



# 2025 Information Gathering Report

## Hospice Quality Reporting Program

Contract No. 75FCMC18D0014  
Task Order No. 75FCMC24F00011

### **Submitted by:**

Abt Global  
6130 Executive Boulevard  
Rockville, MD 20852

### **Submitted to:**

Centers for Medicare & Medicaid  
Services  
7500 Security Blvd  
Baltimore, MD 21244

**November 18, 2025**

*The authors used iThenticate software to confirm this document represents an original work and, where applicable, has properly cited the work of others.*



## Contents

<b>1.</b>	<b>Background and Significance</b> .....	<b>1</b>
<b>2.</b>	<b>Methods</b> .....	<b>2</b>
<b>3.</b>	<b>Results</b> .....	<b>3</b>
	3.1 Hospice Use .....	3
	3.2 Hospice Care Delivery.....	4
	3.3 Caregiver Support .....	6
<b>4.</b>	<b>Conclusion</b> .....	<b>7</b>
	<b>Appendix A. Methods</b> .....	<b>A-1</b>
	<b>Appendix B. Literature Review Tables</b> .....	<b>B-1</b>
	<b>Appendix C. References</b> .....	<b>C-1</b>
	<b>Supplemental Appendix</b> .....	<b>C-1</b>

## List of Exhibits

Exhibit 2-1: Literature Review Results Summary.....	2
Exhibit B-1: Recent Hospice Literature Review Table .....	B-1

## 1. Background and Significance

Many Americans rely on hospice for end-of-life care. In 2023, more than 1.7 million Medicare beneficiaries received hospice care, with Medicare hospice spending totaling \$25.7 billion (MedPAC, 2025). Hospice services are comprehensive and holistic, focusing on comfort and palliative care at the end of life. Services include physician oversight, nursing care, medical equipment and supplies, drugs to manage pain and symptoms, medical social services, counseling (e.g., dietary, spiritual, bereavement) and other services, as needed. The Centers for Medicare & Medicaid Services (CMS) continually strives to improve hospice quality and the experience of care for beneficiaries and prioritizes high-impact quality measure areas that are meaningful to patients, their families and caregivers.

CMS' Hospice Quality Reporting Program (HQRP) establishes quality reporting requirements for hospice programs. The HQRP currently includes a quality measure calculated using information from the Hospice Item Set (HIS), two claims-based quality measures, and a Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Hospice Survey measure. CMS contracted with Abt Global, LLC to support the HQRP in areas such as quality measure development and the implementation of the Hospice Outcomes and Patient Evaluation (HOPE) tool.

CMS anticipates expanding the HQRP over the next several years to include additional meaningful quality measures that assess the quality of care provided to hospice patients. As finalized in the Fiscal Year (FY) 2025 Hospice Wage Index and Payment Rate Update, Hospice Conditions of Participation Update, and HQRP Requirements Final Rule (89 FR 64202 August 6, 2024), HOPE will collect additional data to support assessment-based quality measures. The Hospice Information Gathering Reports support HQRP efforts by reviewing available resources and informing potential future quality measurement development. Prior reports are available at:

<https://www.cms.gov/medicare/quality/hospice/provider-and-stakeholder-engagement>.

This 2025 Information Gathering Report (IGR) summarizes the most recent literature focused on quality of care in the hospice setting. Our findings reflect three aspects of hospice care:

- **Hospice Use:** This section focuses on literature related to accessing and enrolling in hospice care, as well duration of hospice enrollment.
- **Hospice Care Delivery:** This section focuses on literature related to the care provided to patients during their hospice stay.
- **Caregiver Support:** This section focuses on the type of support caregivers would like, how hospices are supporting caregivers, and caregiver experience of care.

Prior 2025 information gathering efforts include summarizing literature on assessing cognitive function and interoperability in the hospice setting. The corresponding memoranda that present those results are available in the **Supplemental Appendix**.

## 2. Methods

To maintain a current understanding of quality care in the hospice setting, the Abt team conducted a literature review on recently published material (i.e., published in the past 12 months), focused on quality of care in the hospice setting. The 23 identified articles are consistent with search criteria in [Exhibit 2-1](#),

The Abt team searched for and reviewed both peer-reviewed and grey literature. For the literature review, the team used the MEDLINE/PubMed® database with pre-developed search terms specific to hospice quality. For grey literature, the team established a list of well-known resources and applied key words from each topic to find relevant information.

**Exhibit 2-1** presents our search results. For more details on our methods refer to **Appendix A**. The report includes complete literature review tables in **Appendix B**.

### Exhibit 2-1: Literature Review Results Summary

Hospice Quality of Care	
Search Terms	("hospice" OR "end-of-life care" OR "terminal care") AND ("quality")
Search Date Range	July 1, 2024 – June 30, 2025
Total Peer-Reviewed Articles	95
Title/Abstract Rejection	58
Article Rejections	10
Final Peer-Reviewed Articles	27
Total Grey Literature Articles	3
Final Articles	30

## 3. Results

The team identified 23 final articles, which focused on the areas of hospice use, hospice care delivery, and caregiver support.

### 3.1 Hospice Use

**Medicare Advantage enrollment can impact hospice use.** Though hospice services are not a Medicare Advantage benefit, patients who enroll in hospice can retain their Medicare Advantage plan for services unrelated to their terminal condition. A recent cross-sectional study found that Medicare Advantage patients were more likely to enroll in hospice at end-of-life than FFS patients, with Medicare Advantage beneficiaries also more likely to use a for-profit hospice (White et al., 2024).

**Several factors may influence hospice use in patients with dementia and cancer.** A secondary review focused on transitioning persons living with dementia to hospice care found that increasing illness severity (e.g., functional decline or organ failure), insurance status, race and ethnicity, and caregiver burden were all predictors of hospice use (Murali et al., 2025). Another review found that late-stage dementia patients who receive palliative care consultation during a hospitalization were more likely to receive hospice care than patients who did not (Gupta & Patel, 2024). For advanced cancer patients, supportive care (including hospice) use was low but increased throughout the last six months of life, spiking in the last 30 days of life, following a similar trajectory to acute care visits and emergency department (ED) visits (Kwon, et al., 2025).

**Some recent Medicare models positively impacted hospice use.** One study of provider participation in the [Medicare Care Choices Model](#), a model which allowed hospice patients to continue receiving non-palliative medical care, found the model increased hospice use and the number of days at home, and decreased aggressive treatments (Niedzwiecki, et al., 2024). Similarly, hospice administrators in states that participated in Medicare's [Value-Based Insurance Design Model](#), which allows Medicare Advantage plans to include a hospice benefit, found that it supported smoother transitions into hospice, though it did not meaningfully impact hospice enrollment or length of stay (Klaiman, et al., 2024; Eibner et al., 2025). In the Value-Based Insurance Design Model, researchers found that hospice agencies in areas with high Medicare Advantage penetration 1) were willing to accept payment below the Medicare fee-for-service (FFS) rate, 2) “invested considerable staff and resources” to implement the newly covered benefit, and 3) had ongoing challenges efficiently working with the health plans (Eibner et al., 2025).

**Palliative care use may impact hospice length of stay, end-of-life care satisfaction, and hospice use.** Two studies consider length of stay. The first, a small study of lung cancer patients, found that patients who receive early palliative care had longer hospice stays and died in the hospital less frequently than those who did not receive early palliative care (Oswalt, et al., 2024). The second focused on veterans, and whether their palliative care setting impacted hospice care, found that the length of the average hospice stay did not vary across settings, though patients with only one palliative care encounter had shorter hospice lengths of stay (Kaufman, et al., 2024). Another study focused on veterans with advanced heart failure found that patients treated at Veteran Affairs Medical centers with higher rates of palliative care consultations reported better end-of-life care even if they did not receive

palliative care. They also found that patients at centers with higher rates of palliative care consultation were more likely to receive palliative care, and rates of inpatient hospice use were higher for patients who received palliative care than those who did not. (Feder et al., 2025)

**Effective staff training and novel workflows can improve hospital-based end-of-life conversations and transitions to hospice.** A recent study tested approaches to improving nursing staff end-of-life communication skills at a safety net hospital. The intervention included a brief in-person educational session, a booklet, posters, and a pocket card tool. It improved nursing staff confidence and competence in having end-of-life conversations with limited interruption to clinical workflows or operations (Wolownik & Wholihan, 2025). A hospital-based quality improvement project that implemented formal care transitions in their emergency department significantly increased the percentage of emergency department patients eligible for hospice care who were enrolled within 96 hours (Baugh et al., 2024). A third quality improvement study developed training and clinical pathways to support medical oncology unit staff who provided general inpatient hospice care. The authors reported that staff found these interventions useful and that they improved staff ability to admit patients for inpatient hospice, appropriately manage symptoms at the end of life, identify end-of-life resources, and communicate with patients who are dying and their loved ones. (Hoch et al., 2024)

### **3.2 Hospice Care Delivery**

**Some hospices are successfully providing end-of-life care to people experiencing homelessness, though living conditions generally can also impact hospice care.** For example, one Kentucky hospice operates a comfort care home that accepts hospice-eligible patients without a home or those that do not have home caregivers. (Hospice Foundation of America, 2025). A systematic review focused on delivering hospice care to homeless adults found that multiagency collaboration, patient advocacy, and staff education programs coupled with counselling support for the providers, working within a supportive environment, and the use of trauma-informed care, can improve delivery of end-of-life care to this population—though most interventions did not show cost savings (Coverdale & Murtaugh, 2024). Though not focused on homelessness, a small qualitative study focused on hospice care provided during the COVID-19 public health emergency found that patient living conditions can impact consistent access to and delivery of high-quality care. For example, emergency response was more complicated for patients with poor building conditions (e.g., structural damage or broken intercoms) and patients with fewer financial resources were more impacted by nursing shortages, as wealthier families were more likely bridge the gap with private-pay nursing. (David et al., 2025)

**Hospice quality for patients enrolled in Medicare Advantage may differ from patients with FFS Medicare.** In addition to difference in hospice use, White and colleagues considered hospice quality. They found that Medicare Advantage and FFS beneficiaries enrolled in plans of similar quality, though Medicare Advantage beneficiaries were less likely to have a hospitalization within seven days of hospice enrollment. When considering Medicare Advantage [Special Needs Plans](#) or [Medicare-Medicaid Plans](#), patients with those plan types were more likely to enroll in lower quality hospices, and more likely to use a hospice with a low [CAHPS®](#) rating, than their FFS counterparts (White et al., 2024).

**Recent literature offers approaches to supportive hospice care for patients with dementia and behavioral health disorders.** A systematic review identified several strategies hospice providers can use to serve dementia patients, including care assessments, open conversations with family and friends, and reassertion of patient beliefs and values (Gupta & Patel, 2024). In another study, researchers interviewed hospice medical directors regarding the behavioral health needs of hospice patients and caregivers. Participants reported that behavioral health disorders, such as anxiety and depression, make it difficult to deliver end-of-life care. They recommended improving behavioral health in hospice care by expanding available supports (e.g., using telehealth for patients to meet with behavioral health specialists, hiring psychiatrists and psychologists to care teams) and providing families and staff more training and education on behavioral health disorders (Tiwari et al., 2025).

**Training hospice staff in patient-centered approaches may support goal-concordant prescribing.** Researchers worked with a Massachusetts hospice to develop a goal-concordant prescribing approach that aims to improve patient understanding of medication, including purpose and effectiveness, as well as mutual understanding of patient goals and values. The research team focused on using positive language, such as how the patient’s medications aligned with their personal goals, and sought to minimize the prescribing of unnecessary medication. Participants felt this approach would facilitate important conversations without impacting workflows, and that physicians may be more likely to approve medication changes if framed in the context of patients’ priorities (Fromme et al, 2025).

**Some providers are offering innovative care options, including using virtual reality, offering grief counseling, supporting pet care, and using portable fans.** One Georgia hospice uses virtual reality to support patients (e.g., by enabling “travel” somewhere the patient wished to go before they die) and the bereaved (with meditative sessions) (Hospice Foundation of America, 2025). A midwestern hospice also piloted a virtual reality intervention and found that an immersive nature-based experience for informal caregivers significantly improved their quality of life and decreased their anxiety (Lehto, et al., 2024). A Maryland hospice offers individual grief counseling sessions to the loved ones of patients who died in the hospice’s care. An Oregon hospice helps patients care for their pets at end-of-life and offers pet therapy to both patients and the bereaved. A New York hospice makes dieticians and occupational, physical, speech, and respiratory therapists widely available to patients. A Connecticut hospice employs certified art and music therapists to support both patients and the bereaved (Hospice Foundation of America, 2025). Additionally, a hospital-based quality improvement study found that using portable fans on patient faces can alleviate dyspnea at the end of life (Salveti et al., 2015).

**Quality end-of-life care can be difficult to formally define.** A small Tennessee study compared how experts and legislators defined quality end-of-life care. While both groups identified similar core concepts (e.g., diagnosis, timeframe, care location, planning for the future), experts were more likely to provide clinical answers, while legislators were more likely to give personal experiences or anecdotes. With no consensus definition of end-of-life care, researchers concluded that end-of-life healthcare must be tailored to each individual (Mauck, 2024). Researchers are continuing to develop tools to better measure hospice quality as reflected in patient experiences. One study assessed the Hospice Quality of Life Index-14 (HQLI-14), a self-report instrument designed to measure patients’ perception of their quality of life while receiving interdisciplinary hospice care. They found that hospice patients with

various kinds of cancer had similar HQLI-14 ratings, reinforcing the instrument's consistency and validity (Longcoy et al., 2024).

### 3.3 Caregiver Support

**Caregivers often want support that aligns with their preferences and values, such as religious support.** A qualitative study of eight Puerto Rican caregivers found that they appreciate religious support from hospice teams, in addition to frequent and timely communication (Park et al., 2024). A small survey of informal adult caregivers found that hospice users were significantly more likely to have family or friends present at death and to have providers respect the patient's religious beliefs than patients who did not use hospice (Cagle, et al., 2024). Traditional hospice support also remains important. A report focused on military and veteran caregivers highlighted positive hospice experiences related to quick initiation of care, assistance with activities of daily living, and exceptional education about services (Gandhi, Williams, & Ramchand, 2024).

**Innovative approaches to supporting caregivers had mixed results.** A pilot study demonstrated promising results using storytelling to deliver information relevant to caregivers. Use of telenovela-style educational videos to improve hospice caregiver self-efficacy and anxiety significantly reduced anxiety when caregivers attended two or more sessions (Cruz-Oliver et al., 2024). One study of music therapy treatment yielded mixed results, with caregivers receiving music therapy treatments reporting a lower quality of life after the treatment while hospice patients indicated a higher quality of life and decreased distress after the music therapy treatments (Estell, et al., 2025).

**Caregivers of hospice patients receiving care in facilities, or from larger or for-profit hospices, may be more likely to have negative experiences.** Hospices with a higher proportion of patient days in assisted living facilities were more likely to receive lower caregiver ratings on pain assessment, dyspnea treatment, team communications, and training the family to provide care, and were less likely to have high aggregate CAHPS or HIS composite scores. However, hospices with a higher proportion of assisted-living days were rated higher on emotional support (Guo, Temkin-Greener, & McGarry, 2024). Additionally, an analysis of Google reviews, Yelp reviews, Glassdoor metrics, and quality measure scores found that larger hospices and for-profit hospices were associated with both lower caregiver satisfaction and lower employee satisfaction (Hotchkiss, Ridderman, & Hotchkiss, 2024). Hotchkiss et al. (2024) also found that the highest quality hospices tended to be non-profits.

## 4. Conclusion

Over the past 12 months, peer-reviewed and grey literature have explored topics that included hospice use, hospice care delivery approaches, and methods to support caregivers. Participation in Medicare models that supported hospice use and palliative care use, such as Value-Based Insurance Design and Medicare Care Choices Model, are associated with longer hospice lengths of stay and Medicare Advantage enrollment is associated with hospice use and quality. Many hospices offer innovative approaches to care, such as virtual reality travel and pet therapy, or identifying care approaches for specific populations, such as those experiencing homelessness or with behavioral health disorders. Additionally, training approaches that incorporate goal-concordant prescribing and end-of-life conversations and care have shown promise. Caregivers have expressed preferences for religious support and may benefit from novel approaches to reduce their anxiety, such as telenovela-style educational videos. In addition to exploring impacts on hospice patients, several research studies have focused on the experience of caregivers. Caregiver experiences may be more likely to be reported as negative when hospice care is provided in a facility rather than in the home, or when the hospice is larger or for-profit.

## Appendix A. Methods

The Abt team used a stepwise process to identify information relevant to our research questions. The process additionally included steps to enhance consistency and reliability of studies included in the final report. These steps are outlined here.

**Determine search terms.** The team determined a specific set of search terms for this report, consistent with prior information gathering reports focused on recent hospice literature: [(“hospice” or “end-of-life-care” or “terminal care”) and (“quality”)].

**Determine search parameters and identify articles.** We conducted our literature searches in PubMed, which includes MEDLINE indexed journals, journals and manuscripts deposited in PubMed Central, and the National Center for Biotechnology Information Bookshelf. We used the following steps to conduct the search and ensure the most relevant results.

- Determine Boolean phrase using predetermined search terms (i.e., how terms will connect using and/or)
- Set results filters to adult, human, and English language results in the pre-established lookback period (June 30, 2024 – June 30, 2025) for recent hospice quality literature).
- Use the Advanced Search option to search in the Title and Abstract fields.

For searches that yield fewer than ten or more than 500 results, the team will either update search parameters to look in Text Word or All Fields (rather than Title or Abstract) to increase the results or revise our search terms to try and narrow the results. For this 2025 report, the results yielded less than 500 results. The team exported all results to a Zotero library, as well as into an Excel file for review

**Review identified articles.** To facilitate our review, the team used the Excel file to document relevant articles, somewhat relevant articles, and insufficiently relevant articles that the team rejected from our results. We further sorted rejected articles based on how detailed our review of each article was. Some were rejected based on the relevance of their title or abstract. Remaining articles were either kept or rejected based on a review of the full text. In addition, the team was not available to review articles for which they could not obtain the full text. Potential reasons for rejection include incorrect setting, incorrect population, or lack of specificity to the target questions. A second reviewer independently reviewed the full results. Reviewers discussed discrepancies and made final determinations.

If fewer than five articles remained after the review process, a secondary staff member would review rejected articles and consult with a subject matter expert. For this 2025 report, our search yielded a sufficient number of 20 articles after the review process.

**Identify and review grey literature.** The Abt team identified relevant grey literature by using the search terms “hospice” and “quality” in the following individual sites with a focus on healthcare or hospice:

- AARP
- Academy Health
- American Academy of Hospice and Palliative Care

- Center to Advance Palliative Care
- Hospice and Palliative Care Nurses Association
- Hospice Foundation of America
- Institute for Healthcare Improvement
- Joint Commission
- Kaiser Family Foundation
- National Academy of Medicine
- National Alliance for Care at Home (membership required)
- National Coalition for Hospice and Palliative Care
- RAND
- Robert Wood Johnson Foundation
- The Commonwealth Fund

An Abt staff member reviewed the search results within each site and compiled links relevant to hospice. Abt staff then searched these compiled links using “hospice” in the pages’ search bars for sites not specific to hospice or palliative care, or previously determined search terms for sites that are specific to hospice or palliative care. The team included any search results that otherwise complied with our pre-established search criteria in the report. A second staff member independently searched each site to ensure all relevant articles were identified.

**Review additional supplemental information.** We compiled information provided by the subject matter experts, and other interested parties (such as CMS or other HQRP staff) over the course of the year, such as news articles or papers. Abt staff reviewed these materials and incorporated relevant findings into their research questions. No supplemental materials were relevant to this year’s report.

## Appendix B. Literature Review Tables

Exhibit B-1: Recent Hospice Literature Review Table

Citation	Setting	Population	Design	Main Findings
Baugh, C. W., Ouchi, K., Bowman, J. K., Aizer, A. A., Zirulnik, A. W., Wadleigh, M., Wise, A., Remón Baranda, P., Leiter, R. E., Molyneaux, B. J., McCabe, A., Hansrivijit, P., Lally, K., Littlefield, M., Wagner, A. M., Walker, K. H., Salmasian, H., Ravvaz, K., Devlin, J. A., ... Rickerson, E. M. (2024). A hospice transitions program for patients in the emergency department. <i>JAMA Network Open</i> , 7(7). <a href="https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2820860">https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2820860</a>	Boston, tertiary care hospital	658 emergency department patients identified as eligible for hospice transitions with 96 of arrival.	Pre-post quality improvement study to improve transition from the emergency department to hospice care for eligible patients	<ul style="list-style-type: none"> <li>Intervention patients had more than 5 times the odds of enrolling in hospice care within 96 hours of their ED visit (OR 5.0; CI 3.17-2.99).</li> <li>Patients in the intervention group were more significantly more likely to use general inpatient or outpatient facility hospice, and significantly less likely to enroll in home hospice or die prior to hospice enrollment.</li> </ul>
Cagle, J. G., Zhang, P., & Clem, S. (2024). Estimating the Impact of Hospice Care on Key Patient-Family Care Outcomes Using a Nationwide U.S. Probability Sample. <i>The American journal of hospice &amp; palliative care</i> , 41(9), 978–986. <a href="https://doi.org/10.1177/10499091231218261">https://doi.org/10.1177/10499091231218261</a>	U.S. – nationally representative sample	235 adult informal caregivers (national population-based probability sample). Participants had experienced the death of a close relative or friend within the past 5 years and were involved in providing care prior to the death. Participants spoke English or Spanish.	<p>Survey data collection: conducted Spring/Summer 2015.</p> <p>Bivariate analyses tested for differences based on hospice involvement.</p> <p>Logistic regression: 6 models to evaluate linkages between hospice involvement and EOL outcomes.</p> <p>Measured outcomes: pain, home death, presence of family, access to life-prolonging care, respect for spiritual/religious beliefs, financial burden.</p>	<p>A higher proportion of respondents in the sample reported beneficial outcomes for hospice-involved deaths compared to deaths without hospice across all six outcomes.</p> <p><b>Unadjusted analyses:</b> hospice was statistically associated with better results for two outcomes (family/friends present and spiritual/religious beliefs respected).</p> <p><b>Adjusted analyses:</b> hospice users had better outcomes for presence of family/friends at death (OR=2.82, p&lt;.05) and respect for spiritual/religious beliefs (OR=9.52, p&lt;.01). Hospice utilization was not statistically significant for the other outcome models.</p> <p><b>Other findings:</b> <i>Pain:</i> Hispanic respondents and Midwest respondents had statistically significantly higher odds of reporting unnecessary pain prior to death.</p>

Citation	Setting	Population	Design	Main Findings
				<p><i>Access to life prolonging treatment:</i> Respondents who helped make decisions had much lower odds of reporting that the patient had appropriate access to life prolonging treatment.</p> <p><i>Wishes followed:</i> Older respondents and respondents who cared for a dying parent had greater odds of reporting that the decedent’s wishes were followed.</p> <p><i>Family/friends present:</i> Respondent’s older age and being married were associated with higher odds of family/friends present at death.</p> <p><i>Spiritual/religious:</i> White respondents had 5x the odds of reporting beliefs were respected.</p> <p><i>Financial burden:</i> Deaths at home and respondents with a college degree had lower odds of undue financial burden.</p>
<p>Coverdale, M. R., &amp; Murtagh, F. (2024). Destitute and dying: interventions and models of palliative and end of life care for homeless adults - a systematic review. <i>BMJ supportive &amp; palliative care</i>, 14(e3), e2411–e2422. <a href="https://doi.org/10.1136/spcare-2024-004883">https://doi.org/10.1136/spcare-2024-004883</a></p>	<p>UK, Canada, and USA</p>	<p>Nine studies. Sample sizes ranged from 3 to 150+. Five study populations primarily reported from professionals with roles including non-clinical hostel staff, palliative care doctors/nurses, social workers, and community nurses. 4 study populations focused on the care of homeless adults. All interventions/models were initiated between 2001-2021. In studies that documented homeless adult characteristics, most were of</p>	<p>Systemic review to identify strengths and gaps in the delivery of palliative and end of life care to homeless adults. PEOS (Population, Exposure, Outcome, and Study Design) framework. Excluded: case series, case reports, commentary, review/opinion pieces. Narrative synthesis conducted to organize and summarize main findings from the varied body of research.</p>	<p>Only 1 study directly focused on the experiences of a model of care from the perspective of the homeless adults involved.</p> <ul style="list-style-type: none"> <li>• Multiagency communication and collaboration enhanced the quality of palliative/EOL care provided to homeless adults and reduced care fragmentation.</li> <li>• Advocacy enhanced person-centered care for vulnerable adults experiencing homelessness. Introducing a healthcare navigator, with social work expertise, enabled SDOH to be targeted. Social worker participation in advance directive completion favorably enhanced uptake. Embedding specialist palliative care teams into hostels helped hostel staff develop</li> </ul>

Citation	Setting	Population	Design	Main Findings
		<p>white ethnicity; 2 study populations had a majority of Black homeless adults. Most homeless individuals were hostel-based.</p>		<p>awareness of social and healthcare needs of their residents.</p> <ul style="list-style-type: none"> <li>• Educational programs enhanced confidence and knowledge of hostel staff re: ethos of palliative care and how to use this within their practice. However, increased educational workload risked staff burnout. 2 interventions encouraged hostel staff to optimize their well-being through use of counselling services/psychological support.</li> <li>• Working within supportive environments improved hostel staff productivity and proactivity. Spiritual support was offered for both homeless individuals and professionals to address impact of grief and bereavement.</li> <li>• Professionals faced barriers when engaging homeless adults in EOL discussions related to concurrent addictions. Interventions were identified which overcame this struggle. Harm reduction strategies helped in caring for homeless adults with tri-morbidity. Use of trauma-informed care helped to educate professionals as to why homeless adults may maintain dependency on substances despite severity of faltering health.</li> <li>• 2 Interventions/models were cost saving, but others were time-consuming and required investment and dedication from professionals.</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Cruz-Oliver, D. M., Milner, G. E., Menseh, K., Bugayong, M., Blinka, M. D., Durkin, N., Abshire Saylor, M., Budhathoki, C., &amp; Oliver, D. P. (2024). Promising Impact of Telenovela Intervention for Caregivers of Hospice Patients: A Pilot Study. <i>The American journal of hospice &amp; palliative care</i>, 41(12), 1400–1407. <a href="https://doi.org/10.1177/10499091241228835">https://doi.org/10.1177/10499091241228835</a></p>	<p>Telehealth visits (NOVELA) for hospice family caregivers. Data collected 11/2020-3/2022.</p>	<p>59 adult hospice family caregivers (HFCGs) of hospice patients from 3 hospices in the US Mid-Atlantic region.</p>	<p>Single-group pretest-posttest study with descriptive, t-test, and chi-square statistics. HFCGs completed self-administered surveys at baseline and at final posttest score.</p>	<ul style="list-style-type: none"> <li>• Median hospice length of stay was 69 days. Average number of intervention sessions was 3.2.</li> <li>• Pre/post-test outcome scores trended toward higher self-efficacy (Cohen’s d = -0.08) and lower anxiety (Cohen’s d = 0.2) – however these outcomes are not statistically significant (both 95% confidence intervals cross 0) nor clinically significant.</li> <li>• 85.7% of HFCGs reported to be satisfied or very satisfied with the NOVELA interventions.</li> <li>• HFCGs who completed more than 2 intervention sessions had significantly higher reduction in GAD-7 scores (-1.57 vs +2.75, p=.02) and improved CaSES scores (+.08 vs -.21, p=.03).</li> </ul>
<p>David, D., Moreines, L. T., Boafu, J., Kim, P., Franzosa, E., Schulman-Green, D., Brody, A. A., &amp; Aldridge, M. D. (2025). "Who You Are and Where You Live Matters": Hospice Care in New York City During COVID-19 Perspectives on Hospice and Social Determinants: A Rapid Qualitative Analysis. <i>Journal of palliative medicine</i>, 28(1), 59–68. <a href="https://doi.org/10.1089/jpm.2024.0124">https://doi.org/10.1089/jpm.2024.0124</a></p>	<p>New York City, home hospice</p>	<p>30 hospice clinical and administrative professionals who</p>	<p>Qualitative design using semi-structured interviews</p>	<ul style="list-style-type: none"> <li>• Social determinants of health (SDOH) affect access to and delivery or equitable hospice care</li> <li>• SDOH exist and can affect the delivery of high-quality care</li> <li>• Disparities were exacerbated by the COVID-19 pandemic resulting in barriers to care.</li> <li>• Common COVID-19 barriers included: decreased enrollment, telehealth challenges contributing to deficient patient and caregiver education, nursing assistant shortages in some neighborhoods, and diminished overall quality.</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Eibner, C., Khodyakov, D., Taylor, E. A., Agniel, D., Anhang Price, R., Bandini, J., Booth, M., Burgette, L. F., Buttorff, C., Cohen, C. C., et al. (2025). <i>Evaluation of the Medicare Advantage Value-Based Insurance Design Model Test: 2020 to 2023</i>. RAND Corporation.. <a href="https://www.rand.org/pubs/external_publications/EP70904.html">https://www.rand.org/pubs/external_publications/EP70904.html</a></p>	<p>US, Medicare Advantage</p>	<p>Hospices partnering with VBID health plans and patients seen by those hospices</p>	<p>Mixed-methods analysis of the hospice benefit component of the Value-based Insurance Design Model</p>	<p>A RAND-led evaluation of the Value-Based Insurance Design Model, which allows Medicare Advantage plans to include a hospice benefit, found that agencies in areas with high Medicare Advantage penetration were willing to accept payment below the Medicare FFS rate. These hospices “invested considerable staff and resources” to implement the newly covered benefit, and had ongoing challenges in efficiently working with the health plans. The hospice benefit did not meaningfully impact hospice enrollment of length of stay. As of 2024, the hospice benefit is no longer part of the VBID Model.</p>
<p>Estell, M. H., Whitford, K. J., Ulrich, A. M., Larsen, B. E., Wood, C., Bigelow, M. L., Dockter, T. J., Schoonover, K. L., Stelpflug, A. J., Strand, J. J., Walton, M. P., &amp; Lapid, M. I. (2025). Music Therapy Intervention to Reduce Symptom Burden in Hospice Patients: A Descriptive Study. <i>The American journal of hospice &amp; palliative care</i>, 42(1), 102–111. <a href="https://doi.org/10.1177/10499091241237991">https://doi.org/10.1177/10499091241237991</a></p>	<p>Mayo Clinic Hospice Program, 05/2018-03/2022. Care primarily provided at home.</p>	<p>18 hospice patients enrolled in the Mayo Clinic Hospice Program from 05/2018-03/2022</p>	<p>Prospective cohort study of hospice patients who received music therapy (MT) interventions. Outcomes evaluated pre- and post-intervention using measures of pain, depression, anxiety, and quality of life (QOL). Assessed caregiver stress and quality of life. Used multiple outcome measure tools including Edmonton Symptom Assessment Scale-revised (ESAS-r), Linear Analogue Self-Assessment (LASA), Patient Health Questionnaire (PHQ)-4, and Music Therapy Program Survey.</p>	<ul style="list-style-type: none"> <li>• Post-intervention mean ESAS-r score was 6.8 points lower than pre-MT survey, indicating lower distress.</li> <li>• Participant LASA scores rose, indicating better QOL (pre-MT mean 5.2, post-MT mean 6.4).</li> <li>• Patient satisfaction with MT treatment was overall positive. Patients described the treatment as beneficial for stress relief, relaxation, spiritual support, emotional support, and generally feeling well.</li> <li>• Mean caregiver QOL was lower at week 3 follow-up (CG-LASA 5.2) compared with pre-MT (CG-LASA 6.4). Caregivers’ mental, physical, emotional, social, spiritual, pain frequency, and pain severity scores were lower at the end of the study. However, caregiver fatigue and perceived support from family and friends were higher.</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Feder, S. L., Han, L., Zhan, Y., Abel, E. A., Akgün, K. M., Fried, T., Ersek, M., &amp; Redeker, N. S. (2024). Use of Hospice and End-of-Life Care Quality Among Medical Centers with High Versus Lower Specialist Palliative Care Reach Among People with Heart Failure: An Observational Study. <i>Journal of palliative medicine</i>, 27(12), 1583–1590. <a href="https://doi.org/10.1089/jpm.2024.0182">https://doi.org/10.1089/jpm.2024.0182</a></p>	<p>US, inpatient hospice, Veteran’s Affairs Medical Centers (VAMCs)</p>	<p>3681 people with advanced health failure who dies in one of 83 VAMCs</p>	<p>Retrospective cohort study</p>	<ul style="list-style-type: none"> <li>• In VAMCs with the highest rates of palliative care consultations (the top 20% of VAMCs), patients were more likely to rate their end-of-life care as “Excellent” on the Bereaved Family Survey Performance Measure (0.69 v 0.060; p=0.04) than patients who died in VAMCs with lower rates. There was no difference in patient ratings of inpatient hospice care (0.56 v 0.51; -=0.32).</li> <li>• High rates of palliative care consultation, receipt of palliative care, and death and in patient were significantly associated with receipt of palliative care (p=0.001)</li> <li>• Rates of inpatient hospice were higher for those who received palliative in all VAMCs.</li> </ul>
<p>Fromme, E. K., Tjia, J., Clayton, M. F., Duodu, V., Puerto, G., Troiani, F., &amp; DeSanto-Madeya, S. (2025). Human-Centered Design Development and Acceptability Testing of a Goal Concordant Prescribing Program in Hospice. <i>Journal of palliative medicine</i>, 28(5), 624–631. <a href="https://doi.org/10.1089/jpm.2024.0149">https://doi.org/10.1089/jpm.2024.0149</a></p>	<p>A not-for-profit hospice in Massachusetts</p>	<p><b>Development:</b> 5 active hospice clinicians for review.  <b>Implementation:</b> convenience sample of licensed hospice clinicians at a single not-for-profit hospice in MA. Included NPs, all nursing staff, and executive staff (ED, Dir SW, Clin Dir)</p> <p>Two-day, in-person training had 17 participants (9 hospice nurses, 2 APRNs, 3 Directors, 3 SWs)</p>	<p>Iterative development and acceptability testing of a structured, interdisciplinary approach to goal concordant prescribing (GCP). Started with a previously developed curriculum then reviewed, aligned, and simplified. Acceptability was tested with nursing and social work staff at a not-for-profit hospice. Collected written and verbal reflections (unstructured open-ended questions) after each session about the overall training and tools, and evaluations of specific training components. Content analytic approach to</p>	<ul style="list-style-type: none"> <li>• Positive responses to the first session of acceptability testing led hospice leadership to request the inclusion of all front-line social workers for Session 2.</li> <li>• Participants found the GCP toolkit and training useful. Participants noted that the structured and simplified approach of “review, align, simplify” would help facilitate conversations without adding to or changing their workflow. Social workers could play a key role in difficult conversations.</li> <li>• Goal Assessment and Prioritization (GAP) tool received most enthusiastic reception. Participants felt GAP would add value to their current practice. Attending physicians might be more likely to approve medication</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Gandhi, P., Williams, K. M., &amp; Ramchand, R. (2024). <i>Perspectives of America's military and veteran caregivers: A qualitative exploration (RR-A3212-3)</i>. RAND Corporation. <a href="https://www.rand.org/pubs/research_reports/RR-A3212-3.html">https://www.rand.org/pubs/research_reports/RR-A3212-3.html</a></p>	<p>US, home</p>	<p>38 military and veteran caregivers</p>	<p>evaluate written and verbal feedback. Qualitative exploration using caregiver interviews</p>	<p>change recommendations if framed in the context of patients' priorities. Three caregivers reference hospice care. One noted that hospice services were able to provide services on the same day the patient requested a referral from their physician. One described the respite care hospice provided, as patient was returned more heavily medicated than prior to the respite stay. One noted the comprehensiveness of hospice educational materials and wished all providers provided such materials.</p>
<p>Guo, W., Temkin-Greener, H., &amp; McGarry, B. E. (2024). Hospice providers serving assisted living residents: Association of higher volume with lower quality. <i>Journal of the American Geriatrics Society</i>, 72(8), 2483–2490. <a href="https://doi.org/10.1111/jgs.18883">https://doi.org/10.1111/jgs.18883</a></p>	<p>Hospices that serve assisted-living (AL) facility patients</p>	<p>2877 hospices from 499 counties</p>	<p>Cross-sectional study. Linear-probability models adjusting for county fixed effects. <b>Outcome variables:</b> HIS quality measures (assessment of treatment preferences, assessment of beliefs and values, pain screening, pain assessment, dyspnea screening, dyspnea treatment, opioid patients receiving a bowel regimen, composite, visits when death is imminent) and Hospice CAHPS top box scores (emotional and spiritual support, rating of the hospice, willingness to recommend, feeling respected, pain and symptom management, team communication, hospice providing timely</p>	<p><b>Descriptive:</b></p> <ul style="list-style-type: none"> <li>Hospices with higher AL volumes were more likely to have lower daily census (76.6% vs 82.3%), more likely to be for-profit (63.5% vs 54.3%), and more likely to have lower average CAHPS scores (55.2% vs 65.6%) and HIS composite scores (45.3% vs 53.4%).</li> <li>Providers with higher AL volumes had lower CAHPS scores on specific measures: pain and symptom management (41.5% vs 60.9%), team communication (39.3% vs 59.8%), and training family members to provide care (35% vs 59.4%).</li> <li>Higher AL volume hospices had somewhat lower scores on HIS measures: assessment of beliefs and values (41.7% vs 47.6%), pain assessment (48.6% vs 55.4%), and dyspnea treatment (47.4% vs 54.9%).</li> </ul> <p><b>Multivariate:</b></p>

Citation	Setting	Population	Design	Main Findings
			<p>help, training family members to care for patients), also average CAHPS score</p> <p><b>Independent variables:</b> Volume of AL patients (high vs low)</p> <p><b>Covariates:</b> hospice ownership, average daily census (large vs small), county-level fixed effects</p>	<ul style="list-style-type: none"> <li>• After controlling for profit status and size, higher AL-volume hospices were 5 percentage points less likely to have CAHPS scores above the national average (95% CI = -0.09, -0.00). For-profit providers were 8 percentage points less likely to have higher CAHPS scores (95% CI = -.13, -0.04).</li> <li>• Higher AL-volume hospices were 7 percentage points less likely to have high HIS composite scores (95% CI -0.11, -0.02) and for-profit providers were 6 percentage points less likely to have high HIS composite scores (95% CI -0.11, -0.01).</li> <li>• Higher AL-volume hospices were 7 percentage points less likely to have high scores for pain assessment (CI -0.12, -0.02) and dyspnea treatment (CI -0.12, -0.02).</li> <li>• Higher AL-volume hospices had lower CAHPS scores for team communication (<math>\beta</math>=-0.08) and training of family members (<math>\beta</math>=-0.09).</li> <li>• However, hospices with higher AL volumes were rated higher on emotional support (<math>\beta</math>=0.07).</li> <li>• Low-AL volume providers tended to serve more patients residing at home (64.87% vs 50.57%).</li> <li>• Stronger, statistically significant association between AL volume and quality among nonprofit agencies.</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Gupta, E., &amp; Patel, P. (2024). Palliative care in dementia. <i>Annals of palliative medicine</i>, 13(4), 791–807. <a href="https://doi.org/10.21037/apm-23-503">https://doi.org/10.21037/apm-23-503</a></p>	<p>U.S.</p>	<p>Articles (number unknown) identified by searching PubMed, EBSCO, and Google Scholar (1980-present) using search terms: dementia, palliative care, advanced dementia, hospice care, geriatrics, end-of-life, decision making, advanced care, capacity evaluation, nutrition, infections, pain management, dyspnea, delirium, de-prescribing, and spiritual care.</p>	<p>Review article highlighting the patient-centered approach to treat symptoms and dementia patients' needs to improve quality of life.</p>	<ul style="list-style-type: none"> <li>• Holmerova et al. in their Best Practice Statement for Dementia offered a learning framework for physicians, dividing care of dementia patients into: protect basic rights of the patient, promote dignity with inclusion, plan for future, manage and appropriately treat symptoms, live the best possible life, provide support for friends and family and provide palliative care practice in advanced dementia. Hospice care misses opportunities in care provided to patients with dementia. Gaps in care are complicated by poor communication during the last years of life, and the difficulty of prognosticating the decline in these patients. People with dementia need extensive care for a long period of time before they die.</li> <li>• Factors associated with higher hospice enrollment include older age, women, patients with higher education, more severe cognitive impairment, more decline in instrumental activities of daily living (IADLs).</li> <li>• African American and Hispanic populations with dementia more commonly have ED visits and hospitalization after hospice enrollment, are less likely to complete advance directives, and prefer choosing all care possible to prolong life.</li> <li>• A Cochrane systematic review in 2009 (Sampson et al) showed no evidence that enteral tube feeding prolongs life, improves</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<p>quality of life, or leads to better nutrition or decreased risk of pressure sores.</p> <ul style="list-style-type: none"> <li>• Spiritual care can help patients with dementia fulfill meaning in life.</li> </ul>
<p>Hoch, B. J., Hauschildt, M., Palmer, L. M., &amp; Christensen, S. S. (2024). Elevating end-of-life care: Implementing general inpatient hospice services on a medical oncology unit. <i>Clinical Journal of Oncology Nursing</i>, 28(5), 544–550. <a href="https://doi.org/10.1188/24.CJON.544-550">https://doi.org/10.1188/24.CJON.544-550</a></p>	<p>Utah, Inpatient hospice</p>	<p>Medical staff and providers of a medical oncology unit with 3 general inpatient hospice beds</p>	<p>Quality improvement project using comparative analysis or pre- post survey</p> <p>The intervention Training staff and implementing clinical pathway focused on patient qualifications for Hospice care, approaches to pain treatment and sedation, awareness of death anxiety, and communicating with dying patients and their loved ones was found</p>	<p>Users found the intervention useful and comparative analysis found the training improved:</p> <ul style="list-style-type: none"> <li>• competencies for admitting patients for inpatient hospice (<math>p &lt; 0.01</math>, <math>r = 0.43</math>),</li> <li>• finding EOL care resources (<math>p &lt; 0.01</math>, <math>r = 0.51</math>),</li> <li>• escalating symptom management (<math>p &lt; 0.01</math>, <math>r = 0.45</math>), and</li> <li>• communicating with patients who are dying (<math>p &lt; 0.01</math>, <math>r = 0.37</math>) and their loved ones (<math>p &lt; 0.01</math>, <math>r = 0.33</math>).</li> </ul> <p>Participants also felt more comfortable:</p> <ul style="list-style-type: none"> <li>• setting up a patient-controlled analgesia pump (<math>p &lt; 0.01</math>, <math>r = 0.28</math>),</li> <li>• setting up continuous medication drips (<math>p &lt; 0.01</math>, <math>r = 0.28</math>), and</li> <li>• withdrawing life-sustaining treatments (<math>p &lt; 0.01</math>, <math>r = 0.26</math>).</li> </ul>
<p>Hospice Foundation of America. (2025, April 30). <i>Improving dying</i>. <a href="https://hospicefoundation.org/improving-dying-programs/">https://hospicefoundation.org/improving-dying-programs/</a></p>	<p>US. Hospice</p>	<p>6 hospices offering innovative programs to hospice patients and the bereaved</p>	<p>Video summaries of innovative hospice approaches</p>	<ul style="list-style-type: none"> <li>• A Georgia hospice uses Oculus virtual reality headsets to support patients (for example, by allowing patients “travel” someplace they have always wanted to go) and to offer “meditative comfort” to the bereaved.</li> <li>• A Maryland hospice provider offers up to 10 individual grief counseling sessions to</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<p>loved ones who died in their care, and created a grief and wellness center open to entire community.</p> <ul style="list-style-type: none"> <li>• A Kentucky hospice offers a comfort care home that accepts hospice-eligible patients without a home or available home caregivers.</li> <li>• An Oregon hospice helps patients continue caring for their pets at the end-of-life (e.g., facilitating vet visits or providing pet food when needed), and offers pet therapy to hospice patients and the bereaved.</li> <li>• A New York hospice makes occupational, physical, speech, and respiratory therapists as well as dieticians widely available to their patients.</li> <li>• A Connecticut hospice employs board certified art and music therapists to support reminiscing in ways that bring comfort to both hospice patients and the bereaved.</li> </ul>
<p>Hotchkiss, J., Ridderman, E., &amp; Hotchkiss, B. (2024). Caregiver and Employee Experience Among Big Hospices-Ranking of the Largest US Hospices by Three Quality Indicators. <i>The American journal of hospice &amp; palliative care</i>, 41(9), 987–1001.  <a href="https://doi.org/10.1177/10499091231206481">https://doi.org/10.1177/10499091231206481</a></p>	<p>US, hospice</p>	<p>50 largest US hospices</p>	<p>Retrospective mixed methods of natural language processing (NLP) sentiment analysis (of 3,389 Google and Yelp reviews) and multivariate regression analysis to compare overall user experience between non-profit and for-profit hospices.            Measures:            CAHPS composite, CAHPS Star Rating, Review (Google/Yelp) Star Rating,</p>	<ul style="list-style-type: none"> <li>• The top 10 hospices for overall quality were all non-profits. 8 of 10 were small in market share (0.22-0.43%), while 2 were medium market share.</li> <li>• Among the 10 lowest overall quality, 5 were very large (0.82%-4.26%).</li> <li>• Larger hospices and for-profit hospices were associated with lower caregiver and employee satisfaction (<math>r=0.862</math>, <math>p&lt;0.001</math>).</li> <li>• CAHPS Composite was negatively correlated with profit status (<math>r=-0.506</math>, <math>p&lt;0.001</math>) and market share (<math>r=-0.410</math>, <math>p&lt;01</math>).</li> </ul>

Citation	Setting	Population	Design	Main Findings
			<p>Caregiver Sentiment, Emotional Intensity, Glassdoor Composite (employee satisfaction metric), Hospice Quality Index (constructed for overall hospice quality: 60% CAHPS, 20% caregiver sentiment, 20% Glassdoor Rating)</p>	<ul style="list-style-type: none"> <li>• Caregiver Sentiment and CAHPS Composite were so highly correlated (<math>r=0.862</math>, <math>p&lt;0.001</math>) that they appear to measure the same construct.</li> <li>• Similarly, Caregiver Sentiment and CAHPS Rating (<math>r=0.772</math>), Review Star Rating and CAHPS Composite (<math>r=0.725</math>), and Review Star Rating and CAHPS Rating (<math>r=0.718</math>) seemed to be converging towards the construct of “caregiver satisfaction.”</li> <li>• Review Star Rating explained 52.5% of the variance in CAHPS Composite. Glassdoor Composite explained 22.4% of the variance in CAHPS Composite. The combined effect of profit status, market share, and Caregiver Sentiment explained 82.1% of the variance in CAHPS Composite.</li> <li>• Caregiver Sentiment and Review Star Rating predicted CAHPS Composite with statistical significance.</li> <li>• CAHPS scores were generally significantly higher for non-profits than CMS published norms. Nearly all for-profit CAHPS scores were lower than published norms.</li> <li>• CAHPS Star Rating was significantly higher than Google/Yelp Review Star Rating. For-profit hospices had significantly higher overall Emotional Intensity scores than non-profits. Lack of staffing was more frequent among for-profits (13%) than non-profits (6%).</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Kaufman, B. G., Woolson, S., Stanwyck, C., Burns, M., Dennis, P., Ma, J., Feder, S., Thorpe, J. M., Hastings, S. N., Bekelman, D. B., &amp; Van Houtven, C. H. (2024). Veterans' use of inpatient and outpatient palliative care: The national landscape. <i>Journal of the American Geriatrics Society</i>, 72(11), 3385–3397.  <a href="https://doi.org/10.1111/jgs.19141">https://doi.org/10.1111/jgs.19141</a></p>	<p>Veterans Health Administration (VA)</p>	<p>120,249 Veterans with VA palliative care from 2014-2017.</p>	<p>Multivariate logistic regression analysis. Compared veteran characteristics and hospice use across care setting (inpatient vs outpatient) and dose (number of palliative care encounters). Used VA and Medicare administrative data (2014-2017) to describe veteran demographics, SES, life-limiting conditions, frailty, and palliative care utilization. Specialty palliative care encounters identified using VA Corporate Data Warehouse clinic stop codes and current procedural terminology codes.</p>	<ul style="list-style-type: none"> <li>• Outpatient palliative care users were less likely to have had hospice use before palliative care (9% vs 18%) and were more likely to have only one palliative care encounter (25% vs 69%).</li> <li>• Duration of hospice use was similar between care settings (inpatient median=37 days, outpatient median=44 days), but was shorter among those with only one palliative care encounter (median=18 days).</li> </ul>
<p>Klaiman, T., Steckel, J., Hearn, C., Diana, A., Ferrell, W. J., Emanuel, E. J., Navathe, A. S., &amp; Parikh, R. B. (2024). Hospice Administrators' and Providers' Perspectives on Providing Upstream Palliative Care: Facilitators, Barriers, and Policy Prescriptions. <i>Journal of palliative medicine</i>, 27(10), 1359–1367.  <a href="https://doi.org/10.1089/jpm.2024.0138">https://doi.org/10.1089/jpm.2024.0138</a></p>	<p>States that participate in Medicare Advantage's value-based insurance design (VBID) Model.</p>	<p>23 hospice administrators and clinicians from 12 organizations in 8 states (March-August 2022)</p>	<p>Key informant qualitative study. Semi-structured interviews using snowball and purposive sampling.</p>	<p>All respondents were supportive of seriously ill patients having earlier access to palliative care.</p> <p><b>Benefits</b></p> <ul style="list-style-type: none"> <li>• Benefits of early access to palliative care included goals of care discussions, psychosocial support, education, nutrition, occupational therapy, symptom management, care coordination, spiritual services, DME services, PT, transportation, and grief/bereavement support for loved ones.</li> <li>• Respondents highlighted benefits of community-based palliative care, such as increased quality of life, better symptom</li> </ul>



Citation	Setting	Population	Design	Main Findings
				<p>management, increased access to care, and/or reduced health care spending.</p> <ul style="list-style-type: none"><li>• Early access to palliative care often allowed for seamless transition to hospice, facilitated by the relationships formed with the palliative care team.</li></ul> <p><b>Barriers</b></p> <ul style="list-style-type: none"><li>• Staffing challenges: Widespread staffing shortages persist in the industry, particularly since the COVID-19 pandemic. Respondents sometimes lacked resources to employ key team members or provide the number of visits desired.</li><li>• Reimbursement challenges: Medicare benefits do not cover the quantity or quality of each service that hospice clinicians wished to offer. Partnerships with or referrals to other organizations often required patients to have extensive resources (private pay). Organizations may have FFS or Per-member per-month payment arrangements. One respondent reported not billing social work services because the documentation and effort was too substantial.</li><li>• Payers: payers are influential in setting palliative care eligibility and quality standards. Respondents desired payers to be more engaged in identifying palliative eligible patients and communicating eligibility to patients.</li><li>• Payer delivery of palliative care: Respondents were skeptical about a trend</li></ul>

Citation	Setting	Population	Design	Main Findings
				<p>of payers/for-profit entities serving as direct providers of palliative care. Maximizing profits could come at the expense of individualized patient care, clinician decision making, or ethics.</p> <p><b>Facilitators to upstream palliative care</b></p> <ul style="list-style-type: none"> <li>• Staff training: some organizations provided additional training to staff and implemented training within local hospitals.</li> <li>• Reimbursement policy changes: Many respondents desired a standardized definition of palliative care to codify treatment and enable greater reimbursements.</li> <li>• Telehealth: tele-palliative care may be a reimbursable alternative to address some of the challenges of patients needing to leave their homes.</li> <li>• Referrals: Respondents liked the idea of routine referrals initiated by objective measures to increase awareness of and access to palliative care.</li> </ul>
<p>Kwon, Y., Hu, X., Shi, K. S., Zhao, J., Jiang, C., Fan, Q., Han, X., Zheng, Z., Warren, J. L., &amp; Yabroff, K. R. (2025). Contemporary Patterns of End-of-Life Care Among Medicare Beneficiaries With Advanced Cancer. <i>JAMA health forum</i>, 6(2), e245436.  <a href="https://doi.org/10.1001/jamahealthforum.2024.5436">https://doi.org/10.1001/jamahealthforum.2024.5436</a></p>	<p>US, end-of-life care</p>	<p>33,744 FFS Medicare decedents age 66+ who died 2014-2019 and were originally diagnosed with distant-stage breast, prostate, pancreatic, or lung cancers.</p>	<p>Retrospective cohort study. Linked Surveillance, Epidemiology, and End Results and Medicare data. Outcomes: monthly use of acute care, systemic therapy, supportive care in last 6 months of life, potentially aggressive care in the last 30 days of life (&gt;1 acute care visit, in-hospital mortality, late receipt of</p>	<p><b>Trends in last 6 months of life</b></p> <ul style="list-style-type: none"> <li>• From 6 months before death to the month of death, there was an increase in the mean number of acute care visits (from 14.0 to 46.2 per 100 person-months) and ED visits (from 18.7 to 49.2 per 100 person-months), as well as an increase in supportive care such as hospice use (from 6.6 to 73.5 per 100 person-months), palliative care (from 2.6 to 26.1 per 100 person-months), and advanced care</li> </ul>

Citation	Setting	Population	Design	Main Findings
			<p>systemic therapy, or hospice entry).</p> <p>Covariates: demographic variables, cancer type, duration of survival, area-level variables.</p>	<p>planning (from 1.7 to 12.8 per 100 person months).</p> <ul style="list-style-type: none"> <li>• Mean receipt of systemic therapies decreased during the same time period (from 53.7 to 22.0 per 100 person-months).</li> </ul> <p><b>Palliative care trends</b></p> <ul style="list-style-type: none"> <li>• Roughly ¼ of the sample received any palliative care in the last 6 months of life. Use of palliative care increased over time (from 21% in 2014 to 35% in 2019).</li> <li>• Patients who were older, non-Hispanic white, lower SES quintiles, or had longer survival durations were less likely to receive any palliative care.</li> </ul> <p><b>Potentially aggressive care</b></p> <ul style="list-style-type: none"> <li>• 45% of decedents experienced an indicator of potentially aggressive care, driven by ICU visits. Potentially aggressive care prevalence was stable across the study period.</li> <li>• In adjusted models, patients were less likely to receive potentially aggressive care if they had prostate cancer (-4.98 percentage points, CI [-7.17, -2.19]) or pancreatic cancer (-8.29 percentage points, CI [-10.06,-6.52]).</li> <li>• Patients who lived 6+ months after diagnosis, were female, older, or unmarried were significantly less likely to receive potentially aggressive care.</li> <li>• Non-Hispanic Black patients and patients with greater comorbidity were more likely to receive potentially aggressive care.</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Lehto, R. H., Patano, A., Alanazi, M., Bente, G., Mason, A., Caldwell, G., Goldstein, D., &amp; Wyatt, G. (2024). Evaluation of a nature-based virtual reality intervention to support hospice caregivers: A pilot feasibility study. <i>BMJ Supportive &amp; Palliative Care</i>, 15(2), 249–255. <a href="https://doi.org/10.1136/spcare-2024-005087">https://doi.org/10.1136/spcare-2024-005087</a></p>	<p>Midwest, US, home hospice</p>	<p>15 Adult, unpaid Caregivers recruited from a statewide hospice service</p>	<p>Feasibility pilot study using Pre- postsurvey design.</p>	<ul style="list-style-type: none"> <li>• Descriptive analyses found that using an immersive VR nature experience to provide respite to caregivers was both feasible and acceptable, with few adverse symptoms (such as headache or dizziness reported).</li> <li>• The Feasibility of Intervention measure 13.93 and the Acceptability of Intervention measure was 14.46, out of 16, where a higher score indicates higher feasibility/acceptability.</li> <li>• The intervention also improved quality of life and lowered anxiety. The PROMIS-9 overall score significantly decreased (66.33 to 61.07; <math>p = 0.10</math>) as did the anxiety subscale (9.07 – 7.13; <math>p = 0.027</math>)</li> </ul>
<p>Longcoy, L. H., Longcoy, J., Tai, C. Y., Doorenbos, A. Z., &amp; Beckstead, J. W. (2024). Measurement Invariance of the Hospice Quality of Life Index-14 in Lung Cancer and Nonlung Cancer Patients Admitted to Hospice. <i>Journal of nursing measurement</i>, 32(3), 371–381. <a href="https://doi.org/10.1891/JNM-2022-0110">https://doi.org/10.1891/JNM-2022-0110</a></p>	<p>US, Southeast</p>	<p>424 participants at 2 hospice agencies (age 18+, cancer diagnosis, have a primary caregiver who assisted the patient 4+ hours each day, read/understand English, able to pass mental status screening)</p>	<p>Confirmatory factor analyses to test configural, metric, and scalar invariance of Hospice Quality of Life Index-14 (HQLI-14). Secondary data analysis.</p>	<p><b>Configural and Metric Invariance</b></p> <ul style="list-style-type: none"> <li>• 7 models used to test MI. Model 2 served as the baseline for comparing more restrictive models. Similarity of model fit indices confirmed configural invariance of HQLI-14.</li> <li>• Likelihood-ratio tests revealed that Model 3 fit equally well compared with baseline (Model 2), supporting the HQLI-14 having consistent construct validity for lung cancer and nonlung cancer patients.</li> </ul> <p><b>Scalar Invariance</b></p> <ul style="list-style-type: none"> <li>• Scalar invariance did not hold. One or more of the items were variant across groups. Team identified 1 potentially problematic item: “how breathless do you feel?” After adjusting for this item, HQLI-14 met partial scalar invariance.</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<ul style="list-style-type: none"> <li>• These tests provided favorable evidence of metric invariance of metric invariance and partial scalar invariance. Only slight differences between groups were observed in the subscales of psychophysiological well-being (<math>t=-0.09</math>, <math>p&gt;0.05</math>), functional well-being (<math>t=-0.38</math>, <math>p&gt;0.05</math>), and social/spiritual well-being (<math>t=-0.11</math>, <math>p&gt;0.05</math>).</li> </ul>
<p>Mauck E. E. (2024). An Operational Definition of End-of-Life Healthcare: A Complex and Subjective Construct. <i>Omega</i>, 89(3), 954–966. <a href="https://doi.org/10.1177/00302228221086058">https://doi.org/10.1177/00302228221086058</a></p>	<p>Tennessee (10/15/2019-4/23/2020)</p>	<p>19 participants, including end-of-life healthcare experts and TN legislators. Non-probability sample; purposive sampling. Tier 1 experts (n=10): experts in hospice, palliative, and geriatric medicine; other experts with extensive knowledge of end-of-life healthcare. Tier 2 (n=9): legislators from the health committees of the TN House of Representatives (n=5) and TN Senate (n=4).</p>	<p>Qualitative. Semi-structured interviews to examine the perceived quality of end-of-life healthcare in Tennessee.</p>	<p>Concepts within interview responses included: a diagnosis, a timeframe, type of care, location of care, and planning for the future.</p> <p>Tier 1 interviews were more likely to give a clinical answer.</p> <ul style="list-style-type: none"> <li>• Diagnosis: A life-ending or terminal diagnosis from a doctor. Timeframe</li> <li>• Timeframe: Typically described as referring to a prognosis of 6 months or less to live, though one respondent explained it as either the last 2 years or last 2 weeks of someone’s life.</li> <li>• Type of care: Hospice care, palliative care, and/or continued treatment</li> <li>• Location: Different places at different stages during end of life</li> <li>• Planning for future: Discussions around goals of care, advance directives or living wills, making one’s wishes known, whether patient values quality of life or quantity of life.</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<p>Tier 2 interviews were more likely to share a personal experience .</p> <p>The concepts identified were open to interpretation and there is ambiguity. Determining a timeframe for end-of-life healthcare was the most difficult of the five concepts to specify.</p>
<p>Murali, K. P., Gogineni, S., Bullock, K., McDonald, M., Sadarangani, T., Schulman-Green, D., &amp; Brody, A. A. (2025). Interventions and Predictors of Transition to Hospice for People Living With Dementia: An Integrative Review. <i>The Gerontologist</i>, 65(5), gnaf046. <a href="https://doi.org/10.1093/geront/gnaf046">https://doi.org/10.1093/geront/gnaf046</a></p>	<p>US</p>	<p>14 articles</p>	<p>Secondary review. Integrative review methodology, 5 databases searched for articles between 2000-2023.</p>	<p><b>Hospice Transitions Interventions</b></p> <ul style="list-style-type: none"> <li>• Three interventions included a primary/secondary focus on the person living with dementia and/or their caregivers: Connect-Home Alzheimer’s Disease and related dementias (ADRD); video-assisted advance care planning (ACP); triggered palliative care for late-stage dementia.</li> <li>• Connect Home ADRD intervention was deemed feasible and acceptable but had limited sample size.</li> <li>• Video-assisted ACP intervention showed modest reduction in the number of hospital transfers in the last 90 days of life.</li> <li>• Pilot RCT examining the impact of dementia-specific palliative care for advanced/late-stage dementia found participants were likely to have increased communication and conversations about prognosis and decisions related to late-stage dementia.</li> <li>• Qualitative study developed a preliminary hospice transitions checklist.</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<ul style="list-style-type: none"> <li>• Evidence suggests that intervention development in the area of hospice transitions for persons living with dementia is limited. The existing interventions were moderate/high quality.</li> </ul> <p>Predictors of transitions to hospice for people with dementia</p> <ul style="list-style-type: none"> <li>• Palliative care integration: receiving palliative care in the hospital and nursing home setting was associated with hospice transition for persons living with dementia.</li> <li>• Clinical condition: persons living with dementia who experienced serious or critical illness with declining cognitive and physical functioning with multiple chronic conditions led more frequently to transitions to hospice care.</li> <li>• Escalation of care to the care unit was associated with hospice transitions.</li> <li>• The presence of comfort-focused care orders was not associated with hospice transition.</li> <li>• Sociodemographic characteristics: People living with dementia (PLWD) on Medicaid had a significant association with hospice use. Utilization of hospice among minoritized groups was low.</li> <li>• Caregiver burden: Caregivers with high levels of emotional difficulty and burden with assisting PLWD were 5.89 times more likely to use hospice.</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Niedzwiecki, M. J., Forrow, L. V., Gellar, J., Pohl, R. V., Chen, A., Miescier, L., &amp; Kranker, K. (2024). The Medicare Care Choices Model was associated with reductions in disparities in the use of hospice care for Medicare beneficiaries with terminal illness. <i>Health services research, 59</i>(4), e14289. <a href="https://doi.org/10.1111/1475-6773.14289">https://doi.org/10.1111/1475-6773.14289</a></p>	<p>US, hospice</p>	<p>All terminally ill Medicare Fee-for-service beneficiaries nationwide (Medicare claims and enrollment data from 2013-2021)</p>	<p>Matched comparison group to estimate subgroup-specific effects on hospice use, days at home, and aggressive treatment and multiple ED visits in the last 30 days of life.</p>	<ul style="list-style-type: none"> <li>• Underserved groups (racial and ethnic minority, dually eligible, and rural beneficiaries) were underrepresented in the Medicare Care Choices Model (MCCM).</li> <li>• Most MCCM enrollees (83%) transitioned to hospice, 3% left the model without choosing hospice, 13% stayed in the model until their death. Enrollees who transitioned to hospice were more likely to be non-Hispanic White and to have cancer, and less likely to be dually eligible and to have congestive heart failure and chronic obstructive pulmonary disease..</li> <li>• MCCM increased enrollees' hospice use and the number of days at home and reduced aggressive treatment among all subgroups analyzed.</li> <li>• MCCM reduced disparities in hospice use by race and ethnicity by 4.1 percentage points (90% CI [1.3-6.1]), representing a 32% reduction in the size of the disparity. Bayesian analyses estimated a 98% probability that MCCM reduced this disparity.</li> <li>• MCCM increased the percentage of enrollees among racial/ethnic minorities who did not have aggressive treatment in the last 30 days of life (+13.6pp; 90% CI [10.4-15.8]); however MCCM increased the percentage of non-Hispanic White</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<p>enrollees who did not have aggressive treatment in the last 30 days of life by even more (+15.7pp; 90% CI [14.2-17.3]).</p> <ul style="list-style-type: none"> <li>• 92% probability that MCCM reduced disparities in hospice use by dual eligibility by 2.4 percentage points (90% CI [0.1-2.7]), representing a 20% reduction in the disparity</li> <li>• 95% probability that the dual-eligibility status disparity in aggressive treatments at the end of life increased, driven by the model having smaller impacts for dually-eligible enrollees than Medicare-only enrollees.</li> <li>• Rurality: 94% probability that MCCM reduced disparity in the likelihood of having multiple emergency department visits in the last 30 days of life. Estimated size of reduction 1.3pp (90% CI [-0.1-2.7pp]), representing a 25% disparity reduction. MCCM reduced the outcome more for rural enrollees than for non-rural enrollees.</li> </ul>
<p>Oswalt, C. J., Nakatani, M. M., Troy, J., Wolf, S., Locke, S. C., &amp; LeBlanc, T. W. (2024). Timing of Palliative Care Consultation Impacts End of Life Care Outcomes in Metastatic Non-Small Cell Lung Cancer. <i>Journal of pain and symptom management</i>, 68(4), e325–e332. <a href="https://doi.org/10.1016/j.jpainsymman.2024.07.008">https://doi.org/10.1016/j.jpainsymman.2024.07.008</a></p>	<p>US, Duke University</p>	<p>152 Patients with metastatic non-small cell lung cancer (mNSCLC) who initiated first-line treatment with chemotherapy, immunotherapy, or combined chemotherapy at Duke University between 03/2015-07/2019.</p>	<p>Retrospective review. Data from Duke Tumor Registry used to identify eligible patients. Assessed whether patients received aggressive end-of-life (EOL) care (defined as cancer-directed therapy, 1+ ED visit, or 1+ hospital admission within last 30 days of life), hospice entry</p>	<ul style="list-style-type: none"> <li>• Over half (53%) of patients never saw palliative care (PC) specialists.</li> <li>• Among patients who saw PC: 31% were seen within 2 months of diagnosis (early), 33% were seen 2-6 months after diagnosis (intermediate), and 36% after 6 months (late).</li> <li>• Among patients who saw PC: 25% only saw inpatient PC, 28% saw PC 1-2 times,</li> </ul>

Citation	Setting	Population	Design	Main Findings
			<p>within last 3 days of life, or in-hospital death. Chi-squared or Fisher's exact tests for categorical variables; Wilcoxon rank-sum tests used for continuous variables.</p>	<p>and 47% saw PC 3+ times. (Patients who saw both inpatient and outpatient PC were included in the outpatient group).</p> <ul style="list-style-type: none"> <li>• 110 (72.4%) patients were deceased at data cutoff. Median survival = 18 months.</li> <li>• Of decedents, 59% enrolled in hospice. 78.5% of those received hospice care at home, and 21.5% received inpatient hospice care.</li> <li>• Of 72 PC referrals, 70.8% were proactive, 13.9% were EOL referrals, and 13.9% were through clinical trials.</li> <li>• Patients who received early PC had longer median time on hospice (35 days vs 11 days for intermediate vs 18 days for late), had lower rates of aggressive EOL care (43%), and experienced less frequent in-hospital deaths (14%) compared to other groups. However, none of these outcomes had statistical significance.</li> </ul>
<p>Park, T., Phongtankuel, V., Blinka, M. D., Silva, M., &amp; Cruz-Oliver, D. M. (2024). Understanding the home hospice experience of Puerto Rican caregivers. <i>Annals of palliative medicine</i>, 13(6), 1401–1408. <a href="https://doi.org/10.21037/apm-24-24">https://doi.org/10.21037/apm-24-24</a></p>	<p>Puerto Rico, home hospice care</p>	<p>8 Puerto Rican (PR) caregivers of Medicare beneficiaries who received home hospice care from 2 hospice organizations in Puerto Rico. Caregivers were 18+ years old, spoke English and/or Spanish, and identified as Hispanic.</p>	<p>Qualitative interviews. Spanish-speaking researcher contacted and screened participants. One-time virtual (Zoom) interviews. Interviews conducted in Spanish. Study team developed interview questions based on a lit review, clinical experience, and previous work in the field. Qualitative</p>	<p>On average, hospice nurses visited patients twice a week, while chaplains and social workers visited once a month. PR caregivers identified 3 domains: 1) symptom management, 2) cultural and religious values, 3) interaction with hospice providers.</p> <p><b>Symptom management</b></p> <ul style="list-style-type: none"> <li>• Loss of appetite: many caregivers struggled to cope with patient's loss of appetite and felt they would have benefitted from education on end-of-life signs and symptoms.</li> </ul>

Citation	Setting	Population	Design	Main Findings
			<p>content analysis using NVivo.</p>	<ul style="list-style-type: none"> <li>• Pain: Many caregivers cited pain as a distressing symptom.</li> <li>• Anxiety/confusion: Caregivers identifies anxiety and confusion as challenging symptoms. Made caregivers feel helpless.</li> </ul> <p><b>Cultural/Religious values</b></p> <ul style="list-style-type: none"> <li>• Family-centered values: Caregiving as a family was a crucial aspect of family values. Caregivers appreciated hospice workers who understood their family-centered values and kept them involved.</li> <li>• Religious support: Caregivers emphasized importance of religion in their lives and expressed desire for their religion to be represented in their hospice care team and to have support specific to their belief. Most caregivers appreciated hospice team’s religious support. Especially helpful in coping with fear of death and bereavement.</li> </ul> <p><b>Interaction with hospice providers</b></p> <ul style="list-style-type: none"> <li>• Communication: quality and frequency of communication were key to caregivers’ satisfaction with hospice. Caregivers appreciated respectful, empathetic, and tailored communication. A subset of caregivers wanted more frequent, timely responses.</li> <li>• Support and education: Some caregivers wanted more emotional support and in-depth education about end-of-life symptoms. Other caregivers wanted more</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Rowan, P., Whicher, D., Luhr, M., Miescier, L., Kranker, K., &amp; Gilman, B. (2024). Supportive services at end of life can help reduce acute care services: Observations from the Medicare Care Choices Model. <i>The American Journal of Hospice &amp; Palliative Care</i>, 41(9), 1037–1044. <a href="https://doi.org/10.1177/10499091231216887">https://doi.org/10.1177/10499091231216887</a></p>	<p>US, hospice</p>	<p><b>Quantitative analysis:</b>            Medicare fee-for-service beneficiaries (N=7,263), who were:</p> <ol style="list-style-type: none"> <li>1. Referred to one of 89 hospices participating in MCCM</li> <li>2. Met eligibility; requirements for MCCM enrollment; and</li> <li>3. And volunteered to enroll in MCCM from January 2016 – June 2021.</li> </ol> <p>Eligibility requirements for MCCM include having a diagnosis of cancer, congestive heart failure, chronic obstructive pulmonary diseases, or HIV/AIDS, and live at home</p> <p><b>Qualitative analysis:</b>            Staff (hospice directors, program coordinators, and frontline clinicians) from 10 exemplary hospices that successfully implemented MCCM.</p>	<p>Mixed methods:            Quantitative analysis of MCCM programmatic data reported between 2016 through 2021            Semi-structured interviews with staff (hospice directors, program coordinators, and frontline clinicians) from a sample of hospices that successfully implemented MCCM</p>	<p>guidance with financial management or other resources.</p> <p><b>Quantitative findings:</b></p> <ul style="list-style-type: none"> <li>• Clinically trained staff provided most MCCM services: ~30% provided by registered nurse care coordinator; ~50% provide by hospice nurse or nurse aid</li> <li>• 69% of all MCCM encounters were in person</li> <li>• 84% of patients received an initial assessment and 70% received a follow-up comprehensive assessment</li> <li>• 83% of all patients and caregivers were engaged in discussions about advanced care planning and spiritual or religious concerns</li> </ul> <p><b>Qualitative findings:</b>            Staff from exemplary hospices felt that the services below helped to keep Medicare beneficiaries from going to the emergency departments and prevented hospitalizations:</p> <ul style="list-style-type: none"> <li>• Early and frequent assessment of needs.</li> <li>• Direct observation of patients in their homes.</li> <li>• Immediate response to patients' medical complaints.</li> <li>• 24/7 access to nurse staff for symptom management.</li> <li>• Communication and care coordination with primary care physicians and specialists.</li> <li>• Interview participants also noted that hospice staff needed to gain patient's trust,</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<p>which occurred through in person visits with the hospice team. They noted that patients and caregivers needed to trust the medical judgment of the hospice nurse.</p> <ul style="list-style-type: none"> <li>• In addition, hospice staff need to teach patients and caregivers about how to manage their health and develop a care plan to follow.</li> </ul>
<p>Salvetti, M. C., Ramrup, N., &amp; Davis, M. E. (2025). Effectiveness of fan-on-face therapy on dyspnea at end of life: A quality improvement project. <i>Clinical Journal of Oncology Nursing</i>, 29(1), 14–18.  <a href="https://doi.org/10.1188/25.CJON.14-18[1](https://www.ons.org/publications-research/cjon/29/1/effectiveness-fan-face-therapy-dyspnea-end-life-quality-improvement)">https://doi.org/10.1188/25.CJON.14-18[1](https://www.ons.org/publications-research/cjon/29/1/effectiveness-fan-face-therapy-dyspnea-end-life-quality-improvement)</a></p>	<p>New York City, cancer center</p>	<p>50 cancer patients identified as having as receiving end-of-life care and experiencing dyspnea.</p>	<p>A quality improvement project designed to show the whether using portable fans on patient faces at end-of-life improved dyspnea symptoms.</p>	<ul style="list-style-type: none"> <li>• Clinicians assessed 15 verbal and oriented patients using a numeric rating scale where 0 is 0 being no shortness of breath and 10 being the worst shortness of breath experienced. After five minutes of fan-on-face, 12 patients had improved symptoms and 3 had no change.</li> <li>• Clinician assessed 35 non-verbal or altered mental status patients using the Respiratory Distress Observation Scale (RDOS). After 5 minutes of fan-on-face 25 patients had improved symptoms and 10 have no change.</li> <li>• No patients exhibited worsening symptoms</li> <li>• Some family members reported increased satisfaction and appreciation, and some nurses reported gratitude for having an available intervention o addressed patient suffering.</li> </ul>
<p>Tiwari, A., Park, T., Parillon, B., Prather, S., Shalev, D., Reid, M. C., Czaja, S., Adelman, R., &amp; Phongtankuel, V. (2025). Understanding the Behavioral Health Needs of Hospice Patients and Their Family Caregivers: Perspectives of</p>	<p>U.S. home hospice settings</p>	<p>17 certified hospice medical directors (14 from nonprofit hospice organizations; 2 from for profit hospice organizations; 1 unknown)</p>	<p>Semi-structured interviews; qualitative thematic analysis</p>	<ul style="list-style-type: none"> <li>• Anxiety and depression were the most common behavioral health disorders being treated in hospice care among patients and caregivers.</li> </ul>

Citation	Setting	Population	Design	Main Findings
<p>Hospice Medical Directors. <i>The American journal of hospice &amp; palliative care</i>, 42(7), 688–695.  <a href="https://doi.org/10.1177/10499091241268578">https://doi.org/10.1177/10499091241268578</a></p>				<ul style="list-style-type: none"> <li>• Substance use disorder was the most challenging behavioral health disorder to treat.</li> <li>• Behavioral health disorders make it challenging to deliver high quality end-of-life care</li> <li>• Social workers and nurses are important to providing behavioral health care in hospice.</li> <li>• Behavioral health care practices are diverse.</li> <li>• Solutions to improving behavioral health care include expanding hospice behavioral health support and education, such as using telehealth for patients to work with behavioral health specialists, hiring psychiatrists and psychologists to care teams, and providing more training and education to staff and families on behavioral health disorders.</li> </ul>
<p>White, L. L. Y., Sun, C., &amp; Coe, N. B. (2024). Quality of hospices used by Medicare Advantage and traditional fee-for-service beneficiaries. <i>JAMA Health Forum</i>, 5(7), e241790.  <a href="https://doi.org/10.1001/jamahealthforum.2024.1790">https://doi.org/10.1001/jamahealthforum.2024.1790</a></p>	US, hospice	Medicare beneficiaries who dies or enrolled in hospice in 2108 or 2019	Population-based cross-sectional study of Medicare enrollment claim and hospice quality reporting data.	<ul style="list-style-type: none"> <li>• Beneficiaries enrolled in Medicare Advantage (MA) Plans were more likely than Medicare fee-for-service (FFS) beneficiaries to use hospice care in the last six months of life (3.4 percentage points).</li> <li>• MA and FFS beneficiaries enrolled in hospices of similar quality</li> <li>• Beneficiaries in MA Special Needs Plans and Medicare-Medicaid Plans were more like to use lower quality hospices.</li> </ul>

Citation	Setting	Population	Design	Main Findings
				<ul style="list-style-type: none"> <li>• Patients referred from the same facility were more likely to use lower quality hospices, suggesting referral patterns are influencing hospice choice.</li> <li>• MA beneficiaries were less likely to have a hospitalizations within 7 days of hospice enrollment than FFS beneficiaries (5.2 pp).</li> <li>• MA beneficiaries of all plan types were more likely to use a for-profit hospice than FFS beneficiaries (1.4 pp).</li> <li>• MA beneficiaries in a Special Needs Plan were 4.3pp more likely than FFS beneficiaries to use a hospice with a low CAHPS global rating, while MA beneficiaries in a Medicare-Medicaid Plan were 6.8pp more likely.</li> </ul>
<p>Wolownik, G., &amp; Wholihan, D. (2025). "I Don't Know What to Say": A Multimodal Educational and Environmental Intervention to Improve Bedside Nursing Communication at End of Life. <i>Journal of Hospice &amp; Palliative Nursing</i>, 27(2), E61-E67.  <a href="https://doi.org/10.1097/NJH.0000000000001084">https://doi.org/10.1097/NJH.0000000000001084</a></p>	<p>U.S., hospital end-of-life care</p>	<p>Medical-surgical registered nurses and nursing assistants at a large urban safety net hospital's medical surgical unit for patients at end of life who want to focus on comfort-care measures</p>	<p>Quality improvement education intervention, with the goal of improving nurse and nursing assistants end-of-life communication; the intervention included a physical pocket card, posters, a brief 10-minute in-person education session, and handouts collated into a booklet.</p> <p>Survey (pre-intervention test [baseline], post-intervention test, and reassessment 1 month later); survey was based on 3 modified tools (1) Frommelt Attitude Toward</p>	<ul style="list-style-type: none"> <li>• This study demonstrated that a low-cost education intervention, with very little interruption in clinical workflow/ operations can improve nurse and nursing assistants' confidence and competence when communicating with patients/families interested in end-of-life comfort measures.</li> <li>• The educational intervention improved confidence and competence of nursing staff around end-of-life communications. Staff confidence grew 10.5% post education session by 3.1% at reassessment (1 month after the education session), while staff competence grew by</li> </ul>



Citation	Setting	Population	Design	Main Findings
			Care of the Dying Scale, (2) the End-of-Life Professional Caregiver Survey, and (3) the Palliative Care Quiz for Nursing; Nursing staff were asked open-ended questions on the posttest and reassessment.	4.5% post education session and by 6.4% at reassessment. <ul style="list-style-type: none"><li>• On posttest, registered nurses improved by 11% in confidence and 10% in competence over baseline, and on reassessment, 6.4% in confidence and 5.4% in competence.</li><li>• On posttest, nursing assistants improved by 17% in confidence and 4% in competence over baseline, and on reassessment, 2% in confidence and 13% in competence.</li><li>• Qualitatively, staff feedback was generally favorable. Most staff reported using the pocket cards at least once a week. Every nurse reported using one of the communication techniques learned in the education session. Staff used the skills they learned through the intervention, even when they felt uncomfortable with end-of-life care.</li></ul>

## Appendix C. References

- Baugh, C. W., Ouchi, K., Bowman, J. K., Aizer, A. A., Zirulnik, A. W., Wadleigh, M., Wise, A., Remón Baranda, P., Leiter, R. E., Molyneaux, B. J., McCabe, A., Hansrivijit, P., Lally, K., Littlefield, M., Wagner, A. M., Walker, K. H., Salmasian, H., Ravvaz, K., Devlin, J. A., ... Rickerson, E. M. (2024). A hospice transitions program for patients in the emergency department. *JAMA Network Open*, 7(7).  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2820860>
- Cagle, J. G., Zhang, P., & Clem, S. (2024). Estimating the Impact of Hospice Care on Key Patient-Family Care Outcomes Using a Nationwide U.S. Probability Sample. *The American journal of hospice & palliative care*, 41(9), 978–986. <https://doi.org/10.1177/10499091231218261>
- Coverdale, M. R., & Murtagh, F. (2024). Destitute and dying: interventions and models of palliative and end of life care for homeless adults - a systematic review. *BMJ supportive & palliative care*, 14(e3), e2411–e2422. <https://doi.org/10.1136/spcare-2024-004883>
- Cruz-Oliver, D. M., Milner, G. E., Mensh, K., Bugayong, M., Blinka, M. D., Durkin, N., Abshire Saylor, M., Budhathoki, C., & Oliver, D. P. (2024). Promising Impact of Telenovela Intervention for Caregivers of Hospice Patients: A Pilot Study. *The American journal of hospice & palliative care*, 41(12), 1400–1407. <https://doi.org/10.1177/10499091241228835>
- David, D., Moreines, L. T., Boafo, J., Kim, P., Franzosa, E., Schulman-Green, D., Brody, A. A., & Aldridge, M. D. (2025). "Who You Are and Where You Live Matters": Hospice Care in New York City During COVID-19 Perspectives on Hospice and Social Determinants: A Rapid Qualitative Analysis. *Journal of palliative medicine*, 28(1), 59–68.  
<https://doi.org/10.1089/jpm.2024.0124>
- Eibner, C., Khodyakov, D., Taylor, E. A., Agniel, D., Anhang Price, R., Bandini, J., Booth, M., Burgette, L. F., Buttorff, C., Cohen, C. C., et al. (2025). Evaluation of the Medicare Advantage Value-Based Insurance Design Model Test: 2020 to 2023. RAND Corporation. Published on the Centers for Medicare & Medicaid Services website.  
[https://www.rand.org/pubs/external\\_publications/EP70904.html](https://www.rand.org/pubs/external_publications/EP70904.html)
- Estell, M. H., Whitford, K. J., Ulrich, A. M., Larsen, B. E., Wood, C., Bigelow, M. L., Dockter, T. J., Schoonover, K. L., Stelpflug, A. J., Strand, J. J., Walton, M. P., & Lapid, M. I. (2025). Music Therapy Intervention to Reduce Symptom Burden in Hospice Patients: A Descriptive Study. *The American journal of hospice & palliative care*, 42(1), 102–111.  
<https://doi.org/10.1177/10499091241237991>
- Feder, S. L., Han, L., Zhan, Y., Abel, E. A., Akgün, K. M., Fried, T., Ersek, M., & Redeker, N. S. (2024). Use of Hospice and End-of-Life Care Quality Among Medical Centers with High Versus Lower Specialist Palliative Care Reach Among People with Heart Failure: An Observational Study. *Journal of palliative medicine*, 27(12), 1583–1590. <https://doi.org/10.1089/jpm.2024.0182>
- Fromme, E. K., Tjia, J., Clayton, M. F., Duodu, V., Puerto, G., Troiani, F., & DeSanto-Madeya, S. (2025). Human-Centered Design Development and Acceptability Testing of a Goal Concordant Prescribing Program in Hospice. *Journal of palliative medicine*, 28(5), 624–631.  
<https://doi.org/10.1089/jpm.2024.0149>
- Gandhi, P., Williams, K. M., & Ramchand, R. (2024). Perspectives of America's military and veteran caregivers: A qualitative exploration (RR-A3212-3). RAND Corporation.  
[https://www.rand.org/pubs/research\\_reports/RRA3212-3.html](https://www.rand.org/pubs/research_reports/RRA3212-3.html)

- Guo, W., Temkin-Greener, H., & McGarry, B. E. (2024). Hospice providers serving assisted living residents: Association of higher volume with lower quality. *Journal of the American Geriatrics Society*, 72(8), 2483–2490. <https://doi.org/10.1111/jgs.18883>
- Gupta, E., & Patel, P. (2024). Palliative care in dementia. *Annals of palliative medicine*, 13(4), 791–807. <https://doi.org/10.21037/apm-23-503>
- Hoch, B. J., Hauschildt, M., Palmer, L. M., & Christensen, S. S. (2024). Elevating end-of-life care: Implementing general inpatient hospice services on a medical oncology unit. *Clinical Journal of Oncology Nursing*, 28(5), 544–550. <https://doi.org/10.1188/24.CJON.544-550>
- Hospice Foundation of America. (2025, April 30). Improving dying. <https://hospicefoundation.org/improving-dying-programs/>
- Hotchkiss, J., Ridderman, E., & Hotchkiss, B. (2024). Caregiver and Employee Experience Among Big Hospices-Ranking of the Largest US Hospices by Three Quality Indicators. *The American journal of hospice & palliative care*, 41(9), 987–1001. <https://doi.org/10.1177/10499091231206481>
- Kaufman, B. G., Woolson, S., Stanwyck, C., Burns, M., Dennis, P., Ma, J., Feder, S., Thorpe, J. M., Hastings, S. N., Bekelman, D. B., & Van Houtven, C. H. (2024). Veterans' use of inpatient and outpatient palliative care: The national landscape. *Journal of the American Geriatrics Society*, 72(11), 3385–3397. <https://doi.org/10.1111/jgs.19141>
- Klaiman, T., Steckel, J., Hearn, C., Diana, A., Ferrell, W. J., Emanuel, E. J., Navathe, A. S., & Parikh, R. B. (2024). Hospice Administrators' and Providers' Perspectives on Providing Upstream Palliative Care: Facilitators, Barriers, and Policy Prescriptions. *Journal of palliative medicine*, 27(10), 1359–1367. <https://doi.org/10.1089/jpm.2024.0138>
- Kwon, Y., Hu, X., Shi, K. S., Zhao, J., Jiang, C., Fan, Q., Han, X., Zheng, Z., Warren, J. L., & Yabroff, K. R. (2025). Contemporary Patterns of End-of-Life Care Among Medicare Beneficiaries With Advanced Cancer. *JAMA health forum*, 6(2), e245436. <https://doi.org/10.1001/jamahealthforum.2024.5436>
- Lehto, R. H., Patano, A., Alanazi, M., Bente, G., Mason, A., Caldwell, G., Goldstein, D., & Wyatt, G. (2024). Evaluation of a nature-based virtual reality intervention to support hospice caregivers: A pilot feasibility study. *BMJ Supportive & Palliative Care*, 15(2), 249–255. <https://doi.org/10.1136/spcare-2024-005087>
- Longcoy, L. H., Longcoy, J., Tai, C. Y., Doorenbos, A. Z., & Beckstead, J. W. (2024). Measurement Invariance of the Hospice Quality of Life Index-14 in Lung Cancer and Nonlung Cancer Patients Admitted to Hospice. *Journal of nursing measurement*, 32(3), 371–381. <https://doi.org/10.1891/JNM-2022-0110>
- Mauck E. E. (2024). An Operational Definition of End-of-Life Healthcare: A Complex and Subjective Construct. *Omega*, 89(3), 954–966. <https://doi.org/10.1177/00302228221086058>
- Medicare Payment Advisory Commission (MedPAC) (2025). *Report to the Congress: Medicare and the health care delivery system (March 2025). Chapter 9: Hospice services*. Retrieved from: <https://www.medpac.gov/document/chapter-9-hospice-services-march-2025-report/>
- Murali, K. P., Gogineni, S., Bullock, K., McDonald, M., Sadarangani, T., Schulman-Green, D., & Brody, A. A. (2025). Interventions and Predictors of Transition to Hospice for People Living With Dementia: An Integrative Review. *The Gerontologist*, 65(5), gnaf046. <https://doi.org/10.1093/geront/gnaf046>

- Niedzwiecki, M. J., Forrow, L. V., Gellar, J., Pohl, R. V., Chen, A., Miescier, L., & Kranker, K. (2024). The Medicare Care Choices Model was associated with reductions in disparities in the use of hospice care for Medicare beneficiaries with terminal illness. *Health services research*, 59(4), e14289. <https://doi.org/10.1111/1475-6773.14289>
- Oswalt, C. J., Nakatani, M. M., Troy, J., Wolf, S., Locke, S. C., & LeBlanc, T. W. (2024). Timing of Palliative Care Consultation Impacts End of Life Care Outcomes in Metastatic Non-Small Cell Lung Cancer. *Journal of pain and symptom management*, 68(4), e325–e332. <https://doi.org/10.1016/j.jpainsymman.2024.07.008>
- Park, T., Phongtankuel, V., Blinka, M. D., Silva, M., & Cruz-Oliver, D. M. (2024). Understanding the home hospice experience of Puerto Rican caregivers. *Annals of palliative medicine*, 13(6), 1401–1408. <https://doi.org/10.21037/apm-24-24>
- Rowan, P., Whicher, D., Luhr, M., Miescier, L., Kranker, K., & Gilman, B. (2024). Supportive services at end of life can help reduce acute care services: Observations from the Medicare Care Choices Model. *The American Journal of Hospice & Palliative Care*, 41(9), 1037–1044. <https://doi.org/10.1177/10499091231216887>
- Salveti, M. C., Ramrup, N., & Davis, M. E. (2025). Effectiveness of fan-on-face therapy on dyspnea at end of life: A quality improvement project. *Clinical Journal of Oncology Nursing*, 29(1), 14–18. <https://doi.org/10.1188/25.CJON.14-18>
- Tiwari, A., Park, T., Parillon, B., Prather, S., Shalev, D., Reid, M. C., Czaja, S., Adelman, R., & Phongtankuel, V. (2025). Understanding the Behavioral Health Needs of Hospice Patients and Their Family Caregivers: Perspectives of Hospice Medical Directors. *The American journal of hospice & palliative care*, 42(7), 688–695. <https://doi.org/10.1177/10499091241268578>
- White, L. L. Y., Sun, C., & Coe, N. B. (2024). Quality of hospices used by Medicare Advantage and traditional fee-for-service beneficiaries. *JAMA Health Forum*, 5(7), e241790. <https://doi.org/10.1001/jamahealthforum.2024.1790>
- Wolownik, G., & Wholihan, D. (2025). “I Don’t Know What to Say”: A Multimodal Educational and Environmental Intervention to Improve Bedside Nursing Communication at End of Life. *Journal of Hospice & Palliative Nursing*, 27(2), E61-E67. <https://doi.org/10.1097/NJH.0000000000001084>

## Supplemental Appendix

In the latter half of 2023 the IGR team conducted brief information gathering activities specific to delirium, interoperability, and cognitive function in the hospice setting. The corresponding memoranda that present those results in the **Exhibit S-1**.

### Exhibit S-1. Delirium, interoperability, and cognitive function memoranda

Memorandum	Topics	Document
October 15 Memorandum	Delirium and interoperability	 Hospice%20Memo% 20Supplemental%20I
December 2 Memorandum	Cognitive function	 Hospice_CognitiveFu nction_ForCMS.docx