

Using Evidence-based Programs to Get Beyond High-Cost Medical Care for an Aging Population

Nancy Chernett 23 September 2011

Summary

To maintain the health, function and overall well-being of an aging population, we must consider the effectiveness and comparative effectiveness of treatment approaches, as well as the cost and cost-effectiveness of preventive and treatment services. Evidence-based programs (EBPs) to help adults to maintain their health and independence have been deployed by 27 states through both public and private partnerships. These EBPs do not require expensive technology, are acceptable to adults across the age span, and have shown to be effective in managing as well as preventing the consequences of chronic conditions. Yet, there has been limited success in sustaining such programs without philanthropic support, government subsidy or out-of-pocket expenses. EBPs should be used to complement patient-centered medical care with the potential of reducing higher-intensity, higher-cost care.

Introduction

Over the past 10 to 15 years a plethora of alarming predictions from politicians, the media and even economists have indicated that the aging of our population is and will be one of the key contributors to the exorbitant growth in healthcare costs—especially when considering the fiscal impact on the government through Medicare spending. We are undoubtedly facing demographic changes. There has been a decline in the fertility rate during the last century (with the exception of the baby boomer years of 1946–1964) in conjunction with a steady increase in longevity. Furthermore, people are now living beyond the life expectancy predicted when Medicare was enacted 50 years ago. In the current economic environment, how will we be able to curb the runaway costs of healthcare services for a “graying” population with more healthcare needs?

During the second half of the twentieth century, we have also experienced an explosion in new medical technology. New diagnostic and interventional technologies and blockbuster pharmaceuticals, along with more intensive use of medical care, have been significant contributors to increased longevity, allowing us to live longer and hopefully with improved quality of life. As a society we have paid a price for this evolving medical technology. People are indeed living longer, but often with more chronic conditions—cardiovascular diseases, diabetes, arthritis, Alzheimer’s disease/dementia—which require more healthcare services and increased costs. Economic

data make clear that these miracles of modern medicine have played a major role in the dramatic increase in healthcare spending and its growing percentage of our GDP (Schultz and Binstock 2006).

Given this confluence of aging and the high cost of high-tech health care, what are the most effective ways to maintain the health, function and overall well-being of an aging population? We must consider the effectiveness and comparative effectiveness (Ommaya and Kupersmith 2011) of treatment approaches, as well as the cost and cost-effectiveness of preventive and treatment services, if we are going to be able to improve the current picture.

The Role of Evidence-based Practice

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Evidence-based practice has been the stalwart thinking in medicine and the allied health disciplines for close to 20 years (Guyatt 1992). This approach to treatment combines scientific evidence of the most effective methods of diagnosing and treating patients with clinical expertise. More recently, evidence-based programming has also emerged within the field of aging. New psychosocial and educational programs extend beyond the individual patient with chronic illness, incorporating disease prevention, maintenance and even improvement of health and function. These evidence-based approaches support disease self-management and

positive health behaviors as well as addressing social engagement and ongoing mental stimulation, which have been shown to have a significant impact on the health and well-being of aging individuals (Altpeter et al. 2006).

What are evidence-based programs (EBPs) for older adults? Where does the evidence come from, and how is it being implemented? The Prevention Resource Centers of the Centers for Disease Control, the U.S. Administration on Aging (AoA), the National Institutes of Health (NIH) and the Center for Healthy Aging at the National Council on Aging (NCOA), along with philanthropic organizations such as the Robert Wood Johnson Foundation and the Atlantic Philanthropies, have been funding intervention research with measureable positive outcomes. In addition, these organizations have supported the translation of evidence-based approaches that have been shown to be feasible to implement in real-world settings, as well as reproducible and acceptable to those participating. For example, during 2006–2007, AoA initiated its state-based Evidence-based Disease and Disability Prevention Program (EBDDP). Through both public and private partnerships, 27 states have deployed evidence-based interventions whose primary focus is to help enable adults to maintain their health and independence.

Three Examples of EBPs

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The Chronic Disease Self-Management Program (Lorig et al. 2001) has been implemented in the United States and internationally with adults of all ages and a variety of chronic conditions. This is a low-cost, 2.5-hour, 6-week program taught by trained peer leaders who have chronic conditions themselves. The program has been demonstrated to reduce healthcare utilization and improve patient self-care through enhanced symptom and pain management, more effective medication management, and improved communication between patients and health providers leading to more informed healthcare choices. Currently AoA is supporting national implementation of the program at no cost to participants and will systematically measure cost savings to Medicare. NCOA also has been instrumental in disseminating this program through online access.

Another important arena of evidence-based programming has been directed to patients and families managing Alzheimer's disease and related dementias—conditions that are increasingly prevalent as the population ages, with huge financial and resource costs. In the 1990s NIH began funding studies that evaluated community-based nonpharmacologic approaches to managing challenging and disruptive behaviors in dementia patients, and the stress and subsequent mental and physical illness associated with intense caregiving (Burgio et al. 2010; Gitlin et al. 2005; Mittelman 2000; Schultz et al. 2003). These programs have been effectively implemented in the

home and community sites by nurses, occupational therapists, social workers and psychologists who train families in how to manage and cope with their loved one's disruptive behaviors (e.g., resistance to care, aggressive behavior, wandering and incontinence). These behaviors are a primary cause of families placing their loved ones in a nursing home; nursing home costs represent the largest proportion of Medicaid expenses to states (O'Brien 2005). In point of fact, pharmacologic approaches to managing dementia behaviors have not been shown to be very effective, yet continue to be prescribed at huge expense to patients, families and health insurers (Sink, Holden, and Yaffe 2005).

Another program, Project ABLE (Advancing Better Living for Elders), a multi-component home intervention to reduce functional disability in vulnerable elders (Gitlin, Winter, et al. 2006), has been shown to be both effective and cost-effective with only six in-home visits with an occupational therapist and a physical therapy consultation. This approach has been shown to be instrumental in helping frail community-dwelling older adults to safely manage and maintain themselves in their homes, improve their self-confidence, adaptation skills and physical function, and reduce mortality (Gitlin, Hauck, et al. 2006).

Conclusion

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How are these programs paid for and reimbursed?

Although billions of dollars are spent annually on high-cost medically intensive approaches to disease treatment with variable effectiveness, almost none of the aforementioned programs are reimbursable through private or public health insurance. Tax dollars have gone to researching and developing EBPs shown to be effective in managing as well as preventing the consequences of chronic conditions. These EBPs do not require expensive technology and are acceptable to adults across the age span. Yet, there has been limited success in sustaining such programs without philanthropic support, government subsidy or out-of-pocket expenses.

As we continue the process of rethinking and reorganizing healthcare services in the United States, we need to consider not only how we will pay for evolving and expensive medical technology, but also how to integrate lower-tech, lower-cost approaches into the spectrum of evidence-based health care, and incorporate mechanisms for reimbursement. EBPs should not remain outside the traditional medical model of care. Models such as the Chronic Care Model (Glasgow et al. 2001) integrate these approaches to disease self-management and incorporate community resources. The Patient-Centered Medical Home, a key component of the Affordable Care Act, represents another vehicle for integration of this comprehensive approach to improving health and functional outcomes of older adults.

EBPs are not recommended to replace high-quality, safe and effective medicine; rather, they should be used to complement patient-centered medical care with the potential of reducing higher-intensity, higher-cost care. Dissemination of EBPs must go beyond the gerontology and academic communities, and become an integral part of primary healthcare practice in order to maintain the total health and well-being of an aging population.

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References

References

Altpeter, M., L. Bryant, E. Schneider, and N. Whitelaw. (2006). Evidence-based Health Practice: Knowing and Using What Works for Older Adults. *Home Health Care Services Quarterly*, 25(1-2): 1-11. doi: 10.1300/J027v25n01_01.

Burgio, L. D., I. B. Collins, B. Schmid, T. Wharton, D. McCallum, and J. DeCoster. (2010). Translating the REACH Caregiver Intervention for Use by Area Agency on Aging Personnel: The REACH OUT Program. *The Gerontologist*, 49(1): 103-116. doi: 10.1093/geront/gnp012.

Gitlin, L. N., W. W. Hauck, M. P. Dennis, and L. Winter. (2005). Maintenance of Effects of the Home Environmental Skill-Building Program for Family Caregivers and Individuals with Alzheimer's Disease and Related Disorders. *Journal of Gerontology: Medical Sciences*, 60A: 368-374. doi: 10.1111/j.1532-5415.2006.00733.x.

Gitlin, L. N., W. W. Hauck, L. Winter, M. P. Dennis, and R. Schultz. (2006). Effect of an In-Home Occupational and Physical Therapy Intervention on Reducing Mortality in Functionally Vulnerable Older People: Preliminary Findings. *Journal of the American Geriatrics Society*, 54(6): 950-955. doi: 10.1111/j.1532-5415.2006.00703.x.

Gitlin, L. N., L. Winter, M. P. Dennis, M. Corcoran, S. Schinfeld, and W. W. Hauck. (2006). A Randomized Trial

of a Multicomponent Home Intervention to Reduce Functional Difficulties in Older Adults. *Journal of the American Geriatrics Society*, 54(5): 809-816. doi: 10.1111/j.1532-5415.2006.00703.x.

Glasgow, R. E., C. T. Orleans, E. H. Wagner, S. J. Curry, and L. I. Solberg. (2001). Does the Chronic Care Model Serve Also as a Template for Improving Prevention? *Milbank Quarterly*, 79(4): 579-561. doi: 10.1111/1468-0009.00222.

Guyatt, G., and the Evidence-based Medicine Working Group. (1992). Evidence-based Medicine, A New Approach to Teaching the Practice of Medicine. *Journal of the American Medical Association*, 268(17): 2420-2425. doi: 10.1001.

Lorig, K. R., P. Ritter, A. L. Stewart, D. Sobel, B. W. Brown, Jr., A. Bandura, V. M. Gonzales, D. D. Laurent, and H. R. Holman. (2001). Chronic Disease Self-Management Program: 2-Year Health Status and Health Care Utilization Outcomes. *Medical Care*, 39: 1217-1223.

Mittelman, M. S. (2000). Nonpharmacologic Management and Treatment: Effect of Support and Counseling on Caregivers of Patients with Alzheimer's Disease. *International Psychogeriatrics*, 12:341-346.

O'Brien, E. (2005). Medicaid's Coverage of Nursing Home Costs: Asset Shelter for the Wealthy or Essential Safety Net? Washington, D.C.: Georgetown University Long-Term Care Financing Project Issue Brief. Available at

<http://ltc.georgetown.edu> (accessed August 19, 2011).

Ommaya, A. K., and J. Kupersmith. (2011). Challenges Facing the US Patient-centered Outcomes Research Institute. *Journal of the American Medical Association*, 306(7): 756-757. doi: 10.1001.

Schultz, J. H., and R. H. Binstock. (2006). *Aging Nation: The Economics and Politics of Growing Older in America*. Baltimore: Johns Hopkins University Press, 192-195.

Schulz, R., S. H. Belle, S. J. Czaja, L. N. Gitlin, S. R. Wisniewski, and M. G. Ory. (2003). Introduction to the Special Section on Resources for Enhancing Alzheimer's Caregiver Health (REACH). *Psychology and Aging*, 18(3): 357-360. doi: 10.1037/0882-7974.18.3.357.

Sink, K. M., K. F. Holden, and K. Yaffe. (2005). Pharmacological Treatment of Neuropsychiatric Symptoms of Dementia: A Review of the Evidence. *Journal of the American Medical Association*, 29(5): 596-608. doi: 10.1001/jama.293.5.596.

Additional Resources

Alzheimer's Association (2011). 2011 Alzheimer's Disease Facts and Figures. Available at http://www.alz.org/downloads/Facts_Figures_2011.pdf (accessed August 28, 2011).

American Recovery and Reinvestment Act Communities

Putting Prevention to Work: Chronic Disease Self-Management Program. (2010, November 29). Available at http://www.aoa.gov/AoARoot/AoA_Programs/HPW/ARRA/index.aspx (accessed August 28, 2011).

Evidence-based Disease and Disability Prevention Program. (2011, August 16). Available at http://www.aoa.gov/AoA_Programs/HPW/Evidence_Based/index.aspx (accessed August 28, 2011).

Improving Chronic Illness Care. (n.d.). The Chronic Care Model. Available at http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2 (accessed August 19, 2011).

National Council on Aging. (n.d.). Online Self-Care Programs. Available at <http://www.healthyagingprograms.org/lib/filelist/Resources%20and%20Tools/Table%2019%20-%20Online%20Suite%20of%20Programs%20-%20jk,JB.pdf>.

Vincent, G. K., and V. A. Velkoff. (2010). The Next Four Decades: The Older Population in the United States: 2010 to 2050. Current Population Reports, P25-1138. Washington, D.C.: U.S. Census Bureau. Available at <http://www.census.gov/prod/2010pubs/p25-1138.pdf> (accessed August 29, 2011).