Improved Dementia Care with Disease Management

Vickrey BG, Mittman BS, Connor KI, et al. The effect of a disease management intervention on quality and outcomes of dementia care: a randomized, controlled trial. Ann Intern Med 2006;145:713–26.

Study Overview

Objective. To evaluate the impact of a guideline-based disease management program on quality of care and outcomes for patients with dementia.

Design. Cluster randomized controlled trial.

Setting and participants. 408 Medicare-insured dementia patients aged ≥ 65 years were enrolled from 18 primary care clinics in 3 southern California health care organizations. Patients were required to have an informal caregiver aged ≥ 18 years. Clinics within each health care organization were paired by volume, and each pair of clinics was randomized to either the intervention or usual care. Each patient/caregiver dyad in the intervention group was assigned a trained care manager who collaborated with the caregiver to prioritize problem areas, teach problem-solving skills, and initiate care plan actions. The care manager also sent an assessment summary and recommendations to the patient's primary care physician by way of internet-based management software.

Main outcome measure. The primary outcome was adherence to 23 dementia guideline recommendations, which fell into 4 domains (assessment, treatment, education and support, safety). Adherence was assessed by medical record review and caregiver survey at follow-up (range, 12–28 months). Secondary outcomes, assessed by caregiver survey, included patient health-related quality of life, quality of patient care, caregiving quality, social support, level of unmet caregiving assistance needs, and caregiver health-related quality of life.

Main results. The intervention group had a significantly higher mean percentage of per-patient guideline adherence than the usual care group (63.9% versus 32.9%, respectively; adjusted difference, 30.1% [95% confidence interval, 25.2%–34.9%]; $P < 0.001$). Compared with participants who received usual care, those who received the intervention had higher quality of care for 21 of 23 guideline recommendations ($P \leq 0.013$ for all) as well as received more community agency assistance ($P \leq 0.03$). With 1 exception, all secondary outcomes were better in the intervention group as compared with the usual care group (all $P < 0.05$). Only caregiver health-related quality of life did not differ between groups.

Conclusion. A guideline-based disease management program can improve quality of care for patients with dementia.

Commentary

Dementia is common in the elderly, and the vast majority of patients receive dementia care in primary care settings. Despite established evidence-based guidelines and recent treatment advances that can reduce symptom severity and improve quality of life for dementia patients, barriers to dementia care continue to challenge primary care providers [1,2]. Improved outcomes for these patients often requires time-intensive, team-based processes of care. A relatively small study by Callahan and colleagues [3] in a medically indigent, mixed-race population demonstrated the potential of such a collaborative approach; however, the generalizability to other patient populations was limited.

In this study, Vickrey and colleagues presented the results of a clinic-focused disease management program that linked caregivers, care managers, management software, and primary providers for the care of dementia. The result of this complex intervention was dramatically higher improvement in the quality of dementia care as measured by adherence to clinical practice guidelines. Associated secondary outcomes, which included patient quality of life and caregiver social support, mastery of caregiving, and confidence, all concurrently improved.

While impressive in scope and effectiveness, the intervention designed by Vickrey and colleagues is limited in that the sample was predominantly white and well-educated and had relatively few comorbid conditions. In addition, all patients had insurance and usual source of care within a larger health care organization. For solo or small group providers with mixed patient populations, this intervention may be difficult to implement without more resources and changes in the current visit-based fee-for-service reimbursement.

Applications for Clinical Practice

Clinicians should broaden the focus of care for dementia patients to include provision of resources and support to the

caregiver. They should also consider working with the health care system to coordinate services. The involvement of a care manager in a coordinated approach may help to achieve significant improvements in quality of care for these patients.

—Review by Mark S. Horng, MD, MPH

References

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