



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

- **Hunt for diabetes genes**—VA investigators have been honing in on genes that boost the risk for type 2 diabetes. One group of VA diabetes specialists, working with Mexican-American families, has narrowed their search to seven genes. The exact functions of these genes are still unknown. Two are involved in metabolic pathways not previously connected with diabetes or obesity. The remaining five appear to be “master regulators” that can alter the expression of hundreds of other genes. Ongoing research is aimed at determining exactly how these genes raise the risk of diabetes, as well as obesity.
- **Improving therapy for type 2 diabetes**—VA is conducting a seven-year study, cosponsored by the American Diabetes Association and four pharmaceutical companies, testing the use of stronger doses of drugs currently given to lower blood-sugar levels and help the body use insulin. The aim of the study is to help prevent “macrovascular” complications such as coronary heart disease and peripheral vascular disease. Results are expected by 2009.
- **Diabetes registry**—An invaluable tool for research in this area is VA’s diabetes registry, which contains data on hundreds of thousands of veterans with diabetes, including information on prescribed drugs, test results, blood pressures, and vaccinations. A recent VA study that took advantage of this resource, for example, identified factors predicting chronic uncontrolled hypertension in patients with diabetes.

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 that researchers began to investigate the link between specific genes and diabetes.

