



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

TRENDS IN NURSING HOME-HOSPICE CONTRACTING AND COMMON OWNERSHIP BETWEEN HOSPICE AGENCIES AND NURSING HOMES:

FINAL REPORT

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Office of the Assistant Secretary for Planning and Evaluation

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Final Report**

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KEY FINDINGS

- The proportion of hospice agencies and nursing homes with common ownership grew substantially over the study period, as did the proportion of hospice enrollees and nursing home residents receiving care from these providers.
- Rates of common ownership were highest among chain nursing homes and hospice agencies.
- As nursing home-hospice use expanded over the last decade, the number of hospice agencies from which residents in particular facilities receive hospice increased.
- Although these trends imply greater freedom of choice for Medicare beneficiaries, it is still the case that a large proportion of hospice users within individual facilities enroll at the hospice agency with which the nursing home appears to have a primary referral relationship.
- The proportion of hospice enrollees using the commonly-owned hospice was somewhat higher among not-for-profit relative to for-profit nursing homes, potentially suggesting greater coordination of services between not-for-profit nursing homes and hospice agencies.
- In unadjusted analyses, hospice patients in nursing homes with common ownership had higher rates of live discharge, longer lengths of stay, a higher proportion of stays greater than 90 days, and a lower proportion of stays less than or equal to three days.
- After adjusting for geographic, provider, and patient-level factors, hospice patients receiving hospice care from a commonly-owned agency were more likely to have long hospice stays and registered nurse/licensed practical nurse visits at the end of life. At the same time, these individuals had a slightly lower proportion of days with any kind of hospice visit and fewer visit hours per day.

ACRONYMS

The following acronyms are mentioned in this report.

ASPE	HHS Office of the Assistant Secretary for Planning and Evaluation
CASPER	Certification and Survey Provider Enhanced Reporting
CI	Confidence Interval
CMS	HHS Centers for Medicare & Medicaid Services
HHI	Herfindahl Hirschman Index
HHS	U.S. Department of Health and Human Services
IQR	Interquartile Range
LPN	Licensed Practical Nurse
MDS	Minimum Data Set
OR	Odds Ratio
OSCAR	Online Survey, Certification, and Reporting
PECOS	Provider Enrollment Chain Ownership System
RN	Registered Nurse
SNF	Skilled Nursing Facility
SW	Social Worker

EXECUTIVE SUMMARY

Working together on this project, Vanderbilt and Harvard built upon earlier research for the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (Tracking the Impact of Ownership Changes in Hospice Care Provided to Medicare Beneficiaries) and used several datasets to illuminate key issues of interest. In particular, using data from 2005-2015, the report describes: (1) trends in nursing home-hospice contracting relationships and in common ownership between hospice agencies and nursing homes; (2) geographic dimensions of nursing home-hospice contracting; and (3) hospice use trends in nursing homes with and without common ownership.

Guiding these analyses was the objective to characterize trends in nursing home-hospice contracting and common ownership and to identify potential tradeoffs in the care provided by nursing homes and hospice agencies that share common ownership.

Between 2005 and 2015, the number of hospice agencies with common ownership to nursing homes nearly quintupled in number and now represents almost one-in-five hospice agencies participating in the Medicare program. The proportion of nursing homes with common ownership to hospice agencies increased similarly over our study period, from 5% to 20% of all nursing homes (and nursing home residents) between 2005 and 2015. Not surprisingly, most nursing homes and hospice agencies that shared common ownership were part of larger chain organizations. Although select geographic areas had higher proportions of common ownership among hospice agencies and nursing homes, few clear geographic trends emerged.

As nursing home-hospice use expanded, the number of hospice agencies across which residents in particular facilities receive hospice increased. Nonetheless, a large proportion of hospice users within most individual facilities enroll at the hospice agency with which the nursing home appears to have a primary referral relationship (67% in 2015, on average). Among nursing homes with common ownership to a hospice agency, the proportion of hospice enrollees using the commonly-owned hospice was similar to this level, at 65% in 2015.

After adjusting for geographic, provider, and patient-level factors, we identified several differences in hospice service use between individuals using hospice in nursing homes without common ownership relative to nursing home-hospice users in facilities with common ownership. Residents of commonly-owned facilities who use the commonly-owned hospice are more likely to have long hospice stays (i.e., both stays of >90 days and very long stays of >180 days) than residents of facilities without common ownership. Perhaps more interesting is the fact that residents of commonly-owned facilities who use the commonly-owned hospice are more likely to have longer hospice stays than those in commonly-owned facilities who use an externally-owned hospice.

We also find that residents who use commonly-owned hospices have a lower intensity of hospice visit use overall (i.e., the percentage of hospice days with any visits and the average visit hours per day are lower) relative both to residents of non-commonly-owned facilities and residents of commonly-owned facilities who use an externally-owned hospice. Residents of commonly-owned nursing homes (regardless of whether they use the commonly-owned hospice or not) are more likely to receive at least one registered nurse or licensed practical nurse hospice visit in the last three days of life relative to residents of non-commonly-owned facilities.

The differences we observe in hospice length of stay and services delivered among residents of commonly-owned facilities who use the commonly-owned hospice versus an externally-owned hospice might reflect distinct care patterns that are facilitated (and/or incented) by common ownership itself. It is possible that commonly-owned organizations have closer coordination between the nursing home and hospice, which could lead to earlier hospice enrollment (and thus longer stays). It is also possible that commonly-owned organizations deploy nursing facility resources differently for enrollees of their commonly-owned hospice versus enrollees of externally-owned hospices. For example, for a commonly-owned hospice enrollee, nursing home staff could provide more of the nursing or custodial care than for an externally-owned hospice, but we are unable to observe service provision by nursing home staff with our data. Importantly, claims data alone do not allow us to determine whether the different hospice utilization patterns we observe for residents who use commonly-owned hospices (particularly relative to residents of commonly-owned nursing homes who do not use the commonly-owned hospice) result in improvements or decrements in quality of care.

Common ownership between hospice agencies and nursing homes is an emerging trend that reflects a broader push toward consolidation in the health care sector. The analyses presented above are a first step toward improving our understanding of these trends and their implications. Going forward, policymakers and other stakeholders must continue studying these dimensions and the mechanisms that will shape them and the care that nursing home-hospice enrollees receive.