Assessing the uptake and variation of Bree Collaborative aligned recommendations for End-of-Life care in Washington state hospitals

Karie A. Nicholas, G.Dip, M.A., G.C.[1†]

[1] Foundation for Health Care Quality, Seattle, United States of America.

March 30, 2026

Abstract

Background and introduction: This study aims to quantify the extent to which hospital policies for End-of-Life Care (EOL) in Washington State are well aligned with Bree Collaborative Guidelines. **Methods:** Hospital policies for end of life care were collected from the Washington State Department (WA-DOH) of Health and the WA-DOH checklist for EOL services (EOLS) was assessed for alignment with Bree Collaborative recommendations for best practices in EOL care. **Results:** This study found statistically significant variation for two EOLS checklist items when comparing Bree members to non-Bree members, after controlling for geography and hospital type. A majority of hospitals (52.7%) had complete uptake of all Bree-aligned items. Services for EOL planning had the lowest adoption. **Conclusions:** Uptake of Bree aligned recommendations is robust across Washington State, but gaps in access to EOL care still exist in Washington State, particularly for planning services.

1 Introduction

In the early 2000s, elderly patients received more medical care towards the end of life than ever before; however, there were large variations in end of life (EOL) planning and care services across the US and across different types of care facilities. [**4**] End-of-life care planning is an important step towards improving patient-centered care and patient and family satisfaction with hospital care for elderly and terminal patients. [**2**]

In the 1990's, the landmark SUPPORT study found that less than half of physicians were aware of the wishes of their patients regarding their preferences for resuscitation and more than 50% of the family members of dying patients reported that their loved ones experienced pain at least half the time in the hospital during EOL care. [**4**] End-of-life care has remained a resource-intensive type of care that does not always align with the wishes of the patient or their families. [**4**]

Patient Self-Determination Act (PSDA), for example, passed by Congress in 1990 stated that hospitals are required to 1) inform patients of their rights, 2) ask about and document Advanced Directives (AD), 3) educate staff about AD's and 4) not deny patients care based on presence or absence of AD's. [5] Items 2, 3, and 11 on the EOLS checklist mention these requirements, but are also lacking in details that the PSDA includes.

Advanced Care planning provides tools to help align care with patient wishes and typically includes documentation through a Physician Order for Life-Sustaining Treatment (POLST) and/or Advance Directives (AD) such as a living will, health care directive, or durable power of attorney for health care. [1]

A Physician Order for Life-Sustaining Treatment "provides medical orders for current treatment to guide emergency medical personnel and in-patient care" and "is meant for individuals with serious illness" who are generally expected to die within one year. [5]

An Advanced Directive (AD) is a document with "written instruction relating to the provision of future health care for a time when an individual is incapacitated". [5] Part of an AD can be a summary of the values of the person receiving care as those values pertain to their death. Advanced directives can also include a living will or Health Care Directive which helps inform providers of an individual's wishes for their end-of-life care when they are unable to communicate or are otherwise incapacitated. [5]

In 2007, Goodman, et. al. documented "regional and hospital-specific variations in medical care provided to Medicare beneficiaries with one or more chronic illnesses at the end of life" and found that, despite increases in measurement and attention to EOL issues, the problem of variation in adherence to patient wishes remained. [**4**]

1.1 Background information and study rational

In 2011, the Bree Collaborative was established by legislative statute to "identify specific ways to improve health care quality, outcomes, and affordability in Washington State". [1] One of the key components of quality improvement is the reduction in variation in health care services. Each year, Bree members choose three health care topics, convene work groups, and create guidelines for all relevant health care stakeholders. [1] In 2014, the Bree selected EOL care planning and services as a topic due to the high variability of care practices across Washington State. A work group was convened to create guidelines for all health system actors (i.e. hospitals, payors, purchasers, etc.) and the final report cited the following goals to reduce variations in EOL care across Washington state:[5]

- Increase the accessibility of completed ADs and POLST for health systems and providers
- Increase the likelihood that a patient's end-of-life care choices are honored [5]

The guidelines reports produced by the Bree Collaborative are submitted to the Washington State Health Care Authority to be implemented into Medicaid, health insurance exchange plans, and Public and School Employees health insurance contracts. It is also distributed to Bree members who can voluntarily implement the recommendations in their settings (insurance requirements, union

benefits, hospital system processes, etc.). The "audiences" (i.e., types of organizations that can or should implement the recommendations) for the EOL recommendations are provider practices, hospitals, skilled nursing facilities, health plans, employer/healthcare purchasers, and the State of Washington. [5]

In February of 2022, the Washington State Legislature certified WAC 246-320-141 on patient rights and organizational ethics for health care, focusing on EOL care. [6] This legislation is aligned with previous Bree Collaborative work on EOL care and requires hospitals to "Adopt and implement policies and procedures that define each patient right to:"

- Have advanced directives and for the hospital to respect and follow those directives
- Be involved in all aspects of their care, including:

  Refusing care and treatment; and

  Resolving problems with care decisions.
- Have advance directives and for the hospital to respect and follow those directives;
- Request no resuscitation or life-sustaining treatment;
- Confidentiality, privacy, security, complaint resolution, spiritual care, and communication;
- Family input in care decisions;
- End of life care; [6]

; WAC 246-320-141 also requires that "every hospital must submit to the department its policies related to access to care: (a) Admission; (b) Nondiscrimination; (c) End of life care; and (d) Reproductive health care... No later than sixty days following the effective date of this section" and it required all hospitals to post changes or additions to these policies within 30 days after approval from hospital administrators. [6]

Because there tends to be variation in the way that hospitals write their policies, even when those policies cover the same items, DOH created an End-of-Life Services Form (EOLS), which utilizes a checklist to determine if the policies submitted are aligned with the law.

This study uses the EOLS checklist items that are aligned with Bree Collaborative recommendations to measure the current variation in EOL policies across Washington state hospitals.

2 Methods

The research questions this report aims to address are: What is the variation in EOL care practices and policies at Washington State Hospitals in 2026? And, how many hospitals have implemented 100% of the EOLS checklist items? The following analysis objectives were identified help answer this question:

1. Determine the extent to which the EOL policies at Washington State Hospitals are aligned with Bree Collaborative recommendations.

2. Determine whether organizations were more likely to answer positively to policies aligned with Bree recommendations if organizations are a Bree member.

3. Determine if Bree-aligned EOL policies are equally distributed between urban and rural hospitals.

4. Determine what proportion of the EOLS checklist times were implemented by each hospital.

2.1 Data Collection and Analysis

End-of-Life Policies documents and the End-of-life Services Form were downloaded from the Washington State Department of Health and Human Services public facing website on January 26th, 2026. [2]

The inclusion criteria for this study was based on the WA-DOH legal definition of organizations that need to have EOL policies and services in place: "The change to WAC 246-320-141 requiring hospitals to submit policies about admission, nondiscrimination, end-of-life care and reproductive health does not include private psychiatric and alcoholism hospitals (WAC 246-322) and private alcohol and chemical dependency hospitals (WAC 246-324)." [2] Organizations that were not required to submit EOL policies did not meet the inclusion criteria and were dropped from the analysis, of 110 hospitals in Washington state, 93 met the inclusion criteria.

Items on the EOLS checklist were assessed for fidelity with the Bree Collaborative recommendations using the Bree EOL report and the Bree EOL score cards for hospitals. Each EOLS item was compared to the Bree Collaborative's EOL guidelines for concordance with overall recommendations and hospital specific recommendations, and a crosswalk was created. (Appendix A) Items were sorted into two domains: Advanced care planning (Domain 1) and End-of-Life and Palliative Care Services (Domain 2). Alignment was defined by two categories. If similar language existed in the Bree report, the EOLS item was determined to be "aligned", even if there was additional nuanced Bree recommendations or additional language in the EOLS item, and if the service was recommended to be provided by the hospital. Items were considered "not aligned" if a specific service was not recommended to be provided by the hospital or language did not exist in the Bree report.

A spreadsheet was created to aggregate the EOLS checklist items across all hospitals. For those organizations that did not have an EOLS form, policies were reviewed using search terms generated from the EOLS checklist items and for each EOLS item, using a single reviewer.

Variables collected from either the policies or the EOLS checklist were:

Table 1: Alignment of EOLS items with Bree Collaborative recommendations. Advanced care planning (Domain 1) and End-of-Life and Palliative Care Services (Domain 2).

Domain	**EOLS Item**	**Aligned with Bree**
1	Item 1: Has written policies & procedures on advance care planning and advance directives	Yes
1	Item 2: Offers information & support for advance care planning including written information on the patient's right to make decisions concerning medical care, the right to accept or refuse medical or surgical treatment, the right to formulate advance directives, & the hospital's policies respecting the implementation of such rights	Yes
1	Item 3: Ask patients about advance care planning and documents whether or not a patient has an advance directive	Yes
1	Item 4: Assist patients with advance care planning	Yes
2	Item 5: Provides end-of-life education to patients	Yes
2	Item 6: Provides an evaluation of treatment options	Yes
2	**Item 7: Provides hospice care**	**No**
2	**Item 8: Provide palliative care**	**No**
2	**Item 9: Provides spiritual care**	**No**
2	Item 10: Provides ethics consultation services to providers and patients	Yes
2	Item 11: Provides referrals and resources on community resources & education on palliative care	Yes
2	Item 12: Provides consultation about pain & symptom management	Yes
2	Item 13: Process to review and honor Portable Order for Life-Sustaining Treatment forms (PLOST)	Yes

Hospitals were defined as Bree Members if they were on the list of organizations appointed by the Washington State Governor's Office to the Bree board.[3]
Hospitals were defined as urban or rural based on their county location and Office of Financial Management's designations of Washington State counties as either "urban" or "rural". [4]
Year of submission was collected from the DOH website. [2]
Response options to each EOLS item were coded as "yes", "no" and "unknown".

The analysis was performed using Stata BE/18.0. The frequency and percentages of all EOLS checklist item responses, urban/rural status, and critical access hospital status were calculated using chi-squared tests. Odds ratios were calculated comparing non-Bree members (baseline) to Bree members for a positive response to each EOLS item using a complete case analysis to confirm any differences in the distribution of responses.
Binomial regression models were used to control for Urban/Rural status and Critical-access hospital

status, comparing non-Bree members to Bree members for each EOLS item.
Sensitivity analyses were conducted using three scenarios; the first assigning all missing or unknown responses to "no", the second assigning all missing or unknown responses to "yes", and the third using multiple imputations for missing and unknown data. Imputation was based on information from critical-access status and urban/rural status and a multiple imputation strategy was used. Sensitivity analyses were used to assess the validity of the crude odd ratios and the binomial regression outputs.

Because this analysis uses the entire Washington state hospital "population" instead of a sample, power calculations were not conducted.

3 Results

All 93 hospitals in Washington State that met the inclusion criteria were included in the analysis. Bree Collaborative member hospitals were statistically significantly more likely to be located in urban counties and to be non-critical access hospitals compared to their non-Bree member counterparts. Positive responses on Bree aligned EOLS checklist items ranged from 85.2% to 96.4% for Bree member hospitals and 52.3% to 80.0% for non-Bree members.

The majority, 52.7%, of hospitals reported complete uptake of Bree-aligned EOLS checklist items 1-6 and 10-13, with a statistically significant portion of those being Bree members (84%, p=0.001), rural (65.9%, p=0.010), and not critical access hospitals (65.2%, p=0.020).

Table 2: Frequence and percentages of responses for each EOLS item, urban/rural status and critical-access hospital status, for Bree and non-Bree members. Chi-squared P-value for expected vs observed comparing non-Bree members to Bree members. * EOLS items that are not aligned with Bree recommendations.

EOLS Items	Bree Member			Non-Bree Member			
	Yes	No	Unknown	Yes	No	Unknown	p-value
Item 1	27	1	0	52	6	7	
	96.4%	3.6%	0.00%	80.0%	9.2%	10.8%	0.107
Item 2	24	1	3	41	8	16	
	85.7%	3.6%	10.7%	63.1%	12.3%	24.6%	0.089
Item 3	24	2	2	52	6	7	
	85.7%	7.1%	7.1%	80.0%	9.2%	10.70%	0.801
Item 4	23	2	3	37	12	16	
	82.1%	7.1%	10.7%	56.9%	18.5%	24.6%	0.660
Item 5	24	2	2	45	7	13	
	85.7%	7.1%	7.1%	69.2%	10.8%	20.0%	0.224
Item 6	24	1	3	45	10	10	
	85.7%	3.6%	10.7%	69.2%	15.4%	15.4%	0.189
*Item 7	21	3	4	21	28	16	
	75.0%	10.7%	14.3%	32.3%	43.1%	24.6%	0.001
*Item 8	22	4	2	29	19	17	
	78.6%	14.3%	7.1%	44.6%	29.2%	26.2%	0.009
*Item 9	24	2	2	30	19	16	
	85.7%	7.1%	7.1%	46.2%	29.3%	24.6%	0.002
Item 10	23	1	3	34	16	15	
	85.2%	3.7%	11.1%	52.3%	24.6%	23.1%	0.010
Item 11	25	1	2	47	10	8	
	89.3%	3.6%	7.1%	72.3%	15.4%	12.3%	0.172
Item 12	22	2	2	4 1	11	13	
	85.7%	7.1%	7.1%	63.1%	16.9%	20.0%	0.092
Item 13	25	2	1	46	8	11	
	89.3%	7.1%	3.6%	70.8%	12.3%	16.9%	0.131
Rural	3	25	N/A	42	23	N/A	
	10.7%	89.3%	N/A	64.6%	35.4%	N/A	0.001
Critical Access	4	24	N/A	33	32	N/A	
	14.3%	85.7%	N/A	50.8%	49.2%	N/A	0.001

Only one of the Bree-aligned EOLS items, Item 10 - "ethical consultation services to provider and patients", had a statistically different distribution between Bree and non-Bree members. EOL checklist items 7-9 (hospice, spiritual, and palliative care) had different distributions between Bree

and non-Bree members.

3.1 Urban and rural distributions

Responses for EOLS items were distributed evenly across urban and rural hospitals, with the exception of items 7-9, which remained significantly different between urban and rural hospitals. Additionally, item 10 - "ethical consultation services to provider and patients" just barely reached significance with a p-value of 0.051. (Table 3)

Table 3: Frequency and percentage of responses for each EOLS item and critical-access hospital status, for urban and rural hospitals. Chi-squared P-value for expected vs observed comparing urban to rural. Italicized items reached significance at the 0.05 level, all other significance levels are in bold. Asterisk indicates EOLS items that are not aligned with Bree recommendations.

	Urban		Rural		
N=93	Yes	No/Unknowns	Yes	No/Unknown	P=
Item 1	41 85.4%	7 14.6%	38 84.4%	7 15.1%	0.896
Item 2	33 68.8%	15 31.3%	32 71.1%	13 28.9%	0.804
Item 3	38 79.2%	10 20.8%	38 84.4%	7 15.60%	0.804
Item 4	32 66.7%	16 33.3%	28 62.2%	17 37.8%	0.654
Item 5	35 66.7%	13 33.3%	34 62.2%	11 37.8%	0.654
Item 6	39 81.3%	9 18.8%	30 66.7%	15 33.3%	0.108
*Item 7	28 58.3%	20 41.7%	14 31.1%	31 68.9%	0.008
*Item 8	33 68.8%	15 31.3%	18 40.0%	27 60.0%	0.005
*Item 9	35 72.9%	13 27.1%	19 42.2%	26 57.8%	0.003
Item 10	34 70.%	14 29.2%	23 51.1%	22 48.9%	0.051
Item 11	38 79.2%	10 20.8%	34 75.6%	11 24.4%	0.677
Item 12	37 77.1%	11 22.9%	28 62.2%	17 37.8%	0.118
Item 13	37 77.1%	11 22.9%	34 75.6%	11 24.4%	0.862
Critical Access	7 14.6%	41 85.2%	30 66.7%	15 33.3%	0.001

After controlling for urban/rural status and critical-access hospital status, EOLS items 7 remained statistically significantly different and EOLS checklist item 2, reached statistical significance

for a difference between Bree and non-Bree members. EOLS checklist item 4 had a p-value of 0.058, just shy of statistical significance.

Table 4: Odds ratios, p-values, confidence intervals, and degrees of freedom for binomial regressions comparing non-Bree members to Bree members controlling for urban/rural status and critical-access status. Bolded items have significant P-values and items with an asterisk are non-Bree aligned items.

	OR	p=	CI		DF
Item 1	1.43	0.156	-0.089	0.549	3
Item 2	**2.09**	**0.04**	0.013	0.559	3
Item 3	0.98	0.328	-0.149	0.442	3
Item 4	1.93	0.058	-0.007	0.456	3
Item 5	1.42	0.161	-0.084	0.499	3
Item 6	1.55	0.125	-0.058	0.466	3
*Item 7	**3.02**	**0.004**	0.098	0.480	3
*Item 8	1.02	0.311	-0.104	0.032	3
*Item 9	1.56	0.124	-0.048	0.039	3
Item 10	1.77	0.081	-0.025	0.429	3
Item 11	1.67	0.099	-0.422	0.479	3
Item 12	0.99	0.325	-0.123	0.367	3
Item 13	1.15	0.135	-0.067	0.491	3

3.2 Sensitivity Analyses

Sensitivity analyses demonstrated some uncertainty around multiple EOLS checklist item distributions and odds ratios. Distribution sensitivity showed uncertainty for Items 1,2, 4, 10 and 12 when the unknown answers were assigned to "no". (Supplemental A) All other sensitivity tests showed little difference in the likelihood that either the uptake or variability across geographic area or Bree-member status of the EOLS items changed based on the assignment of the "unknown" responses.

After controlling for urban/rural and critical-access hospital status, only one Bree aligned item, Item 2, continued to show some uncertainty when unknown answers were assigned to "no". (Supplemental B)

4 Discussion

4.1 Checklist Alignment with Bree Recommendations

During the coding processes, this study found that the EOL checklist items used by WA-DOH were conceptually aligned with the broad concepts of Bree Collaborative's recommendations to hospitals but lacking in exact language, with a few exceptions.

EOLS item 2 demonstrated weaker concordance with the Bree recommendations, included language about patient rights that the Bree report did not mention. However, since this was in addition to Bree recommendations, it was still considered "aligned". This can be attributed to the fact that the EOLS checklist also included language to support the Death With Dignity act, which the Bree did not address.

EOLS items 7-9 (hospice, palliative care, and spiritual care) specifically asked whether these services were provided by the hospital or hospital system. The Bree recommendations did not recommend that hospitals adopt these service lines, but did recommend that services be provided through referrals and provided guidance IF hospitals already offered these services. Therefore, EOLS items 7-9 were determined to be not aligned with Bree recommendations as they specifically recommended service-line adoption that the Bree did not.

The Bree report focuses more on the inclusion of family in decision making, measuring patient satisfaction, and involving or engaging community in discussions around EOL care while the EOLS checklist is more pragmatic, focusing primarily on a hospital's responsibilities to the patient. (Appendix A) These differences could greatly affect a patients and families overall experience with EOL care, even if hospitals are following the letter of the laws. Overall, the EOLS checklist was a moderately useful tool for assessing the fidelity of hospital policies with Bree recommendations.

4.2 Variations in care and services

Geography and critical-access hospital status play a role in the variation in care services. After controlling for these two variables, a different pattern of significance emerged, especially for EOLS checklist items 8 and 9. Whether or not these services (palliative care, hospice care, spiritual care) are provided in-house or within a health system has a strong association with the type and location of the hospital regardless of Bree membership.

EOLS checklist item 11, which is more closely aligned with Bree recommendations, addresses the issue of in-house services vs. referrals. This item specifically calls out palliative care as a service to refer patients to, but the term "other" in the checklist item refers to "community resources for end-of-life care" which is left vague as to additional services that should be included. Without having specific policies or program information on referrals processes, this limits the extent to which we can determine whether organizations that don't offer hospice, spiritual care, or EOL planning services in-house can or do rely on referrals to fill this service gap. Determining whether there was an adequate network of service providers in the area is also out of the scope of this study and this study lacks the patient data to measure whether patients received these services through the referral process.

EOLS Item 2 was the only item that was not significant in the crude analysis but reached statistical significance after controlling for confounding in the regression analysis, with Bree-member hospitals being twice as likely as non-Bree member hospitals to have implemented this recommendation. This finding suggests that the implementation of planning services is influenced by Bree participation, although it is possible that it is also influenced by hospital size (i.e. being part of a larger system).

4.3 Distribution and prevalence of care services

This study found that the range of positive responses to EOLS items that were considered well aligned with Bree recommendations was 82.1% to 96.4% among Bree member hospitals and 52.3% to 80.0% among non-Bree member hospitals, indicating a high prevalence of Bree aligned policies implemented in Washington State hospitals. Although Bree member hospitals had consistently higher uptake of all EOLS checklist items, no item had 100% up-take at all hospitals.

Although 52.7% of hospitals had complete uptake of the EOLS checklist items that were aligned with Bree recommendations, between 1/10th and 1/4th of hospitals still do not include some Bree aligned procedures or services, or their policies are unknown. This is true in particular for EOLS Items 2 and 4 for advance care planning support and services. Once a patient has completed advanced care planning documents, all hospitals in Washington state are more likely to have policies that facilitate the review, implementation, and support patient wishes. However, there is still a gap in planning services available to patients within hospital systems or at hospitals themselves.

The sensitivity analysis supports the findings of the complete case analysis, that planning services are offered less often than services that support EOL care once a person has documented their wishes.

Limitations

There are several limitations to this study. First, because there was not a baseline evaluation prior to the Bree EOL guidelines, this study is unable to determine improvement or quantify changes in either variation or uptake since 2014.

There is limited specificity in the measurement of "aligned" and "not aligned" EOLS items. The qualitative nature of the information leaves a determination of "alignment" open to interpretation.

The data used for this analysis was not collected for the purpose of assessing the Bree report. Many of the policies were developed for the Death with Dignity Act and only dealt with EOL care as they pertain to that act. Although organizations are required to submit all of their EOL policies to WA-DOH, it is possible that there exist other policies that are relevant to the Bree EOL guidelines but which are not labeled "End-of-life" and thus not submitted to WA-DOH.

There were some errors with the DOH documentation of the policies with four organizations that were listed as having an EOLS checklist having a policy document uploaded instead. This was mitigated by a thorough review of the policy documents. The document review was not validated by multiple coders and there could be differences in what the organizations actually answered compared to what was coded.

This study is unable to quantify how much the use of the Bree guidelines contributed to the uptake of each EOLS item. Bree members are often early adopters and may have had these policies in place prior to the development of the guidelines. Other hospitals may have taken up these policies in response to other legislation, regulations, or other influencing factors other than Bree recommendations. Finally, Bree guidelines may be tangentially responsible along with other guidance or changes, influencing legislation, regulations, or incentives that trickled down to hospitals.

The definition of rural and urban may affect the variability of these findings across geographic area. It is possible that a more refined (smaller than the county level) or different definition may

influence these findings.

This study did not assess information on religious affiliations, corporate administration structure, size, or other factors that could influence the adoption of Bree EOL care recommendations. Future studies may want to consider other factors unmeasured here.

Finally, this study is not likely to be generalizable to other states or countries, as the recommendations, requirements, and legislation are specific to Washington state. However, the methodology used may be replicated in other settings.

Conclusions

Although uptake is generally robust, the number of hospitals with "unknown" responses on EOLS checklist items makes it that clear gaps in understanding exist on the extent to which specific Bree policies have been adopted across the state. This study has clarified that full implementation of Bree recommendations has not occurred for all hospitals and that variation in EOL care services and processes still exists, especially when it comes to planning services at hospitals or in hospital systems.

The EOLS checklist is an imperfect tool for quantifying the alignment of hospital policy with Bree Collaborative recommendations and further research is required. However, it does provide a rudimentary understanding of the extent to which Bree-aligned recommendations have been integrated into hospital policies and the extent of the effects of two main factors affecting adoption examined here - geography and the type of hospital where patients receive EOL care.

This is particularly important when primary care resources are scarce and when there is an aging population, especially in rural areas, as is currently the case in Washington state. These factors make for a perfect storm, where an individual requiring EOL care has not been able to plan in a way that is consistent with their wishes and their only option for receiving quality EOL care is through communication with providers once admitted to a hospital.

Bree membership is a strong indicator of being a change leader, either by being a proving ground organization for the development of best practices which get included in Bree recommendations or by being an early adopter of recommendations once they are published. Bree members were consistently more likely to have policies that aligned with Bree recommendations, regardless of geography or hospital type.

Recommendations

Because organizations are required to submit updates to their policies to DOH when changes are made, it is recommended that this report be used as a baseline and that EOLS checklist items be reviewed in the future to determine if there are changes to uptake and reduction in the number of organizations answering "no" or being defined as "unknown" for all items.

It is recommended that appropriate organizations work to help hospitals in Washington State that do not have robust planning support develop the capacity to provide EOL planning services to patients who end up in the hospital with a terminal illness and no prior POLST or Advanced

Directives. Appropriate organizations to help address EOL care planning support may be employers, health plans, payors, or community organizations, which can partner with hospitals to create "in-house" or more easily accessible planning services for patients who are hospitalized with no EOL planning in place and to reduce the number of patients who enter EOL care without advanced planning documentation.

Further research on Bree recommendations that were not covered in this study, such as patient experience, family involvement, access to hospice, palliative, and spiritual care, reimbursement, details about planning support services, community engagement by hospitals, use of quality improvement programs for EOL care, and types of tools being used for EOL care planning and documentation is needed to better understand the fidelity of services with the Bree report. Research on other factors affecting uptake of Bree recommendations is also recommended, including identification of barriers and facilitators.

Finally, it is recommended that the legislature and state agencies improve their support of the Bree report distribution, implementation, and evaluation in order to expedite the uptake of best practices. Legislation and activities by state agencies facilitated the collection of hospital policies for all hospitals for this evaluation and concordance between legislation and Bree recommendations likely facilitated adoption of best practices. Closer collaboration between the Bree Collaborative and state agencies after future guidelines are published can facilitate better measurement and measurement tools for more robust evaluations in the future, which are informative for all parties.

4.4 Ethics

This study is based on publicly available data on hospital policies and does not require ethical review.

Funding

This research was conducted as part of the Bree Collaborative's evaluation program and funded by the Bree's parent organization, the Foundation for Health Care Quality.

Authors' Contributions

K.N. Conducted data collection, analysis, and served as the primary writer. S.L. Provided editing.

Conflicts of Interest

The author is funded by the Foundation for Health Care Quality and declares that there is no conflict of interest with respect to the publication of this article.

Supplementary Materials

Supplemental A: Complete case analysis and three sensitivity scenarios for the odds of having a positive response to comparing Bree to non-Bree members.

	N=93	Overall (complete case analysis)					Sensitivity 1 - unknown moved to no				Sensitivity 2 - unknown moved to yes				Sensitivity 3 - unknown imputed			
	Comparing Bree Members to non-Bree members	OR	P=	CI		n	OR	P=	CI		OR	P=	CI		OR	P=	CI	
Item 1	Has written policies & procedures on advance care planning and advance directives	3.11	0.285	0.35	27.98	86	6.75	**0.043**	0.79	57.71	2.75	0.345	0.31	24.48	3.79	0.194	0.44	32.86
Item 2	Offers information & support for advance care planning including written information on the patient's right to make decisions concerning medical care, the right to accept or refuse medical or surgical treatment, the right to formulate advance directives, & the hospital's policies respecting the implementation of such rights	4.68	0.128	0.53	41.79	83	3.51	**0.029**	1.04	11.77	3.79	0.194	0.44	32.86	5.5	0.080	0.64	47.03
Item 3	Asks patients about advance care planning and documents whether or not a patient has an advance directive	1.38	0.704	0.26	7.45	84	1.50	0.515	0.44	5.13	1.32	0.743	0.25	7.06	1.57	0.589	0.30	8.17
Item 4	Assists patients with advance care planning	3.73	0.089	0.73	19.00	74	3.48	**0.020**	1.13	10.71	2.94	0.164	0.60	14.49	2.29	0.218	0.59	8.86
Item 5	Provides end-of-life education to patients	1.87	0.455	0.35	9.86	87	2.67	0.097	0.80	8.91	1.56	0.589	0.30	8.17	1.09	0.892	0.31	3.85
Item 6	*Provides an evaluation of treatment options	5.33	0.089	0.61	46.60	80	2.67	0.097	0.80	8.91	4.91	0.108	0.57	42.08	4.91	0.108	0.57	42.08
Item 7	***Provides hospice care**	**9.33**	**0.000**	**2.11**	**41.21**	**73**	**6.29**	**<0.001**	**2.10**	**18.78**	**6.31**	**0.003**	**1.60**	**24.84**	**5.04**	**0.002**	**1.60**	**15.92**
Item 8	***Provides palliative care**	**3.60**	**0.033**	**1.02**	**12.71**	**74**	**4.55**	**0.003**	**1.54**	**13.50**	**2.48**	**0.128**	**0.74**	**8.29**	**3.27**	**0.028**	**1.06**	**10.03**
Item 9	***Provides spiritual care**	**7.60**	**0.005**	**1.45**	**39.79**	**75**	**7.00**	**<0.001**	**1.99**	**24.68**	**5.37**	**0.020**	**1.09**	**26.33**	**4.88**	**0.011**	**1.26**	**18.90**
Item 10	**Provides ethics consultation services to providers and patients**	**10.82**	**0.008**	**1.18**	**98.81**	**75**	**4.19**	**0.007**	**1.34**	**13.04**	**8.81**	**0.017**	**1.02**	**75.97**	**6.65**	**0.007**	**1.34**	**32.93**
Item 11	Provides referrals and resources on community resources & education on palliative care	5.32	0.089	0.61	46.27	83	3.19	0.074	0.83	12.26	4.91	0.108	0.57	42.08	**7.41**	**0.032**	**0.87**	**63.48**

Item 12	Provides consultation about pain & symptom management	3.21	0.135	0.06	16.31	78	3.51	**0.029**	1.05	11.78	2.64	0.215	0.53	13.11	1.89	0.354	0.48	7.39
Item 13	Process to review and honor Portable Order for Life-Sustaining Treatment forms	2.17	0.342	0.42	11.25	81	3.44	0.055	0.90	13.22	1.82	0.463	0.36	9.32	2.94	0.164	0.60	14.49

Supplemental B. Comparing Bree members to non=Bree members on positive responses to each EOLS item, controlling for urban/rural status and critical access status

		Complete case analysis					Sensitivity 1 - unknown moved to no				Sensitivity 2 - unknown moved to yes				Sensitivity 3 - unknown imputed			
		T	**P=**	**CI=**		DF	**T**	**P=**	**CI=**		**T**	**P=**	**CI=**		**T**	**P=**	**CI=**	
Item 1	Has written policies & procedures on advance care planning and advance directives	*1.43*	*0.156*	*-0.089*	*0.549*	*3*	*2.27*	***0.026***	*0.032*	*0.486*	*1.32*	*0.191*	*-0.106*	*0.522*	*1.32*	*0.191*	*-0.106*	*0.522*
Item 2	**Offers information & support for advance care planning including written information on the patient's right to make decisions concerning medical care, the right to accept or refuse medical or surgical treatment, the right to formulate advance directives, & the hospital's policies respecting the implementation of such rights**	***2.09***	***0.04***	***0.013***	***0.559***	***3***	***2.71***	***0.008***	***0.064***	***0.413***	*1.68*	*0.096*	*-0.043*	*0.514*	***2.09***	***0.04***	***0.013***	***0.559***
Item 3	Asks patients about advance care planning and documents whether or not a patient has an advance directive	0.98	0.328	-0.149	0.442	3	1.20	0.233	-0.085	0.346	0.91	0.363	-0.162	0.439	0.98	0.328	-0.149	0.442
Item 4	Assists patients with advance care planning	*1.93*	*0.058*	*-0.007*	*0.456*	*3*	*2.45*	***0.016***	*0.040*	*0.378*	*1.59*	*0.116*	*-0.046*	*0.415*	*1.93*	*0.058*	*-0.007*	***0.0457***
Item 5	Provides end-of-life education to patients	*1.42*	*0.161*	*-0.084*	*0.499*	*3*	*1.95*	***0.054***	*-0.004*	*0.375*	*1.25*	*0.216*	*-0.105*	*0.459*	*1.42*	*0.161*	*-0.084*	*0.499*
Item 6	Provides an evaluation of treatment options	1.55	0.125	-0.058	0.466	3	0.96	0.337	-0.099	0.286	1.59	0.115	-0.051	0.459	*1.55*	*0.125*	*-0.058*	*0.466*
Item 7	***Provides hospice care***	***3.02***	***0.004***	***0.098***	***0.480***	***3***	***3.02***	***0.004***	***0.098***	***0.480***	***2.69***	***0.009***	***0.061***	***0.409***	***3.02***	***0.004***	***0.98***	***0.48***
Item 8	**Provides palliative care*	*1.02*	*0.311*	*-0.104*	*0.0322*	*3*	*1.89*	***0.063***	*-0.008*	*0.336*	*0.72*	*0.475*	*-0.126*	*0.268*	*1.02*	*0.311*	*-0.103*	*0.321*
Item 9	*Provides spiritual care	1.56	0.124	-0.048	0.0394	3	1.56	0.124	-0.048	0.394	1.23	0.221	-0.079	0.338	*1.56*	*0.124*	*-0.049*	*0.394*

Item 10	Provides ethics consultation services to providers and patients	1.77	0.081	-0.025	0.429	3	1.90	0.060	-0.007	0.341	1.54	0.126	-0.049	0.392	*1.77*	*0.081*	*-0.025*	*0.429*
Item 11	Provides referrals and resources on community resources & education on palliative care	1.67	0.099	-0.422	0.479	3	1.17	0.091	-0.028	0.369	1.59	0.115	-0.051	0.459	*1.67*	*0.099*	*-0.042*	*0.480*
Item 12	Provides consultation about pain & symptom management	0.99	0.325	-0.123	0.367	3	1.58	0.117	-0.037	0.327	0.85	0.396	-0.137	0.345	*0.99*	*0.325*	*-0.123*	*0.367*
Item 13	Process to review and honor Portable Order for Life-Sustaining Treatment forms	*1.51*	*0.135*	*-0.067*	*0.491*	*3*	*2.38*	***0.020***	*0.0038*	*0.425*	*1.39*	*0.167*	*-0.081*	*0.460*	*1.51*	*0.135*	*-0.067*	*0.491*

References

[1] Feb. 2026. URL: https://www.qualityhealth.org/bree/about/.

[2] Feb. 2026. URL: https://doh.wa.gov/data-statistical-reports/healthcare-washington/hospital-and-patient-data/hospital-policies.

[3] Mar. 2026. URL: https://www.qualityhealth.org/bree/about/members/.

[4] Feb. 2026. URL: https://doh.wa.gov/public-health-provider-resources/rural-health/data-maps-and-other-resources.

[5] Bree Collaborative. *End-of-Life Care Report*. Tech. rep. Foundation for Health Care Quality, 2014.

[6] *WAC,Title 246, Chapter 246-320, Section 246-320-141*. 2009. URL: https://app.leg.wa.gov/wac/default.aspx?cite=246-320-141.