Cognition, psychological well-being, stress, functional status, and pain are all priority outcomes of interest to oncology nurses. However, it can be challenging to choose an instrument for clinical assessment or for use in research projects that assess these constructs. The National Institutes of Health Toolbox for Assessment of Neurological and Behavioral Function was created for measuring emotional health and cognitive, motor, and sensory function. The toolbox can be a potentially useful resource for clinicians and nurse researchers.

AT A GLANCE

- The National Institutes of Health Toolbox for Assessment of Neurological and Behavioral Function includes a variety of measures of cognitive, emotional, motor, and sensory function, which may be of interest to oncology nurses.
- The toolbox can facilitate and advance clinical nursing research and practice with the consistent use of standardized measures of assessment and evaluation.
- The toolbox is readily available, with detailed instructions for use and options to store data for later analysis.

Behavioral and Neurologic Assessment

Using the National Institutes of Health Toolbox

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Oncology nurses routinely assess and seek to better understand the constructs of cognition, psychological well-being, stress, pain, and functional status. The National Institutes of Health (NIH) Toolbox for Assessment of Neurological and Behavioral Function is one readily available means to measure emotional health, as well as cognitive, motor, and sensory function (Hodes, Insel, & Landis, 2013). This is a resource that can be used by researchers and clinicians. In 2006, the NIH commissioned the creation of this set of royalty-free, easy-to-administer, reliable behavioral and neurologic measures that have a wide range of potential applications (Hodes et al., 2013). The initial impetus for creating the toolbox was to help researchers from a variety of disciplines standardize outcomes across samples, settings, and age groups (Hodes et al., 2013).

Launched in 2012, the toolbox was created by a team of more than 250 multidisciplinary content experts from about 100 academic institutions (Hodes et al., 2013). The full toolbox includes four functional areas in the domains of cognition, emotion, motor, and sensation (see Table 1). The full toolbox can be administered in less than two hours. Subdomains and subscales can be completed in a few minutes and can be used for the purposes of data collection for research, quality improvement projects, or for screening patients for untoward effects of therapy at a single instance or over time (Gershon et al., 2013).

Contents of the Toolbox

The toolbox includes detailed information on how to administer and score each instrument, so assessment is complete and consistent across users. Similarly, researchers can use the toolbox to measure a construct once or over time. An option exists to save the data for analysis for quality improvement and research studies.

The toolbox offers multiple instruments to assess cognition. It would take about two hours to administer all of these instruments, but brief cognitive subdomain measures of executive function, episodic memory, language, processing speed, working memory, and attention are all designed to be administered in minutes using minimal equipment (Weintraub et al., 2013). Using subdomain components of the toolbox can be effective and acceptable measures for cancer research or quality improvement projects and potentially routine clinical assessment. For example, distress screening is now routinely done using a simple tool to detect problems with the goal of early intervention. Cognitive changes are a subtle but important problem in oncology practice. Routinely screening for such changes with a normed, easy-to-use tool could identify patients who are experiencing cognitive decline with the goal of more comprehensive evaluation and interventions to