

## **Hayden B. Bosworth**

I received funding to examine the antecedents of poor blood pressure control in a sample of veterans with hypertension. This observational study helped identify important patient characteristics which became the cornerstone of a theoretical model that we developed to explain what behaviors to focus on in self management interventions <sup>1</sup>. These data led to a recently completed four year VA Health Service Research randomized clinical study that tested both a patient and provider intervention in a sample of older male veterans (Veteran Study To Improve The Control of Hypertension – V-STITCH, HSR&D IIR 20-034). The patient intervention involved a nurse-administered intervention that I developed in which patients received a tailored telephone behavioral/education intervention to promote adherence with medication, including support and reminders, information on the risks of hypertension, and health behaviors at periodic telephone contacts. The provider intervention for the grant involved the implementation of Mary Goldstein's sophisticated ATHENA project (VA HSRD IIR 99-275), which I was a co-investigator. The final results of this study have been presented at the American Heart Association Annual conference and the 2007 HSR&D Annual conference and are currently under review at a major journal. Of the 294 patients randomized to the nurse intervention, 84% of the sample received all 12 intervention telephone calls. The average length of time to administer the intervention call was 3.7 minutes (SD=2.5 minutes). It took the nurse an average of two attempts to contact patients every two months. After 24 months of follow-up, BP control increased from 44% to 65% in the nurse intervention group compared to the control group 44% to 53% (p<.03; an absolute difference of 12.6%). There was no difference in the number of primary care visits over the 2 years (both groups had an average of 7 PCP visits).<sup>2,3</sup> In subsequent analyses, we determined that it would cost approximately \$70 per person for a nurse to administer the intervention and a nurse could feasibly follow between 600 and 1200 patients <sup>4</sup>. In addition to a number of publications and presentations <sup>1,2,4-15</sup>, as recognition of the importance of this work and my contributions to the field of treatment adherence, I was awarded the Margret M. Baltes Early Career Award in Behavioral and Social Gerontology for recognition in outstanding early career contributions in behavioral and social gerontology. At the 2003 Annual Gerontological Society of America Conference session, I presented my model of treatment adherence and preliminary data from this study.

Dr. Bosworth is a health psychologist/health services researcher. He is the Co-Principal Investigator of the Center for Health Services Research in Primary Care at the Durham VAMC. He is a Research Professor in the Department of Medicine, Division of General Internal Medicine, Research Professor in the Department of Psychiatry and Behavioral Sciences, Research Professor in the School of Nursing at Duke University Medical Center. Dr. Bosworth has expertise in developing interventions to improve health behaviors and treatment adherence related to hypertension and other chronic diseases including coronary artery disease, hypertension, and diabetes and has been developing and implementing tailored patient interventions to improve patient outcomes as well as reduce the burden of other chronic diseases. Dr. Bosworth has published over 125 articles that have examined the role of patient characteristics and social environment among individuals' coronary heart disease, stroke, and hypertension. He has received prior funding to examine the antecedents of poor blood pressure control in a sample of veterans with hypertension. Funding for his work has been provided by various sources including the NIH, VA, AHA, and RWJ.

## Reference

Bosworth HB, Olsen MK, McCant F, Harrelson M, Gentry P, Rose C, Goldstein MK, Hoffman BB, Powers B, Oddone EZ. Hypertension Intervention Nurse Telemedicine Study (HINTS): testing a multifactorial tailored behavioral/educational and a medication management intervention for blood pressure control. *American Heart Journal* 2007 Jun 153(6): 918-24.

Siegler IC, Bastian LA, Steffens, DC, BOSWORTH HB & Costa PT (2002). Behavioral Medicine and Aging: Middle age, aging and the oldest-old. *Journal of Consulting and Clinical Psychology*, 70 (3):843-851.

BOSWORTH, H. B. & Schaie, K. W. (1997). The Relationship of Social Environment, Social Networks, and Health Outcomes in The Seattle Longitudinal Study: Two Analytical Approaches. *Journal of Gerontology: Psychological Sciences*, 52B, P197-P205.