

# Making Functional Cognition a Professional Priority

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Functional cognition is a critical domain of concern for occupational therapy practice. As the health care system moves to assessing value through achievement of quality outcomes, the field of occupational therapy must address the inclusion of functional cognition in evaluation and treatment. Evidence indicates that impaired cognition contributes to risk of hospital readmission and poor overall health outcomes across diagnostic groups. Moreover, expenditure on occupational therapy services that address functional cognition has been shown to lower hospital readmission rates. To improve client outcomes, occupational therapists must consistently screen for and, when appropriate, evaluate and treat functional cognition impairments and consider functional cognition in the discharge planning process. Occupational therapy professionals must make a proactive, coordinated effort to establish the profession's role in evaluating and treating clients' limitations in functional cognition as a means to achieving improved quality care and client outcomes.

The Centers for Medicare & Medicaid Services (CMS; 2019), which administers the Medicare program, now holds health systems accountable for the cost-effective use of resources in achieving interdisciplinary evidence-based quality outcomes in multiple settings, including hospital inpatient care and postacute care (PAC) settings such as skilled nursing facilities, home health, and inpatient rehabilitation hospitals. The move from volume to value at the forefront of health policy began with passage of the Patient Protection and Affordable Care Act (2010; Pub. L. 111-148) with its goal to achieve what is called the Triple Aim: cost-effective, best-practice health care that truly improves individual and population health (Berwick et al., 2008). The Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 (Pub. L. 113-185) further recognized the need to consider cognition in ensuring positive client outcomes and prioritized cognition as a key data element that needs to be screened, assessed, and treated across PAC settings. In addition, the 2016 revisions to *Current Procedural Terminology*® (CPT) occupational therapy evaluation codes highlighted cognition as a reimbursable practice area for occupational therapists (American Medical Association, 2016).

In response to the IMPACT Act, AOTA has advocated for the importance of functional cognition. Functional cognition is fundamental to achieving and maintaining community placement and discharge stability and preventing failed care transitions. PAC occupational therapy plans of care must address all critical client factors, including functional cognition in the context of clients' performance skills and patterns, to foster achievement of these prioritized outcomes. The occupational therapy care objective is to ensure that clients can safely navigate their discharge environment, manage their medical conditions, and engage in activities of daily living (ADLs) and instrumental activities of daily living (IADLs). This care objective is essential to limit client risk of adverse events and ensure that clients get home, stay home, and stay well (e.g., fall, readmission; American Occupational Therapy Association [AOTA], 2014). In this column, we describe functional cognition, highlight the recent history of occupational therapy relating to functional cognition, discuss the emerging policy context, and describe opportunities for our professional organizations, researchers, educators, and practitioners to champion functional cognition in a changing health care environment.

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## What Is Functional Cognition?

*Functional cognition*, which can be defined as the cognitive ability to perform daily life tasks, is conceptualized as incorporating metacognition, executive function, other domains of cognitive functioning, performance skills (e.g., motor skills that support action), and performance patterns (e.g., habits, routines; Giles et al., 2017; Wolf et al., 2019). Rather than assess specific cognitive skills (e.g., attention, memory, executive function) in isolation from one another, the goal of functional cognition evaluation is to identify clients' capacity to perform essential tasks given the totality of their abilities, including their use of strategies, habits and routines, and contextual and environmental resources. The evaluation of functional cognition is therefore a central concern of occupational therapists' professional practice (Wolf et al., 2019). Given its intimate relationship to ADLs and IADLs, functional cognition can be adequately evaluated only in the context of actual task performance (i.e., occupational performance; AOTA, in press). Occupational therapists must address the challenge of evaluating functional cognition in a way consistent with the demands of professional practice and the requirements of national quality programs to demonstrate our positive impact on client outcomes.

## Occupational Therapy and Cognition

Advocates within the occupational therapy profession, particularly since the 1980s, have considered cognitive functioning, and executive functioning in particular, as a central focus in evaluating an individual's functional performance. At the same time, some occupational therapy practitioners have viewed cognitive assessment as the preserve of other disciplines. The marginalization of cognition from occupational therapy's professional concerns arose in part from the absence of a clear way to delineate disciplinary boundaries in the various settings in which occupational therapy practitioners work. This lack of clarity regarding professional roles may have led to a passive relinquishing of this critical domain by occupational therapy to other disciplines, with many therapists limiting their focus to ADL and IADL issues in the absence of a coherent professional response to cognitive impairments.

Despite this apparent neglect of cognition as a focus, occupational therapists have regularly embedded non-standardized cognitive assessment and intervention approaches into treatment plans and sessions by constructing plausible scenarios that mimic the cognitive demands clients are likely to face after discharge. These nonstandardized approaches are not always recognized and, perhaps by default, have become part of occupational therapy's "hidden practice." For example, a therapist can have a client plan and execute a meal for two in the occupational therapy kitchen. Both client and therapist can observe potential areas of deficit, including limitations in functional cognition, as performance proceeds, and the therapist can address these performance issues before the client returns home.

Building on this naturalistic approach, occupational therapists have developed a range of performance-based assessments of functional cognition. We see this work as an important step in the right direction, yet more must be done. Very few of our performance-based measures are standardized, validated, and normed, and many are too long to be used easily in screening. Because of this absence of validated assessment practices and the unstated and implicit nature of this approach, occupational therapists' skills in this area have little currency outside the profession. Thus, although both performance-based testing and the construct of functional cognition have a long history in the profession, formal evaluation and measurement using validated and normed tools have only recently become a focus (Wesson & Giles, 2019). The IMPACT Act and all the quality directions now under way in Medicare require that we move forward in this direction.

Given the value placed on evaluating and treating impaired functional cognition to prevent poor postdischarge outcomes, it is essential that the occupational therapy profession develop, validate, and systematically use performance-based assessments of functional cognition (Wolf et al., 2019). The recognition of cognition in policy and our understanding of its role in successful performance and participation require us to emphasize functional cognition in our daily practice, education, and research.

### Current National and Professional Policy Priorities

The passage of the IMPACT Act has heightened the profession's focus and advocacy in the area of cognition. AOTA has been advocating for CMS to include the proactive screening of functional cognition as a critical component of quality in PAC settings. Policy arguments have promoted both screening for functional cognition limitations to identify clients at risk for failed care transition and linking of clients who need services with appropriate evaluation, intervention, level of care, and support. This strategy builds on the profession's understanding of the interrelationship of cognition and occupational performance (AOTA, *in press*) and the link to successful PAC outcomes. AOTA has advocated to CMS that PAC data collection procedures should include information from a standardized assessment of functional cognition. This message is also conveyed with regard to practice in community settings, which could also benefit from adoption of practices heightening attention to functional cognition.

Although the message about the importance of functional cognition has been heard, methods to identify cognitive impairments need to be enhanced. At this time, CMS has selected two screening tools to be embedded in patient assessment across PAC settings: (1) the Confusion Assessment Method (CAM; [Wei et al., 2008](#)), to identify clients with delirium, and (2) the Brief Interview for Mental Status (BIMS; [Saliba et al., 2012](#)), to identify clients with cognitive impairments. These tools do not identify clients with milder forms of cognitive impairment, and thus practitioners may fail to identify subsets of clients at risk for failed care transition and other negative outcomes. CMS has indicated the need for tools that are more sensitive to subtle cognitive impairment (i.e., that have a higher ceiling for impairment than the current screening tools), but no screening tool for functional cognition has been adopted at this time ([Medicare Program, 2019](#)) because there are no easy-to-administer, short screening tools that can be implemented by a variety of professionals—a CMS requirement.

Given that the CAM and BIMS lack sufficient sensitivity to identify subtle but significant cognitive impairment, AOTA has argued that an interdisciplinary performance-based screening approach should be implemented for individuals categorized as unimpaired on the CAM and the BIMS. This approach would bridge the gap between the measurement capacity of these tools, on one hand, and on the other the level of cognitive functioning that is adequate to support successful independent community living. Using a skip pattern or gateway screening—that is, using a functional cognition screening tool only for individuals who pass the CAM and the BIMS—would minimize the burden of testing on both clinicians and clients. After a care team member completes a functional cognition screen and identifies the need for further assessment, a referral can be initiated to occupational therapy for an in-depth performance-based evaluation of functional cognition to guide the plan of care. Such an approach would allow for further identification and analysis of occupational performance problems and provision of interventions and resources needed before discharge to ensure clients are able to get home and stay home ([Morrison et al., 2015](#); [Wolf et al., 2019](#)). Although CMS recognizes the importance of the gap in testing, it has determined that at this time no brief screening tool has sufficient evidence supporting its use, leaving it to the profession to move forward in the development and implementation of such tools.

### The Path Forward

Attention to functional cognition should be addressed quickly with the current opportunity in PAC. If the occupational therapy profession is to champion functional cognition, be recognized as a health system leader, and drive optimization of key outcomes, we must harness the efforts of our community and professional organizations and the expertise of research universities and scholars, educators, and, most important, practitioners.

AOTA's Volume to Value project is part of the quality initiative and aims to establish recommended practices in occupational therapy for screening, evaluation, and intervention that practitioners can easily use in new value-based paradigms, including Medicare quality measurement efforts. As a part of the quality initiative, AOTA has developed the AOTA Occupational Profile Template ([AOTA, 2017](#)), quality improvement education, and evaluation checklists. The evaluation checklists include recommendations for core areas to address in evaluation, including functional cognition,

and they list quality performance measures that may relate to occupational therapy interventions. These materials are all available at <https://www.ota.org/value>.

AOTA has also developed rigorous clinical practice guidelines as a part of the evidence-based practice initiative. AOTA could build on the quality initiative and the Practice Guidelines series (AOTA, n.d.) by collaborating with other professional organizations and with practitioners to identify consensus recommendations that incorporate the research findings. As part of this effort, practitioners should consider screening clients consistently for functional cognition impairments, capturing related client data, and quantifying function. If these recommendations are adopted by practitioners, their use would promote the accumulation of data supporting occupational therapy's role in achieving improved patient outcomes through more effective identification and treatment of impaired functional cognition.

In addition, other occupational therapy professional organizations need to continue their advocacy efforts with CMS. They must keep CMS apprised of developments within the profession that address the potential for screening and evaluation of functional cognition to improve patient outcomes in terms of discharge stability, reduced resource utilization, and improved quality of life.

### Research Universities and Scholars

Currently, no performance-based screen of functional cognition meets the full CMS criteria, and none has adequately assessed psychometric properties. As a profession, we need to look to our research-intensive academic institutions to develop such tools. Regardless of whether CMS adopts a functional cognition screening tool, frontline occupational therapists need tests that can be embedded systematically within plans of care across at-risk patient populations to enhance quality of care and drive achievement of desired outcomes.

The implications of the development and adoption of assessments of functional cognition go far beyond CMS to other agencies and entities that influence quality achievement. For example, the National Quality Forum, a nonprofit organization that promotes patient protections and health care quality through measurement and public reporting, must endorse quality measures before they are implemented in PAC. We need a performance-based assessment of functional cognition that qualifies for National Quality Forum endorsement and thus CMS implementation.

We must also find ways to generate normative data for the performance-based screening and assessment tools for functional cognition that we have, such as the Executive Function Performance Test (Baum et al., 2008) and the Performance Assessment of Self-care Skills (Rogers et al., 2003), and to continue ongoing measure development. One option is to identify novel funding mechanisms to develop norms for tests that are already available. Then, we need researchers to partner with health and other systems and frontline practitioners to evaluate such tools in the context of broader care delivery and key health system outcomes. Inclusion of data from these tools as discrete fields in electronic health records would allow systems to complete rapid large-scale data collection and provide the data sets necessary for outcome analysis. In the future, widespread use of functional cognition screening tests and follow-up performance-based assessments will allow us to develop empirical criteria for the selection of interventions.

### Educators

The construct of functional cognition is included in the most recent edition of the occupational therapy education standards (Accreditation Council for Occupational Therapy Education, 2018). Thus, educators now must emphasize the relevance of functional cognition as a key competency in practice. In recognition of the evolution of health care system requirements, we must ensure that the next generation of leaders understands the importance of achieving quality outcomes for our clients and quantifying our success. This is essential to the future of the profession.

## Practitioners

Practitioners need to recognize the construct of functional cognition, support its use in practice, and disseminate knowledge of the construct among care teams and administrators and in their everyday interactions with clients and caregivers. In addition, practitioners need to participate in quality improvement initiatives focused on functional cognition and collaborate with researchers and educators on the systematic dissemination and implementation of this practice (Institute of Medicine, 2012). Finally, practitioners need to advocate within their own health systems to include functional cognition as a field in the documentation platform to gather the data needed to support policy and payment decision making.

## Conclusion

At this time, CMS has not incorporated a functional cognition screening measure into routine PAC data collection, but it may do so in the future. In the meantime, we must as a profession address the issues that led CMS to decide against the routine cross-disciplinary screening for functional cognition. We need reliable and valid measures to support occupational therapy practice and to gather data to bring to the policy and regulatory table as evidence of our contribution to high-quality client outcomes. AOTA has advocated for occupational therapy's critical role in assessing functional cognition, but the association cannot do this without data that support the profession's contribution to improved client outcomes. The enthusiasm of practitioners who want the development of reliable and valid measures that are suitable for use in their day-to-day clinical practice is very exciting for those of us who have been working in functional cognition. We need to work together to give them the tools to do the job. 🧩

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