Occupational Therapy and Management of Multiple Chronic Conditions in the Context of Health Care Reform

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One in four individuals living in the United States has multiple chronic conditions (MCCs), and the already high prevalence of MCCs continues to grow. This population has high rates of health care utilization yet poor outcomes, leading to elevated concerns about fragmented, low-quality care provided within the current health care system. Several national initiatives endeavor to improve care for the population with MCCs, and occupational therapy is uniquely positioned to contribute to these efforts for more efficient, effective, client-centered management of care. By integrating findings from the literature with current policy and practice, we aim to highlight the potential role for occupational therapy in managing MCCs within the evolving health care system.

Leland, N. E., Fogelberg, D. J., Halle, A. D., & Mroz, T. M. (2017). Health Policy Perspectives—Occupational therapy and management of multiple chronic conditions in the context of health care reform. *American Journal of Occupational Therapy, 71,* 7101090010. https://doi.org/10.5014/ajot.2017.711001

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The prevalence of people with multiple chronic conditions (MCCs) continues to grow. Despite the disproportionately high health care spending of this population, outcomes are poor in part because of fragmented, low-quality care provided within a system that is not well designed to support efficient, effective, client-centered management of MCCs (Anderson, 2010; Gerteis et al., 2014; Parekh, Goodman, Gordon, & Koh, 2011). System redesign, such as primary care transformation and the move to true patient-centered care, is occurring, especially in relation to MCCs. Achieving efficient care, reducing costs, and improving health in this group are critical to the entire health care system because their care affects access and system costs for all. The occupational therapy role in this redesign must be nurtured in relation to MCCs to ensure that the knowledge, skills, and precepts of the profession are fully used to improve health for all patients, including people with MCCs.

Historically, the U.S. health care system has been structured around a reactive response to acute medical issues and therefore has not effectively addressed the chronic care needs of the population. Care is often siloed, with different providers addressing specific conditions or medical issues, which has resulted in poor care for people with MCCs (Parekh et al., 2011). To address this longstanding, suboptimal care delivery system for those with MCCs and for other patients, recent health care reform initiatives have promoted prevention, targeted the improvement of population health, and incentivized the delivery of high-quality care (U.S. Department of Health and Human Services [HHS], 2010). To these ends, several national health care initiatives are focusing on improving care for people with MCCs, including enhancing primary care service delivery. Integrating findings from the literature with current policy and practice, this article highlights the potential roles for occupational therapy in addressing participation restrictions and promoting self-management of MCCs within the evolving health care system.

Prevalence and Impact of Multiple Chronic Conditions

More than 25% of the U.S. community-living adult population has been diagnosed with MCCs, and their numbers are increasing exponentially (Anderson, 2010; Office of the Assistant Secretary for Planning and Evaluation [OASPE], 2010). Among older

adults, the prevalence is even higher, with as many as 75% of people age 65 and older having MCCs (Anderson, 2010; Lochner & Cox, 2013; Wolff, Starfield, & Anderson, 2002). Together, this population is responsible for more than 65% of U.S. health care spending, primarily as a result of progressive functional limitations and exacerbations of their chronic conditions (Anderson, 2010). People with MCCs have higher rates of emergency department visits; more outpatient visits; and longer, more expensive hospital stays (Gerteis et al., 2014; Lochner & Cox, 2013; Lochner, Goodman, Posner, & Parekh, 2013; Skinner, Coffey, Jones, Heslin, & Moy, 2016). Among Medicare beneficiaries, those with a greater number of chronic conditions have higher Medicare expenditures, emergency department visits, and 30-day hospital readmissions (Centers for Medicare and Medicaid Services [CMS], 2014a, 2014b).

Although more research is needed to better understand specific clusters of chronic conditions, people with MCCs are faced with the task of simultaneously managing a combination of chronic conditions, such as diabetes, hypertension, ischemic heart disease, heart failure, atrial fibrillation, arthritis, chronic kidney disease, chronic obstructive pulmonary disease, depression, and cancer (Vogeli et al., 2007). Although clients typically enter a health care encounter with a primary medical diagnosis, they frequently have multiple comorbid conditions that need to be taken into account to achieve a successful outcome.

Despite understanding the importance of addressing these multiple comorbid conditions to achieve successful outcomes, clinical outcomes for people with MCCs remain poor. This is due in part to aspects of the health care system that are not well structured to manage MCCs effectively (Gerteis et al., 2014). Health care is often delivered by multiple professionals with minimal coordination and communication between providers, leading to fragmentation, duplication of services, and diffusion of responsibility (Parekh et al., 2011). Episodes of care are too often focused on a single diagnosis, with limited attention paid to other conditions that may be present, diminishing the overall effectiveness and quality of care (Anderson, 2010; OASPE, 2010). Moreover, although single-disease management programs have proliferated, limited client education on general principles of chronic disease management makes self-management especially challenging for those with MCC (Anderson, 2010; OASPE, 2010).

Not only do MCCs result in high rates of health care utilization and correspondingly high costs, they also have a negative impact on people's occupational performance and quality of life (Lochner & Shoff, 2015). For example, Barstow, Warren, Thaker, Hallman, and Batts (2015) found that clients with MCCs experience a loss of independence in self-care and of safe participation in desired social and leisure activities. These losses are further exacerbated by the psychosocial implications of a new diagnosis: People have reported feeling a loss of control over their own life, a theme reflected across multiple client populations (Brereton & Nolan, 2000; Pyatak, 2011; Wood, Connelly, & Maly, 2010). Research has demonstrated that occupational therapy providers are effective at tackling these common concerns related to MCC management by approaching these care needs from an occupational lens (Arbesman & Mosley, 2012; Clark et al., 2012). By understanding current policy directions, occupational therapy leaders can help position the profession to take a key role in these changes.

Policy Initiatives Related to Multiple Chronic Conditions

Several policy initiatives have been implemented in response to the high level of health care utilization among people with MCCs and the persistent poor outcomes they experience. The goal of these national policy initiatives is to enhance care delivery, promote comprehensive care for this high-risk population, reduce adverse events, and improve client outcomes (Bazemore, Petterson, Peterson, & Phillips, 2015).

Efforts to enhance the health of this population are being developed and implemented from a public health approach through community-based group interventions and within the health care system (Ahn, Jiang, Smith, & Ory, 2014; Franek, 2013; Nolte & Osborne, 2013; Ory et al., 2014). Self-management is a core target for improving health care generally but especially for management of MCCs. For instance, Stanford's peer mentor–led Chronic Disease Self-Management Program is known worldwide (Brady et al., 2013; Kahvecioglu, Moore, Michaelides, Ruiz, & Bertrand, 2011; Lorig, Sobel, Ritter, Laurent, & Hobbs, 2001). Occupational therapy, with its focus on habits, routines, and self-direction, fits well into any efforts to support clients in improving their own approach to health.

Within the traditional health care system, efforts are also being made to transition from a reactionary to a proactive model of care delivery. To this end, HHS (2010) has developed a strategic framework aimed at enhancing the quality of care for clients with MCCs. The framework emphasizes holistic and coordinated care for people with MCCs instead of disease-specific siloed care. Specifically, HHS has four overarching goals: targeting system redesign, which includes changes to the health care and public health systems; empowering clients to engage in their own care; and enhancing the evidence base by developing tools, training, and clinical decision supports and by funding necessary research to improve care delivery (HHS, 2010).

Primary care has been identified as one clinical area in which chronic disease management can be enhanced. CMS's Center for Medicare and Medicaid Innovation, established by the Patient Protection and Affordable Care Act of 2010 (Pub. L. 111–148), has multiple ongoing projects aimed at enhancing and expanding primary and coordinated care to enhance the quality of outcomes for clients with MCCs, such as the Comprehensive Primary Care Initiative and the recent Comprehensive Primary Care Plus model and the Patient-Centered Medical Home Initiative.

Enhancing Care of Multiple Chronic Conditions: Occupational Therapy's Contribution

Occupational therapy has a long-standing history of treating clients with MCCs in acute and postacute settings to improve their occupational engagement. In these

settings, occupational therapy practitioners typically consider MCCs in addition to the primary medical diagnosis and integrate secondary and tertiary prevention strategies into the care plan to optimize client outcomes, reduce the risk of subsequent medical exacerbations (e.g., acute hospitalization for chronic obstructive pulmonary disease), and prevent adverse outcomes (e.g., infections, accidental falls).

Occupational therapy has an established record of addressing health management, wellness, and prevention in an effort to optimize people's quality of life (Arbesman & Mosley, 2012; Clark et al., 2012; Meyer, 1922). By drawing on the profession's experience in treating clients with MCCs in acute and postacute care settings and its broader history of health promotion and management, the occupational therapy practitioner can assess an client's current knowledge, willingness, and ability to engage in health management and maintenance and other health-promoting occupations within the client's context while taking into account habits, roles, and routines to optimize quality of life (American Occupational Therapy Association [AOTA], 2014).

Occupational therapy can contribute to national priorities aimed at enhancing care quality through the profession's holistic approach to care. Specifically, by evaluating and treating the client as an occupational being, taking into account all the factors that may affect participation, including MCCs, client factors, context and environment, and performance, the occupational therapy practitioner can help facilitate care designed for the client rather than a specific disease or setting. Moreover, the occupational therapy perspective would infuse into these systems new ideas about the interplay between MCCs and the client's habits, roles, and routines, which may affect their risk for adverse events and poor health outcomes.

Client activation and the delivery of effective holistic self-care management services are central to these national initiatives (HHS, 2010; Venkatesh, Goodrich, & Conway, 2014), both of which are at the core of occupational therapy practice. By taking a client-centered approach to the management of MCCs, occupational therapy practitioners can collaborate with the client to develop foundational medical management knowledge and integrate healthy lifestyle approaches into the client's daily routine to promote self-management skills (Mroz, Pitonyak, Fogelberg, & Leland, 2015).

Interdisciplinary Care Teams in Primary Care: A Place of Opportunity

In the context of current federal system change priorities, which are intended to enhance client engagement, promote care coordination, and improve client outcomes, occupational therapy is uniquely situated to be an integral part of the chronic disease management team, including in primary care. Given the profession's specialized education (e.g., mental and physical health, management, and advocacy) and skills in functional assessments, activity analysis, skill development, problem-solving barriers, environmental assessments, adaptation, compensation, and remediation, occupational therapy practitioners are well equipped to support clients in managing their MCCs (Krupa & Clark, 1995; Robinson, Fisher, & Broussard, 2016). To this end, occupational therapy is included among the professions targeted in HHS's (2015) MCC education and training framework, a product that resulted from HHS's (2010) strategic framework for MCC, which challenges professional academic programs to equip providers with the skills to optimize their scope of practice in order to improve care delivery to and patient outcomes among this population.

However, as interdisciplinary primary care teams have emerged, rehabilitation professionals have mostly been overlooked (Bazemore, Wingrove, Peterson, & Petterson, 2016; Peikes, Chen, Schore, & Brown, 2009; Wagner, 2000). Primary care teams are generally led by family physicians and most commonly include nurse practitioners, registered nurses, licensed practical nurses, and physician assistants and, to a lesser extent, pharmacists, behavioral health specialists, and social workers (Bazemore et al., 2016). Although some approaches facilitate the diversification of disciplines represented in primary care (e.g., pharmacists and behavioral health specialists), occupational therapy practitioners need advocacy and an evidence base to support their claim to a place on the chronic disease management care team in primary care (Hildenbrand & Lamb, 2013; Peikes et al., 2016).

As members of the care team, occupational therapy practitioners can approach the client's functional and medical needs and enhance outcomes from an occupational performance perspective instead of a disease-specific approach. By demonstrating that their skills transcend the clinical context and environment, occupational therapy practitioners can be key contributors to the MCC care team; they can target self-management skills, foster client engagement, and facilitate client and caregiver training with the goal of reducing risk and optimizing participation. These opportunities include facilitating clients' self-management skills for MCCs, engaging in screening for and treatment of adverse events (e.g., readmissions, accidental falls), serving as case managers and care coordinators, and supporting client and caregiver education (Hand, Law, & McColl, 2011; Metzler, Hartmann, & Lowenthal, 2012; Richardson et al., 2014; Sanders & Van Oss, 2013; Taylor, 2004).

For example, complying with and managing medications associated with MCCs is an essential component of health management for this client population. Failure to adhere to a medication routine is associated with adverse events and hospitalizations (Malet-Larrea et al., 2016). Occupational therapy practitioners can work along with the physician and nurse to optimize medication utilization. Occupational therapy practitioners can assess and develop interventions related to the client's functional cognition, physical capacity, memory, and other issues to improve the client's ability to manage medications prescribed by the physician. The occupational therapy evaluation of medication issues can guide recommendations for environmental and personal supports to optimize medication management and adherence (AOTA, 2016). Moreover, occupational therapy practitioners can collaborate with the client to establish and implement a medication routine that

aligns with the physician-prescribed regimen and fits into the client's daily routine. Thus, successful participation in occupations can contribute to effective management of chronic conditions, helping to achieve the core goals of new primary care delivery models, the need to improve MCC care and outcomes, and other policy initiatives (Metzler et al., 2012).

Conclusions and Next Steps for Occupational Therapy

National initiatives are emphasizing comprehensive care for the high-risk MCC population, reducing adverse events, and improving client outcomes (Bazemore et al., 2015). The occupational therapy practitioner can be a valuable member of the interdisciplinary care team by approaching care of MCCs in a comprehensive manner that transcends diagnoses and takes into account the client's habits, roles, and routines. To achieve this goal, though, the profession needs to take steps to establish a distinct role in both current systems and emerging systems as the transformation of health care continues. We need to generate evidence within the health care context that demonstrates the relationship between occupation-based MCC health management interventions and prioritized system outcomes such as reduced hospital admissions, lower frequency of physician visits, and enhanced medication compliance. In developing our evidence base, it will be imperative to look to other disciplines working in this area to integrate their standardized measures so we can subsequently compare outcomes and programs. Moving forward, if these objectives are achieved, occupational therapy will be well situated to define, deliver, and document its value as part of the interdisciplinary team promoting occupational engagement—and thus improved health—for clients with MCCs. ▲

Acknowledgments

During the preparation of this article, Natalie E. Leland was supported by the Agency for Healthcare Research and Quality (K01 HS 022907-01A1); Donald J. Fogelberg was supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (K01HD076183); and Ashley D. Halle was supported by the Health Resources and Services Administration, under the Geriatrics Workforce Enhancement Program Award.

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