

Evaluating Mental Capacity - Common Medical Terms and Definitions:

Diseases and Symptoms

1. Dementia - Memory impairment, plus one of the following:
 - a. Aphasia (Language impairment)
 - b. Apraxia (Motor activity impairment)
 - c. Agnosia (Recognition impairment)
 - d. Impaired executive functioning

2. Executive Function – The abilities involved in planning, considering options and likely consequences, understanding and use of abstract concepts, organizing, strategizing, initiating behavior, and monitoring behavior and outcomes. It is thought that impaired executive functions occur in the elderly at least as frequently as memory problems; however, the presentation may be subtle, and impairment may be mistaken for personality quirks.

3. Causes of dementia (not a comprehensive list):
 - a. Alzheimer’s Disease – A progressive and degenerative illness. It is the most common cause of dementia. There is no cure, and treatments vary in effectiveness. It often co-exists with vascular disease/dementia. Functional stages based upon behavior have been described, and may be used to clarify the extent of cognitive impairment.
 - b. Vascular dementia – Loss of blood, oxygen, and nutrients to brain cells produces impairment and damage. Such loss may occur quickly – as with a stroke – or it may develop slowly. The damage produces an erratic, downward course of cognitive abilities and behavior (called a “stair-step” pattern). This is the second most common form of dementia. There is no cure. Treatment is directed towards preventing future damage, and maximizing remaining functionality.
 - c. Nutritional deficiency – This is caused by lack of fresh fruits/vegetables and/or inability to properly absorb nutrients – as may occur in the elderly. The symptoms may be indistinguishable from other forms of dementia.
 - d. Drug/alcohol use – Chronic use of illicit drugs or alcohol may cause deterioration of specific brain areas. This is different from the changes caused by acute intoxication or delirium.
 - e. Depression – This disease may produce symptoms of dementia. The symptoms will often abate once the depression resolves (either

naturally or via treatment), but may presage the later development of a chronic dementia.

4. Other Causes of Memory and Executive Function deficits:
 - a. Traumatic Brain Injury
 - b. Substance induced
 - c. Learning disorders
 - d. Medical disorders
 - e. Environmental effects
5. Delirium - A sudden state of severe confusion and rapid changes in brain function. Sometimes called “encephalopathy,” “acute brain syndrome,” or “acute confusional state.” The person may be agitated, hallucinating and hyperactive, or may be quiet, and somnolent. People in a delirium are unable to concentrate and have disorganized thinking – often evidenced by rambling, irrelevant, or incoherent speech. Sleep disturbance is common, as is disorientation to time, place, or person, and also memory problems. When treated, the person often returns to his/her usual level of function.

Delirium can be due to a number of conditions that derange brain metabolism, including infection, brain tumor, poisoning, drug toxicity or withdrawal, seizures, head trauma, and metabolic disturbances such as fluid, electrolyte, or acid-base imbalance, hypoxia, hypoglycemia, or hepatic or renal failure.

6. Psychosis – A fundamental physiological disruption in brain function that manifests as symptoms of hallucinations, delusions, and/or grossly illogical or bizarre behavior. Common causes: Schizophrenia, Depression, Mania, Delusional disorders, “Brief psychotic” disorders, Medical/drug induced (inc. delirium).
7. Hallucination – A false sensory experience.
8. Delusion – A false belief, not consistent with the person’s education, social setting, culture or religion, that is maintained despite contrary evidence.
9. Schizophrenia – Biological disorder that manifests as psychotic symptoms. Generally arises in young adulthood, but a variant has onset in later years. Affects 1% of the population. Schizophrenia-related violence is not common; however, when it occurs, it is associated with specific psychotic symptoms (ex. a delusional belief that one’s life is endangered).
10. Depression – A biological disorder that impairs function of several centers in the brain - going beyond mere ‘sadness’ to include a variety of physiological changes. Psychotic symptoms may arise when the disease is especially severe. Affects 3-5% of the population.

11. Mania – A biological disorder that impairs function of several centers in the brain - going beyond mere 'happiness' to include a variety of physiological changes. Psychotic symptoms may arise when the disease is especially severe. Impaired insight and judgment is common.

General Terms

1. "Alert and Oriented"
 - a. "Alert" means "awake." Rarely, "alert" will indicate mental acuity, but this is not the common medical usage.
 - b. "Oriented" means that the person knows his/her name, the location, the date, and possibly, the general nature of the interaction.
 - i. Oriented X 1 - Known own name only
 - ii. Oriented X 2 – Knows name and location
 - iii. Oriented X 3 – Known name, location, and date/time
 - iv. Oriented X 4 – Knows name, location, date/time, and general nature of the event or interaction.

Note 1: In most medical settings, patients are assessed only to the level of "oriented X 3" – often written as "O X 3."

Note 2: "Oriented X 4" is not the medical equivalent of competency. A person may understand the general nature of an interaction (ex. meeting with an attorney), without understanding pertinent details (ex. ramifications of executing a Durable Power of Attorney).
2. Mini-Mental State Examination (AKA "mini-mental," "MMSE," or "Folstein") – This is a general screening test of cognitive functions. It has many limitations, but is easy to administer and score, and therefore popular. Many factors affect scores such as age, education, culture, language, presence of non-psychiatric medical diseases, and medications. Further, the test does not assess all pertinent cognitive functions. Therefore, some people who have high scores are unable to function in the real world, while some who have low scores are able to function adequately.

Note #1: All psychological test results must be compared to clinical – or "real world" – observations.

Note: #2: Dr. Folstein, the creator of the MMSE, and his group gave the test to people who were not competent to care for themselves. Nearly 40% obtained perfect or near-perfect scores despite obvious and severe decision-making impairment [Holzer *et al*, "Cognitive Functions in the Informed Consent Evaluation Process: A Pilot Study," in Journal of the American Academy of Psychiatry and the Law, 25(4), 1997 pp. 531-540]. These people had impaired executive functions (see above), and the MMSE is not designed to adequately assess executive functions.