**Cognitive Impairment and Normative Aging**

*Most people believe that memory decline is a normal part of aging, but this is a myth. Memory tends to slow with age like other functions, but decline in the ability to remember things is not a normal part of the aging process. It’s important to understand and recognize the difference.*

One of the most common questions health professionals face when working with aging populations and hearing complaints of memory loss, forgetting names, and having difficulty finding words is, “Is this normal?” As people get older, these experiences become frightening. Americans worry that these are signs of one of the greatest fears that they face as they age: losing their mental capacity (Charlton Research Company 2005).

The prevalence of dementia in North America is expected to rise by 35 percent from 2007 to 2050 (Brookmeyer, Johnson, Ziegler-Graham, and Arrighi 2007). Projections have health professionals and research organizations working hard to develop methods of assessment and early interventions, designed to detect and slow the progression of cognitive decline and diminished functional ability. The question remains: Is memory loss, difficulty concentrating, or other noticed change normal?

**Understanding Cognition**

To understand cognitive decline, it is first important to understand cognition. Cognition is a singular term for a broad range of overarching concepts. These include our abilities in domains, such as:

- **Language** (the ability to speak and understand spoken communication);
- **Visual-spatial construction** (the ability to understand the world around us and our place in relation to it);
- **Non-verbal reasoning** (the ability to use things like remote controls, drive, and complete other more visually dependent mechanical tasks);
- **Attention, concentration and, tracking** (the ability to focus on information);
- **Memory and learning** (the ability to remember both in the short and long term, and our ability to acquire and keep new information);
- **Executive functioning**—commonly known as higher functioning (the ability to sort and categorize information, and problem solve).

**What is “Normal” Aging?**

The normative process of the aging mind is something of debate in the medical profession. But there is a foundational understanding of what are normative cognitive changes and what are warning signs of greater decline to come. The truth is, most of us do not experience cognitive impairment as we age—we experience cognitive slowing. As people age, there are detectable changes in the brain. Its weight declines by 10 percent by age eighty, blood flow diminishes, nerve conduction slows, and nerves experience cell death (Patel and Holland 2012). Cognitive abilities decline gradually with these changes, but tend not to affect overall function or activities of daily living.
Studies have shown that even with gradual decline, the majority of cognitive abilities remain within a normal range (one standard deviation from the mean) throughout most of the lifetime (Hedden and Gabrieli 2004). What falls below this range as we get older (late seventies and early eighties) is our ability to think quickly (processing speed), and our numeric ability such as paying bills and calculating tips (Hedden and Gabrieli 2004).

Most people believe that memory decline is a normal part of aging, but this is a myth. Memory tends to slow with age like other functions, but decline in the ability to remember things is not a normal part of the aging process. It takes us longer to retrieve the information we are looking for. The same is true of learning. While we could acquire information relatively quickly and retain it well when we were younger, it takes more effort to process, store, and retrieve information as we age. To summarize, as we age, we can expect to take more time to think things through, spend more effort learning, and occasionally have difficulty remembering something, but eventually these tasks are completed.

What is Cognitive Impairment?
Impairment in whole domains of cognition, even with adequate time and assistance—such as being unable to remember familiar things, having difficulty with planning or problem solving, not being able to communicate or understand words—is not normative aging. Impairment in these domains however does not necessarily mean the person is experiencing a degenerative disorder. The severity of the impairment (mild or severe), the onset, rate, and precipitating factors all play a significant role in diagnosis and treatment.

Diagnosis of cognitive impairment. With the transition from the Diagnostic and Statistical Manual of Mental Disorders, fourth edition-text revision, to the Manual’s fifth edition (DSM-5; APA 2013), cognitive decline has been streamlined into mild and major neurocognitive disorders. These diagnoses come with subtype categories that include impairments consistent with the neurodegenerative diseases, such as vascular dementia and dementia of the Alzheimer’s type, as well as impairments consistent with other diagnoses, such as traumatic brain injury, and substance/medication-induced neurocognitive disorders.

Diagnosis is based on the severity and domains of cognitive deficits, interference with functional ability, and behavioral disturbances (APA 2013). Even if these aspects of a diagnosis are present, the decline is not necessarily permanent, especially in the case of delirium or substance-induced neurocognitive disorders. With diagnoses of mild neurocognitive impairment, although some patients progress to dementia, others remain stable, or even improve (Patel and Holland 2012).

Cognitive Screeners
When assessing for specific diagnosis, medical professionals often use cognitive screeners that assess functioning in most of the cognitive domains mentioned. These types of screeners could include the Mini Mental Status Exam (MMSE) or the Montreal Cognitive Assessment (MoCA). These are “normed” tests, meaning they have been applied to a wide range of the population and have a particular cutoff point that demonstrates impairment greater than what we would expect from age-related decline. Although these screeners assess a range of domains, they give a global score for overall cognition. For example, an overall score of twenty-five or lower on the MoCA is concerning, because the vast majority of people score a twenty-six or above (unless they have an education below eighth-grade level). Depending on the level of impairment and corroborating information, a diagnosis may be made based on a screener, or additional, more comprehensive testing may be necessary.

Cognitive screeners have the same limitations as other screeners in the medical community. Where they may have sensitivity to a particular diagnosis (they will demonstrate cognitive impairment when it is present), they do not necessarily have specificity (the ability to accurately diagnose a specific problem, like dementia). Even when a score suggests impairment, it does not necessarily indicate the diagnosis or prognosis.
Dementia is known to significantly impact executive functioning, language, working (immediate) memory, visual-spatial ability, and verbal memory (UCSF Memory and Aging Center 2014), but many other diagnoses and developmental components of the lifespan do as well. These include depression, delirium, traumatic brain injury, cerebrovascular accident (CVA) such as a stroke, transient ischemic attack (TIA)—often known as “mini strokes”—learning disability, and lack of education, to name a few. Cognitive complaints are also a common side effect of many medications and whole treatment protocols, like chemotherapy.

If clients of CSAs or other professional advisors express concern about cognitive impairment, it is important to encourage them to seek medical consultation. It is not necessarily a dementia. Despite its expected increase in prevalence by the year 2050 (Brookmeyer et al. 2007), dementia’s current prevalence rates are lower than most people expect (18.9 percent of the population aged seventy-one to seventy-nine, 37.4 percent of the population aged ninety and older) (Plassman et al. 2007).

When seeking consultation with medical providers on cognitive complaints, patients as well as their care providers (spouses, children, concerned friends) should provide information on the onset (timing) of complaints, recent stressors, historical and recent injuries, current medications, lifetime substance use, family history of cognitive impairment, and any functional complaints (problems driving, paying bills, or preparing food). It is sometimes helpful to write these down before meeting with a medical professional. If a screener is administered, it is important to know that it may detect cognitive impairment, which clients may have already detected themselves. But it cannot provide the diagnosis by itself. As mentioned before, many different diagnoses can result in cognitive impairments that are not dementia and may fully resolve, improve, or at least remain stable.

Franklin D. Roosevelt famously said in his inaugural speech, “We have nothing to fear but fear itself.” In the realm of cognitive impairment, this is not an absolute truth, but it is a relative one. The fear of cognitive decline is often more significant than the decline itself, and more intense than the resulting diagnosis.

Carilyn Ellis is a psychology intern at the Salt Lake VA Medical Center, specializing in Palliative Care, Geriatric Home-Based Primary Care, Outpatient Mental Health and Neuropsychology. She has a master’s degree in clinical psychology and is a Psy.D. (doctor of psychology) candidate at George Fox University in Newberg, OR. She can be reached at cellisalaska@yahoo.com.

*Cognitive Impairment and Normative Aging* was recently published in the Spring 2014 edition of the CSA Journal.

Reprinted by Always Best Care Senior Services with permission from *Senior Spirit, the newsletter of the Society of Certified Senior Advisors*. The Certified Senior Advisor (CSA) program provides the advanced knowledge and practical tools to serve seniors at the highest level possible while providing recipients a powerful credential that increases their competitive advantage over other professionals. The CSA works closely with Always Best Care Senior Services to help ABC business owners understand how to build effective relationships with seniors based on a broad-based knowledge of the health, social and financial issues that are important to seniors, and the dynamics of how these factors work together in seniors’ lives. To be a Certified Senior Advisor (CSA) means one willingly accepts and vigilantly upholds the standards in the CSA Code of Professional Responsibility. These standards define the behavior that we owe to seniors, to ourselves, and to our fellow CSAs. The reputation built over the years by the hard work and high standards of CSAs flows to everyone who adds the designation to their name. For more information, visit [www.society-csa.com](http://www.society-csa.com).
About Always Best Care

Founded in 1996, Always Best Care Senior Services is based on the belief that having the right people for the right level of care means peace of mind for the client and family. Always Best Care assists seniors with a wide range of illnesses and personal needs, and currently provides more than 3 million hours of care every year. Franchise opportunities are available to individuals interested in leveraging the company's clear strategy and proven track record for delivering affordable, dependable service to seniors in their local areas.

By working with case managers, social workers, discharge planners, doctors, and families, Always Best Care franchise owners provide affordable, comprehensive solutions that can be specifically matched to meet a client's particular physical or social needs. The hallmark services of the Always Best Care business portfolio include non-medical in-home care and assisted living finder and referral services, with skilled home health care now being phased in throughout the country. For more information, visit www.AlwaysBestCare.com. For franchise opportunities, visit www.FranchiseWithAlwaysBestCare.com.

Always Best Care also offers Always in Touch, a telephone reassurance program that provides a daily phone call to seniors and disabled adults who are living alone and have limited contact with the outside world. Always in Touch is the only absolutely free national telephone reassurance program of its kind anywhere in the USA and Canada. For more information on Always in Touch, or to request an application, visit www.Always-in-Touch.com.

Another special program from Always Best Care is Always on Call—provided free to Always Best Care clients and their families with a minimum of 5 hours of monthly care. Families will have anytime access to physicians 24/7 if they're considering ER or urgent care for non-emergency issues, if they need a non-narcotic prescription or refill, if they can't take time off from work or school, if they're traveling and need medical care, if their primary physician is not available, or if they have a sick child, spouse or elderly parent. This special service is provided to Always Best Care clients and their families by 24HourMDNow, an independent company not affiliated with Always Best Care.

October, 2014