Health care systems are prioritizing the quality of outcomes over the quantity of services provided, and health care payers and other stakeholders are focusing on preventing hospital readmissions. This priority supports the effort to reduce the cost of health care by avoiding the most expensive care type and improving the quality of health care by promoting sustained return to the community and remaining in the community. Occupational therapy practitioners have expertise that is critically important in this effort. Occupational therapy places a unique and immediate focus on patients’ functional and social needs, which can be important drivers of readmissions if they are not addressed. By addressing activities of daily living, instrumental activities of daily living, functional cognition, psychosocial needs, vision, fear of falling, and safety, occupational therapy practitioners can be a valuable addition to the effort to keep people out of the hospital and participating in their lives. This article reviews the literature supporting the role of occupational therapy in each of these key areas.

The Quadruple Aim is the new normal in health and health care. Organizations across the country now support the four noble goals of reducing health care costs, improving the patient experience, improving the health of people, and preventing practitioner burnout (Rathert et al., 2018). Addressing the first three of these goals (known collectively as the Triple Aim) is challenging, especially given the fragmented systems and payers in the United States. Although no single way to measure progress exists in these areas, hospital readmission rates are often used as a proxy for overall care. Occupational therapy has an extremely important role to play in preventing readmissions to hospitals and promoting optimal participation in the community.

National Trends and Policies Influencing Quality Measure Reporting

The Patient Protection and Affordable Care Act (ACA; Pub. L. 111-148) has moved Medicare providers to a world of accountability and quality (Lowell & Bertko, 2010). One provision affecting acute care hospitals is § 3025, the Hospital Readmission Reduction program, which was implemented initially as part of the fiscal year 2012 inpatient prospective payment system final rule (Centers for Medicare and Medicaid Services, 2011). In addition, § 3026 of the ACA describes the Community Care Transitions program, which provides funds for implementation of evidence-based care transition interventions for adults at risk for readmissions.

More recently, quality measures for readmissions have been added through the value-based purchasing program in postacute care settings. These quality measures compare facilities on the basis of the risk-adjusted number of readmissions to the hospital after discharge. The best performing facilities receive bonus (upward adjusted) payments that are balanced by worst performing facilities receiving penalty (downward adjusted) payments. Skilled nursing facilities saw the first bonus and penalty payments in October 2018, and the readmissions measures and payment adjustments are being tested in nine states for home health agencies. Occupational therapy practitioners are highly qualified to prevent readmissions by assessing and treating core areas and preparing patients to safely transition to the next level of care.
Readmissions are affected not only by patient characteristics but also by complex and critical aspects of care processes, including communication between providers, communication with patients, prevention and responses to patient safety, and coordination with transitions of care. Literature on readmission has focused primarily on discharges from short-stay, acute care hospitals (Khera et al. 2018; Yandrapalli et al., 2018). These acute care studies have considered predischarge characteristics that predispose and create a need for readmissions. Readmissions have been shown to be related to quality of care, and interventions have been able to reduce 30-day readmission rates, so it is important to determine which patients are most vulnerable for readmissions and then target interventions accordingly (Jencks et al., 2009).

Functional impairment has been shown to be associated with increased risk of 30-day all-cause hospital readmission (Arbaje et al., 2008; DePalma et al., 2013; Greysen et al., 2015). Functional impairment may be an important but underaddressed factor in preventing readmissions. Rogers et al. (2016) found that additional spending on occupational therapy reduces readmissions. They noted that occupational therapy places a unique and immediate focus on patients’ functional and social needs, which can be important drivers of readmissions if they are not addressed. Promotion of quality improvements by paying hospitals and postacute care settings for quality care may lead to improved transitions of care from institutions to the community.

Shift From Volume- to Value-Based Care

Value-based purchasing is an initiative to transition health care providers from volume- to value-based care. Value-based programs and payment models are critical for improving quality of care, efficiency of services, and reduction in costs. Value-based regulations give hospitals incentives to identify gaps and improve health care quality and value. To drive health care system progress, value should define the framework for performance improvement (Porter, 2010).

Prevention of Readmissions by Addressing Quality in Key Areas of Occupational Therapy Practice

Rehabilitation providers need to demonstrate how their practice contributes to minimizing risk of poor outcomes and enhancing the likelihood of achieving desired outcomes. Functional status is often associated with health outcomes, including posthospital readmissions (Greysen et al., 2015; Hoyer et al., 2014; Ottenbacher et al., 2014). For occupational therapy practitioners to improve outcomes by targeting the care provided in key areas of practice, it is critical to engage patients and families in that care.

The Occupational Therapy Practice Framework: Domain and Process (3rd ed.; OTPF–3; American Occupational Therapy Association [AOTA], 2014) describes occupational therapy practice as focusing on achieving health, well-being, and participation in life through engagement in occupation. In addition, occupational therapy practitioners are uniquely skilled in the evaluation process in all aspects of the domain, understanding the interrelationships within the domain and the patient's context and environment. Rogers and colleagues (2016) identified some distinct practices of occupational therapy that may relate to its association with decreased hospital readmissions. The sections that follow describe occupational therapy practice areas that are related to important quality measures for patients, health systems, and payers and are connected to the distinct value of occupational therapy.

Note that these practice areas are interrelated. Rarely will a patient need full assessments in every area. However, if occupational therapy practitioners address each area across practice settings, the profession can maximize its effect on decreasing readmissions. AOTA developed an evaluation checklist for use with adults as a clinical tool to promote consistent, comprehensive occupational therapy evaluations. The checklist can be downloaded for free at https://www.aota.org/value.
Activities of Daily Living

Activities of daily living (ADLs) are the basic activities needed to take care of oneself. Some examples included in the OTPF–3 are bathing, toileting, dressing, feeding, and functional mobility (AOTA, 2014). ADL performance is directly connected to readmission to acute care. In a nationally representative retrospective study, the authors found that older adults who were dependent in three or more ADLs had significantly greater odds of being readmitted (Greysen et al., 2015). DePalma et al. (2013) found that older patients who are discharged from the hospital with ADL disability and who report unmet needs for new ADL disabilities after they return home are susceptible to readmission. Pisani and colleagues (2017) found that functional performance in ADLs is a significant predictor of readmission to acute care after elective surgery; that is, people who are more dependent in ADLs are more likely to be readmitted. Medicare is now using Section GG Functional items related to ADLs to score and compare postacute care facilities (skilled nursing facilities, inpatient rehabilitation facilities, home health) on improvement in functional performance of ADLs using outcome measures (Sandhu et al., 2018). Identifying, understanding, and addressing ADLs is key to lowering acute care facility readmissions.

ADLs are critically important for occupational therapy practitioners to consider in evaluation, intervention, and discharge planning. In addition, occupational therapy is effective for improving functional ability in ADL performance (D’Amico et al., 2018; Smallfield & Heckenlaible, 2017; Wolf et al., 2015). Using occupation-based interventions to address and improve people’s ability to perform ADLs independently or at their optimal level may decrease their likelihood of readmission to acute care.

Instrumental Activities of Daily Living

Instrumental activities of daily living (IADLs) support daily life and are more complex than ADLs. They include tasks such as financial management, health management, household management, driving, and community mobility (AOTA, 2014). IADL independence is also a predictor of acute care readmission and morbidity. People who are more dependent in IADLs are more likely to be readmitted to the hospital after discharge (Pisani et al., 2017). In addition, diminished IADL performance in areas such as shopping, transportation, and financial management is associated with the progression from mild cognitive impairment to dementia (Bidzan et al., 2016). IADL performance is complex and requires integration of physical and cognitive factors and skills (Coster et al., 2007; McGrath et al., 2019). Social factors such as depression also play a role in IADL independence (Connolly et al., 2017).

IADL performance is most often assessed using performance-based, standardized tools (Romero-Ayuso et al., 2019). Occupational therapy is uniquely positioned to assess IADLs and address the skills and ability to integrate each activity to achieve improved independence in IADL performance. These factors and skills may be addressed though self-management, prevention, and community-based interventions (Hunter & Kearney, 2018).

Fear of Falling

Falls are a significant contributor to readmissions (Galet et al., 2018). Individualized environmental assessment and modification by occupational therapy is effective at reducing falls. In its Stopping Elderly Accidents, Deaths, and Injuries (SteADI) algorithm for fall risk screening, assessment, and intervention, the Centers for Disease Control and Prevention (2019) now recommends referral to occupational therapy if home hazards are likely.

Fear of falling may be risk increasing, isolating, or protective in its effects. Patients with a low fear of falling but a high risk of falling may be less likely to integrate safety into their habits around occupational engagement. Patients with a high fear of falling but a low risk may undertake habits and routines that are unnecessarily isolating to avoid falls. Patients with a protective fear of falling integrate safe habits and routines into daily occupations. Fear of falling is associated with people’s judgment; those with poor judgment may be associated with an increased risk of falls (Trevisan et al., 2019).
Occupational therapy practitioners are uniquely qualified to address the habits and routines around fear of falling to facilitate a protective fear that supports optimal engagement and minimizes risk.

**Functional Cognition**

Functional cognition is a critical component of fear of falling and IADL performance. The skills and training of occupational therapy practitioners and the OTPF–3 make a strong case that occupational therapy is the ideal profession to assess when and how cognition influences a person’s ability to function independently and safely (Giles et al., 2017). Assessments and screening tools that address functional cognition can identify mild cognitive impairment, a condition that is often missed by clinicians. It is critical to assess, document, and address functional cognition in interventions to promote safe and independent engagement in occupations in the community, which in turn will contribute to a decreased likelihood of hospital readmissions. When a patient with diminished functional cognition requires a caregiver for safe discharge, it is essential that the caregiver understand functional cognition and is trained to support the patient as well as promote his or her own well-being (Giles et al., 2020).

**Social Participation**

*Social participation* is the occupation of engaging with friends, family, and anyone encountered either in person or virtually (AOTA, 2014). Connection and participation in social activities are correlated with decreased readmission rates (Brewster et al., 2019). Social participation is an important factor to assess and address with people with mild cognitive impairment (Bidzan et al., 2016). During evaluation, occupational therapists should identify factors that both support and prevent patients’ social participation. Being aware of patients’ barriers to social participation and integrating occupation-based interventions that are sensitive to their psychosocial needs at discharge promotes the distinct value of the profession.

**Roles, Habits, Routines, and Rituals**

A distinguishing feature of occupational therapy is occupation-based and contextually relevant evaluations and interventions. Performance patterns (roles, habits, routines, and rituals) are critical elements to understand how a person engages in occupations and what elements may be adapted to achieve ongoing optimal performance in the community (AOTA, 2014). Addressing performance patterns from evaluation through discharge allows occupational therapists to collaborate with patients to promote occupational engagement in a contextually meaningful way.

**Vision**

Occupational therapy practitioners may easily overlook vision, sensation, and perception during the occupational therapy assessment. Practitioners must understand how a person perceives the environment along with whether and how this perception has changed over time. Integrating a vision screen into all adult occupational therapy evaluations can identify when vision, sensation, and perception are factors that practitioners should address in the plan of care. Decreased functional ability as a result of vision correlates with a higher likelihood of acute care readmission and higher overall costs of care (Jaffee et al., 2016; Morse et al., 2019). Occupational therapy practitioners have multiple options to address vision deficits, including connecting patients with a vision specialist such as an optometrist, ophthalmologist, or occupational therapy practitioner with vision specialty skills.

**Safety**

Occupational therapy practitioners are in a unique position to understand potential safety concerns for each patient in his or her specific discharge environment. Practitioners collect information from the patient’s perspective in the occupational profile. Understanding ADL and IADL performance, fear of falling, and functional cognition status allows
occupational therapy practitioners to identify potential safety concerns and address them directly or refer patients to follow-up assessment by practitioners in the community or other appropriate professionals.

Matching the discharge environment and safety with the person’s ability is an important step to ensure safe discharge (Pynoos et al., 2012). Occupational therapy practitioners working with patients in an institution must consider the discharge environment at evaluation to appropriately prepare a patient. Arbaje et al. (2008) noted that older adults and their caregivers have a considerable burden during transitions and would benefit from well-targeted, effective interventions. Although some organizations may support practitioners assessing a patient’s home for safety before discharge (Godfrey et al., 2019), such an assessment may not be feasible for most practitioners. However, practitioners should complete some type of home safety screen with the patient to understand whether they should coordinate with or make a referral to other occupational therapy practitioners for an in-home assessment after discharge (Pighills et al., 2019).

Creating Ideal Processes to Improve Transitions of Care in Key Areas of Occupational Therapy Practice

Occupational therapy practitioners can reduce the likelihood of readmission by focusing on patients’ transitions. Transitions of care have been defined as the set of actions taken to ensure that care is coordinated as patients are transferred from one clinical setting to another (Brown, 2018). These transitions are vulnerable periods for all patients and especially so for older adults with multiple comorbidities, prior hospitalizations, poor social or family support, high medication burden, and lower health literacy (Farrell et al., 2015). Brown (2018) reported that in the 30-day posthospital discharge period, 60% of Medicare beneficiaries made one transfer, 18% made two, 9% made three, and 4% made four or more. Each time a patient transitions from one postacute care environment to another, the potential for fragmentation in communication occurs, which can result in loss of critical information and fractionation of care planning. Creating processes that support patients and their families to improve transitions of care are critical to preventing hospital readmissions.

Several studies of transitional care programs have found reductions in readmission rates up to 45%. These programs incorporated several processes, including collaborative discharge planning with detailed, patient-centered discharge summaries; postdischarge telephone calls; home visits; primary care follow-up; and medication reconciliation (Albert, 2016; Brown, 2018; Coleman et al., 2006; Farrell et al., 2015; Hamar et al., 2016). Leland et al. (2019) identified five frequently implemented care transition processes, four of which were used in 74% of the studies: medication self-management; scheduling of follow-up care; postdischarge telephone calls; and medical self-management, which includes interventions, training, and skills by which patients can effectively take care of themselves or leave to others. Patient and family education and care transition coaching were included in 60% of the studies (Leland et al., 2019). The literature supports that single interventions have limited impact on hospital readmission rates and that using a comprehensive, bundled intervention approach has led to reductions in rehospitalization, emergency care, and health care costs and improvements in quality of life and patient, family, and provider satisfaction (Albert, 2016; Brown, 2018).

Transitional Care Programs

Several transitional care programs have been implemented. Coleman et al.’s (2006) care transitions intervention model is designed as a 4-week program that focuses on patient engagement to promote an efficient transition from hospital or skilled nursing facility to home through the use of a transition coach. This model has four pillars: patient-centered medical record, primary care follow-up, medication self-management, and alertness to red flags.

Naylor et al.’s (2011) transitional care model provides interventions over 1–3 months and targets high-risk older adults. An advanced practice nurse completes a predischARGE assessment and then collaborates with the hospital team.
to develop and implement a care plan that involves telephone outreach, home visits, and primary care visits. The pillars of this model include patient engagement; goal setting; and a comprehensive communication plan with the patient, support system, and health care providers.

The Society of Hospital Medicine’s Project BOOST (Better Outcomes for Older Adults Through Safe Transitions) is a systematic model that focuses on discharge processes and communication with the patient and receiving providers (Hansen et al., 2013). Primary interventions include discharge planning, medication reconciliation, patient and family communication before discharge, discharge telephone calls, and patient-centered discharge instructions that reflect the patient’s health literacy level. Project BOOST also incorporates a risk assessment tool.

Another program aimed at reducing hospital readmissions from skilled nursing facilities and long-term care facilities is INTERACT (Interactions to Reduce Acute Care Transfers; Ouslander et al., 2014). This program involves multiple strategies that identify, document, and communicate early changes in medical conditions to allow providers to intervene earlier and minimize the need for rehospitalization.

Many of these programs leverage the expertise of care team members such as nurses, medical providers (physicians, advanced practice nurses, physician assistants), pharmacists, social workers, and care coordinators to implement the prescribed interventions. In Leland et al.’s (2019) scoping review of care transition processes, occupational therapy practitioners were not included in these interventions. However, occupational therapy practitioners are well positioned with their unique lens to provide and support a range of meaningful interventions to optimize quality transitions of care. In addition, occupational therapy evaluations encompass clients’ values, beliefs, and contexts and environment in developing comprehensive, client-centered care plans that can identify and address risks for readmission during the acute care stay.

**Occupational Therapy Empowers Successful Transitions**

Identifying functional, psychosocial, and cognitive deficits that may affect a patient’s ability to successfully navigate medication and medical self-management allows the interprofessional team to target education for the transition to the home or a postacute care environment. Medication self-management skills can involve the functional ability to open containers, visual skills to identify the correct medication from the label, and cognitive skills for adherence to medication timing and dosing regimens. Successful medical self-management requires health literacy skills and education provided in a manner that the patient and support system can understand. Many facilities use the teach-back method to ensure understanding of education after it is delivered. Many transitional care programs have highlighted the importance of patients and families having a good understanding of the medical diagnosis and changes in medical condition that warrant intervention and how to respond. Occupational therapy providers can assist patients and families with understanding how medical conditions can affect physical and cognitive ability to maintain daily routines, habits, and roles.

Early intervention provided by occupational therapy practitioners during the acute care stay can minimize the impact of hospitalization. For patients in both intensive care units and general medical or surgical units, providing early and progressive client-centered interventions has been shown to reduce hospital length of stay, decrease delirium, and improve the level of functional independence (Pritchard et al., 2019; Schweickert et al., 2009). Optimizing a patient’s function early in the hospital stay can enhance the successful transition to home or postacute care with fewer unmet ADL or IADL needs. Occupational therapy providers can assist patients and families with understanding how medical conditions can affect physical and cognitive ability to maintain daily routines, habits, and roles.

Follow-up with medical providers and postdischarge care is another process that occupational therapy practitioners can address with patients and their caregivers. Identifying processes to remember scheduled medical follow-up, including blood work, primary care visits, and home health or outpatient visits, can be facilitated by the occupational therapy practitioner as roles and routines are assessed and understood. Facilitating development of skills and
processes to guide patients and caregivers to successfully navigate calendars and schedules and arrange transportation can be an important role for the occupational therapy practitioner in the discharge planning process.

**Transitions and Readmissions**

Ultimately, high-quality transitions reduce the use of resources, because communication and coordination of care are streamlined. In addition, such transitions increase the use of primary care providers versus the emergency department orrehospitalization, which in turn reduces the overall healthcare cost to the system and results in improved patient, family, and provider satisfaction and patient outcomes.

Rogers et al. (2016) reported that occupational therapy’s role, through its unique focus on functional and social needs, can be important in reducing hospital readmissions. Occupational therapy practitioners are well situated to be active members of the care team given their ability to examine the interplay among the person, the environment, and needs during care transition, occupational therapy practitioners can assist in the prevention of readmissions.

The occupational therapy profession needs to increase awareness of its value when addressing readmissions. The key to successfully improving occupational therapy value in quality performance is by identifying and providing the right treatment and the right processes to drive improvement and prevent readmissions.

**References**


