Aging with GRACE: New health care delivery model improves outcomes, saves money

August 11 2009

Steven R. Counsell, M.D., is the Mary Elizabeth Mitchell Professor of Geriatrics at the Indiana University School of Medicine, an IU Center for Aging Research center scientist and an affiliated scientist of the Regenstrief Institute. Credit: Indiana University School of Medicine

A team approach to preventive healthcare delivery for older adults developed by researchers from Indiana University and the Regenstrief Institute improves health and quality of life, decreased emergency department visits and lowered hospital admission rates. By the second year the new model saved money for the sickest (those with three to four chronic diseases), and in the third year, a year after the home-based

intervention ended, it saved even more.

The cost analysis of the home-based program appears in the August 2009 issue of the *Journal of the American Geriatrics Society* (*JAGS*). In a previous study published in the Dec. 12, 2007, issue of the Journal of American Medical Association (*JAMA*) the researchers reported their success in improving both quality of care and health-related quality of life measures while reducing emergency department use. Hospital admissions were reduced in the second year of the program for those at high risk of hospitalization.

Geriatric Resources for Assessment and Care of Elders (GRACE) was developed by researchers from the IU School of Medicine, the IU Center for Aging Research and the Regenstrief Institute to involve seniors and their primary care physicians in a program to optimize health and functional status, and to decrease high-cost emergency department visits and hospital admissions.

"Healthcare reform is calling out for ways to improve health and lower costs. We have found a strategy to do that for a very vulnerable growing population in a way that shows cost savings over time and has the added benefit of providing services that these seniors desperately need but can't get elsewhere," said study leader Steven R. Counsell, M.D., Mary Elizabeth Mitchell Professor of Geriatrics at the IU School of Medicine, IU Center for Aging Research center scientist and affiliated scientist of the Regenstrief Institute.

The randomized control trial enrolled 951 low-income seniors (average age 72); 477 received usual care, 474 participated in GRACE. Both the usual care and the GRACE groups were comprised of lower risk for hospitalization and higher risk for hospitalization individuals, were predominately female (77 percent) and African-American and were seen at six community-based health centers.

The key to GRACE is two teams. The support team, consisting of a nurse practitioner and a social worker, meet with each patient at his home to conduct an initial comprehensive geriatric assessment from the medicine cabinet to the kitchen cabinet. Based on the support team's findings, a larger interdisciplinary team (including a geriatrician, pharmacist, physical therapist, mental health social worker, and community-based services liaison) develops an individualized care plan.

Then the ball is back in the support team's court. The nurse practitioner and the social worker meet with the patient's primary care doctor to come up with a health-care plan consistent with the patient's goals, such as maintaining the ability to participate in social and religious activities. The support team then works with the patient to implement the plan which contains strategies for medical issues of concern as well as elements related to maintaining quality of life. With the assistance of an electronic medical record and tracking system, the GRACE support team provides ongoing comprehensive care management.

"With GRACE we focused on the many issues faced by aging low-income adults -- access to needed services, medications, mobility, depression, transportation, nutrition, as well as other health issues of aging," said Dr. Counsell, who is a geriatrician. "Using a model for geriatrics care based on our prior work, we were able to deliver care which was very popular with patients and their doctors, improved health outcomes, and saved money because it helped keep seniors from having to use the emergency department or be admitted to the hospital."

Source: Indiana University (news : web)