

Effectiveness of Care Coordination in Managing Medically Complex Patients

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BACKGROUND / RATIONALE:

Patients treated at Veterans Affairs (VA) medical centers are older and have multiple chronic conditions. Two of the most common conditions in the VA population are hypertension (HTN) and Type 2 diabetes (DM). Unfortunately, DM and HTN have few perceptible symptoms on a daily basis that motivate patients to comply with treatment recommendations and lifestyle changes. Thus, serious complications and long-term adverse outcomes are common in both of these conditions.

Home telehealth is a general term used to describe the delivery of health care services to the patient's home using audio, video, or other telecommunications technologies. Although home telehealth offers a number of theoretical advantages, few well-designed controlled clinical trials have been conducted to establish efficacy and cost benefit. Furthermore, projects to date have focused on special populations, e.g., heart failure or mental illnesses. Since home telehealth may hold the most promise for individuals dealing with multiple chronic illnesses, there is a need for population-based studies addressing the needs of patients in primary care settings.

Care coordination, as defined by the VHA Office of Care Coordination, is a process of assessment and ongoing monitoring of patients using home telehealth to proactively enable prevention, investigation, and treatment that enhances the health of patients and prevents unnecessary and inappropriate use of resources. Care coordination embeds technology into a care management process. This results in the right care, at the right time, in the right place.

OBJECTIVE (S):

The primary objective of the proposed study is to evaluate the efficacy of care coordination in improving outcomes in veterans with co-morbid DM and HTN, the two most common chronic conditions seen in VA Primary Care clinics. The specific aim is to compare outcomes of patients who receive the care coordination intervention to outcomes of patients who receive usual care. Three hypotheses will be tested: Compared to subjects who receive usual care, subjects who receive the care

coordination intervention will have: 1) improved clinical measures [hemoglobin A1c (HbA1c) and systolic blood pressure (SBP)] at 6 and 12 months after study enrollment; 2) improved disease self-management (knowledge, self-efficacy, and adherence) at 6 and 12 months after study enrollment; and 3) improved quality of life and satisfaction with care at 6 and 12 months after study enrollment.

METHODS:

Subjects will be recruited from VA Primary Care clinic rolls and randomly assigned to one of two conditions: usual care (control group), or usual care plus home telehealth. A total of 330 subjects (165 subjects in each group) will be enrolled over two years. Subjects in the treatment group will receive the intervention for 6 months following enrollment. In both groups, data will be collected at baseline and at 6 and 12 months, including measures of clinical outcomes, quality of life, knowledge, adherence, self-efficacy, and satisfaction with care. In addition to these measures, data will be collected to estimate the cost of the home telehealth intervention.

FINDINGS / RESULTS:

No results at this time.

STATUS:

We are identifying potential subjects from VA Primary Care clinic rolls and exploring equipment options.

IMPACT:

We believe home telehealth provides an innovative and pragmatic approach to enhancing patient-provider communication, enabling earlier detection of key clinical symptoms requiring intervention. The provision of patient education and monitoring will assist patients to adhere to treatment recommendations. The result will be improved clinical and health status outcomes for veterans with multiple chronic illnesses.

PUBLICATIONS: None at this time.