

# Capacity assessment in a medical context

By Patricia Jungfer

In western democratic societies, it is assumed that people have the right to autonomy, which includes the right to make decisions regarding treatment, accommodation and finances.

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**T**his concept of autonomy presupposes that the individual has the capacity to be autonomous. While the concept of capacity may appear straightforward, it remains an area of controversy in the medical and legal worlds.<sup>1</sup> Competence is determined by the courts and is determined as a result of a legal judgment. Capacity or decisional capacity refers to a set of abilities that is assessed clinically and by those in the medical field. Medical experts are called upon by the courts to provide opinion as to a person's capacity. The issues that arise within the context of the assessment of capacity are how it may be assessed and what the medical conditions are where capacity may be impaired.

## THE CONCEPT OF CAPACITY

Capacity can be understood from a variety of perspectives or models. Each model has deficiencies, but considering all models of capacity ensures that the issue is fully appreciated.<sup>2</sup> These models are:

1. **Philosophical/legal model:** where the mental capacity results from being able to express desires, understand pertinent risks and benefits, appreciate the ramifications of the decisions and think rationally. This model does not address the issue as to whether the person has the
  2. **Medical model:** in this model, medical symptoms are linked with incapacity. Neurological and psychiatric symptoms impact on the ability to perform certain cognitive tasks which then can impair mental capacity. The challenge in the medical model is that the symptoms elicited may not cause incapacity in the real world. Nor does the presence of the medical symptoms equal incapacity.
  3. **Functional model:** this focuses on observable behaviour. In this case, it is assumed that several mental abilities must be intact to make informed, reasoned and rational decisions. In this model, there is no assessment as to why there is the loss (or absence) of ability. The loss of ability must be causally linked to a medical diagnosis. Without a medical diagnosis, however, a lack of ability is not an issue for clinicians.
- Medical practitioners are called upon to determine capacity in routine clinical practice; the need to assess capacity in this situation typically occurs when a patient refuses treatment or containment for treatment.<sup>3</sup> Medical practitioners may also be asked for opinions as to a person's capacity to make advanced health care directives, wills or powers of attorney. Finally, in their role as experts, medical practitioners may be



asked to determine if a person has capacity to manage their financial affairs or provide legal instruction. Each task faced by the medical practitioner is different and highlights the task-specific nature of capacity.

Individual autonomy is a principle enshrined in law in many societies; the United Nations Human Rights declaration highlights the intrinsic right of self-determination.<sup>4</sup> In our society, the premise in almost all situations is that a person does have the capacity to decide and determine their affairs and needs. There are specific circumstances where a person must prove their capabilities – such as the right to engage in various professional roles – but, otherwise (except in the case of children), the assumption is that an individual is capable. Autonomy (and capacity) to choose is a valuable right and should be respected. However, it is imperative that the person deemed to be autonomous has adequate capacity to choose and reason.

A number of fundamental principles guide the understanding of what constitutes capacity.<sup>5</sup> For a person to have capacity, they must be able to:

1. understand the relevant information;
2. reason about the potential risks and benefits of the options;
3. appreciate the nature of the situation and the consequences of one's choice; and
4. express the choice and adhere to the decision.

Capacity is not an all-or-nothing phenomenon. An individual may have capacity for some decisions but not for others. Capacity may also fluctuate according to illness factors or environmental factors. Finally, capacity may be altered by the provision of information and education.

### ASSESSMENT OF CAPACITY

There is no gold standard as to the assessment of capacity. The absence of an agreed methodology and/or pre-requisite procedures to assess capacity remains an area of considerable discussion in medicine and psychology. At present, given the absence of reliable and meaningful tests to assess capacity, capacity is generally assessed with a clinical interview. The findings of the clinical interview should be supplemented, if necessary, with appropriate assessments/investigations.<sup>6</sup> The clinician completing the assessment should document its findings; additional information should be recorded as to the methodology of the assessment and what information was taken into account to come to the clinical opinion.

While the clinical interview remains the gold standard, tools have been devised to assess competency, especially in the area of a person's ability to consent to treatment and research.<sup>7, 8</sup> Tools to assess competency in the legal field are uncommon. Neuropsychometric assessment or bedside cognitive assessment results can also be validly used to assist in determining competency.<sup>9, 10</sup>

There can be substantial variability in capacity assessments. The reasons for the variance include who is making the assessment (independent expert or treating therapist) and what information is available (clinical assessment, psychometric testing, informants, and other clinicians' assessments – for example, occupational therapy assessments). Variability in results may also be caused by

the primary disease process (a deteriorating condition or delirium), the absence of a standard assessment and whether the subject has been educated about the issue being assessed. A person is not deemed incapable of managing their affairs if they lack the relevant knowledge to make appropriate decisions. In the medical legal context, it can be difficult to address the issues of capacity to manage financial affairs or instruct counsel, since the clinician may not know what the person has been told of the process. In the medical area, the doctor seeking consent must give the patient the relevant information to enable them to make the decision. Therefore, assessment to instruct and manage financial affairs may be an assessment of general ability in the case of a client, rather than being related to the specifics of the case.

### COGNITIVE ASSESSMENT TOOLS

The tools available to assess capacity will vary according to the clinical scenario. Clinicians will typically use the mini mental state assessment (MMSE) to assess cognition, and then determine capacity based on the MMSE score. The MMSE is very cost-effective to administer, but its sensitivity is low. A MMSE score of below 19 (maximal score 30) is likely to be equivalent to incapacity; a score of 23 or more is often associated with capacity; scores between 20 and 22 capacity are less clear.<sup>11</sup> The MMSE does not assess executive functioning, which is often the key to how a person makes and executes decisions. The validity of a determination of capacity that largely relies on an MMSE score should be questioned.

Psychometric testing is more expensive and time-consuming to conduct, but provides more specific information about capacity. It can be highly variable in quality and may not assess executive functioning and therefore not provide useful information. In addition, there has been some criticism of the ecological validity of psychometric testing, since the tests are structured, and occur in a non-distracting environment. Environmental factors may render the person incapable of putting into place the actions related to their decisions.<sup>12, 13</sup> Psychometric testing that can assist in determining capacity should include the following tests (or similar tests that tap the same areas of cerebral functioning): auditory verbal learning test, Boston diagnostic aphasia test, controlled oral word association test, Hooper visual organisation test, trail-making test, Wechsler memory scale and the Wisconsin card-sorting test.<sup>14, 15</sup>

### EXECUTIVE FUNCTIONING

'Executive functioning' encompasses those skills required for higher-level cognitive processes. Abnormalities in executive function are strongly implicated in rendering a person incapacitated to make decisions, and explain the variance in decision-making capacity three times more often than memory impairments.<sup>16</sup> Abnormalities of executive functioning may not be evident to casual observation or in casual conversation. Testing of executive functioning is limited by the impact of environmental factors on behavioural outcomes, and subjects who test well may not perform as well in the real world.

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Three circuits in the frontal lobes are implicated in capacity. Disruption to these pathways can occur in head injury, dementia and other physical diseases. The three circuits: are the dorso-lateral circuit (implicated in abstract thought and hypothesis generation); the orbito-frontal circuit (implicated in mood control); and the meso-frontal circuit (which, when damaged, may cause apathy, indifference and impaired goal-directed attention). Executive-impaired subjects may be stimulus-bound, so that the voluntariness of their decision-making is impaired as environmental stimuli and cognitive deficits interact to impair decision-making. The nature of executive impairments may limit a person's ability to utilise feedback, and result in a failure to resolve a problem despite focusing on it.<sup>17, 18</sup>

All mental health disorders, including anxiety, can impact on a person's capacity.

**CAPACITY AND MENTAL ILLNESS**

Mental health disorders fluctuate, and therefore so does a person's capacity. Some subjects' mental health disorder may be resistant to treatment and therefore render them relatively permanently unable to make decisions. All mental health disorders, including anxiety, can impact on a person's capacity. The majority of the research in this area has been directed to assessing whether people with mental illness can consent to treatment and participate in research.<sup>19</sup> Depression, anxiety, schizophrenia and bipolar disorder may have a negative impact on cognitive skills and therefore render a person incapable of managing their affairs.<sup>20</sup> The degree of insight is also a major determining factor with regards to capacity. In mental illness, there are no associations between capacity and gender, socio-economic status and ethnic group. Studies have shown that the greater the psychopathology, the lower the education, and the greater the age, the less capable a person with mental illness is with regards to decision-making ability.<sup>21</sup> Because mental health disorders fluctuate, a person may lack capacity at specific times and therefore require an assessment and opinion of their ability at the time a specific task is to be undertaken (for example, an elderly depressive needing to make a will may require a reassessment at the time they give instructions for the will to ensure that they are fully capable of the task). The mental illness's process will affect a person's decision-making ability according to the phase of their illness; reduced insight will influence the type of decisions the person makes, as they do not consider all facts; a person with persecutory belief systems will not consider all information, which will therefore render their decision-making processes defective. For depressives, the value of the outcome of the decision may be reduced, thereby also impairing their decision-making ability.<sup>22</sup>

**DISORDERS OF LANGUAGE AND CAPACITY**

Various diseases of the central nervous system will affect the ability of a person to produce, process and comprehend

language.<sup>23</sup> Psychiatric disorders that impair reality-testing will also have an impact on a person's language processing and communication. An essential aspect of capacity is whether the person can comprehend the information necessary to make an informed decision, and then convey that

decision. An inability to produce speech should not be seen as equivalent to incapacity, and disorders of language (such as the aphasias) may affect capacity to a varying degree. If a person is mentally ill and they are not able to communicate or process language while the mental illness remains active, they are incapacitated from a decision-making perspective. In neurological diseases that can affect communication (brain injury, stroke, dementia) the person should be assessed by a speech therapist as to the specific nature of the impairment and whether any aids may improve the capacity of that person to communicate, or whether the assessment of capacity needs to be undertaken in a particular manner.<sup>24</sup>

**NEUROLOGICAL DISORDERS AND CAPACITY**

Just as the presence of a mental illness does not preclude capacity, the same can be said for neurological disorders. The presence of a neurological disorder does not indicate incapacity but should alert parties to the need to consider what the person is capable of. Capacity is situation-specific. Therefore, an impairment of memory may not incapacitate a person from making a will, but may impair their ability to manage their financial affairs. Traumatic brain injury (TBI) – because it commonly affects the frontal lobes of the brain – may have a significant impact on an individual's capacity. A study of TBI patients demonstrated that those requiring financial orders had worse performance on tests of impulse control, planning, flexibility of thinking and working memory.<sup>25, 26</sup> In studies of patients with Alzheimer's dementia, financial abilities were well-preserved along the course of the disease, as Alzheimer's affects the frontal regions later in the course of the disease.<sup>27, 28</sup>

**CAPACITY IN CONTEXT**

In the medical field, the standard of knowledge and skills required for decision-making is said to vary according to the risk associated with the decision. Frequently, in the legal area, the question is 'does the person have capacity' not 'does the person have capacity in this context?' People may have capacity in one situation, but not in another. In medicine, it is argued that the standard of proof of capacity should be higher when the decision is associated with significant risk. This principle also has validity in the legal arena, where people may have the capacity to manage small daily sums of money but not the capacity to manage large settlements due to impaired problem-solving or impulsivity; the concept of the greater the risk, the higher the standard of capacity has practical application in such a situation.<sup>29</sup>



The methodology of how a person arrives at the decision is more important than the decision itself in a capacity assessment. Ultimately, the merit of the decision is not the issue in a capacity assessment but how the person came to it (the process they undertake) and how they enact such a decision. Physical impairments that might limit enactment of a decision should not be relevant, whereas behavioural abnormalities are. (A person should not be deprived of their autonomy because of a physical limitation.) The person assessing capacity must determine not only what the person knows they are to decide, but how they came to the decision and, if possible, how they have enacted past decisions to guide how they might enact future decisions.

### ESSENTIAL ELEMENTS OF A CAPACITY ASSESSMENT

While the specific information in the capacity assessment will vary according to what type of capacity is being assessed, each assessment should have some essential elements, which should be documented so that the information can be considered if necessary at another time.

The assessor should document where the assessment took place, when, and if repeated assessments were required, and when these occurred. Who was with the person when they were assessed is also relevant. Has the person been adequately informed as to the issues, and was this information understood? What is the patient's cognitive ability and emotional state? How has this been assessed, and is this stable? What family and social factors are at work and how has this been assessed? How is the person able to complete activities of daily living, and how was this assessed? Is the environment conducive to decision-making? Finally, the person assessing capacity should consider any evidence that contradicts their hypothesis/assessment.

If all these elements are documented, then all relevant information explaining how the assessor came to the conclusion expressed in their opinion will be available if challenged at a subsequent time.

### CONCLUSION

The ability of a person to decide where they live, how they dispose of their assets, what treatment they will have and who they instruct for their legal affairs may fluctuate over time and be impaired due to disease. There are no specific tools for assessing capacity, and the clinical interview remains the gold standard. In this complex world, it is recognised that capacity can vary according to situation and the risk associated with that decision. Language and physical impairments should not be viewed as synonymous with incapacity, nor should the presence of mental illness or a neurological disease. Ideally, each capacity assessment should be a two-step process, with the opinion determined at interview supported by further evidence, including, but not exclusively being, psychometric testing, if relevant. ■

**Notes:** 1 J Cockerill, B Collier, K Maxwell, Legal requirements and current practices. *Mental Capacity: Powers of Attorney and Advanced Health Directives*. Federation Press. Leichhardt 2005, 27-55. 2 A Calcedo-Barba, F Garcia-Solano et al, On measuring

incapacity. *Current Opinion in Psychiatry*. 2007,20:501-6. 3 PS Appelbaum, Assessment of patient's competence to consent to treatment. *New England Journal of Medicine*. 2007, 357:183-40. 4 United Nations website: The Universal Declaration of Human Rights. 1948. 5 PS Appelbaum, T Grisso, Capacities of hospitalised, medically ill patients to consent to treatment. *Psychosomatics*. 1997;38:119-25. 6 K Sullivan, Neuropsychological assessment of mental capacity. *Neuropsychology Review*. 2004, 14(3):131-42. 7 DR Royall, ED Lauterbach et al, The cognitive correlates of functional status: a review from the committee on research of the American Psychiatric Association. *J Neuropsychiatry Clin Neurosc*. 2007 19(3) 249-65. 8 LB Dunn, MA Nowrangi et al, Assessing decisional capacity for clinical research or treatment: a review of instruments. *Am J Psychiatry* 2006 163:1323-34. 9 JJS Janosfsky, RJ McCarthy et al, The Hopkins Competency Assessment Test: a brief method for evaluating patient's capacity to give consent. *Psychiatric Services*, 1992, 43: 132-6. 10 T Grisso, PS Appelbaum et al, The MacCAT-T: a clinical tool to assess patients' capacities to make treatment decisions. *Psychiatric Services*. 1997. 48:1415-9. 11 JH Karlwawish, DJ Cassarette et al, The ability of persons with Alzheimer's disease to make a decision about taking an Alzheimer's dementia treatment. *Neurology* 2005; 64:1514-9. 12 GM Reid-Proctor, K Galin et al, Evaluation of legal competency in patients with frontal lobe injury. *Brain Injury* 2001, 15(5) 377-86. 13 S Tomaszewski Farias, E Harrell et al, The relationship between neuropsychological performance and daily living in individuals with Alzheimer's disease: ecological validity of neuropsychological tests. *Archives of Clinical Neuropsychology*. 2003 18: 655-72. 14 K Sullivan, Neuropsychological assessment of mental capacity. *Neuropsychology Review*. 2004 14(3):131-42. 15 S Spear Bassett, Attention: Neuropsychological predictor of competency in Alzheimer's disease. *Geriatric Psychiatry & Neurology*. 1999. 12(4) 200-5. 16 DR Royall, EC Lauterbach et al, The cognitive correlates of functional status: a review from the committee on Research of the American Psychiatric Association. *J Neuropsychiatry Clin Neurosc*. 2007 19(3) 249-65. 17 GM Reid-Proctor, K Galin et al: Evaluation of legal competency in patients with frontal lobe injury. *Brain Injury* 2001 15(5) 377-86. 18 S Kothari, K Kirschner, Decision making capacity after TBI: Clinical assessment and ethical implication, (eds) ND Zasler, DI Katz, RD Zafonte, *Brain Injury Medicine*, Demos Medical Publishing New York, 2006 1205-21. 19 M Hotopf, The assessment of mental capacity. *Clinical Medicine*, 2005 5 580-4. 20 BW Palmer, BW Jeste, Relationship of individual cognitive abilities to specific components of decisional capacity among middle aged and older patients with schizophrenia. *Schizophrenia Bulletin*. 2006. 32:98-106. 21 D Okai, G Owen, Mental capacity in psychiatric patients: A systematic review. *Brit J Psychiatry*. 2007, 191: 291-6. 22 V Raymont, 'Not in Perfect Mind' - the complexity of clinical capacity assessment. *The Psychiatrist*. 2002. 26:2001-204. 23 RD Adams, M Victor, *Principles of Neurology*. McGraw Hill, New York, 1989 377-96. 24 LC Brady Wagner, Clinical ethics in the context of language and cognitive impairments: rights and protections. *Seminars Speech Lang*. 2003 24:275-84. 25 KM Hoskin, M Jackson et al, Can neuropsychological assessment predict capacity to manage personal finances? *Psychiatry, Psychology and Law*, 2005 12:56-67. 26 L McHugh, RL Wood, Using a temporal discounting paradigm to measure decision making and impulsivity following traumatic brain injury: A pilot study. *Brain Injury*. 2008 22:715-21. 27 KS Earnst, VG Wadley et al, Loss of financial capacity in Alzheimer's disease: the role of working memory. *Aging Psychology and Cognition*. 2001, 8:109-19. 28 S Tomaszewski Farias, E Harrell E et al. The relationship between neuropsychological performance and daily living in individuals with Alzheimer's disease: ecological validity of neuropsychological tests. *Archives of Clinical Neuropsychology*. 2003 18: 655-72. 29 Justice Young took this view in a unreported judgment: *HvH Supreme Court Equity Protected List*, 20 March 2000, when he considered that 'one has to go beyond just managing household bills'.

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