

## Thought leader interview: A chat with Stephen Bartels, MD, MS

Dr. Bartels leads a research group that develops, tests and implements interventions focused on the intersection of physical and mental disorders in older adults.

Magellan is very pleased to share our recent virtual interview with Dr. Bartels in our *eMpowered for Wellness* e-newsletter!

**(PSWHW)** Dr. Bartels, thank you for taking the time to participate in our virtual interview. Can you share with our readers some background regarding your interest and leadership in the area of issues related to co-morbidity among individuals living with serious mental illness?



(Dr. Bartels) As a geriatric psychiatrist working in community mental health early in my career, I became aware of the unaddressed special needs of middle-aged and older adults with serious mental illness. Instead of being challenged by recurrent psychiatric relapses and hospitalizations, this group was struggling with numerous chronic health conditions resulting in medical hospitalizations, nursing home admissions, and premature mortality.

As a geriatric health services researcher, I was also intrigued by the impact of aging and how to design services for older adults with serious mental illness. In my position as a state mental health medical director, I became aware that people with serious mental illness and medical comorbidity were associated with the highest costs of any group and was shocked at the number of heart attacks and other acute medical events among individuals in their 50s. I was also responsible for reviewing nursing home admissions and was struck by the large number of admissions of middle-aged people with serious mental illness.

In traveling around the country, I found that we were not alone in lacking appropriate and effective models of care for people with comorbid medical and psychiatric illness. I decided to take this on as a challenge and a focus of our research group.

(EFW) You have done a great deal of work looking at aspects of primary and behavioral health care for older adults. What have you learned over the course of this work, and what recommendations would you make to help improve health outcomes for older adults?

(Dr. Bartels) We now know that people with serious mental illness are one of the greatest health disparity groups in the nation, as reflected in an 8- to 30- year reduced life



expectancy, as well as a three-and-a-half times greater likelihood of being admitted to nursing homes between the age of 50 and 65 compared to other Medicaid beneficiaries. People with serious mental illness are less likely to receive standard care for common conditions such as diabetes, hypertension, and hyperlipidemia. Finally, adults with serious mental illness have more than double the rate of tobacco use and obesity compared to the general population. I've been fortunate to work with a group of researchers who have been passionate about all of these issues related to the health of people with serious mental illness, spanning prevention to innovative models of self-management for chronic health conditions.

**(EFW)** Your studies around obesity, weight management, and fitness among people who live with serious mental illness are of particular interest to our readers, given their interest in whole health and wellness. How can we influence modifiable lifestyle behaviors to improve individual well-being?

(Dr. Bartels) In addition to our own research, we reviewed the literature on health promotion interventions for people with serious mental illness. We know that lifestyle interventions that are actively coached (not just education), consisting of both physical activity and active learning in nutrition, can effectively achieve clinically significant reduction in cardiovascular risk.

Our own work has focused on the In SHAPE health promotion intervention, which consists of a health mentor who is a trained fitness instructor with additional training in addressing the challenges of people with mental illness. The participants have fitness club memberships and they participate in a coaching session with their health mentor every week. Physical activity is augmented with group celebrations and group nutrition training. We've conducted two randomized trials of In SHAPE: one in New Hampshire funded by the CDC and the other in an ethnically diverse population in Boston funded by NIMH.

Both studies found that approximately half of the In SHAPE participants achieved a clinically significant reduction in cardiovascular risk, as measured by either a 5% reduction of body weight or an increase of at least 50 meters on the six-minute walk test. We are now engaged in implementing research in New Hampshire and we are also conducting a national study to test different approaches to implementing this intervention in mental health centers across the nation. In SHAPE is clearly an evidence-based practice. The challenge is changing the culture and financing within mental health centers to adopt this and other evidence-based health promotion practices.

(EFW) Based on what you have learned about the health challenges facing older adults living with serious mental illness, what guidance would you offer to help change the health outcomes for younger people living with mental health challenges?

(Dr. Bartels) Our work in health promotion and prevention research has spanned age groups from 18 years old to geriatric populations, so we actually have a fair amount of experience testing and studying models in heterogeneous populations with respect to age, race, and ethnicity. Our work has shown that health promotion works equally across all age groups. Age has not been a major factor with respect to participation or outcomes. Clearly,



the earlier that we intervene with respect to risk factors such as obesity and smoking, the better the long-term outcomes are likely to be with respect to decreasing the incidence of chronic illness and increasing long-term function and life expectancy. We are currently engaged in discussions about adapting In SHAPE for developmentally disabled individuals and children and adolescents with mental health conditions.

(EFW) You've published two articles about the use of automated telehealth interventions and supports for people living with serious mental illness. There continues to be rapid growth in the use of technology-enabled solutions to help people engage in activities designed to promote improved fitness and self-managed care. What your thoughts about the role of these technologies as tools to help improve health outcomes?

(Dr. Bartels) I believe that telehealth and mobile health will be the engines of major transformations in the mental health delivery system of the future. Our work has shown that people with a range of severity of psychiatric illness and medical illness are able to benefit from in-home automated telehealth. For example, for people with serious mental illness and diabetes, we found dramatic improvements in diabetes self-management and decreased acute service use. Over six months, two thirds of those who began our study with elevated blood glucoses were in the normal range at the end of our trial.

We are now conducting a large randomized trial in Boston of a virtual health home model comparing training and self-management through health coaches and automated telehealth. We are also engaged in studies blending peer support with smartphone technologies aimed at reducing obesity in high-risk populations. Finally, we are engaged in computer-based programs that promote smoking cessation in tobacco-dependent individuals who have serious mental illness.

At the same time all of these technologies have high potential, we don't believe that these approaches will replace the important element of human contact. Rather, these are tools that will both extend and transform the way we think about providing effective prevention and complex chronic health condition management through a combination of coaching and technology.

(EFW) Looking forward, where do you think the field will be in 5 years relevant to 1) integrated care and 2) health promotion for people living with serious mental illness?

(Dr. Bartels) In addition to the contributions that we've discussed with respect to research on new models of care, perhaps the most important factor that will drive change going forward will be the evolving transformation of healthcare delivery in the context of healthcare reform and accountable care organizations. To the extent that payers and providers increasingly operate under capitated funding for a population, the importance of prevention, health promotion, integrated behavioral health care, and effective approaches to self-management of complex chronic health conditions will emerge as major drivers.

Leaders of healthcare delivery systems understand the major impact of behavioral health conditions on costs and outcomes of care and are increasingly embracing prevention as a critical component of services. I believe that the future is bright for a transformation of care



that will support the integration of behavioral health and physical health care and the primacy of prevention as central to healthcare delivery of the future.

(EFW) Thank you very much for your time and willingness to share your perspective with our readers! Your dedication and contributions to the field continue to inform innovative solutions in both the behavioral health and primary care communities.

## About Stephen J. Bartels, MD, MS

Stephen J. Bartels, MD, MS is the Herman O. West Professor of Geriatrics, Professor of Psychiatry, Professor of Community & Family Medicine at Dartmouth Medical School, and Professor of Health Policy at the Dartmouth Institute for Health Policy and Clinical Practice. He is the Director of Dartmouth Centers for Health and Aging where he oversees the Dartmouth Center for Aging Research, Northern New England Geriatric Education Center, and the Dartmouth-Hitchcock Aging Resource Center. He also directs the CDC Health Promotion Research Center at Dartmouth. Dr. Bartels leads a health services research group focusing on developing, testing, and implementing interventions focused on the intersection between physical and mental disorders in older adults, including health care management, health promotion interventions for obesity in adults with mental disorders, integration of mental health and primary care, self-management, applied use of telehealth technology for co-occurring physical and mental health disorders, community-based implementation research, and evidence-based geriatric psychiatry.

He is a past president of the American Association for Geriatric Psychiatry and founding Chair of the Geriatric Mental Health Foundation. Dr. Bartels served as the expert consultant and author for the Older Adult Subcommittee Report for the President's New Freedom Commission on Mental Health, and recently served on an Institute of Medicine Committee on the future health care workforce for older adults with mental disorders. He has testified before Congress and has participated in Congressional briefings on aging and health policy and on funding for research on mental disorders in older persons. Dr. Bartels has been a recipient of two, 5-year research mentoring awards from the National Institutes of Health and is the Principal Investigator for a multi-site post-doctoral training program in geriatric mental health services research, and also directs the Research Education and Training Program for Dartmouth's Clinical Translational Science Award (CTSA). He has research and training grant funding from the National Institute for Mental Health (NIMH), Centers for Disease Control and Prevention (CDC), Health Resources and Service Administration (HRSA), and the Agency for Healthcare Research and Quality (AHRQ).

