U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy

PATTERNS OF CARE AND HOME HEALTH UTILIZATION FOR COMMUNITY-ADMITTED MEDICARE PATIENTS

April 2019

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This report was prepared under contract #HHSP233201600017I between HHS's ASPE/DALTCP and Mathematica Policy Research. For additional information about this subject, you can visit the DALTCP home page at https://aspe.hhs.gov/office-disability-aging-and-long-term-care-policy-daltcp or contact the ASPE Project Officer, Judith Dey, at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. Her e-mail address is: Judith.Dey@hhs.gov.

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MATHEMATICA Policy Research

REPORT

FINAL REPORT

Patterns of Care and Home Health Utilization for Community-Admitted Medicare Patients

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ACRONYMS

The following acronyms are mentioned in this report and/or appendices.

ADL	Activity of Daily Living
ARF	Area Resource File
CA	Community-Admitted
CHF	Congestive Heart Failure
CI	Confidence Interval
CME	Common Medicare Environment
CMS	Centers for Medicare & Medicaid Services
COPD	Chronic Obstructive Pulmonary Disease
FFS	Fee-For-Service
HCBS	Home and Community-Based Services
HCC	Hierarchical Condition Category
HHA	Home Health Agency
HHGM	Home Health Groupings Model
LTAC	Long-Term Acute Care
LTSS	Long-Term Services and Supports
MedPAC	Medicare Payment Advisory Commission
OASIS	Outcome and Assessment Information Set
OR	Odds Ratio
PAC	Post-Acute Care
POS	Provider of Services
PPS	Prospective Payment System
RAP	Request for Anticipated Payment
SNF	Skilled Nursing Facility

EXECUTIVE SUMMARY

A substantial proportion of growth in Medicare home health care over the past 15 years has been driven by patients who are admitted to home health care directly from the community, rather than from an acute care or post-acute care (PAC) setting. The purpose of this study was to develop a better understanding of the characteristics of community-admitted Medicare home health care patients, how these patients use care, and what their patterns of care tell us about the underlying reasons for their increased numbers. We also focused on understanding the role of home health as a substitute for long-term services and supports (LTSS).

To address the study objectives, we used the U.S. Department of Health and Human Services Centers for Medicare & Medicaid Services DataLink file, which contains episode-level information for all Medicare home health care patients from October 1, 2000, to June 30, 2014.[1] We conducted two sets of analyses, using alternative definitions of community-admitted patients. First, to examine trends in community-admitted patients, we classified patients as community-admitted or PAC in each calendar year from January 1, 2002, until December 31, 2013, based on whether the majority of their episodes in a particular calendar year were community-admitted or PAC episodes. This approach allowed us to include in the analysis all patients who received care in a given year, regardless of when they actually entered Medicare home health care. We then compared trends over time for the two groups of patients. Second, we identified a cross-sectional sample of home health care users who had at least one episode of care between January 1, 2013, and December 31, 2013, and had a spell of care (that is, care without interruption) starting no earlier than January 1, 2011, and no later than December 31, 2013.[2] For this analysis, we defined community-admitted and PAC patients based on whether they had an inpatient or PAC stay in the 14 days before their home health care spell began. This allowed us to explore whether the patient's point of entry into home health care was related to patient characteristics. After defining the source of admission, we further defined logical groups of home health care users based on the length of the patient's spell (one episode [short-term] versus two or more episodes [long-term]) and type of service use (no use of aide services versus any use of aide services and high or low use of skilled services). We then compared the patient-level and geographic characteristics of the groups.

The results from our trend analysis show that there was large growth in community-admitted patients from 2002 to 2010, and much smaller growth from 2010 to 2013. There are two trends that may also be related to this growth. First, the proportion of community-admitted patients entering home health care in states with a history of fraud and abuse grew dramatically over time. Second, therapy use in later episodes of a home health care spell increased substantially among community-admitted patients from 2002 to 2010, then leveled off after 2010.

Our cross-sectional analysis showed that the increase in community-admitted patients has been mostly driven by an increase in the number of episodes per patient. When we focused on

[1] An episode is a 60-day period of home health care.

[2] Medicare pays for home health care services in 60-day periods, which are called episodes of care. For this study, if there were fewer than 60 days between episodes of care, we called them consecutive episodes (and therefore part of the same spell of care); if there were more than 60 days between episodes, we called them distinct spells of care.

the initial source of entry into the system, we found differences between community-admitted and PAC patients based on where they lived and the type of agencies they received care from. However, the length of spell affected the patterns of care more than source of admission. Patients who had fewer episodes were very similar to one another in terms of health status and utilization, whether they were admitted from the community or from an acute care or PAC facility. Patients who had more episodes were more similar to one another in terms of health status, home health care utilization, and the use of other acute care and PAC than to short-term patients with the same source of admission. This is not to say that source of admission did not matter, especially for home health users with many episodes. There were greater differences between the PAC and community-admitted long-term care patients than there were between the PAC and community-admitted short-term care patients.

To understand whether these differences could possibly indicate substitution between LTSS and home health, we examined the patterns of care of long-term community-admitted patients, focusing on type of service use, whether patients lived in congregate living facilities, or entered care from states with poorer LTSS systems. We found limited evidence that the growth in community-admitted patients was related to the growth in individuals living in congregate living facilities, nor an increased use of aide services associated with the community-admitted patients or those admitted from states with poor LTSS systems. There was substantial growth in community-admitted patients in states with a past history of fraud and abuse, suggesting that the growth could be related to fraud issues.

The findings indicate that there are many important differences between patients based on the length of their home health care use, not just based on their source of admission, and that the source of admission may be a more important differentiator among patients who use home health care for longer periods. We also found that use of the home health care benefit is changing--use of home health aide care has declined and use of physical therapy services has increased, even for longer periods of care. Future research should focus on better understanding the increase in long-term home health care users.