



Diabetes

VA researchers are studying innovative strategies and technologies—including group visits, telemedicine, peer counseling, and Internet-based education and case management—to enhance access to diabetes care and improve outcomes for patients. In addition, VA researchers are seeking to develop better ways to prevent or treat diabetes, particularly in special populations such as the elderly, amputees, minorities, spinal cord injured Veterans, and people with kidney or heart disease.

Examples of VA Research Advances

The insulin-Alzheimer's link – Dr. Suzanne Craft of the Geriatric Research, Education, and Clinical Center at the Puget Sound (Wash.) VA was among 25 leading scientists and physicians featured in the spring 2009 HBO production “The Alzheimer’s Project.” Craft’s research focuses on the connection between insulin resistance—the hallmark of type 2 diabetes—and Alzheimer’s disease. In one study, Craft and colleagues found that a nose spray delivering insulin could acutely improve memory in Alzheimer’s patients, but only in those who lack a gene called APOE e4.

Homing in on genes tied to diabetes – A team with VA and the University of Texas Health Sciences Center analyzed genetic information from 294 Mexican-American families with a high incidence of diabetes. They determined that chromosome 12p is a likely site of genes associated with high triglycerides, a condition that is part of “metabolic syndrome” and closely linked to diabetes, obesity, and heart disease.

Exercise found to thwart diabetes in stroke patients – Clinical studies at the Baltimore VA and University of Maryland have found that walking on a treadmill can prevent and even reverse diabetes in chronic stroke patients. Investigators at the site are also doing lab research to learn more about the biochemical pathways involved in insulin resistance, diabetes, and stroke.

Facts About Diabetes

Diabetes is a chronic disease in which the body can not produce or properly use insulin, the hormone needed by the body to change food sugar into energy. About a quarter of the Veterans receiving care from VA have diabetes, and an even greater number are at risk due to overweight or obesity. Of the estimated 16 million Americans with the condition, more than 90 percent have type 2, or non-insulin-dependent, diabetes. While it has been long known that type 2 diabetes runs in families and that certain populations (e.g., Hispanics and Native Americans) are at a higher risk, it was not until recent advances in genetics were made that researchers began to investigate the link between specific genes and diabetes.

