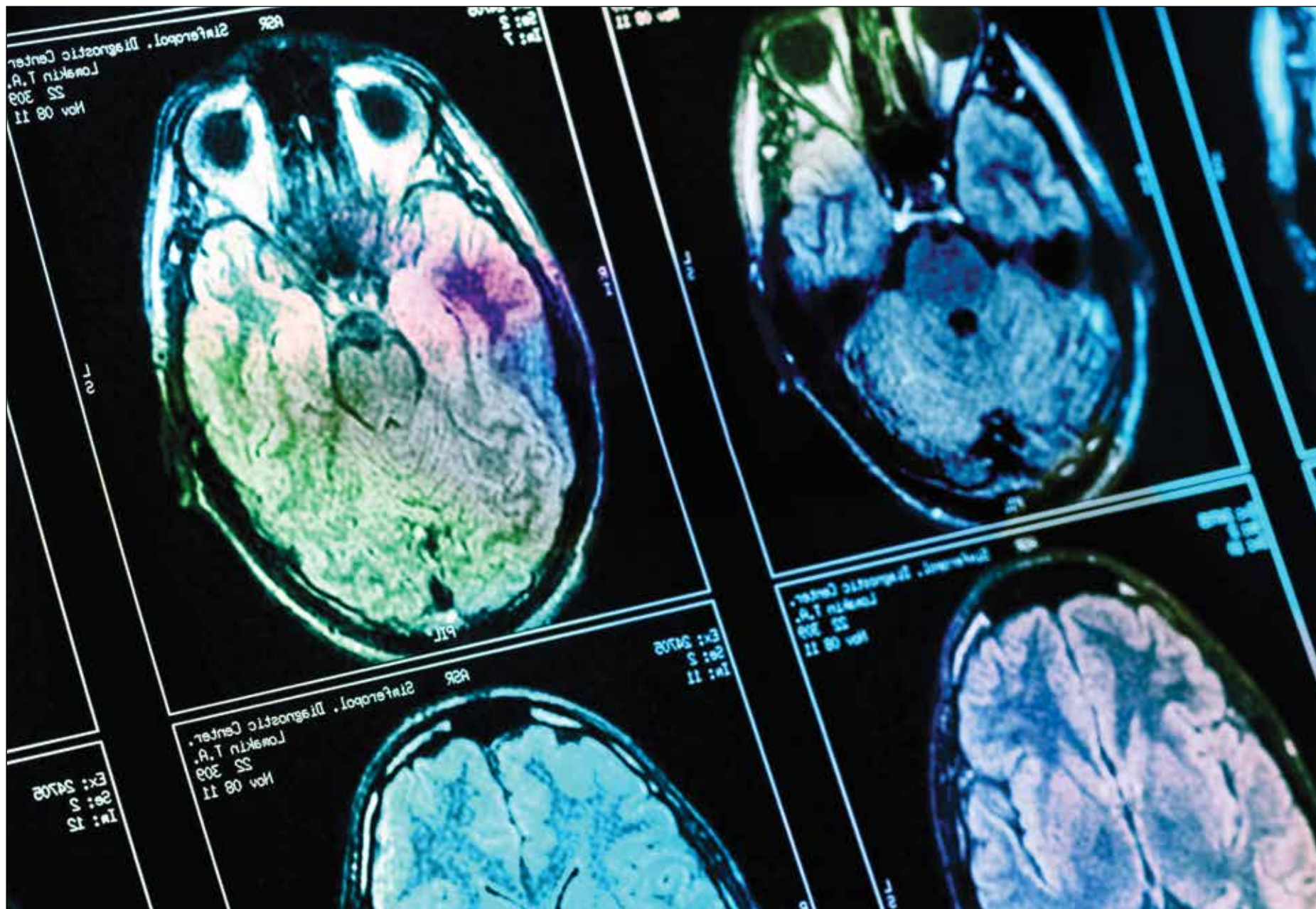
It may sound like something out of a sci-fi novel, but computers using artificial intelligence may soon be able to analyze medical imaging to diagnose and classify Alzheimer's disease.

Researchers have found promise in deep learning, a form of machine learning in which a computer analyzes MRI imaging and learns how to improve at identifying and characterizing disease.

## THE RESEARCH

In 2020, Boston University School of Medicine researchers developed a computer algorithm based on artificial intelligence that can accurately predict the risk for and diagnose Alzheimer's disease using brain MRIs, cognitive impairment testing data and data on age and gender, according to Genetic Engineering and Biotechnology News.

"If computers can accurately detect debilitating conditions such as Alzheimer's disease using readily available data such as a brain MRI scan, then such technologies have a wide-reaching potential, especially in resource-limited settings," explained corresponding author Vijaya B. Kolachalama, Ph.D., assistant professor of medicine, in a



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news release.

In 2019, an analysis performed by researchers from the Indiana University School of Medicine and the Indiana University Network Science Institute looked at existing research on the use of deep learning. They found that the method is 96% successful in classifying Alzheimer's disease and 84.2% successful in predicting a conversion from mild cognitive impairment to

Alzheimer's.

Deep learning is used to identify "intricate structures in complex high-dimensional data," according to the National Library of Medicine. Deep learning also has been found to be successful in diagnosing diabetic retinopathy and some cancers, according to Nature.com.

## MORE WORK TO DO

The authors of the Indiana

research said that while deep learning shows promise in identifying disease even better than skilled professionals, there are some issues with the technology that need to be worked out before it's ready for real-world application. "The diagnostic classification by deep learning needs to show consistent performance under various conditions, and the predicted classifier should be interpretable," they wrote. In

addition, more work needs to be done on the mathematics behind the process, and more data needs to be collected to fine tune the process.

Still, the idea that a computer might be able to detect Alzheimer's disease — the sixth leading cause of death in the United States — early and accurately offers hope for early diagnosis and treatment, and ultimately, better outcomes for patients.



# Diet Matters

Research into the relationship between what we eat and our cognitive functioning points to the benefits of diets that are good for your heart health.

Although more research is needed, studies show that the Mediterranean diet can help reduce heart disease and may also be beneficial in reducing the risk of dementia, according to the Alzheimer's Association. The DASH (Dietary Approaches to Stop Hypertension) diet, commonly used to reduce blood pressure, also shows promise when combined with the Mediterranean Diet.

## MEDITERRANEAN DIET

The Mediterranean diet is based on how people typically eat in the Mediterranean region. The diet focuses on fruit, vegetables, nuts and grains, healthy fats such as olive oil, limited red meat, low salt (use herbs to flavor food instead) and at least twice a week, you should eat fish and poultry.

The Mediterranean diet may help slow cognitive decline in older adults, reduce the risk of mild cognitive impairment and reduce the risk of mild cognitive impairment progressing into Alzheimer's disease, according to the Mayo Clinic. It also may help prevent brain tissue loss associated



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with Alzheimer's. The Mayo Clinic cautions, however, that more research is needed, and the evidence isn't strong enough to show that the diet reduces Alzheimer's disease risk.

## DASH DIET

The DASH diet includes foods low in saturated fat, total fat and cholesterol, and lots of fruits, vegetables and low-fat dairy. To follow this diet successfully, reduce your intake of

fats, red meats, sweets, sugar-sweetened beverages and sodium, and include whole grains, poultry, fish and nuts.

While the DASH diet alone has not been shown to have major impacts on cognitive functioning, a combination of the DASH diet with the Mediterranean diet, which researchers call the MIND diet, has been shown to be effective. According to the Mayo Clinic, the MIND diet includes the following rules:

- At least three servings of whole grains a day.
- Green leafy vegetables (such as salad) at least six times per week.
- Other vegetables at least once a day.
- Berries at least twice per week.
- Red meat less than four times per week.
- Fish at least once per week.
- Poultry at least twice per week.
- Beans more than three

times per week.

- Nuts at least five times per week.
- Fried or fast food less than once per week.
- Mainly olive oil for cooking.
- Less than a tablespoon of butter or margarine a day.
- Less than a serving of cheese per week.
- Less than five pastries or sweets per week.
- One glass of wine or other alcoholic drink a day.

# Equity in Alzheimer's Research

Researchers are working to better reach groups that are affected by Alzheimer's disease but underrepresented in clinical trials.

## THE PROBLEM

Research presented at AAIC 2021 found that African American, Latino and American Indian respondents are more concerned than white people about potential barriers to their participation in studies, such as disruption of work and family responsibilities and availability of transportation and childcare.

In addition, clinical trial exclusion criteria that are commonly used in studies can disproportionately affect African Americans and Hispanics/Latinos, which might mean they are less likely to be represented in research, according to the Alzheimer's Association.



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## A NEW TOOL

Outreach Pro is a tool unveiled at the Alzheimer's Association International Conference 2021 to help researchers, academia, community organizations and others working to better understand brain health reach historically underrepresented populations.

The tool helps researchers create websites, handouts, videos and social media posts targeted at underrepresented

populations.

"We are facing a critical and growing need for people living with Alzheimer's and related dementia, as well as those at higher risk, and healthy people, to participate in clinical trials," said NIA Director, Richard J. Hodes M.D., in an NIH news release.. "That need is especially acute for frequently underrepresented groups such as Black and Hispanic Americans, which is why Outreach Pro includes an

emphasis on helping clinical trial researchers connect with these and other important communities."

## THE LONG TERM

The new tool is part of a longer-term strategy by the NIH, the Alzheimer's Association and other government, private sector, academic and industry stakeholders to increase engagement in Alzheimer's research.

"It is critical that clinical tri-

als have appropriate representation to ensure we have a complete understanding of how well different therapies or approaches to dementia care work in different populations," said Holly Massett, Ph.D., who oversees the implementation of the national strategy. "Outreach Pro was designed to provide well-tested and culturally appropriate outreach materials that resonate with diverse populations and encourage them to participate

in clinical trials."

Outreach Pro's library of content includes materials specifically designed for a range of audiences, including Black Americans and Hispanic/Latinos, according to the news release. The materials were initially available in English and Spanish, with plans to add Asian American and Pacific Islander materials by fall 2021, and American Indian and Alaska Native content by 2022.



# Mental and Physical Exercise

Both physical and mental activity is important for Alzheimer's patients. Brain exercises have been shown to improve brain function, and the benefits are long-lasting.

## THE RESEARCH

One study provided more than 2,800 seniors with brain training sessions for five to six weeks, according to WebMD. The sessions focused on memory, reasoning and speed of processing information. Participants showed improvement in those skills that lasted at least five years. They also showed improvement in completing everyday tasks, such as managing money and doing housework.

Another study showed that people may be able to delay the onset of Alzheimer's by exercising their brains.

Studies have shown that people who are physically active are less likely to experience a decline in their mental function and have a lowered risk of developing Alzheimer's disease, according to the Mayo Clinic. Physical exercise also helps combat some known risk factors for Alzheimer's disease, such as depression obesity.

Even after a diagnosis of



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Alzheimer's disease, exercise continues to be important. According to the National Institutes of Health, physical helps keep the muscles, joints and heart in good shape, and helps with weight management, and good toilet and sleep habits.

## TYPES OF EXERCISE

**Brain training.** Using a computer, playing games, crafting, participating in

social activities, word puzzles (such as crossword puzzles) and number puzzles (like sudoku), card games or Trivial Pursuit.

**Physical exercise.** The American Academy of Family Physicians recommends that older adults get at least 150 minutes of moderate-intensity aerobic activity, 75 minutes of vigorous-intensity aerobic activity, or an equivalent combination of each per week.

**For the Alzheimer's patient.** Simple tasks around the home, such as sweeping and dusting; riding a stationary bike; using soft rubber exercise balls or balloons for stretching or throwing back and forth; using stretching bands, which you can buy in sporting goods stores; lifting weights or household items such as soup cans.

The National Institutes of Health offers the following

tips for helping someone with Alzheimer's stay safe while being active.

- Make sure the person with Alzheimer's disease has an ID bracelet with your phone number if he or she walks alone.
- Make sure the person wears comfortable clothes and shoes that fit well and are made for exercise.
- Make sure he or she drinks water or juice after exercise.



# Respite Care Help

Providing constant care for someone with Alzheimer's disease can take a big toll on a caregiver's physical and mental health.

Respite care is sometimes covered by long-term care insurance. If you are struggling to provide ongoing care for a family member or loved one, look for a respite care programs in your area.

## WHAT IS PROVIDED

The Alzheimer's Foundation of America and the Alzheimer's Association offer grants to respite care programs to help families afford respite care. The grants fund daytime respite care centers where patients can receive care while their regular care-giver attends to their own needs. Also check with your local Area Agency on Aging or local churches to see if they offer respite care programs.

## ELIGIBILITY REQUIREMENTS

Most programs that provide subsidized care are based on financial need, though what that means varies from program to program. You may need to show proof of in-come, such as tax returns or pay stubs, as well as documenting your assets.

According to PayingforSeniorCare.com some programs have other require-



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ments such as:

- A minimum amount of time the caregiver spends caring for the patient, the caregiver might be required to live with the patient, .
- The recipient cannot be receiving respite care help from other organizations.
- The care recipient cannot have a LTC insurance policy that provides adult day care, home care services or hospice care.
- The caregiver cannot be receiving payment for their service.

- The care recipient cannot be on Medicaid.

## CHOOSING A PROGRAM

The Alzheimer's Research Association recommends that caregivers ask the following questions when looking for a respite care service.

- Are families limited to a certain number of hours for services needed?
- Can the provider take care of more than one person at a time?
- Can family members meet and interview the people who

will be providing the respite care?

- Does the program provide transportation for the caregiver/senior?
- Does the program keep an active file on the senior's medical condition and other needs? Is there a written care plan?
- How are the caregivers screened for their jobs?
- How are the caregivers trained? Do they receive extra training, where appropriate, to meet specific family needs?
- How are the caregivers supervised and evaluated?

- How much does the respite care cost? What is included in the fee?

- How far ahead of time do family members have to call to arrange services?

- How do the caregivers handle emergencies? What instructions do they receive to prepare them for unexpected situations (being snowed in or losing power during a thunderstorm, for example)?

- How is the program evaluated? Are family members contacted for their feed-back? If so, review their comments.