HHS Public Access

Author manuscript

Am J Hosp Palliat Care. Author manuscript; available in PMC 2020 February 01.

Published in final edited form as:

Am J Hosp Palliat Care. 2019 February ; 36(2): 93–96. doi:10.1177/1049909118791149.

Facility Placement as a Barrier to Hospice for Older Adult Patients Discharged from a Palliative Care Unit

Myrick C. Shinall Jr., MD, PhD[1,2,*], **Jo Ellen Wilson, MD, MPH**[3], **Mohana Karlekar, MD**[1], and **E. Wesley Ely, MD, MPH**[4,5]

[1]Section of Palliative Care, Vanderbilt University Medical Center

[2]Division of General Surgery, Vanderbilt University Medical Center

[3]Department of Psychiatry, Vanderbilt University Medical Center

[4]Division of Allergy, Pulmonology, and Critical Care Medicine, Vanderbilt University Medical Center

[5]Tennessee Valley Veteran's Affairs Geriatrics Research Education Clinical Center (GRECC)

Abstract

Context: Many older adults discharged from an inpatient stay require post-acute facility placement, which can be a barrier to hospice enrollment since the Medicare hospice benefit does not cover facility costs for patients under routine hospice care.

Objectives: To evaluate the extent to which need for post-discharge facility care was a barrier to hospice enrollment for older patients with short life-expectancy discharged from a palliative care unit.

Methods: Retrospective cohort using a prospectively collected database of patients 65 and older with a life-expectancy of less than 6 months admitted to a palliative care unit in an urban, academic medical center and discharged alive from 2012–2017. Primary outcome was hospice enrollment at hospital discharge. Exposure of interest was need for facility placement at discharge.

Results: Of 817 included patients, 649 (79%) were discharged with hospice. Patients discharged home had a significantly higher rate of hospice enrolment than patients discharged to a facility—92% vs. 71% **(**$p < 0.0001$**).** On multivariate logistic regression analysis, discharge to home vs. facility remained a strong predictor of hospice enrollment, with an odds ratio for hospice enrollment of 6.04 (95% CI 3.73–9.79).

Conclusion: Need for post-discharge facility placement represents a barrier for hospice enrollment among older patients who are otherwise hospice appropriate. The structure of the hospice benefit may require modification so that these hospice appropriate patients can utilize the benefit.

[*]=corresponding author 1161 21st Avenue South, Room D5203 MCN, Nashville, TN 37232, 615-343-5613, ricky.shinall@vanderbilt.edu.

Disclosures

The authors have no conflicts.

Keywords

Hospice; Palliative Care Unit; Skilled Nursing Facility; Medicare; Post-acute Care

Introduction

A significant number of older adults have care needs at the end of life that cannot be met at home. Recent work has suggested that more Medicare patients are admitted to a skilled nursing facility (SNF) in the last six months of their lives than enroll in hospice.[1] There is also evidence that patients in nursing facilities have little access to palliative care outside of hospice services and may not receive the same attention to symptoms, existential distress, and grief if they are not able to enroll in hospice.[2–4]

Since its inception, the Medicare hospice benefit has often proved a mixed blessing for patients desiring comfort-focused care at the end of their lives. By funding hospice agencies, Medicare makes this comfort-focused care available to enrollees, but the structure of the benefit, rather than the patient's needs, often determines the care received.[5,6] Currently, the Medicare hospice benefit does not reimburse for a patient's room and board in a nursing facility unless the patient qualifies for general inpatient or respite levels of care. Some patients who may qualify only for routine level hospice services may nevertheless require too much care to safely return home after an inpatient hospital admission. However, room and board at a facility may be cost prohibitive, and patients often do not have another diagnosis distinct from their hospice-qualifying diagnosis that would make them eligible to utilize the Medicare SNF benefit while they receive hospice. Therefore, patients may not enroll in hospice so that they can utilize the Medicare SNF benefit, which does pay for room and board.

Assessing the significance of this barrier to hospice enrollment is difficult as it is challenging to determine which patients in a SNF or other facility would have wished to enroll in hospice. In order to estimate the extent of this barrier, we performed a retrospective cohort study of patients discharged from an inpatient palliative care unit (PCU). We hypothesized that patients requiring facility placement at discharge would have a lower level of hospice enrollment than those who could return home.

Methods

Patient Population

After obtaining approval from our Institutional Review Board, we queried a prospectively-maintained database of all patients admitted to the PCU at a tertiary academic referral center from September of 2012 to August of 2017, a population that has been characterized in previous work.[7]. The ideal study population would be older patients whose prognosis and goals were consistent with hospice enrollment after discharge. To approximate this ideal, we included all patients 65 years or older at the time of their transfer to the PCU with a life expectancy of less than 6 months in the estimation of the palliative care provider. Based on the provider's estimate of prognosis, all of these patients would have been eligible for

hospice at discharge. Patients were excluded if there was no information available on discharge disposition (the outcome of interest) or if they died before hospital discharge. Transfer to our PCU is generally reserved for inpatients for whom the palliative care service has been consulted and who wish to forego further life-prolonging care in the hospital and instead have their care focused on comfort, so this population closely approximates a population of hospice-appropriate patients. For patients with multiple admissions to the PCU, only the last PCU admission was included.

Outcomes and Covariates

The primary outcome of this study was enrollment in hospice at discharge from the PCU recorded as a yes/no. The explanatory variable was discharge disposition represented dichotomously as private residence vs. healthcare facility. A patient was considered to be discharged to a healthcare facility if their discharge disposition was any one of the following: assisted living facility, nursing home, SNF, long-term acute care facility, or inpatient hospice. The rationale for including all these types of facility within one variable was that we were interested in assessing the potential effect of need for facility care on choice to enroll in hospice. However, the specific type of facility to which patients were discharged was highly influenced by their decision to enroll in hospice. To take an obvious example, to go to inpatient hospice, a patient must have enrolled in hospice. Examining each type of facility as a distinct variable or limiting the analysis only to patients enrolled in one type of facility would have created a situation in which the explanatory variable (facility placement) was highly determined by the putative outcome variable (hospice enrollment). Combining all patients discharged to a facility captures the group of patients whose care needs outstripped their family's ability to meet them whether or not they enrolled in hospice. Other covariates abstracted from the PCU database include sex, age, race, marital status, Eastern Cooperative Oncology Group (ECOG) functional status, life expectancy in the estimate of the palliative care provider, and category of life-limiting diagnosis. We also captured whether prior to transfer to the PCU the patient's primary team's reason for palliative care consultation was referral to hospice.

Statistical Analysis:

Comparison of groups was carried out using two-sided t-tests with unequal variance for continuous variables and Fisher's exact tests for categorical variables. Missing data for the co-variates was managed with multiple imputation; patients without the outcome of interest were excluded. In order to adjust for possible confounding, we constructed a logistic regression model to assess the association of facility placement with hospice enrollment at discharge. Covariates in this model were sex, age, race, marital status, ECOG functional status, life expectancy, life-limiting diagnosis, and original consult for hospice referral. All analyses were carried out using R version 3.4.3.

Results

There were 822 patients who met inclusion criteria, with five excluded for missing information on discharge disposition. Of the remaining 817 patients, 338 (41%) were

discharged home from the PCU, and the remaining 479 were discharged to a facility. Demographic characteristics of these two groups of patients are given in Table 1.

Of all the patients, 649 (79%) were discharged with hospice. However, the proportion discharged to hospice differed significantly between the group of patients discharged home and the group of patients discharged to a facility, 92% vs. 71 % ($p<0.0001$) (Table 2). This difference persisted when controlling for covariates utilizing a logistic regression model. In this model, discharge to home vs. discharge to facility was associated with an odds ratio for hospice enrollment of 6.04 (95% CI 3.73–9.79).

Discussion

This study demonstrates that otherwise similar older patients discharged from a PCU have a much higher rate of hospice enrollment if they are discharged to home than if they are discharged to a healthcare facility. Because the Medicare hospice benefit does not pay for nursing home room and board for routine hospice patients, for many patients a more financially viable option may be discharge to SNF, where room and board are covered by Medicare. Enrollment in SNF may also be advantageous to the facility as the Medicare SNF benefit generally reimburses more than the fee for custodial care.[8] The discrepancy in hospice enrollment for patients discharged home vs. to a facility in this study is consistent with the hypothesis that this financial barrier is a significant impediment to hospice enrollment in patients who would benefit from hospice. As this retrospective dataset did not contain enough information to determine the degree to which this financial barrier was operative in each patient, there may be other factors besides this financial barrier that drove the discrepancy in hospice enrollment between patients discharged home and patients discharged to facility. Nevertheless, the financial barrier is the most readily identifiable potential cause of this discrepancy.

The results of this study suggest that patients with similar prognoses and goals who require facility placement are less likely to enroll in hospice than those who can return home. Nearly a third of Medicare decedents use the SNF benefit in the last 6 months, with 1 of 11 dying while enrolled in the SNF benefit.[1] Given the large proportion of Medicare patients who enroll in SNF care in the last six months of life, there is potentially a large number of patients currently receiving SNF care who would readily enroll in hospice if not for the financial barrier of paying for room and board.

The Centers for Medicare and Medicaid Services (CMS) has identified late enrollment in hospice as a significant problem since late enrollees cannot enjoy the full benefits that hospice services offer in alleviating distressing symptoms and providing psychosocial and spiritual support.[9] Moreover, there is evidence that in many circumstances increasing the length of hospice enrollment decreases overall healthcare expenditure.[10,11] The financial benefits of delaying hospice enrollment to utilize the SNF benefit is a potentially modifiable barrier to early hospice enrollment.

Increasing access to hospice is a major policy priority, but the implications of any changes to the structure of the benefit are difficult to predict in advance, and so demonstration projects

are one important way of testing changes to the benefit.[12] Currently CMS is conducting a demonstration project called the Medicare Care Choices Model that finances Medicare beneficiaries with certain terminal conditions to receive some supportive care from participating hospice agencies while continuing to receive disease-modifying care financed by traditional Medicare.[9,13] However, this demonstration project is only for community-dwelling patients. Future demonstration projects that allow concurrent SNF benefit and hospice enrollment for the same diagnosis or that otherwise provide financial support for room and board for routine hospice patients needing nursing home placement could test whether eliminating this financial barrier promotes earlier hospice enrollment.

This retrospective study has obvious limitations. For one, this database does not contain information on hospice enrollment that occurs after the time of discharge. It may be the case that many of the patients who did not enroll in hospice at discharge went on to enroll later. Although this analysis presumes that the discharge disposition impacts the decision to enroll in hospice, to some degree the causation can run the other direction as well. Certain debilitated patients may be appropriate to return home if their goals are consistent with hospice but may need facility placement if they desire continued life-prolonging therapy. Similarly, patients and families who are not yet ready for hospice may prefer to attempt rehab in a SNF before deciding that hospice is right for them. However, by using a patient population that has already agreed to some limitation of aggressive life-prolonging therapy in being transferred to the PCU, we have minimized the number of patients whose goals are not consistent with hospice. Another limitation is the lack of data on the reasons patients did not enroll in hospice. Nevertheless, one of the major differences between choosing to enroll in hospice for a patient who can return home and choosing to enroll in hospice for a patient who needs facility placement is that the choice to enroll in hospice in a facility entails foregoing the room and board payments of the Medicare SNF benefit. Thus, the difference in hospice enrollment for home discharges compared to facility discharges is strong circumstantial evidence that this financial barrier is operative in these enrollment decisions. A final limitation is that this is a single-center experience, so the results might not be generalizable.

Despite these limitations, this study is the first, to our knowledge, to quantitate the degree to which need for facility placement is a barrier to hospice enrollment. These results are suggestive that for older patients hospitalized near the end of life, need for discharge to a facility may be a significant barrier to hospice enrollment. The most likely explanation for this discrepancy is the financial barrier associated with foregoing the Medicare SNF benefit in enrolling for hospice while in a nursing home. Research with larger datasets with more patients and more details on financial variables could help further delineate the extent to which the structure of the hospice benefit is a barrier to hospice enrollment for these patients.

Acknowledgments

Dr. Shinall’s work was supported by the National Institutes of Health (K12 CA090625). No other specific funding for this study was received.

References

1. Aragon K, Covinsky K, Miao Y, Boscardin WJ, Flint L, Smith AK. Use of the Medicare Posthospitalization Skilled Nursing Benefit in the Last 6 Months of Life. Archives of Internal Medicine 2012;172(20):1573. [PubMed: 23026981]
2. Zerzan J, Stearns S, Hanson L. Access to palliative care and hospice in nursing homes. Jama 2000;284(19):2489–2494. [PubMed: 11074779]
3. Casarett D, Karlawish J, Morales K, Crowley R, Mirsch T, Asch DA. Improving the use of hospice services in nursing homes: a randomized controlled trial. Jama 2005;294(2):211–217. [PubMed: 16014595]
4. Happ MB, Capezuti E, Strumpf NE, et al. Advance care planning and end-of-life care for hospitalized nursing home residents. Journal of the American Geriatrics Society 2002;50(5):829–835. [PubMed: 12028168]
5. Huskamp HA, Buntin MB, Wang V, Newhouse JP. Providing care at the end of life: do Medicare rules impede good care? Health affairs (Project Hope) 2001;20(3):204–211.
6. Aldridge Carlson MD, Barry CL, Cherlin EJ, McCorkle R, Bradley EH. Hospices' enrollment policies may contribute to underuse of hospice care in the United States. Health affairs (Project Hope) 2012;31(12):2690–2698. [PubMed: 23213153]
7. Shinall MC, Jr., Martin SF, Nelson J, et al. Five-Year Experience of an Inpatient Palliative Care Unit at an Academic Referral Center. Am J Hosp Palliat Care 2018:1049909117751878.
8. Ersek M, Wilson SA. The challenges and opportunities in providing end-of-life care in nursing homes. Journal of palliative medicine 2003;6(1):45–57. [PubMed: 12710575]
9. Medicare Payment Advisory C. Report to the Congress: Medicare Payment Policy. Mar, 2017
10. Kelley AS, Deb P, Du Q, Aldridge Carlson MD, Morrison RS. Hospice enrollment saves money for Medicare and improves care quality across a number of different lengths-of-stay. Health affairs (Project Hope) 2013;32(3):552–561. [PubMed: 23459735]
11. Wang S, Hsu SH, Huang S, Soulos PR, Gross CP. Longer Periods Of Hospice Service Associated With Lower End-Of-Life Spending In Regions With High Expenditures. Health affairs (Project Hope) 2017;36(2):328–336. [PubMed: 28167723]
12. Carlson MD, Morrison RS, Bradley EH. Improving access to hospice care: informing the debate. Journal of palliative medicine 2008;11(3):438–443. [PubMed: 18363486]
13. Harrison KL, Connor SR. First Medicare Demonstration of Concurrent Provision of Curative and Hospice Services for End-of-Life Care. Am J Public Health 2016;106(8):1405–1408. [PubMed: 27310352]

Table 1:

Demographic Characteristics

	Patients Discharged Home (n=338)	Patients Discharged to a Facility (n=479)
Sex		
Male	150 (44%)	218 (46%)
Female	188 (56%)	261 (54%)
Median Age [IQR] Missing	75.8 (70.0 – 83.9) N = 7	78.9 (71.6 – 87.2) N = 3
Race		
African American	43 (13%)	59 (13%)
White / Caucasian	269 (80%)	388 (85%)
Other	13 (4%)	11 (2%)
Missing	13 (4%)	21 (4%)
Marital Status		
Unmarried	159 (47%)	297 (62%)
Married	159 (47%)	164 (34%)
Missing	20 (6%)	18 (4%)
ECOG Functional Status		
1 or 2	17 (5%)	5 (1%)
3	123 (36%)	112 (23%)
4	193 (57%)	358 (75%)
Missing	5 (2%)	4 (1%)
Estimated Life Expectancy		
Less than 7 days	50 (15%)	112 (23%)
7 days to 1 month	96 (28%)	169 (35%)
1 to 6 months	192 (57%)	198 (41%)
Life-limiting Diagnosis		
Neurologic	37 (11%)	74 (16%)
Cardiac	52 (15%)	59 (12%)
Pulmonary	33 (10%)	29 (6%)
Gastrointestinal/Hepatic	25 (7%)	37 (8%)
Malignancy	150 (44%)	162 (34%)
Frailty/Dementia	15 (4%)	40 (8%)
Trauma/Burn	10 (3%)	36 (8%)
Multisystem Organ Failure	6 (2%)	23 (5%)
Other	10 (3%)	19 (4%)
Consult for Hospice Referral		
Yes	21 (6%)	27 (6%)
No	314 (93%)	449 (94%)
Reason for Consult Missing	3 (1%)	3 (1%)

Table 2:

Hospice Enrollment by Discharge Disposition

Discharge Disposition	Enrolled in Hospice N = 649	Not Enrolled in Hospice N = 168	Odds Ratio (adjusted*) for Hospice Enrollment (95% CI)
Facility	338 (71%)	141 (29%)	Baseline
Home	311 (92%)	27 (8%)	6.04 (3.73, 9.79)

*Controlling for the following covariates: age, gender, race, marital status, initial palliative care consult placed for hospice referral, life expectancy, functional status and diagnosis