Antidepressant Medication Management Among Older Patients Receiving Home Health Care

Yuhua Bao, Ph.D., Huibo Shao, M.S., Martha L. Bruce, Ph.D., Matthew J. Press, M.D., M.Sc.

Objective: *Antidepressant management for older patients receiving home health care (HHC) may occur through two pathways: nurse–physician collaboration (without patient visits to the physician) and physician management through office visits. This study examines the relative contribution of the two pathways and how they interplay.* **Methods:** *Retrospective analysis was conducted using Medicare claims of 7,389 depressed patients aged 65 years or older who received HHC in 2006–2007 and who possessed antidepressants at the start of HHC. A change in antidepressant therapy (versus discontinuation or refill) was the main study outcome and could take the form of a change in dose, switch to a different antidepressant, or augmentation (addition of a new antidepressant). Logistic regressions were estimated to examine how use of home health nursing care, patient visits to physicians, and their interactions predict a change in antidepressant therapy.* **Results:** *About 30% of patients experienced a change in antidepressants versus 51% who refilled and 18% who discontinued. Receipt of mental health specialty care was associated with a statistically significant, 10- to 20-percentage-point increase in the probability of antidepressant change; receipt of primary care was associated with a small and statistically significant increase in the probability of antidepressant change among patients with no mental health specialty care and above-average utilization of nursing care. Increased home health nursing care in absence of physician visits was not associated with increased antidepressant change.* **Conclusions:** *Active antidepressant management resulting in a change in medication occurred on a limited scale among older patients receiving HHC. Addressing knowledge and practice gaps in antidepressant management by primary care providers and home health nurses and improving nurse–physician collaboration will be promising areas for future interventions.* (Am J Geriatr Psychiatry 2014; ■:■–■)

Key Words: Medication management, antidepressants, home health care

Received December 5, 2013; revised July 3, 2014; accepted July 9, 2014. From the Departments of Healthcare Policy and Research (YB, MJP), Psychiatry (MLB), and Medicine (MJP), Weill Cornell Medical College, New York, NY; and the Department of Quality, Baptist Memorial Health Care Corporation (HS), Memphis, TN. Send correspondence and reprint requests to Yuhua Bao, Ph.D., 402 E. 67th St., New York, NY 10065. e-mail: yub2003@med.cornell.edu

Supplemental digital content is available for this article in the HTML and PDF versions of this article on the journal's Web site (www.ajgponline.org).

http://dx.doi.org/10.1016/j.jagp.2014.07.001

Older patients receiving home health care (HHC) have high burdens of mental as well as medical illness. In a recent study, major and minor depression meeting clinical diagnostic criteria affected almost 1 in 4 older home health patients.[1] Depression in this population was associated with an increased risk of falls,[2,3] hospitalization,[4] and excess service use.[5,6] Antidepressants are the dominant mode of treatment of depression in this setting and were used by as many as one-third of all older home health patients.[6,7] Antidepressant therapy in this population, however, is characterized by mismatch between need and use,[8,9] sub-therapeutic doses,[1] or premature discontinuation,[10] suggesting poor quality of antidepressant management.

In this study, we use Medicare claims data to examine the quality of antidepressant management in HHC and the processes by which antidepressant changes occur. Medication changes for HHC patients can occur via two pathways. In the first pathway, home health nurses evaluate patients' conditions and subsequently communicate with patients' physicians regarding potential needs for medication changes. Alternatively, physicians independently evaluate patients' medication needs during patients' visits to the physicians' offices. There could be overlap between these two pathways, and for both pathways, care coordination between the home health nurse and the physician is important. Little is currently known about the relative contribution of the two pathways to active medication management and how they interplay.

This study focuses on patients with antidepressants in their possession at the start of HHC and describes their courses of antidepressant medication while receiving skilled home health nursing care and possibly primary care and mental health (MH) specialty care. We examine the probability of a change in dosage or medication versus refill or discontinuation of the original antidepressant. The data we use do not allow us to assess whether an antidepressant change (or lack thereof) was clinically indicated for a given patient, but, given the current poor quality of antidepressant therapy and low level of antidepressant management in HHC,[1,8–10] it would be important to understand pathways to active antidepressant management that will likely lead to a higher rate of antidepressant changes at the population level. Such understanding will inform design of interventions to improve the quality of depression care among home health patients.

We hypothesize that greater use of skilled nursing care (representing the first pathway) and greater use of primary care and of MH specialty care (the second pathway) predict a greater likelihood of change in antidepressant medication. Because home health nurses routinely communicate and collaborate with patients' primary care providers (PCPs), we hypothesize that skilled nursing care and visits to PCPs are synergistic in contributing to changes in antidepressants.

METHODS

Data and Sample

We used data from a 5% random sample of Medicare fee-for-service patients with at least one depression diagnosis in 2006–2007 from the Chronic Condition Warehouse.[11] Files used included Part D drug event file, carrier claims, home health claims, and beneficiary summary file and the chronic condition summary file.

We restricted the sample to patients 65 years or older who were continuously enrolled in Medicare Parts A&B and had at least one home health episode during 2006–2007. We required that patients had been enrolled in Medicare Part D for at least 90 days prior to their admission to HHC (to allow us to observe the medications they possessed at the start of HHC based on the Part D data) and continuously enrolled until the end of 2007. We further restricted the sample to patients with 1 day or more of remaining antidepressant supply from a prescription filled on or before the first day of HHC (the index antidepressant; N = 10,126). We excluded patients who received no nursing visits during their HHC (N = 1,514) because of our primary interest in the role of home health nursing care in medication management. For patients who had multiple home health episodes in 2006–2007, we included their first episodes only, resulting in a final analytical sample of 7,389 patient-episodes.

Unit of Analysis

We defined an observation window of antidepressant use for each patient in our sample. This