Telehealth for diabetes promotes aging at home, not in the hospital

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A large study of ethnically and racially diverse individuals with diabetes has found that home telemonitoring of their health resulted in significantly fewer deaths than in a similar group that was not monitored. Diabetes is the sixth leading cause of death in the United States.

The study of 387 diabetics and 387 individuals without diabetes appears in the March 2009 issue of the Journal of Telemedicine and Telecare.

The researchers, led by Neale Chumbler, Ph.D., professor of sociology at Indiana University-Purdue University Indianapolis's School of Liberal Arts and a Regenstrief Institute research scientist, used home telemonitoring technology to support timely transmission of diabetics' symptoms and health status at least once a day to a nurse coordinator who managed the process and acted upon the information when necessary or when requested by the patient.

"People want the freedom to remain in their homes. Telehealth appears to provide a safety net that will allow some of them - such as the growing number of individuals with diabetes - to age in place and to live where they want to live," said Dr. Chumbler, a medical sociologist who studies access to care and is associate chief of the Center of Excellence on Implementing Evidence-based Practice at the Roudebush VA Medical Center in Indianapolis.

Unless diabetes symptoms are closely monitored, the risk of death from the disease increases significantly. Approximately 25 percent of VA patients have diabetes.

The telemonitoring study, which followed VA patients with diabetes for four years, also provided educational resources to trial participants. "This study demonstrates the effectiveness of chronic care management for diabetes and the feasibility of using telehealth to carry it out," said Dr. Chumbler.

The magnitude and significance of home telehealth effects on mortality for those with diabetes had not previously been demonstrated. This new study contributes to the growing list of scientific evidence regarding the effectiveness of care monitoring for a variety of chronic conditions. "Telemonitoring may be one of the most effective and cost effective ways of helping individuals avoid constant visits to their doctor's office or hospitalization."

More information: "Mortality Risk for Diabetes Patients in a Care Coordination/Home-Telehealth Program," *Journal of Telemedicine and Telecare*

Source: Indiana University (news : web)