

# BAI BEACON

*The Newsletter from Family and Community Services  
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## Mild Cognitive Impairment

In your doctor's office or even on a recent news story you may have heard the term, MCI, or mild cognitive impairment. Like other medical jargon, this term can be confusing and is sometimes used and described in different ways by medical professionals. This article aims to help define mild cognitive impairment and understand how it is evaluated, diagnosed, and what this may mean for you and/or a family member or friend.

Mild cognitive impairment (MCI) was first described as a transition state between normal cognition (memory and thinking) and dementia, particularly in reference to memory changes seen prior to Alzheimer's disease. Over the past 15 years or so, the concept of MCI has been studied, debated, and clarified. There are multiple ways that medical providers understand and define MCI. The basic definition is *impairment in thinking skills that goes beyond normal age-related cognitive changes but does not meet criteria for dementia*. That is, as an individual ages, we expect changes in some thinking skills (e.g., learning and memory, speed of thinking) to decline over time. This is usually called *age-associated cognitive changes* or what some people consider "normal aging." However, with MCI, individuals demonstrate loss in skills compared to others their own age. In addition there may be a decline in the person's abilities greater than expected given prior level of cognitive functioning. As discussed in the January 2016 edition of the BAI Beacon newsletter, dementia means that there are changes in thinking abilities that interfere with a person's independence in everyday activities. One of the main differences between dementia and MCI, is that in MCI, individuals can experience mild changes in everyday activities. However, the person's cognitive changes *do not* significantly interfere with the



ability to complete everyday life skills, such as shopping, cooking, cleaning, completing hobbies, and managing money, appointments, and medications.

To help medical providers be more specific when describing cognitive impairment, several MCI *subtypes* have been described based on different areas (i.e., *domains*) of thinking. But first, it is important to understand the main domains of thinking skills that medical providers look at when MCI is considered. These domains generally include:

- Memory: new learning, recall, and retrieval of recent information
- Language: ability to come up with words, name items, understand others
- Attention: concentration, ability to focus and stay on task
- Visuospatial abilities: understand and interpret spatial relationships, constructional skills
- Executive functioning: problem solving, reasoning, sequencing, control over behavior

## Our Mission

To end Alzheimer's disease without losing a generation, to set a new standard of care for patients and their families, and to forge a model of collaboration in biomedical research.

These cognitive domains can be assessed in many ways. Brief cognitive screenings using the Mini-Mental Status Examination (*MMSE*), Montreal Cognitive Assessment (*MoCA*), and/or other brief tests can be done in your doctor's office. They are helpful for the doctor to look for changes in one of these domains if MCI is suspected. Nevertheless, many times these cognitive screenings are not conclusive and physicians order a *neuropsychological evaluation*. A neuropsychological evaluation can provide more in depth testing of these skills. Specifically, a *neuropsychologist* can measure the extent of a patient's cognitive strengths and weaknesses in different domains. The neuropsychologist will compare that person's performance on tests to other cognitively normal healthy adults who are of a similar age.

The multiple subtypes of MCI are based on the cognitive domains described. First, MCI can be split into *amnesic* or *non-amnesic* subtypes. Amnesic and non-amnesic refers to whether or not there is a problem in learning and/or memory skills. Subtypes are then further divided by how many different domains of thinking are impaired and classified into *single domain* or *multi-domain* (i.e., multiple areas). In single domain MCI, there is only one major domain of thinking impaired. In multi-domain MCI, there is impairment in two or more major domains of thinking. Therefore, one can have single domain, amnesic MCI, where memory is the only domain of thinking impaired. In multi-domain amnesic MCI, memory and at least one other domain of thinking is impaired. In comparison, one can have single domain, non-amnesic MCI, where one domain other than memory (e.g., attention) is impaired alone. Likewise, a person could have multi-domain non-amnesic MCI, where at least two non-memory domains (e.g., attention and executive functioning) are impaired.

The reason MCI and these subtypes were originally created was to help describe, detect, and attempt to treat cognitive changes earlier. This is very important in those with an underlying *neurodegenerative* condition (i.e., a condition that affects brain cells and gets progressively worse over time) prior to progression to dementia. Thus, many times MCI reflects early cognitive changes that occur as part of an underlying condition that will later progress to dementia. The type of dementia can include Alzheimer's disease (AD), Dementia with Lewy Bodies (DLB), Vascular dementia (VaD), Frontotemporal dementia (FTD), or other dementias.

Approximately 14-18% of people over the age of 70 have been diagnosed with MCI. Amnesic MCI is the most common form. It is about twice as common as non-amnesic subtypes, occurring in 5-6% of older adults (>70 years of age) per year. A diagnosis of MCI increases the risk for later developing dementia. But, some individuals will never progress to dementia. Up to 15% of those diagnosed with MCI will progress to dementia each year, with up to 60-65% of individuals with MCI progressing to

dementia in his/her lifetime. In contrast, approximately 1-2% of older adults without MCI are diagnosed with dementia per year. Amnesic MCI usually progresses to the most common form of dementia, Alzheimer's disease. Those with non-amnesic forms of MCI may be at lower risk to later develop dementia. Nevertheless, they are still at risk to progress to other syndromes, such as DLB or FTD, where changes in executive functioning, attention, and/or behavior are usually impacted more than learning and memory.

It is important to remember that cognitive impairment can be related to a number of different factors - not always an underlying neurodegenerative syndrome, such as Alzheimer's disease. It can be difficult for medical providers to know the reason for cognitive changes.

Examples include:

- Psychiatric changes (e.g., depressed mood, anxiety);
- Medical and/or neurological conditions (e.g., sleep apnea; stroke; significant sleepiness/fatigue; urinary tract infections; low thyroid);
- Treatment and/or medication effects (e.g., chemotherapy, side effects or interactions of medications) can also impact cognition.

Furthermore, some can have both an underlying neurodegenerative condition along with a condition described above. Therefore, it makes the diagnosis more difficult for medical providers. This is why a full medical work-up usually includes a physical exam, review of background and medical history, laboratory tests, brain imaging, and cognitive testing. MCI is still based on the clinical judgment of the medical provider. Medical follow-up and allowing for the passage of time, is critical in aiding in accurate diagnosis.

Given that there are different subtypes and multiple potential varied causes of MCI, including neurodegenerative illnesses, treatment options vary. Your physician may recommend changes and/or treatment to limit the possible effects of other potential causes of MCI. This can include controlling for side effects of medications, other medical conditions, or treatment of depression/anxiety. If a neurodegenerative process, such as Alzheimer's disease is suspected, your physician may consider initiation of treatment with medications, such as Aricept. Moreover, individuals diagnosed with MCI may also be a candidate for one of several clinical trials and research studies at BAI/BSHRI examining MCI.

We invite you to join the Webinar/teleconference "Dementia Dialogue" on Wednesday, February 17th, 2016 from 12:00-1:00 p.m. Arizona time when Jacquelynn N. Copeland, Ph.D., explores more on "Mild Cognitive Impairment." Registration is required and must be done online at [www.bannershri.org](http://www.bannershri.org) under events and education and online education OR you can call 623-832-3248.



## Ask The Expert

Jacquelynn N. Copeland, Ph.D.  
Neuropsychologist, Stead Family Memory Center

Dear Dr. Copeland,

*I've recently been diagnosed with mild cognitive impairment and started on Aricept. I'm relatively healthy and happy, but I am more forgetful than in the past. I need more reminders and help from my husband when paying the bills and taking medications. I am afraid that soon I won't recognize my family or friends and I won't be able to complete the simplest of tasks. Is there anything I can do to keep this from happening?*

Signed,  
Jan

Dear Jan,

Every person diagnosed with mild cognitive impairment (MCI) is different, but it is not uncommon to experience increased forgetfulness in everyday life. Many will need reminders or more help with complex activities, such as paying bills and managing medications. It is also very common to feel afraid, worried, and anxious when receiving this diagnosis, particularly regarding whether you will later develop dementia and need more care in your everyday life.

However, the unfortunate answer to your question is there may not be a way to fully prevent any person with MCI from developing dementia. That being said, you can develop strategies to help you cope with your everyday limitations. Since everyone has their own strengths and weaknesses, what works for you may not work for others, and vice versa. For instance, if memory is your weakness, set alarms or reminders when you have to do something at a certain time (e.g., take your medications, pay your bills). Also, for many people, there can be trouble learning and remembering information when there is too much going on around them. In this case, limit distractions (e.g., TV/radio) and concentrate on one task at a time. You might have to be creative, but try to add as much structure, routine, and habit to your everyday life, so you are less reliant on your cognitive weaknesses. Some suggestions include, making written checklists, writing and following step by step instructions/details of a task, using a calendar, always putting important items in one place when you come/leave, instill checking behaviors (i.e., ask yourself where are my keys, wallet, phone, glasses before getting in the car), using external aids such as pillboxes, tablets, notebooks, and/or establishing a daily routine (e.g., take your medication after you brush your teeth but before you eat every morning).

Although you are already on a medication to help possibly slow progression to dementia, there are also non-medication options which could potentially help you maintain cognitive abilities and/or help improve your quality of life. Try to stay physically active, (e.g., walking 30 minutes a day) and maintain a heart healthy diet, as recommended by your physician. Keep your mind active as well by engaging in slightly challenging (but not frustrating) mentally stimulating activities, such as reading, playing games, and/or doing puzzles. Social activity, such as outings, conversations, and interactions with friends, family, or others could also potentially provide mental stimulation, limit withdrawal, and help improve mood.

Additionally, use this time to get your medical, legal, and financial affairs in order. Have discussions with your family and let your wishes be known. Lastly, try not to let the jargon or diagnosis itself scare you. The purpose of a diagnosis is to help describe and identify what you and/or your family have experienced and/or observed. This will help you, your family, friends and medical providers to be more aware of these difficulties and try to prepare for, treat, and cope with them better. This is a hard task, but sometimes acceptance of your weaknesses and limitations, can allow you to feel more open to ask for help and to experience an overall better quality of life, with less worry and stress.

## Have a Question?

To submit your question for future consideration email us at: [baiinfo@bannerhealth.com](mailto:baiinfo@bannerhealth.com)

Did you know you can honor physicians and staff at Banner Alzheimer's Institute through a gift of support? For more information, call 602-747-GIVE (4483).



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Banner Alzheimer's Institute  
Banner Sun Health Research Institute

Banner Health  
901 East Willetta Street  
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## Helpful Memory Strategies

### Written reminders

- Grocery lists
- Post-it notes
- Notepad by phone
- Calendar
- Diary
- Bulletin board

### Auditory reminders

- Alarm clock/watch
- Kitchen timer
- Answering machine/ voice mail

### Organizational reminders

- Memory basket/defined location for items
- String around your finger / keys on casserole for party

### Technology

- Reminder apps for smart phones/iPads
- Alarmed pill dispenser
- Digital recorder
- Wireless key/remote finders



Banner Alzheimer's Institute

#### *Recipe for a Healthy Brain*

**Serves: Everyone**

**From the Kitchen of: Banner Alzheimer's Institute**

#### Ingredients

- 1 daily dose of 30-minute exercise
- 1 daily heart healthy diet
- 1 daily dose of mental activity
- 3 weekly doses of social activity
- 1 daily dose of positive thinking
- 1 daily dose of 7-8 hours of sleep

*Mix together on a routine basis and enjoy a longer, happier life! For additional information contact BAI Family & Community Services at 602-239-6900*

## February 2016 Program Schedule

# CAREGIVER EDUCATION PROGRAMS

### CHANDLER

#### Banner Brain Health Program

Learn how lifestyle choices can minimize the risk of Alzheimer's disease and then "flex" your cognitive muscles as you determine how to exercise your brain!

*Monday, February 8; 9:30 a.m. – Noon  
Praise and Worship Center Chandler  
2551 North Arizona Avenue, Chandler  
Free but registration is required.  
To register, call (602) 230-CARE (2273)*

### PHOENIX

#### Planning Ahead Class for Caregivers

This 2-hour class reviews necessary planning for legal, financial and medical decisions for someone with Alzheimer's disease/related dementia or a movement disorder. Included is an overview of community resources and agencies, how to find help and pay for care in the home, community, and residential care.

*Tuesday, February 9; 10:00 a.m. – Noon  
Banner Alzheimer's Institute, 901 E. Willetta Street, Phoenix  
Free but registration is required.  
To register, call (602) 839-6850*

#### Good News in Alzheimer's disease Research

Now is a new era of Alzheimer's disease (AD) treatment and care. As leaders in AD prevention and treatment research, some of the most exciting advances are happening in Arizona. Join one of our researchers to learn how you can participate and make a difference.

*Wednesday, February 10; 10:00 a.m. – 11:30 a.m.  
Banner Alzheimer's Institute, 901 E. Willetta Street, Phoenix  
Free but registration is required.  
To register, call (602) 839-6850*

#### Banner Brain Health Program

Learn how lifestyle choices can minimize the risk of Alzheimer's disease and then "flex" your cognitive muscles as you determine how to exercise your brain!

*Thursday, February 11; 9:30 a.m. – Noon  
Banner Alzheimer's Institute, 901 E. Willetta Street, Phoenix  
Free but registration is required.  
To register, call (602) 230-CARE (2273)*

### PHOENIX (CON'T)

#### As Dementia Progresses: Next Steps for Caregivers

Learn about the moderate to advanced stages of dementia, how common symptoms can be managed, how to cope with changing function while assisting caregivers to find success in their daily efforts.

*Monday, February 15; 10:00 a.m. – Noon  
Banner Alzheimer's Institute, 901 E. Willetta Street, Phoenix  
Free but registration is required.  
To register, call (602) 839-6850*

#### Problem Behaviors: Solutions that Work

This class will address the most common types of behavior problems and pose a variety of solutions that caregivers can easily utilize.

*Thursday, February 18; 10:00 a.m. – Noon  
Banner Alzheimer's Institute, 901 E. Willetta Street, Phoenix  
Free but registration is required.  
To register, call (602) 839-6850*

#### COMPASS: Directions for Caregivers after the Dementia Diagnosis

Dementia 101: This class teaches caregivers all about what Dementia is, different types of dementias, how to manage behaviors, and shares resources. We highly encourage caregivers to attend this class after a new diagnosis.

*Thursday, February 25; 4:00 p.m. – 5:30 p.m.  
Banner Alzheimer's Institute, 901 E. Willetta Street, Phoenix  
Free but registration is required.  
To register, call (602) 839-6850*

#### Free Memory Screening Event

Free monthly memory screening allowing community participants to screen for potential memory concerns and provide direction to prevention studies, clinical trials and memory clinics.

*Friday, February 26; 9:00 a.m. – Noon  
Banner Alzheimer's Institute, 901 E. Willetta Street, Phoenix  
Free but registration is required.  
To register, call (602) 839-6850*

*Please turn over for more classes →*

**These programs are made possible by the generous support of the Banner Alzheimer's Foundation.**

## February 2016 Program Schedule

# CAREGIVER EDUCATION PROGRAMS

### MESA

#### Lack of Awareness v. Denial in Dementia



Families often think their person is in denial about their dementia diagnosis. However, some people with the disease are unable to see changes in themselves. This 60-minute class will assist participants to learn the difference between denial and lack of insight providing strategies to avoid confrontation.

*Tuesday, February 16; 10:00 a.m. – 11:00 a.m.*

*Mesa Red Mountain Library, 635 N. Power Road, Mesa*

*Free but registration is required.*

*To register, call (602) 839-6850*

### SUN CITY

#### Banner Brain Health Program

Learn how lifestyle choices can minimize the risk of Alzheimer's disease and then "flex" your cognitive muscles as you determine how to exercise your brain!

*Tuesday, February 9; 1:00 p.m. – 3:30 p.m.*

*Banner Sun Health Research Institute, 10515 W. Santa Fe Dr. Building B, Morin Auditorium, Sun City*

*Free but registration is required.*

*To register, call (602) 230-CARE (2273)*

#### Planning Ahead Class for Caregivers

This 2-hour class reviews necessary planning for legal, financial and medical decisions for someone with Alzheimer's disease/related dementia or a movement disorder. Included is an overview of community resources and agencies, how to find help and pay for care in the home, community, and residential care.

*Friday, February 12; 1:00 p.m. – 3:00 p.m.*

*Banner Sun Health Research Institute, 10515 W. Santa Fe Dr.*

*Free but registration is required.*

*To register, call (623) 832-3248*

#### To learn about upcoming education and support programs dates at:

- Banner Alzheimer's Institute, visit [www.banneralz.org](http://www.banneralz.org) and click on "Events Calendar" icon or call Deidra Colvin, Events Coordinator at 602-839-6850
- Banner Sun Health Research Institute, visit [www.bannershri.org](http://www.bannershri.org) and click on "Events and Education" or call Veronica Flores, Events Coordinator at 623-832-3248

### SUN CITY (CON'T)

#### BSHRI Community Lecture: Alzheimer's disease Medications: What you need to know.

While use of approved medications for the treatment of Alzheimer's disease don't cure the illness, they can be effective in managing symptoms. This 90-minute lecture will review medications used, how to set reasonable expectations for us, potential side effects and tips for common issues.

*Tuesday, February 23, 2016; 2:00 p.m. – 3:30 p.m.*

*Banner Sun Health Research Institute, 10515 W. Santa Fe Dr.*

*Free but registration is required.*

*To register, call (623) 832-3248*

#### Emotional Impact of Alzheimer's disease Lecture

It is well recognized that Alzheimer's disease causes memory loss. This lecture focuses on helping you better grasp the common emotional changes that may occur in the person with AD. Learning to better understand emotional changes can help you to increase your level of empathy and reduce caregiver frustration.

*Friday, February 26, 2016; 2:00 p.m. – 3:00 p.m.*

*Banner Sun Health Research Institute, 10515 W. Santa Fe Dr.*

*Free but registration is required.*

*To register, call (623) 832-3248*

### ONLINE EDUCATION

#### Dementia Dialogues: Mild Cognitive Impairment (MCI)

People living with MCI are experiencing notable changes in memory and thinking while still functioning at a fairly high level. However, many are at risk for developing dementia. This Dialogue will review what MCI is and what can be done to help those with MCI live their best.

*Wednesday, February 17; Noon – 1:00 p.m. MST (AZ Time)*

*Free webinar but registration is required online at [www.bannershri.org](http://www.bannershri.org) under event/education and online education. Any questions in regards to this program, call (623) 832-3248.*