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The Care Ecosystem: The Effectiveness and Implementation of Telephone-Based Collaborative Dementia Care

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Abstract

Background: Health systems are increasingly interested in collaborative dementia care. Implementation challenges include the limited dementia specialist workforce, time pressures of high-volume care, increasing use of telemedicine, and inadequate reimbursement. The Care Ecosystem is a telephone-based collaborative dementia care model designed to augment existing healthcare services and be amenable to scale. Here we present the latest evidence for the Care Ecosystem, including the effects among subpopulations at risk for health disparities (rural and Hispanic/Latino), and facilitators from the early phase of Care Ecosystem implementation at 6 diverse health systems.

Method: Effectiveness was evaluated in a single-blind, randomized clinical trial (N = 804). Persons with dementia (PWD)-caregiver dyads were randomized to receive 12 months of the intervention (N = 527) or usual care (N = 277). Outcomes were measured via telephone surveys at 6 and 12 months after randomization and medical record review. Subgroup analyses were performed for the 124 dyads who identified as Hispanic/Latino, and the 66 who lived in rural Nebraska or Iowa. The intervention was primarily delivered by an unlicensed, trained care team navigator, who provided education, support and care coordination with supervision and help from a dementia specialist team (advanced practice nurse, social worker, and pharmacist). Implementation facilitators were evaluated through observation and qualitative interviews with clinical teams at 6 health systems implementing the model.

Results: The PWD-caregiver dyads lived in California (n = 476), Nebraska (n = 286), or Iowa (n = 42). Compared with usual care, the Care Ecosystem improved PWD quality of life, reduced emergency department visits, reduced the use of

potentially inappropriate medications, and decreased caregiver depression and caregiver burden. Effect sizes were similar or greater in Hispanic/Latino and rural subgroups on most outcomes. Facilitators of Care Ecosystem implementation included open-access implementation tools (online training, care protocols), the adaptability of the care model, the care team navigator role, and remote care delivery.

Conclusion: Effective dementia care can be delivered by care team navigators via telephone to mitigate the burdens of dementia, including for underserved PWD living in rural areas or who identify as Hispanic/Latino. Implementation is a challenge although features of the care model appear to facilitate adoption.