MCKNIGHT BRAIN RESEARCH FOUNDATION
MCKNIGHT BRAIN INSTITUTES

KEY MESSAGES DISCUSSION DOCUMENT
October 11, 2018

1. What is Cognitive Aging?

Three proposed scientific summary statements:

- **Cognitive aging refers to the effect age has on cognition**. Cognitive aging is therefore unavoidable and inevitable given that all humans age.
- **The effects, and therefore impact, of cognitive aging are not uniform**. *They can involve one cognitive domain (e.g., memory), or another (e.g., processing speed.) They may impact a person noticeably, or they may not.*
- **Cognitive aging is NOT defined by a neurological or psychiatric disease or process.**

Proposed key messages in lay terms:

- As we age, our brains age too.
  - Cognitive aging is a natural process that can have both positive and negative effects.
  - These effects vary widely from person to person.
- Our brains age at different rates and in different ways.
  - While wisdom and expertise increase with age, other abilities like processing speed, decision-making and some types of memory may decline with age.
  - Cognitive aging may impact your ability to complete daily tasks like paying bills, following recipes and sticking to a medication schedule and it may even challenge your ability to live independently or it may have no noticeable impact on your day-to-day life.
- Cognitive aging is not a disease.
  - The brain changes associated with aging are part of a natural process that starts at birth and continues throughout the lifespan.

2. What is Successful Aging?

Proposed scientific summary statement about what activities or behaviors could help delay or prevent the negative effects of cognitive aging:

- **Cognitive training and increased physical activity are interventions that have encouraging, although inconclusive evidence in delaying or slowing ARCD**. (*Cognitive training is defined as "a broad set of interventions, such as those aimed at enhancing reasoning, memory, and speed of processing".*) [2]

Proposed key messages in lay terms

- Successful aging is normal brain aging without any noticeable changes in memory or thinking skills.
- Research suggests there are steps you can take to age successfully/maintain brain health as you age.
  - Stay physically active
  - Reduce and manage your risk for cardiovascular diseases
  - Regularly discuss and review the health conditions you have and medications you take that may impact your cognitive health
  - Stay socially and intellectually engaged
  - Get the recommended amount of sleep

Dr. Lazar statement on optimal brain health:
"Optimal brain health refers to an optimal capacity to function adaptively in the environment. This could be assessed in terms of competencies across the domains of thinking, moving, and feeling,....the abilities to pay attention, perceive, and recognize sensory input; to learn and remember; to communicate; to problem solve and make decisions; to have mobility; and to regulate emotional status. These domains are largely attributable to the functions of the brain (except for aspects of mobility); can be operationally defined and measured; are affected by environment, behaviors, and disease; and are potentially modifiable if changes are detected early enough. These constructs can be readily understood by patients and their primary care providers and should be used as the equivalent of vital signs of the brain, and thus, early warning indexes of brain health to be monitored and addressed at an at-risk stage for the brain."

3. Importance of Cognitive Health Assessments/Steps to Minimize Risk

Scientific summary statements:

- Cognitive aging is not easily defined by clear thresholds on cognitive tests since many factors, including culture, occupation, education, environmental context and health variables (medications, delirium) influence test performance and norms.
- For an individual, cognitive performance is best assessed at several points in time
- The changes that happen with aging are usually so subtle; it's hard to test for them other than with sequential evaluation and advanced neurological tests.

Proposed key messages in lay terms:

- Changes with your brain health happen slowly over time and aren't always easy to detect.
- Be sure to talk with your family and your healthcare providers about any memory changes you notice or concerns you have and ask if you should undergo a cognitive assessment

4. Cost Associated with Cognitive Aging and Memory Loss/Prevalence

The 87% - Molly Wagster article stats for discussion

- One in eight people 65 and older (13 percent) has Alzheimer's disease.
- The other 87% are experiencing cognitive aging. While the effects of dementia may not occur until later in life, they likely are experiencing subtle declines in cognitive function.

AARP 2016 Survey results for discussion

- 84 percent of seniors are very concerned with staying mentally sharp
- Staying mentally sharp (90 percent) and physically fit (87 percent) are the top two interests of seniors