Research Commercialization

Dementia Screening Tool for Home Health Care

Technology #2019-141

Dementia is a common and growing public health problem in the United States and internationally. Researchers at Rutgers University have created a software integration to identify patients with significant cognitive impairment and probable dementia through the meaningful use of the standardized assessment data that is collected on all adult home health care patients using the U.S. Centers for Medicare & Medicaid Services (CMS) Outcome and Assessment Information Set (OASIS). Responses to routine OASIS questions are entered into a mathematical model to generate a dementia risk prediction score.

Background

Many older adults living with dementia are undiagnosed. An estimated 40% of community-dwelling older adults with probable dementia are undiagnosed (Amjad, Roth, Sheehan, Lyketsos, Wolff & Samus, 2018). While there is no cure for dementia, screening for reversible causes of cognitive impairment, patient and family caregiver education, and supportive services are all recommended to maximize safety, independence, and quality of life. Home health care (part-time skilled nursing, physical therapy, occupational therapy, speech therapy, medical social work, and home health aide services) is frequently ordered for brief periods of time to help patients transition after a hospitalization or decline in health. Patients living with cognitive impairment and dementia often require more complex home health care services and care coordination. When the patient, their caregiver, or home health care team are not aware of a dementia diagnosis, or when dementia is undiagnosed, problems can occur including avoidable medication errors and hospitalizations.

Advantages

- The risk-score is developed from five questions that are collected at start-of-care and recertification visits, and not used for reimbursement or quality reporting.
- Identifies patient population with cognitive impairment and high-risk of dementia, which should be communicated with patient, caregiver, and ordering physician for optimal care coordination.
- May be used to improve care quality, safety, and reduce costs through care management and specialized services designed to reduce safety risks, avoidable hospitalizations, and caregiver burnout.

Applications

- Home health care software.
- Primary care provider software.
- Integrated care management, and quality care improvement software used by healthcare systems and insurance providers.
**Intellectual Property & Development Status:**  
Available for licensing, further development, industry partnering or distribution.

For information about licenses contact: Andrea Dick

**Inventors**

**Olga F. Jarrín Montaner, PhD, RN**

Dr. Jarrín Montaner is an Assistant Professor in Rutgers University School of Nursing and Institute for Health, Health Care Policy, and Aging Research. Her research program focuses on understanding the short- and long-term benefits of home health care to support people living with chronic illness and their family caregivers.

**Abner Nyandege, PhD**

Dr. Nyandege is a research project manager in the Rutgers Institute for Health, Health Care Policy, and Aging Research. He has worked with Dr. Jarrín on a variety of projects focused on the comparative effectiveness of home health care to improve outcomes for older adults living with chronic and disabling conditions.