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Variation in hospice services by location of care: Nursing home vs. assisted living facility vs. home

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Abstract

OBJECTIVES—To describe differences in hospice services for patients living at home, in nursing homes or in assisted living facilities, including the overall number and duration of visits by different hospice care providers across varying lengths of stay.

DESIGN—Retrospective cohort study using hospice patient electronic medical record data.

SETTING—Large, national hospice provider

PARTICIPANTS—Data from 32,605 hospice patients who received routine hospice care from 2009–2014 were analyzed.

MEASUREMENTS—Descriptive statistics were calculated for utilization measures for each type of provider and by location of care. Frequency and duration of service contacts were standardized to a one week period and pairwise comparisons were used to detect differences in care provided between the three settings.

RESULTS—Minimal differences were found in overall intensity of service contacts across settings, however, the mix of services were different for patients living at home vs. nursing home vs. assisted living facility. Overall, more nurse care was provided at the beginning and end of the hospice episode; intensity of aide care services was higher in the middle portion of the hospice episode. Nearly 43% of the sample had hospice stays less than two weeks and up to 20% had stays greater than six months.

CONCLUSION—There are significant differences between characteristics of hospice patients in different settings, as well as the mix of services they receive. Medicare hospice payment methodology was revised starting in 2016. While the new payment structure is in greater

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Author Contributions: Unroe, Callahan: study concept and design. Unroe, Stump: acquisition of data. Stump, Tu: statistical analysis. Unroe, Bernard, Stump: literature search, interpretation of data, manuscript preparation. Callahan, Tu: consulting on results interpretation. All authors: review and editing of manuscript.

alignment with the U shape distribution of services, it will be important to evaluate the impact of the new payment methodology on length of stay and mix of services by different providers across settings of care.

Keywords

Hospice; Long term Care; Financing Health Care; Health Reform

Introduction

The Medicare hospice benefit was created over 30 years ago with the dual intent to provide higher quality end-of-life care and to promote cost savings. Cost savings were hypothesized to accrue as patients chose to receive less intensive supportive services. Indeed, hospice care is associated with higher quality end of life care, including less burdensome treatments near the end of life and higher family satisfaction.¹⁻⁵ The impact of hospice on overall Medicare costs, however, is unclear.^{1,6-9} Expenditures for hospice care have dramatically increased as use of the benefit has increased – in 2012, 47% of Medicare beneficiaries received hospice services prior to death.¹⁰ In 2013, Medicare spent an estimated \$15 billion on hospice, representing 420% growth over the past 13 years.¹⁰⁻¹¹

Since its inception, Medicare has financed the hospice benefit for routine hospice care, which represents the vast majority of hospice care days, through a flat per diem rate – \$159 in 2015.¹¹ Motivated by a U-shaped distribution of services across a hospice episode that seemed inconsistent with a flat per diem rate, as well as concerns that the payment structure incentivized recruitment of more stable patients,¹⁰ Centers for Medicare and Medicaid Services (CMS) changed the payment model for routine hospice care effective January 1st 2016. Hospices receive a higher level per diem payment for the first 60 days of a care episode and a lower rate for subsequent days. Following death, hospices may also bill for some skilled services delivered in the last 7 days of life.¹¹

Further hospice payment reforms are being considered, including changes to payments based on site of care. In addition to supporting patients with terminal conditions at home, many people receive hospice while living in nursing homes or assisted living facilities. Rates of nursing home hospice use more than doubled between 1999–2006.¹² Medicare payments for assisted living facilities have also been rising – doubling over a five year period, totaling \$2.1 billion in 2012.¹³ Previous research describes clinical differences among hospice patients in nursing home vs. home settings,^{12,14-15} as well as assisted living facilities vs. home.¹⁶ While it was included in the proposed hospice payment reform rule,¹¹ differences in level of payment by site of care (nursing home vs. home) are not included in the final rule that took effect in 2016.

Previous research has also described differences in care provided by different disciplines over the course of a hospice episode.¹⁸⁻¹⁹ One recent analysis of hospice electronic medical record (EMR) data found that visits increased in the last week of life for all patients receiving routine hospice care, with a greater increase seen in patients at home vs. nursing homes.²⁰ Another analysis of hospice EMR data examined the services provided in the first eight days of a hospice stay and identified patient clinical and demographic characteristics

associated with a higher intensity of services provided, however, nursing home and assisted living patients were excluded.²¹

A deeper understanding of the differences in patient populations and in services delivered across settings, and over the course of hospice episodes, is key to informing current and future payment reform. Using the EMR system of a large national hospice, we describe patient and hospice episode characteristics, including the mix of services provided, for over 32,000 patients from 2009–2014. Through a description of hospice services provided to patients with all diagnoses who lived in nursing homes, assisted living facilities, or at home, this study can inform the debate around continued hospice payment reform, and provide benchmark data for evaluations of the newly implemented payment model.

Methods

This study was approved by the Indiana University Purdue University-Indianapolis Institutional Review Board.

Sample

We obtained EMR data from a national for-profit provider of hospice services, operating 28 programs across 18 states. Patients included for analysis had been enrolled in hospice between Jan 1, 2009 and Dec 31, 2014 and were at least 18 years of age or older at admission (N=72,839 hospice admissions). Patients could have multiple hospice episodes. We included only the patient's last episode of hospice care for analysis (N=69,363). Since the focus on this analysis was on patients receiving routine hospice care, we kept only hospice admissions where 100% of the episode could be classified as routine hospice care (N=32,679). Patients receiving continuous or higher level of care, or respite level of care, were excluded from the analysis, as they receive a different intensity of care and thus are a unique population in terms of visit frequency. Three sites of care were of interest: homes, nursing homes (skilled, non-skilled and long-term nursing facilities) and assisted living facilities (a facility where patients may receive custodial or supportive care services from formal caregivers). Patients receiving care at an inpatient hospice or hospital setting or who received care across sites were excluded from the analysis. For inclusion in the sample, 95% or more of the patient's hospice days had to occur at only one of these three sites (N=32,605). Using the above selection criteria, we captured admission and service utilization data for 32,605 patient records during the above observation period. Admission data included variables such as age, gender, race, length of stay and primary diagnosis. Service utilization data included number of visits and minutes spent by hospice personnel (nurse (RN or LPN), aide, music therapy, social work, chaplain and doctor) with the patient, as well as number of days the patient received hospice care.

Analysis

We calculated descriptive statistics for utilization measures for each discipline and site. Service contacts and service contact minutes were standardized to a weekly period by dividing by each subject's length of stay and then multiplying by 7. Distributions for utilization measures were generally right-skewed with a larger number of patients having a

lower number of contacts and minutes. We made comparisons across sites using non-parametric tests including the Wilcoxon rank sum test (for 2-group comparisons) and the Kruskal-Wallis test (for >2 group comparisons). Comparisons were also done for sub-groups of only patients with a primary hospice diagnosis of dementia and those with a primary diagnosis of cancer across sites, as these represent significant subsets of the population and are likely to have different clinical courses and needs near the end of life. To inform baseline visit intensity prior to the implementation of the new payment model, we also analyzed number of visits provided in the time periods ≤ 60 days and >60 days.

We created graphs to examine intensity of utilization over the hospice episode. First, patients with five or more days of hospice care were used to aggregate utilization across an episode of hospice stay using five quintiles. Only stays of 5 days or greater were examined so that the stay could have a beginning period, middle and end. In order to examine intensity of services provided at the beginning and end of hospice stays, we created graphs that show average number of minutes spent with hospice patients in each of the first 30 days and each of the last 30 days of the hospice episode. All lengths of stay were included.

Results

From 2009–2014, there were 32,605 patients who received only routine hospice level care in one of the three settings. Of these, 15,869 spent at least 95% of the hospice episode in their homes, 10,962 were in nursing homes and 5,774 were in assisted living facilities (Table 1). There were multiple significant differences among the groups – notably the mean length of stay for assisted living patients was the highest at 112 days (compared to 51 days for patients at home and 76 days for those in nursing homes) ($p < .0001$). The median length of stay for assisted living was 42 days compared to 17 days for patient home and 19 days for nursing home. While 11% of the overall sample had hospice stays greater than 6 months, 20% of those in assisted living who received hospice had stays over 6 months ($p < .0001$). About 27% of the overall sample spent a week or less on hospice and about 60% had hospice stays of one month or less. The overall population had a mean age of 79.8, but the assisted living group was older and more likely to be female and white. There were also dramatic differences in primary hospice diagnoses – over half of the patients at home were on hospice for cancer, but the most common diagnosis for those in nursing homes or assisted living facilities, representing nearly 1/3 in each group, was dementia. Notably, there were temporal trends in the hospice primary diagnoses over this time period for the entire sample; the proportion of non-cancer diagnoses, including cardiovascular and cerebrovascular disease, increased over time. Nearly 15% of all study patients were discharged alive from hospice (Table 1) (and results from earlier hospice stays of approximately 3500 patients were not included in analyses). Patients discharged alive were slightly younger, had longer hospice stays (median of 60 vs. 17 days) and were more likely to be Black (18.4% vs. 15.2%) (results not shown).

Over the course of a hospice episode, patients had contact with professionals across multiple different disciplines (Table 2). Given the observed variation in lengths of stay, we standardized the number of these service provider contacts to a weekly period. Overall, total contacts were statistically but not meaningfully different between the groups (mean of 7.5

visits for home per week, 7.4 for nursing home, 7.3 for assisted living facilities). Variation in type of contacts, however, can be appreciated when examining specific categories of hospice personnel. People who lived in assisted living had a mean of 2.1 contacts per week with nurse aides, which was significantly higher than people living at home who had 1.5 contacts per week ($p<.0001$). Nursing services, however, were more frequent for patients living at home with about 1 additional visit per week. This pattern is also reflected in mean number of minutes spent per week – with nurse aides spending significantly more time with people in nursing homes and assisted living facilities (mean of 136 minutes per week in each setting) compared to people living at home (mean of 94 minutes per week). Nursing minutes per week for people living at home were higher than the other two settings ($p<.0001$). Contacts from physicians were low in each setting – only 20% of the entire sample had any contact with a hospice-employed physician.

We conducted further analyses breaking hospice stays into ≤ 60 days and >60 days. The overall average number of minutes spent in a weekly period in the ≤ 60 day time was 508.4 vs. 285.7 minutes in the >60 time period. Time spent by aides was higher in the >60 day period but nurse time was higher in the ≤ 60 day time – 323.6 average minutes spent by nurses in a weekly period vs. 115.6 minutes for weekly periods >60 days. This pattern is seen in each of the three settings of care (results not shown).

Examination of utilization across the hospice episode is visually represented in Figure 1. Figure 1 shows the number of minutes spent by discipline among patients with lengths of stay of 5 days or more. A U-shaped pattern is seen for overall services provided as well as for nursing care. In contrast, intensity of aide services was the inverse – higher in the middle portions of the hospice episode. Social work showed a slight increase in the second quintile while physician visits were consistently flat. Differences between settings were most apparent for nurse and aide time; nursing home received the lowest levels of nurse visit minutes. In Figure 2, we show average number of minutes of services provided each day for the first 30 days and last 30 days of the hospice stays. The pattern of the U-shaped curve is evident, including an increase in services provided at the very end of life for patients in all settings and across varying lengths of stay.

We performed further sub-group analyses, examining patterns for only patients with dementia or with cancer as primary hospice diagnoses. For cancer patients, overall service contacts were not statistically different, however, the mix of services (aide vs. nurse vs. chaplain) was different across settings. Nurse contact was highest in the patient home (4.5 visits per week) compared to assisted living (3.9) and nursing home (4.0). There remained statistically significant differences in total contact minutes per week for patient home versus nursing home, but the absolute differences were small (554 vs. 514). For dementia patients, service contacts and minutes per week for all disciplines combined were statistically different across the three sites of care but did not have clinically significant differences. Mean overall total contact minutes spent by all disciplines were 445 minutes per week for patients at home, 435 for nursing home and 464 for assisted living. Aide minutes were significantly higher for assisted living (148) vs. the patient home (121) and vs. the nursing home (113).

Discussion

Questions about the best clinical and financial models to support end-of-life in different care settings remain²²⁻²⁴ and will continue to be debated. These analyses focused on routine hospice care which accounts for about 94% of hospice days.¹⁷ Our findings add to and update prior work demonstrating differences in the use of the hospice benefit across three care settings. Several findings merit further discussion. Overall, hospice patients cared for in different settings appear to receive similar numbers of visits per week from hospice providers, but with important differences in the type of providers delivering care. These patterns are seen in the overall analyses, as well as sub-group analyses focused on specific hospice diagnoses. While a U shaped curve is seen for overall intensity of services delivered in all settings, we report a more pronounced U-shape for the nursing home setting. Further, the U shaped pattern is strong and seen even across lengths of stay that extend well beyond 60 days. Aide care, in contrast, does not follow a U shaped pattern and is higher for nursing home and assisted living patients.

There are notable differences in the characteristics and utilization patterns of people who live at home vs. a nursing home vs. an assisted living setting while receiving hospice. Perhaps most striking are the differences in primary hospice diagnoses and length of stay. Difference in primary diagnosis across settings may explain in part the differences in length of stay and the mix of services provided. Patients who were living at home received more nursing visits, which could be expected to care for hospice patients with greater medical complexity. Patients in nursing homes or assisted living facilities received more nurse aide care – potentially appropriate for hospice patients in the final stages of dementia. These observational data may reflect the reality that different care settings target different populations and the diverse needs of the patients dictate variations in type and level of providers. Because personnel costs for aides are lower than for nurses, the costs of providing care may differ based on the mix of services needed.²⁵

The U shaped pattern of hospice care has been well described over the past few decades.^{18,25} Consistent with prior research, we found this pattern for overall service contacts and for the dominant category of service providers – nurses. Aide care, however, followed the opposite pattern – highest in the middle part of the hospice episode of care. This finding may reflect a relatively medically stable period of time near the end of life for some patients – after initial assessments and stabilization, aides are able to provide support for the patient care needs. We did observe, even with hospice stays longer than six months, an increase in services provided at the very end of life.

While this sample of hospice patients was large and nationally representative, it is derived from one provider whose practices may differ from other hospice providers, which may limit generalizability. We are unable to account for care provided by formal or informal caregivers outside of the hospice provider for any setting of care, i.e.- family caregivers or nursing home staff. Only one hospice stay was included per patient in the reported results, excluding approximately 3500 records that represented patients with multiple hospice stays. In sensitivity analyses including these records, our findings remain robust.

In these analyses, about 11% overall and as high as 20% for the assisted living group had lengths of stay greater than 6 months. At the other end of the spectrum, however, nearly 43% of the sample had stays of 2 weeks or less. It is not clear how the re-designed payment structure will impact lengths of stay or mix and timing of services provided. Hospice payment reform should incentivize appropriate, timely enrollment of patients near the end of life. Intensity of services provided should match palliative care needs of patients. Studies are needed to examine the impact of this change in payment structure on the delivery of services and on patient outcomes.²⁷

Conclusion

Patients who live in different settings and have different diagnoses require tailored plans of care from hospice providers. Concerns have been raised that hospices may be providing less care to patients in long term care settings. These analyses demonstrate minimal differences in overall number or intensity of visits provided to patients in home vs. nursing home vs. assisted living settings, but lend support to earlier studies that found that a different mix of services is provided to these populations. We found that nurses have the most frequent contact with patients in all settings; nurses spend more time with patients at home and aides spend more time caring for patients in nursing homes and assisted living settings. Further research is needed to understand the relationship of different mixes of services on patient experiences, as well as to examine the impact of payment reform on utilization across settings.

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Sponsor's Role: None

Appendix

Elements of Financial/Personal Conflicts	*Kathleen Unroe		Brittany Bernard		Timothy Stump		Wanzhu Tu		Christopher Callahan	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Employment or Affiliation		x		x		x		x		x
Grants/Funds		x		x		x		x		x
Honoraria		x		x		x		x		x
Speaker Forum		x		x		x		x		x
Consultant		x		x		x		x		x
Stocks		x		x		x		x		x
Royalties		x		x		x		x		x
Expert Testimony		x		x		x		x		x
Board Member		x		x		x		x		x
Patents		x		x		x		x		x
Personal Relationship		x		x		x		x		x

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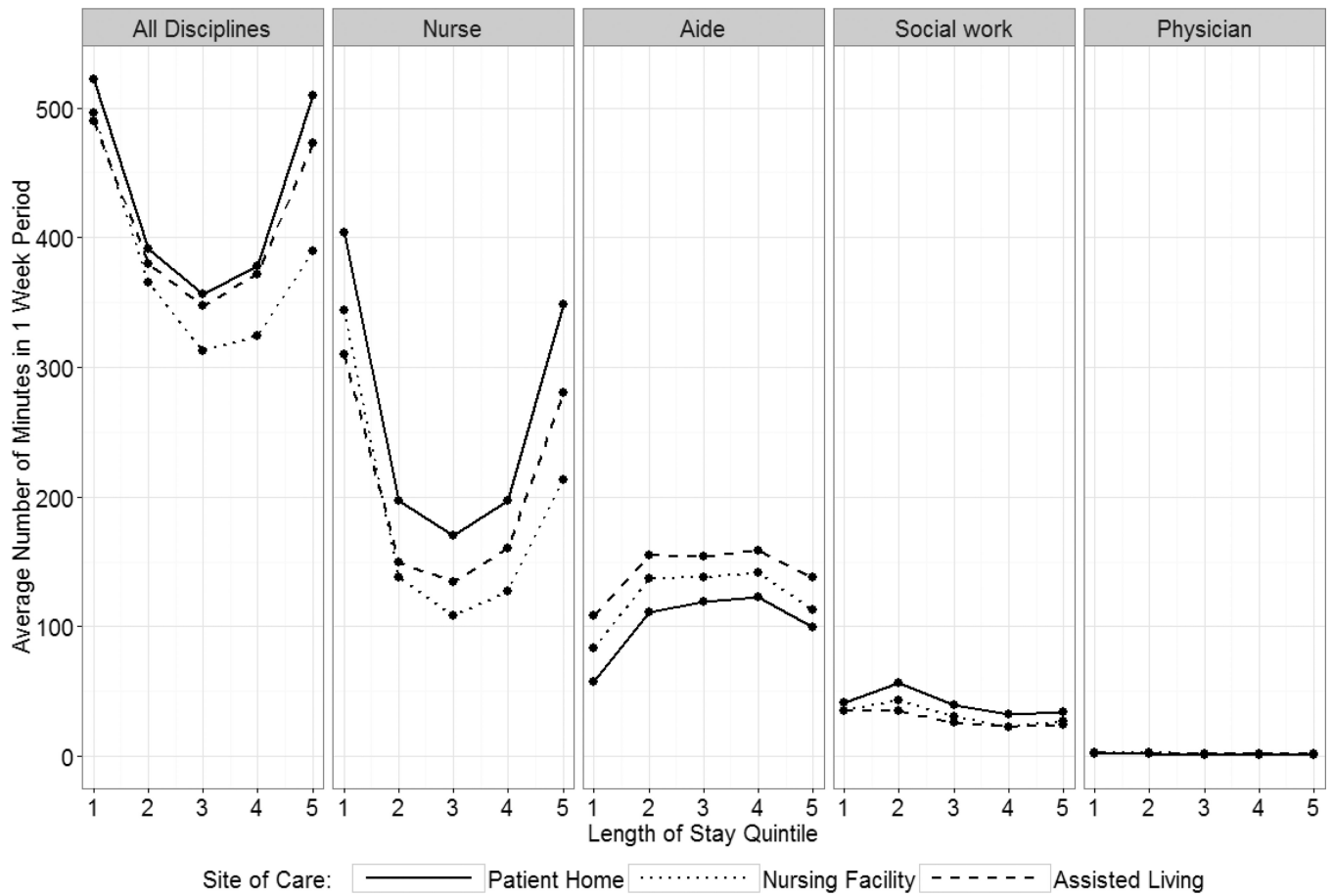


Figure 1. Average number of minutes spent with hospice patient by length of stay and discipline among patients with length of stay 5 days or more (N=32,605 patients receiving routine hospice care between 2009 and 2014).*
 *Music therapy and chaplain minutes were included in the all disciplines category, but were not shown in individual panels due to low numbers.

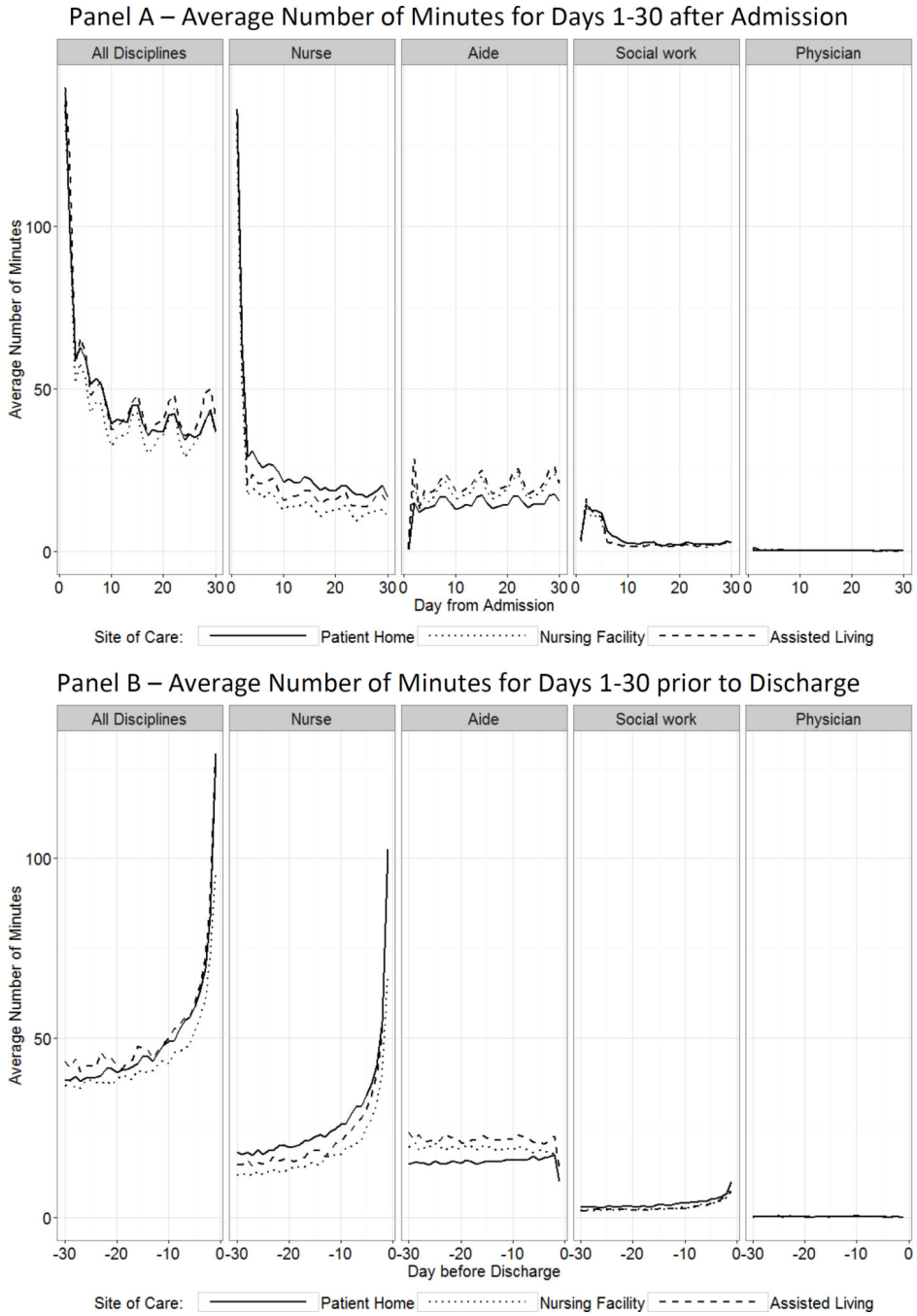


Figure 2. Average number of minutes by discipline for each day from admission (panel A) and for each 1 day prior to discharge (panel B) up to 30 days (N=32,605 patients receiving routine hospice care 2 between 2009 and 2014).*
 *Music therapy and chaplain minutes were included in the all disciplines category, but were not 4 shown in individual panels due to low numbers.

Table 1

Demographic characteristics by site of care (N=32,605 patients receiving routine hospice care between 2009 and 2014)*

Characteristic	Site of care			
	Overall N=32,605	Patient home N=15,869	Nursing home N=10,962	Assisted living N=5,774
Age, mean (SD); median; range	79.8 (13.3); 83; 18–110	75.1 (14.2); 77; 18–110	82.7 (11.7); 85; 20–108	87.0 (7.6); 88; 45–108
Length of hospice episode (days), mean (SD); median; range	70.4 (129.7); 20; 1–2117	51.2 (102.1); 17; 1–2117	76.0 (137.6); 19; 1–1470	112.4 (165.9); 42; 1–1281
1–4, No. (%)	5149 (15.8)	2667 (16.8)	1925 (17.6)	557 (9.7)
5–14, No. (%)	8761 (26.9)	4660 (29.4)	2984 (27.2)	1117 (19.4)
15–30, No. (%)	5552 (17.0)	3059 (19.3)	1618 (14.8)	875 (15.2)
31–60, No. (%)	4300 (13.2)	2205 (13.9)	1301 (11.9)	794 (13.8)
61–90, No. (%)	2170 (6.7)	1012 (6.4)	701 (6.4)	457 (7.9)
91–180, No. (%)	3063 (9.4)	1216 (7.7)	1029 (9.4)	818 (14.2)
>180, No. (%)	3610 (11.1)	1050 (6.6)	1404 (12.8)	1156 (20.0)
Male sex, No. (%)	12800 (39.3)	7149 (45.1)	3809 (34.8)	1842 (31.9)
Race, No. (%)				
White	24421 (74.9)	11168 (70.4)	8075 (73.7)	5178 (89.7)
Black	5123 (15.7)	2777 (17.5)	2139 (19.5)	207 (3.6)
Asian	658 (2.0)	397 (2.5)	241 (2.2)	20 (0.4)
Hispanic	1697 (5.2)	1113 (7.0)	350 (3.2)	234 (4.1)
Other	706 (2.2)	414 (2.6)	157 (1.4)	135 (2.3)
Married, No. (%)	9743 (29.9)	6628 (41.8)	2107 (19.2)	1008 (17.5)
Primary hospice diagnosis, No. (%)				
Cancer	10883 (33.4)	8361 (52.7)	1867 (17.0)	655 (11.3)
Dementia	6721 (20.6)	1345 (8.5)	3318 (30.3)	2058 (35.6)
Cardiovascular disease	3656 (11.2)	1786 (11.3)	1070 (9.8)	800 (13.9)
Cerebrovascular disease	2878 (8.8)	839 (5.3)	1393 (12.7)	646 (11.2)
Pulmonary disease	1865 (5.7)	1068 (6.7)	564 (5.2)	233 (4.0)
Debility	2707 (8.3)	773 (4.9)	1157 (10.6)	777 (13.5)
End stage renal disease	760 (3.3)	365 (2.3)	338 (3.1)	57 (1.0)
Other	3135 (9.6)	1332 (8.4)	1255 (11.5)	548 (9.5)
Hospice region in U.S., No. (%)				
Northeast	3743 (11.5)	1696 (10.7)	1530 (14.0)	517 (9.0)
Midwest	14709 (45.1)	6113 (38.5)	5704 (52.0)	2892 (50.1)
South	10909 (33.5)	6068 (38.2)	3062 (27.9)	1779 (30.8)

Characteristic	Site of care			
	Overall N=32,605	Patient home N=15,869	Nursing home N=10,962	Assisted living N=5,774
West	3244 (10.0)	1992 (12.6)	666 (6.1)	586 (10.2)
Discharged alive, No. (%)	4835 (14.9)	2487 (15.7)	1370 (12.5)	978 (17.0)

* Chi-square used for categorical variables; Kruskal-Wallis non-parametric test used for continuous variables; p-values adjusted for multiple testing using false discovery rate method indicate overall difference across the three groups. Omnibus tests were all significant at the $p < .0001$ level. Pairwise comparisons were conducted and all tests were significant at the $p < .01$ level except for discharged alive between patient home and assisted living ($p = .0243$). The number and distribution of individual hospice programs were similar across the three sites: patients from home were cared for by 28 different programs in 18 states; nursing home patients were cared for by 26 programs in 17 states; and assisted living patients were cared for by 26 programs in 18 states.

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Table 2

Service contact utilization by site of care (N=32,605 patients receiving routine hospice care between 2009 and 2014).

Characteristic	Site of Care			
	Overall N=32,605	Patient home N=15,869	Nursing home N=10,962	Assisted living N=5,774
Service contact occurred during hospice episode, No. (%)				
All disciplines	32605 (100.0)	15869 (100.0)	10962 (100.0)	5774 (100.0)
Aide	25613 (78.6)	11294 (71.2)	9124 (83.2)	5195 (90.0)
Nurse	32566 (99.9)	15852 (99.9)	10940 (99.8)	5774 (100.0)
Social work	29460 (90.4)	14113 (88.9)	9882 (90.2)	5465 (94.7)
Music therapy	17352 (53.2)	6195 (39.0)	6918 (63.1)	4239 (73.4)
Chaplain	18583 (57.0)	6913 (43.6)	7579 (69.1)	4091 (70.9)
Physician	6026 (18.5)	2144 (13.5)	2266 (20.7)	1616 (27.8)
Number of service contacts standardized to a 1 week period, mean (SD); median				
All disciplines	7.4 (4.1); 6.5	7.5 (4.2); 7.0	7.4 (3.9); 6.2	7.3 (3.8); 6.2
Aide	1.7 (1.3); 1.8	1.5 (1.4); 1.5	1.8 (1.1); 1.9	2.1 (1.3); 2
Nurse	4.0 (2.9); 3.1	4.4 (3.1); 3.5	3.7 (2.8); 2.7	3.5 (2.7); 2.6
Social work	0.9 (1.1); 0.5	0.9 (1.1); 0.6	0.9 (1.1); 0.5	0.7 (0.9); 0.4
Music therapy	0.4 (0.7); 0.1	0.3 (0.7); 0	0.4 (0.7); 0.3	0.4 (0.6); 0.3
Chaplain	0.4 (0.8); 0.2	0.4 (0.7); 0	0.5 (0.8); 0.3	0.4 (0.6); 0.3
Physician	0.0 (0.2); 0	0.1 (0.2); 0	0.1 (0.3); 0	0.1 (0.2); 0
Number of service contact minutes standardized to a 1 week period, mean (SD); median				
All disciplines	513.0 (431.7); 389.4	547.1 (474.6); 425.4	478.0 (378.5); 357	485.8 (393.7); 364.6
Aide	107.2 (102.1); 107.6	94.2 (113.2); 80.2	136.3 (97.7); 114	136.3 (97.7); 129.2
Nurse	326.0 (373.8); 206.2	374.8 (410.8); 249.0	282.4 (331.0); 168	274.6 (322.8); 159.2
Social work	44.0 (82.4); 22.4	49.3 (93.8); 26.3	40.9 (73.1); 19.7	35.5 (62.1); 17.9
Music therapy	14.6 (45.0); 2.3	10.9 (34.0); 0	17.9 (39.5); 8.1	18.4 (72.1); 10.4
Chaplain	18.7 (46.9); 5.3	15.8 (47.3); 0	23.1 (50.2); 9.7	18.1 (37.6); 9.7
Physician	2.2 (15.2); 0	1.7 (15.3); 0	2.7 (15.8); 0	2.6 (13.9); 0

* Chi-square used for categorical variables; Kruskal-Wallis non-parametric test used for continuous variables; p-values adjusted for multiple testing using false discovery rate method indicate overall difference across the three groups. Omnibus tests were all significant at the $p < .001$ level. Pairwise comparisons were conducted and all tests were significant at the $p < .01$ level except for:

1. aide contact (yes/no) between patient home and nursing home ($p = .0492$) and
2. aide contact (yes/no) between patient home and assisted living ($p = .0137$) and

3. chaplain contact (yes/no) between nursing home and assisted living (p=.0229) and
4. all disciplines number of contacts between nursing home and assisted living (p=.8213) and
5. number of nurse contacts between nursing home and assisted living (p=.0102) and
6. number of nurse minutes between nursing home and assisted living (p=.9634) and
7. number of social work minutes between nursing home and assisted living (p=.0408)

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