Original Article

Are Hospice Admission Practices Associated With Hospice Enrollment for Older African Americans and Whites?

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Abstract

Context. Hospices that enroll patients receiving expensive palliative therapies may serve more African Americans because of their greater preferences for aggressive end-of-life care.

Objectives. Examine the association between hospices' admission practices and enrollment of African Americans and whites.

Methods. This was a cross-sectional study of 61 North and South Carolina hospices. We developed a hospice admission practices scale; higher scores indicate less restrictive practices, that is, greater frequency with which hospices admitted those receiving chemotherapy, inotropes, and so forth. In separate multivariate analyses for each racial group, we examined the relationship between the proportion of decedents (age $\geq$ 65) served by a hospice in their service area (2008 Medicare Data) and admission practices while controlling for health care resources (e.g., hospital beds) and market concentration in the area, ownership, and budget.

Results. Nonprofit hospices and those with larger budgets reported less restrictive admission practices. In bivariate analyses, hospices with less restrictive admission practices served a larger proportion of patients in both racial groups ($P < 0.001$). However, in the multivariate models, nonprofit ownership and larger budgets but not admission practices predicted the outcome.

Conclusion. Hospices with larger budgets served a greater proportion of African Americans and whites in their service area. Although larger hospices reported less restrictive admission practices, they also may have provided other services that may be important to patients regardless of race, such as more in-home support or assistance with nonmedical expenses, and participated in more outreach activities increasing their visibility and referral base. Future research should explore factors that influence decisions about hospice enrollment among racially diverse older adults. J Pain Symptom Manage 2016;51:697−705.

Key Words
Hospice, African Americans, racial disparities, end-of-life care

Introduction

Between 2000 and 2011, the proportion of Medicare beneficiaries who enrolled in hospice nearly doubled from 23% to 45%.[1,2] However, despite this growth, African Americans continue to use hospice at lower rates than whites. In 2011, 47% of white Medicare beneficiaries used hospice compared to only 35% of African Americans.[2] With evidence that hospice enrollment improves end-of-life care, efforts have increased to understand and reduce racial differences in hospice use.[3−9] Increasing hospice use among African Americans may help to address documented

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disparities in pain management, communication, and satisfaction with end-of-life care.[10,11]

There is substantial variation in hospice use across geographic areas. For example, in 2002, the proportion of African-American Medicare beneficiaries who used hospice ranged from 10% in New York to 49% in Arizona. The proportion of whites who used hospice ranged from 11% in Alaska to 49% in Arizona.[12] At least some of this variation has been attributed to the availability of other health care resources (e.g., hospital beds, specialists) and patient characteristics (i.e., age, diagnosis).[13–15] However, in one study of county-level variation in hospice use, even after controlling for these factors, there was a significant amount of unexplained variation.[16]

Another potential reason for variation in hospice use across areas is variation in the mix of services and practices of hospice providers. For example, hospice ownership and size are associated with variation in services provided, patients served, and staffing.[17–20] In a national survey, over three-fourths of hospices had at least one policy that restricted enrollment of patients receiving high-cost medical care, such as chemotherapy, radiation, or blood transfusions; such practices were more common among smaller and for-profit hospices.[21] These practices are likely driven by the fixed, daily per diem payment structure of the Medicare Hospice Benefit ($156 per day for routine care).[22] Some hospices also restrict admission of patients based on social factors, such as having a primary caregiver in the home.[23]

Among potential barriers to hospice use for African Americans are greater preferences for the use of expensive, life-prolonging therapies at the end of life, less traditional social support systems, such as the more frequent absence of a single, full-time primary caregiver in the home and a caregiver structure that may include multiple caregivers in different locations.[24–33] As such, hospices that restrict enrollment of patients who desire high-cost palliative therapies or without a primary caregiver in the home may serve disproportionately fewer African Americans than whites. In this way, restrictive admission practices may contribute to the gap between African Americans and whites in rates of hospice enrollment. Hospice providers with less restrictive admission practices may serve a greater proportion of African Americans in their service areas.

Currently, there are no data examining the association between hospice admission practices, beyond the Medicare hospice eligibility criteria, and use of hospice by different racial groups. These data could provide evidence for the design of new care models or changes to the Medicare Hospice Benefit that increase use of hospice by traditionally underserved groups. Therefore, this study examined the association between hospice providers' admission practices and their enrollment of African-American and white Medicare beneficiaries.

Methods

Design

This study was a cross-sectional survey of North and South Carolina hospices, conducted between December 1, 2009 and September 1, 2010 to examine the association between the practices of hospice providers and the use of hospice by older African Americans. The institutional review board of the Duke University Health System approved this study. Participating hospices received $125.

Study Population

We identified hospices using data collected by the Carolinas Center for Hospice and End-of-Life Care, a nonprofit organization committed to the growth of end-of-life care resources and services throughout the Carolinas. We identified 118 hospices meeting our eligibility criterion of being in operation for at least two years. Of these, 80 (68%) completed the survey. In these analyses, we only included 61 of the 80 hospices (76%) with the following additional criteria: Medicare-certified; operating for three years or more; enrolled 20 or more Medicare beneficiaries who died in 2008; and hospice service area (HSA) included 20 or more African-American and 20 or more white Medicare beneficiaries who died in 2008. We imposed these additional criteria to exclude hospices that were very small or that were in service areas with a small number of decedents.

We contacted the hospices' executive director who identified a staff member to complete the study. Of the survey respondents, 21 (34%) were executive directors and 27 (44%) were directors in some other capacity (e.g., compliance, quality, nursing). The remainder included social workers, chief medical officers, and clinical managers or administrators.

Hospice Provider Admission Practices Scale

We developed a scale of hospice admission practices based on patients' clinical and social factors using items from prior work [23] and additional items that we developed. The scale was reviewed by hospice and palliative care providers and researchers for face validity and tested in a sample of five hospices outside of North and South Carolina. The final scale included 14 items. Practices queried in the scale include admission of patients receiving chemotherapy, radiation therapy, total parenteral nutrition (TPN), inotropes,