

Telehealth Opportunities in Occupational Therapy Through the Affordable Care Act

KEY WORDS

- health promotion
- occupational therapy
- Patient Protection and Affordable Care Act
- preventive health services
- telemedicine

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Occupational therapy practitioners and their clients are poised to benefit from the use of emerging technologies to deliver health and wellness, habilitation, and rehabilitation services across multiple practice settings. The Patient Protection and Affordable Care Act (ACA; 2010) defines a new direction for the U.S. health care system by transforming the current health care system to improve access, quality, efficiency, and transparency of health care services. These goals are addressed by employer incentives, expansion of public programs, premium and cost-sharing subsidies, health insurance exchanges, and coordinated care approaches such as accountable care organizations (ACOs) and patient-centered medical homes (PCMHs). These aspects of the ACA may increase coverage and access to health care services for millions of Americans.

Prevention and Wellness

Prevention and wellness are an important component of the ACA. As a provision of the act, the National Prevention, Health Promotion, and Public Health Council has developed a national strategy to improve the nation's health and coordinate federal prevention, wellness, and public health activities (U.S. Department of Health and Human Services [HHS], 2011). The expressed vision of the National Prevention Strategy is “working together to improve the

health and quality of life for individuals, families, and communities by moving the nation from a focus on sickness and disease to one based on prevention and wellness” (p. 7). This vision is in harmony with the American Occupational Therapy Association's (AOTA's; 2010e) definition of *occupational therapy* as a “science-driven, evidence-based profession that enables people of all ages to live life to its fullest by helping them to promote health and prevent—or live better with—illness, injury, or disability” (para. 1).

One way in which occupational therapy practitioners can promote health and wellness is through the use of emerging service delivery models, including telehealth and telerehabilitation. These service delivery models have the potential to improve access to quality health care, including occupational therapy services for prevention, chronic care management, treatment of mental health disorders and substance abuse, habilitation, and rehabilitation.

Occupational Therapy's Role in Prevention and Wellness

AOTA supports and promotes occupational therapy practitioners' involvement in health promotion and disease or disability prevention programs. According to *Occupational Therapy in the Promotion of Health and the Prevention of Disease and Disability* (AOTA, 2008a),

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there are three critical roles for occupational therapy practitioners in health promotion and disease or disability prevention: to promote healthy lifestyles; to emphasize occupation as an essential element of health promotion strategies; and to provide interventions, not only with individuals but also with populations. (p. 696)

Further support of occupational therapy's role in the promotion of health and wellness is evident through the World Health Organization's (WHO's; 2011b) definition of *health* as "a state of complete physical, mental and social well-being" (para. 1). WHO, established by the United Nations in 1948, is the leading authority on global health matters and shapes health care policy, research, and standards (WHO, 2011a). In line with WHO's definition of health as more than the absence of disease, occupational therapy practitioners promote physical, mental, and social well-being by "supporting health and participation in life through engagement in occupation" (AOTA, 2008b, p. 626).

Coordinated Care

The ACA also advocates for coordinated care initiatives as part of health care reform. The ACO and PCMH models supported by the ACA create avenues to coordinate care and reduce costs while maintaining or improving quality of health care services. *PCMHs* consist of interdisciplinary health care teams working together to provide integrated care. *ACOs* allow providers to band together to provide the majority of a beneficiary's health care needs, coordinate care, improve quality, contain costs, and integrate health systems for Medicare beneficiaries (Kaiser Family Foundation, 2011). *ACOs* also allow for sharing of savings that are achieved.

Occupational Therapy and Coordinated Care

Patient-centered care, health promotion, and chronic disease management will be enhanced by the inclusion of occupational therapy practitioners as members and case managers within coordinated care teams.

The ability to analyze client factors, performance skills and patterns, contexts and environments, and activity demands that affect health and engagement in areas of occupation (e.g., activities of daily living [ADLs], work, education, leisure, social participation) is a unique skill set of occupational therapy practitioners. This holistic, client-centered perspective is critical to coordinated care teams to promote optimal client outcomes (AOTA, 2010b). Occupational therapy practitioners must be aware of these developments and promote the important ways in which occupational therapy should be integrated into primary, acute, and chronic care provided by these entities, including telehealth.

Telemedicine, Telerehabilitation, and Telehealth

Electronic information and telecommunications technologies provide a platform for occupational therapy practitioners to participate in national prevention, wellness, and public health initiatives created by the ACA and facilitate coordinated patient-centered care, chronic care management, habilitation, and rehabilitation services for people across the lifespan. The sections that follow provide an overview of terminology and applications of telehealth technologies within occupational therapy.

Telemedicine

The American Telemedicine Association (2011) defines *telemedicine* as "the use of medical information exchanged from one site to another via electronic communications to improve patients' health status" (para. 1). The use of technology to promote health has been argued to be an essential component of health care reform (Bashur & Shannon, 2009). Telemedicine technology embodies the "electronic . . . exchange of information for the purpose of promoting health, preventing disease, treating the sick, managing chronic illness, rehabilitating the disabled, and protecting public health and safety" (p. 601).

Telerehabilitation

AOTA (2010d) defines *telerehabilitation* as the "application of evaluation, preventive, diagnostic, and therapeutic services

via two-way or multi-point interactive telecommunication technology" (p. 1). In the WHO and World Bank (2011) *World Report on Disability*, telerehabilitation was recognized as a viable service delivery model for the delivery of therapeutic services, including occupational therapy:

Growing evidence on the efficacy and effectiveness of telerehabilitation shows that telerehabilitation leads to similar or better clinical outcomes when compared with conventional interventions. Further information on resource allocation and costs is needed to support policy and practice. (p. 119)

Telehealth

Telehealth, a broad term that encompasses both telemedicine and telerehabilitation, refers to the use of electronic information and telecommunications technologies to provide health-related services at a distance. Whereas AOTA defines telerehabilitation broadly to include health and wellness applications, it is often defined in the literature more narrowly as the delivery of rehabilitation services to people with disabilities using telehealth technology (Forducey et al., 2003; Parmanto et al., 2010; Russell, 2007). Although the terms *telehealth* and *telerehabilitation* can be used interchangeably, the term *telehealth* better describes the scope of occupational therapy and is used throughout the remainder of this article unless quoting a source that uses the term *telerehabilitation*.

Applications of Telehealth in Occupational Therapy

Occupational therapy practitioners are using telehealth as a service delivery model to assist clients with

- Developing skills;
- Incorporating assistive technology and adaptive techniques;
- Modifying work, home, or school environments; and
- Creating health-promoting habits and routines.

Potential benefits of telehealth as a service delivery model within occupational

therapy include increased accessibility of services to clients who live in remote or underserved areas; improved access to providers and specialists otherwise unavailable to clients; prevention of unnecessary delays in receiving care; and decreased isolation for practitioners through distance learning, consultation, and research, among other activities. By removing barriers to accessing care, including social stigma, travel, and socioeconomic and cultural issues, the use of telehealth as a service delivery model within occupational therapy leads to improved access to care and ameliorates the impact of personnel shortages in underserved areas.

There is potential for using telehealth as a service delivery model in each major practice area within occupational therapy:

- Children and youth
- Productive aging
- Health and wellness
- Mental health
- Rehabilitation, disability, and participation
- Work and industry.

Occupational therapy outcomes that can be achieved with telehealth include the facilitation of occupational performance, adaptation, health and wellness, prevention, and quality of life. Use of telehealth within occupational therapy aligns with the goals of the ACA in restructuring how health care services are delivered and improves access to services for the many people who are expected to be covered for the first time as a result of implementation of the ACA.

Children and Youth

Telehealth can be used to deliver early intervention and school-based services effectively and efficiently. Early intervention services, mandated by Part C of the Individuals With Disabilities Education Improvement Act of 2004 (IDEA; 2004), are designed to promote development of skills and enhance the quality of life of infants and toddlers who have been identified as having a disability or developmental delay. Telehealth technology supports delivery of early intervention services (Cason, 2009, 2011; Heimerl & Rasch, 2009; Kelso, Fiechtl, Olsen, & Rule, 2009). Similarly, evidence supports

the use of telehealth for the delivery of occupational therapy services within the school setting (Gallagher, 2004). In addition to school-based services that traditionally fall under the purview of IDEA, there is potential for occupational therapy practitioners to use telehealth within school-based interdisciplinary team models for wellness programming, including efforts to combat the obesity epidemic, and for programming targeting prevention of violence among youth.

Productive Aging/Health and Wellness

The growing numbers of older adults in the United States create opportunities for occupational therapy practitioners to use telehealth to promote health and wellness, prevention, and productive aging while reducing health care costs. Researchers using actual cost analysis concluded that the use of telerehabilitation to remotely monitor and provide self-management strategies to older adults who had chronic illnesses and were living in their homes resulted in decreased hospitalizations and nursing home stays (Bendixen, Levy, Olive, Kobb, & Mann, 2009). According to the Administration on Aging (2011), people ages 65 years or older numbered 39.6 million in 2009—12.9% of the U.S. population—and are expected to grow to 72.1 million, or 19% of the population, by 2030.

Interactive videoconferencing technologies can promote health and aging in place among older adults (Bendixen, Horn, & Levy, 2007; Harada et al., 2010; Hori et al., 2009). In turn, this approach saves resources that would otherwise be spent to care for these clients in inpatient or long-term care facilities. The use of home monitoring devices such as self-monitoring analysis and reporting technology (SMART) enable occupational therapy practitioners to remotely monitor clients' occupational performance within the home environment and provide recommendations for environmental modifications and interventions to support occupational performance (Mann & Milton, 2005). The use of telehealth as a service delivery model supports health and wellness and prevention programming by enabling remote assessment and manage-

ment of obesity (Neubeck et al., 2009) and chronic diseases such as diabetes mellitus, congestive heart failure, and hypertension (Darkins et al., 2008; Steel, Cox, & Garry, 2011).

Mental Health

In the practice area of mental health, the use of telehealth as a service delivery model within occupational therapy increases access to specialized care by circumventing barriers, including work and family responsibilities, that limit clients' availability to travel to receive care; fear of social stigma; cultural issues; and personnel shortages limiting access, particularly in rural communities. Occupational therapy practitioners promote participation and psychological and social functioning for people with mental health issues within the home, work, and community through engagement in meaningful occupations. Through videoconferencing and the use of electronic information and telecommunications technologies, practitioners can provide services in locations convenient for clients such as in the home, thereby overcoming barriers that limit access to mental health services. Research has demonstrated the efficacy of telehealth as a delivery model for psychological and behavioral interventions among people with posttraumatic stress disorder and other mental health issues (Germain, Marchand, Bouchard, Drouin, & Guay, 2009; Gros, Yoder, Tuerk, Lozano, & Acierno, 2011).

Rehabilitation, Disability, and Participation

Telehealth has been used as a delivery platform for stroke rehabilitation (Chumbler et al., 2010; Clark, Dawson, Scheideman-Miller, & Post, 2002; Hermann et al., 2010); assessment of ADLs and hand function in people with Parkinson's disease (Hoffmann, Russell, Thompson, Vincent, & Nelson, 2008); assessment and recommendations for durable medical equipment, home modifications, and assistive technology for older adults with mobility impairments (Sanford et al., 2007); and rehabilitation and reintegration into the community for people with traumatic

brain injury (Diamond et al., 2003; Forducey et al., 2003; Girard, 2007; Verburg, Borthwick, Bennett, & Rumney, 2003).

Work and Industry

Although no studies have been published on the use of telehealth as a service delivery model for occupational therapy in work and industry, practitioners are using telehealth technology to conduct remote assessment and analysis of work spaces. Voice over Internet Protocol (VoIP) videoconferencing software and other telehealth technologies enable practitioners to consult with employers and clients to provide education and training for injury prevention; analyze workstations; and make recommendations for modifications to workstations, tools, and environments to eliminate risk factors leading to injury and promote health in the workplace.

Practice Challenges and Opportunities

Telehealth demonstrates promise as a delivery model for occupational therapy, but practitioners must use a high level of clinical reasoning to ensure that interventions provided through telehealth meet the same professional, legal, and ethical standards as services provided in person. AOTA's position paper *Telerehabilitation* (AOTA, 2010d) and *A Blueprint for Telerehabilitation Guidelines* (Brennan et al., 2011) outline important administrative, clinical, technical, and ethical principles associated with the use of telehealth. Occupational therapy practitioners using telehealth as a service delivery model must adhere to the *Standards of Practice for Occupational Therapy* (AOTA, 2010c) and the *Occupational Therapy Code of Ethics and Ethics Standards (2010)* (AOTA, 2010a) as well as pertinent licensure and reimbursement requirements. Additional safeguards inherent in the use of technology must be considered to ensure privacy and security of confidential information (Watzlaf, Moieni, & Firouzan, 2010; Watzlaf, Moieni, Matusow, & Firouzan, 2011).

Although preliminary research indicates that telehealth is an effective service

delivery model in occupational therapy, barriers to its implementation remain: lack of reimbursement and sustained funding; limited technology infrastructure and interoperability; apprehension by practitioners and clients; privacy and security concerns; state licensure issues, including portability; and need for rigorous research supporting telehealth as a service delivery model. Overcoming these barriers will require

- Increased awareness, education, and advocacy for telehealth as a service delivery model within the profession;
- Development of professional standards and guidelines;
- Model regulatory language;
- Inclusion of telehealth in accreditation standards, textbooks, and educational curricula;
- Continuing education opportunities for experienced practitioners; and
- Education and resources for stakeholders (e.g., state boards, legislators, reimbursement entities, practitioners, and consumers).

AOTA and Telehealth

Recognizing that technology is transforming health care delivery as the ACA is transforming the entire landscape of health care access, AOTA is assisting members in accessing resources that will ensure the ethical use of telehealth within occupational therapy. AOTA has been active in lobbying for expanded reimbursement for occupational therapy services provided through telehealth. Additionally, AOTA is participating in interdisciplinary discussions on licensure issues through a working group hosted by the American Telemedicine Association's Telerehabilitation Special Interest Group. These endeavors ensure that occupational therapy is at the table as important policy decisions are made that will affect the profession.

Conclusion

Health care reform through the passage of the ACA creates opportunities for occupational therapy to be a vital part of the health care solution. The use of telehealth as a service delivery model within occupational

therapy has the potential to increase access to services, improve functional outcomes, enhance communication and continuity of care, enhance management of chronic diseases, and promote health and wellness. Although the use of telehealth within occupational therapy is in its infancy, increasing demand for occupational therapy, increasing comfort with electronic information and telecommunications technologies by practitioners and clients, and growing evidence demonstrating the efficacy of telehealth will advance its acceptance as a service delivery model within the profession. ▲

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