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Maximizing the Potential of an Aging Population

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With the aging of the population, the burden of disability will have an increasingly profound influence across a number of domains ranging from health care expenditures and provision of care to older persons' quality of life. Although a slow but steady decline in older Americans' disability rates was documented during the last 2 decades of the 20th century, recent national data suggest that this decline may have ended, with disability rates increasing among community-dwelling adults aged 65 years or older during the first 5 years of the 21st century.¹ Among the potential reasons for this trend are greater morbidity accompanying better chronic disease survival rates, increasing obesity among midlife and older adults, and the effects of aging-associated patterns of disuse and deconditioning—all of which are linked with functional impairment.^{1,2} Such factors are exacerbated by reduced socioeconomic circumstances.³

Evidence has accumulated in recent years about how older adults may maintain levels of functioning sufficient for participation in physical and social activities. Two pathways for improving or maintaining functional health are physical activity and social engagement.

The Role of Regular Physical Activity

Physical activity is an important strategy for preventing or reducing many of the adverse consequences of chronic disease, obesity, and disuse.⁴ A comprehensive summary of the evidence base generated by the US Department of Health and Human Services (DHHS) Physical Activity Guidelines Advisory Committee supports several principles⁴: (1) Increases from sedentary lifestyles to even low levels of physical activity (eg, slower-paced walking

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among more functionally limited older adults) can improve function, decrease hospitalization rates, and protect against chronic diseases and conditions in older patients. (2) Regular physical activity may reduce the incidence of dementia and delay the onset of age-associated cognitive decline. (3) Moving more and sitting less are emerging as complementary and independent approaches to optimizing health and function in the later years. (4) It is generally never too late to enhance function and improve quality of life through increasing physical activity levels, even when chronic disease or substantial functional loss exist.

Additionally, maintaining function through an active lifestyle can be achieved by myriad approaches, including incorporating walking, strengthening, or other discretionary physical activities during leisure; engaging in walking or cycling for transport purposes; enhancing built environments to facilitate greater movement throughout the day; and participating in active social or civic pursuits.⁵

Given that relationships between health, function, and physical activity are bidirectional (ie, healthier individuals will often engage in more physically active pursuits), more experimental trials are needed to establish the causality of physical activity in preventing disability. Nevertheless, while multifactorial interventions may be required to reduce the effects of the constellation of factors that cause functional decline, physical activity represents one valuable approach in this area.

Brief Advice and Referral by Clinicians

Clinicians are an important source of personalized information and credibility in raising awareness of the beneficial effects that regular physical activity can have on maintenance of functioning and chronic disease prevention. These benefits have been summarized succinctly by the DHHS to assist health care professionals in providing brief physical activity advice to patients.⁶ There is increasing evidence of the value of collaboration between physicians encouraged to deliver brief oral and written physical activity advice (including physical activity prescriptions) and the types of health promotion specialists available in most communities in the United States and other industrialized nations.⁷ Follow-up support by trained community specialists can occur by telephone or other avenues.⁷ Expanding referral systems that efficiently link clinical care with these community physical activity resources is imperative. An example of effective clinical community linkages is the Silver Sneakers fitness program, offered by a number of health plans to Medicare-eligible adults in partnership with designated community fitness centers. In one study, the Silver Sneakers health benefit was associated with reduced total health care costs relative to matched controls at 2 years.⁸

Communication Technologies as Physical Activity “Advisors”

Clinicians will likely find increasing assistance in the lifestyle arena through advances in communication technologies that extend beyond the clinic walls to the places where individuals live, work, and play. This area has received additional support through funding streams emanating from the 2009 American Recovery and Reinvestment Act (ARRA).

Increasing evidence suggests that midlife and older adults across socioeconomic strata are ready, willing, and able to use such technologies to promote healthier and more physically active lifestyles. For example, automated telephone counseling has been shown to be comparable with telephone counseling by trained health educators in increasing midlife and older adults' physical activity to recommended levels across 1 year.⁹ Such technology-based health promotion distribution systems are a potentially convenient and cost-efficient means of delivering personalized health information throughout a person's day. An important consideration is to make certain that all segments of the population have access to such technologies to ensure that health disparities are not exacerbated by their use.

Social Engagement as a “Stealth” Strategy for Promoting Functional Health

Social engagement represents another potential pathway for promoting functional health. Investing in new community service roles and responsibilities that provide meaningful and productive ways for older adults to remain socially engaged makes sense from a variety of societal perspectives. The recently signed Serve America Act reflects the renewed national commitment to volunteer service that can benefit individuals of all age groups and functional abilities, not only as recipients but as participants in such generative roles. For example, older adults, including those with functional impairments, who initiate community volunteer activities (eg, tutoring children in the school setting) can reap a range of benefits, including increases in physical activity and strength as well as improvements in cognitive and social activity levels.⁵ This effort would benefit from research examining the effects across different cultural groups of a range of social engagement strategies on health and functioning outcomes to better direct policy development in this area.

Distributed Responsibility for Health Promotion

Several key provisions of the 2010 national health reform legislation could enable clinician-patient-community partnerships to promote regular physical activity and improve functional health across all patients. These include formation of patient-centered community health teams for persons with chronic conditions and creation of a National Prevention, Health Promotion, and Public Health Council charged with developing a national health promotion strategy. Exploration of the best approaches for connecting such health promotion efforts with primary care practice may facilitate continuity and sustainability of these efforts.

Future Directions

New legislation supporting national health reform and health promotion, health-oriented technology development, and volunteer service provide a propitious opportunity to create a more integrated system linking clinical activities to community-based approaches for promoting functional health at the individual and population levels. A positive example of such linkages is the current ARRA-funded dissemination of a previously developed and proven chronic disease self-management community course, taught by trained lay-persons and deliverable online, that includes symptoms management and maintenance of functional ability through physical activity.¹⁰ Such national initiatives, if appropriately harnessed and integrated with primary health care, may not only reduce health care expenditures¹⁰ but also

pave the way for greater civic engagement and contributions that can fulfill the promise of a long life.

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