Brief Methodological Report

Identifying Optimal Factor Scores on the Bereaved Family Survey: Implications for Practice and Policy

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Abstract

Context. The Bereaved Family Survey (BFS) is used to evaluate the quality of end-of-life (EOL) care in Veterans Affairs inpatient settings. The BFS consists of a global Performance Measure (BFS-PM) and three factors that relate to specific aspects of EOL care.

Objective. The purpose of this study was to identify empirically based target scores on each BFS factor that are most strongly related to a rating of "excellent" on the BFS-PM.

Methods. We conducted a cross-sectional analysis of BFS and Veteran clinical data from January 2012 to January 2016. Logistic regression models were constructed for each potential cut point on the three BFS factors and accounted for facility case-mix and nonresponse bias. Model fit was assessed primarily using the Liu Index, Bayesian Information Criterion (BIC), and classification accuracy values.

Results. Our analytic sample included 40,180 Veterans whose next-of-kin completed a BFS. The mean BFS response rate across study years was 58%. A score of 14 or higher on the Respectful Care and Communication factor (range 0–15) had the lowest BIC (121355) and highest percent correctly classified (81.2%). The Emotional and Spiritual Support factor (range 0–9) had an optimal score of 8 or higher (BIC = 133685; % correctly classified = 77.1%). An optimal cut point on the Benefits factor was not identified.

Conclusion. The identification of data-driven targets makes BFS factor scores more useful to clinicians and administrators focused on improving quality of EOL care in their facilities. Our results lend support for prioritizing quality improvement efforts related to respectful care and communication. J Pain Symptom Manage 2019;58:108–114. © *2019 American Academy of Hospice and Palliative Medicine. Published by Elsevier Inc. All rights reserved.*

Key Words
Palliative care, end-of-life care, Veterans, quality improvement, quality measures

Introduction

Learning health care systems use data to monitor outcomes and to identify areas of strength and targets for quality improvement surrounding the care experience.[1,2] In the Veterans Affairs (VA) Healthcare System, the Bereaved Family Survey (BFS) is used as the primary method to evaluate the quality of care provided to Veterans at the end of life (EOL) and their family members in inpatient settings. The instrument includes the BFS–Performance Measure (BFS-PM)—a single global item regarding the overall experience of care received by the Veteran and family, and three distinct factors related to Respectful Care and Communication, Emotional and Spiritual Support, and Benefits.[3]

Prior work has demonstrated that the BFS has three distinct factors and that bereaved families who report

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higher scores on each of the factors are more likely to report an optimal response on the BFS-PM (i.e., an "excellent" rating regarding the overall care received during the last month of life).[3] BFS-PM and factor scores are calculated and provided to leadership and hospice/palliative care teams in every VA Medical Center nationwide on a quarterly basis by the Veteran Experience Center (VEC) to guide intervention efforts that improve the Veteran and family experience of care. Although a benchmark is provided for the BFS-PM, VEC reports do not include data-driven targets for facilities to achieve on each factor so that BFS-PM scores can be optimized. Therefore, the purpose of this study was to identify empirical cut points on the three BFS factor scores that are associated with an optimal rating of "excellent" on the BFS-PM.

Methods

Study Design and Data Sources

We performed a retrospective, cross-sectional analysis of BFS data collected between January 2012 and January 2016 (n = 40,180). Data were collected as part of ongoing activities of VEC, formerly known as PROMISE (http://www.cherp.research.va.gov/PROMISE/PROMISE_ Methods.asp). VEC is a national VA quality improvement program that monitors the care of all Veterans who die in VA inpatient units, including acute care, intensive care, hospice/palliative care, and VA nursing home settings.

The BFS was used to measure family perceptions of quality of end-of-life care. The potential sample for the BFS is created using a method that identifies 99% of inpatient deaths. To assess family perceptions of EOL care, the decedent's next-of-kin was contacted and asked to complete the BFS via mail, phone, or online. Prior work has established measurement invariance across BFS modes of administration.[3] The BFS contains 17 forced-choice, Likert-type items focused on specific aspects of care, one global item—a National Quality Forum-endorsed performance measure[4]—evaluating the overall care received during the last month of life, and two open-ended questions soliciting comments about positive and negative aspects of care, and suggestions for improvement.[3,5,6] Detailed methods for collecting these data are described elsewhere.[3,7,8]

For risk adjustment purposes, we also obtained demographic and clinical information for each Veteran's medical records from the VA's Corporate Data Warehouse, an integrated database containing clinical, financial, and administrative information. Variables included age, race/ethnicity, primary diagnosis at the time of death using AHRQ Clinical Classification System categories,[9] and comorbid conditions as defined by Elixhauser and colleagues.[10,11] These variables were used to create weights to adjust our models for BFS nonresponse bias and facility case-mix.[8,12] This secondary analysis was approved by the Corporal Michael J. Crescenz VA Medical Center Institutional Review Board.

Variables and Measures

Our primary outcome of interest was the BFS global item, also known as the BFS-PM. For this analysis, the BFS-PM was dichotomized into "excellent" versus all other responses (i.e., "very good," "good," "fair," "poor") to align with current VEC reporting structures.

Our independent variables were each of the three BFS factors that have been identified previously[3]:1) Respectful Care and Communication, which consisted of five items scored on a four-point Likert-type scale indicating the degree to which staff listened to concerns, staff gave treatment the Veteran wanted, staff were kind, caring, and respectful, staff kept family members informed about the Veteran's condition and treatment, staff attended to personal care needs; 2) Emotional and Spiritual Support, which consisted of three items scored on a four-point Likert-type scale indicating the degree to which staff gave Veteran enough emotional support before the Veteran's death, staff gave family enough emotional support after the Veteran's death, staff gave Veteran enough spiritual support; and 3) Benefits, which consisted of three items scored as yes/no indicating whether staff gave enough information about survivor benefits, staff gave enough information about burial benefits, staff gave enough help with funeral arrangements.

Factor scores were calculated using the Likert scale sum score for each of the items included in the factor. Scores theoretically range from 0 to 15 for the Respectful Care and Communication factor, 0 to 9 for the Emotional and Spiritual Support factor, and 0 to 3 for the Benefits factor. To reclaim cases with missing BFS item-level data, we employed hot-deck imputation procedures for all multivariate analyses where values of missing items were imputed by randomly selecting values from a donor pool with complete information.[13] Overall, 6% of missing/nonapplicable cases were imputed. After imputing missing data for each item, we then created a summary score by summing the Likert scale score for each item on each factor.

Statistical Analysis

Descriptive statistics were calculated for the demographic and clinical characteristics of the study sample, as well as for the BFS-PM and BFS factor scores. For each of the three BFS factors, we then ran a series of logistic regression models at the respondent level with the BFS-PM as the outcome variable and all possible binary cut points for each factor score as

Table 1
Veteran Characteristics and Unadjusted BFS Results for Veterans Whose Next-of-Kin Completed the BFS, January 2012 to January 2016

Characteristics	$N = 40{,}180$
Veteran age in yrs: mean (SD)	76.2 (11.7)
Veteran race/ethnicity: *n* (%)	
Non-Hispanic white	29,474 (73.4)
All other race/ethnicity[a]	10,706 (26.6)
Listed next-of-kin relationship: *n* (%)	
Spouse	17,575 (43.7)
Child	12,052 (30.0)
Sibling	5087 (12.7)
Other family	3154 (7.9)
Other nonfamily	2312 (5.7)
Mode of survey administration: *n* (%)	
Mail	32,603 (811)
Telephone	6275 (15.6)
Online	1302 (3.2)
Elixhauser Comorbidity Index: mean (SD)	5.5 (2.7)
Primary diagnosis at death: *n* (%)	
Neoplasms	12,179 (30.3)
Diseases of the circulatory system	5784 (14.4)
Diseases of the respiratory system	5630 (14.0)
Mental illness	3770 (9.4)
Infectious and parasitic diseases	3140 (7.8)
Other primary diagnoses[b]	9677 (24.1)
Unadjusted Bereaved Family Survey outcomes[c]	
Bereaved Family Survey Performance Measure score: mean % "Excellent" (SD)	61.4(48.7)
Respectful Care and Communication factor score: mean (SD)	13.2(2.5)
Emotional and Spiritual Support factor score: mean (SD)	7.2 (2.4)
Benefits factor score: mean (SD)	1.74 (1.2)

BFS = Bereaved Family Survey.
[a]All other race/ethnicity includes Asian, Pacific Islander, Filipino, Native American, and mixed race.
[b]Digestive system (5.4%); ill-defined conditions/factors influencing health status (4.5%); diseases of the central nervous system/sense organs (3.3%); genitourinary system (3.2%); nutritional/metabolic, immunity disorders (2.2%); injury/poisoning (2.4%); endocrine, residual codes, unclassified, all E/V codes, none (0.9%); musculoskeletal system/connective tissue (0.9%); skin/subcutaneous tissue (0.7%); and diseases of the blood and blood-forming organs (0.6%).
[c]Theoretical range of factor scores: Respectful Care and Communication (0−15), Emotional and Spiritual Support (0−9), and Benefits (0−3).

the main independent variables (e.g., for the Respectful Care and Communication factor, 0 vs. 1−14, 0−1 vs. 2−14, 0−2 vs. 3−14, etc.). Robust standard errors were calculated to account for clustering of Veterans within facilities. Models included adjustment for patient case mix[12] and nonresponse bias[8] with inverse probability weights. To evaluate model fit, we examined a set of model fit criteria and classification accuracy values, including the Liu Index, Bayesian Information Criterion (BIC), sensitivity and specificity, and percent correctly classified. The Liu Index[14] is a nonparametric approach that defines the optimal cut point as the point maximizing the concordance probability of sensitivity and specificity. We chose the Liu Index because it has been shown to outperform other cut point finding measures.[15]

We conducted sensitivity analyses to confirm the cut point selected by the Liu Index using random forest (RF) analyses and associated permutation importance tests. RF is a machine-learning method based on classification and regression trees (CART). While CART creates a single classification tree, RF creates many classification trees and aggregates the results over all trees. The permutation importance test in RF randomly shuffles each predictor and evaluates the degradation of model fit. The predictor that most negatively impacts model fit is considered most important. The importance of other predictors is then calculated relative to the most important predictor. In addition to using RF to confirm factor score cut points, we also used RF to evaluate the relative importance across the three BFS factor domains at their optimal cut points (Respectful Care and Communication vs. Emotional and Spiritual Support vs. Benefits). We used STATA statistical software version 13.1 (StataCorp., College Station, TX) for all analyses and set the statistical significance level at $P < 0.05$.

Results

Our analytic sample included 40,180 Veterans whose next-of-kin completed a BFS. The mean BFS response rate across study years was 58%. Table 1 displays characteristics of the Veterans and their family members included in the sample. The mean age of Veterans at the time of death was 76.2 years and nearly three-quarters (73.4%) self-identified as non-Hispanic white. The most common primary diagnosis on the last admission was neoplasm (24.3%), while the average Veteran had 5.5 comorbid health conditions at the time of death. Almost 44% of BFS respondents were spouses, and 38.8% completed the survey via mail.

On the BFS-PM, 61.4% of respondents rated the quality of care received during the last month of life as "excellent." The mean factor scores were as follows: Respectful Care and Communication: 13.2 (SD 2.5), Emotional and Spiritual Support: 7.2 (SD 2.4), Benefits: 1.7 (SD 1.2).

When each possible cut point for the three factor scores was tested in robust logistic regression models, each was significantly associated with the BFS-PM (results not shown). Table 2 includes the optimal cut point using the Liu Index,[15] BIC, sensitivity and specificity, and classification accuracy values for each possible cut point on the three factors that were derived from the regression models. Figure 1 graphically displays the BIC and "percent correctly classified" for several model-fit indices. We found that a score of 14 or higher on the Respectful Care and Communication factor had the lowest BIC (121355)

and highest percent correctly classified (81.2%). The Emotional and Spiritual Support factor (range 0–9) had an optimal score of 8 or higher (BIC = 133685; % correctly classified = 77.1%). Sensitivity and specificity values were well balanced for each of these cut points [(Respectful Care and Communication: Sensitivity = 88.3%, Specificity = 70.1%) and (Emotional and Spiritual Support: Sensitivity = 78.7%, Specificity = 74.5%)], which confirmed our primary findings. A clear cut point did not emerge on the Benefits factor (range 0–3). The BIC values for scores of 1 or 2 (vs. 3) were nearly identical (159541 and 159656, respectively), while the classification accuracy was low for these two groups (36.8% and 34.7%, respectively). Results from the sensitivity analyses using the RF permutation predictor importance tests of alternative cut points confirmed all optimal cut points identified by the Liu Index. Relative to the optimal Respectful Care and Communication factor cut point of ≥14, a cut point of ≥13 was 78% less important (100 vs. 22), while a cut point equal to 15 (maximum score) was 98.5% less important (100 vs. 1.5). Relative to the optimal Emotional and Spiritual Support factor cut point of ≥8, a cut point of ≥7 was 79% less important (100 vs. 21), while a cut point equal to 9 (maximum score) was 98.6% less important (100 vs. 1.4). Assessment of the relative importance of each BFS factor at their optimal cut points indicated that the Respectful Care and Communication factor was the most important (100), while the Emotional and Spiritual Support factor was 58% less important (100 vs. 42), and the Benefits factor was 98% less important (100 vs. 2.2).

Discussion

This study resulted in two important advancements related to the practical use of the BFS. First, we identified empirically based cut points on two of the three BFS factors—Respectful Care and Communication, and Emotional and Spiritual Support—that are most predictive of an "excellent" overall rating on the BFS-PM. Second, our findings also showed that exceeding the cut point on the Respectful Care and Communication factor was more predictive of receiving an "excellent" overall rating on the BFS-PM compared to exceeding the cut point on the Emotional and Spiritual Support factor. We did not find evidence of an empirical cut point on the Benefits factor. These results have significant implications for quality improvement efforts embedded in clinical practice and for performance measurement and quality improvement efforts.

Table 2
Table of Model Fit and Classification Accuracy Values for Each Possible Cutoff Point by BFS Factor

Cutoff Point	Selected Cut Point: Liu Criteria[14]	BIC	Sensitivity, %	Specificity, %	Correctly Classified, %
Respectful Care and Communication Score (ROC_{AUC} = 0.85; 95% CI: −0.85 to 0.86)					
0 vs. 1–15		166046	100.00	0.29	61.34
0–1 vs. 2–15		165792	100.00	0.72	61.51
0–2 vs. 3–15		165426	100.00	1.32	61.74
0–3 vs. 4–15		164705	100.00	2.32	62.13
0–4 vs. 5–15		163542	99.99	3.96	62.76
0–5 vs. 6–15		161498	99.98	6.73	63.82
0–6 vs. 7–15		159023	99.97	9.65	64.95
0–7 vs. 8–15		155726	99.94	13.26	66.33
0–8 vs. 9–15		151240	99.90	18.02	68.16
0–9 vs. 10–15		145444	99.78	24.39	70.55
0–10 vs. 11–15		138101	99.37	32.96	73.62
0–11 vs. 12–15		129815	98.18	43.71	77.06
0–12 vs. 13–15		123683	95.25	55.99	80.03
0–13 vs. 14–15	Optimal cut point	121355	88.25	70.14	81.23
0–14 vs. 15		127469	72.22	84.22	76.87
Emotional and Spiritual Support Score (ROC_{AUC} = 0.83; 95% CI: 0.82–0.83)					
0 vs. 1–9		161183	99.75	7.59	64.02
0–1 vs. 2–9		158097	99.39	13.51	66.10
0–2 vs. 3–9		154327	98.99	20.46	68.54
0–3 vs. 4–9		149400	97.92	29.28	71.31
0–4 vs. 5–9		144625	96.38	38.19	73.82
0–5 vs. 6–9		139533	93.57	48.67	76.16
0–6 vs. 7–9		135406	87.98	62.06	77.93
0–7 vs. 8–9	Optimal cut point	133685	78.73	74.49	77.09
0–8 vs. 9		136226	65.07	84.78	72.71
Benefits score (ROC_{AUC} = 0.34; 95% CI: 0.34–0.35)					
0 vs. 1–3		161261	51.13	24.60	40.84
0–1 vs. 2–3		159541	33.82	41.38	36.75
0–2 vs. 3		159686	15.27	65.25	34.65

BFS = Bereaved Family Survey; BIC = Bayesian Information Criterion.

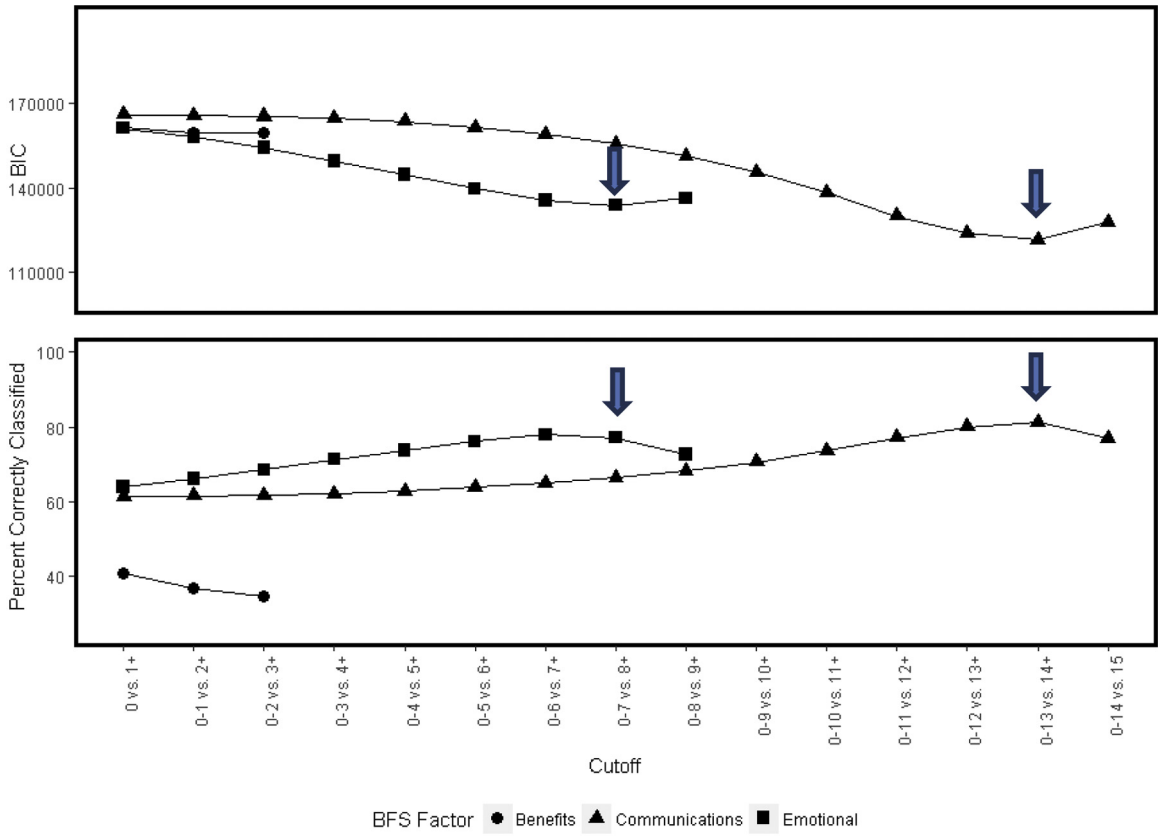

Fig. 1. BIC and percent correctly classified values for potential cutoff scores by BFS factor. BFS = Bereaved Family Survey; BIC = Bayesian Information Criterion.

Previously, VA hospice and palliative care program managers had access to BFS factor scores; however, the identification of data-based thresholds allows for the creation of empirical targets for quality improvement efforts. As such, our findings also lay the groundwork for the development of clinically relevant tools for performance measurement and quality improvement. For example, a histogram could be provided for each site indicating the facility-level performance in relation to the empirically based target on each BFS factor. Program managers would be able to quickly recognize areas in need of improvement by identifying scores that fall below the target. Quality improvement efforts could then be directed to those low performing areas. It should also be noted that the Respectful Care and Communication, and Emotional and Spiritual Support factor scores had to be almost perfect (14 out of 15 and 8 out of 9, respectively) to achieve the highest likelihood of receiving an overall score of excellent on the BFS-PM.

Our findings also suggest that quality improvement efforts could be prioritized from areas of greatest impact on the BFS-PM to least, that is, Respectful Care and Communication, Emotional and Spiritual Support, and Benefits. The Benefits factor had the least variation of BIC values and the lowest classification accuracy across all cut points. Therefore, use of an empirical cut point as an empirical target on the Benefits factor may not have significant clinical value in quality improvement. We do note, however, that higher scores on the Benefits subscale are associated with higher scores on the BFS-PM and therefore should continue to be integrated into standard VA EOL care practices. Our finding that the Respectful Care and Communication factor was most highly associated with overall quality ratings is aligned with previous research. Seccareccia and colleagues[16] found that communication is an important component of bereaved family satisfaction, while the National Consensus Project for Quality Palliative Care Clinical Practice Guideline[17] highlights communication as a central feature of quality EOL care.

A primary limitation in studies seeking to establish empirical cut points on continuous scales is the potential bias that is introduced into sensitivity and specificity measures by small sample sizes.[18] Our sample of over 40,180 bereaved family members helps to overcome this common weakness among similar studies.

Another potential limitation of our study is that performance on the BFS is determined by bereaved family members. Family reports of care may or may not align with actual care received; however, family reports of care remain a cornerstone in the evaluation of EOL care quality.[19] Furthermore, it is possible that the mental state and grief reaction stage of bereaved families may affect BFS responses. As such, the BFS was developed with careful consideration of administering the survey within four to six weeks of death.[20] Prior studies have shown that minimal distress is caused to family members as a result of participating in bereavement surveys[20,21] and responses are not affected by timing of administration.[22] Finally, the item response set associated with the Benefits factor (i.e., yes/no format) may explain why we could not identify an empirical cutoff score due to restricted variation in the measure. The lower contribution of the Benefits factor to the BFS-PM may be also be related to its less inherent variability. Nonetheless, the Benefits factor retains a significant relationship with the BFS-PM and is consistently reported as an important factor in EOL care quality among bereaved family members of Veterans.[5,6,23]

In order for hospice and palliative care clinicians and program managers to effectively evaluate their programs, outcomes must be easy to interpret. The data-based approach we describe allows for rapid and straightforward assessment of the performance of VA facilities on the various domains of the BFS. This information can be used to target interventions to improve the overall experience of Veterans at the end of life and their family members.

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References

1. Atkins D, Kilbourne AM, Shulkin D. Moving from discovery to system-wide change: the role of research in a learning health care system: experience from three decades of health systems research in the Veterans Health Administration. Annu Rev Public Health 2017;38:467–487.

2. Institute of Medicine. Best care at lower cost: The path to continuously learning health care in America. Washington, DC: National Academies Press, 2012.

3. Thorpe JM, Smith D, Kuzla N, Scott L, Ersek M. Does mode of survey administration matter? Using measurement invariance to validate the mail and telephone versions of the Bereaved Family Survey. J Pain Symptom Manage 2016; 51:546–556.

4. Performance Measurement Coordination Strategy for Hospice and Palliative Care: Final Report. Washington, DC: National Quality Forum, 2012. Available from http://www.qualityforum.org/Publications/2012/06/MAP_Hospice_and_Palliative_Care_Final_Report.aspx. Accessed March 21, 2019.

5. Smith D, Cariagian N, Kazlo E. Can we make reports of end-of-life care quality more consumer focused? Results of a nationwide quality measurement program. J Palliat Med 2011;14:301–307.

6. Casarett D, Shreve S, Luhrs C, et al. Measuring families' perceptions of care across a health care system: preliminary experience with the Family Assessment of Treatment at End of Life Short Form (FATE-S). J Pain Symptom Manage 2010; 40:801–809.

7. United States Department of Veterans AffairsPROMISE Center. PROMISE methods. 2017. Available from https://www.cherp.research.va.gov/PROMISE/vecmethods.asp. Accessed March 21, 2019.

8. Smith D, Kuzla N, Thorpe J, Scott L, Ersek M. Exploring nonresponse bias in the Department of Veterans Affairs' bereaved family survey. J Palliat Med 2015;18:858–864.

9. Healthcare Cost and Utilization Project (HCUP) Clinical Classification Software (CCS). Rockville, MD: Agency for Healthcare Research and Quality. 2017. Available from https://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp. Accessed March 21, 2019.

10. Elixhauser A, Steiner C, Harris DR, Coffey RM. Comorbidity measures for use with administrative data. Med Care 1998;36:8–27.

11. van Walraven C, Austin PC, Jennings A, Quan H, Forster AJ. A modification of the Elixhauser comorbidity measures into a point system for hospital death using administrative data. Med Care 2009;47:626–633.

12. Kutney-Lee A, Carpenter J, Smith D, et al. Case-mix adjustment of the bereaved family survey. Am J Hosp Palliat Med 2018;35:1015–1022.

13. Cox BG. A weighted sequential hot deck imputation procedure. American Statistical Association. Proc Section Surv Res Methods 1980:721–726.

14. Liu X. Classification accuracy and cut-point selection. Stat Med 2012;31:2676–2686.

15. Rota M, Antolini L. Finding the optimal cut-point for Gaussian and Gamma distributed biomarkers. Comput Statdata Anal 2014;69:1–14.

16. Seccareccia D, Wentlandt K, Kevork N, et al. Communication and quality of care on palliative care units: a qualitative study. J Palliat Med 2015;18:758–764.

17. Ferrell BR, Twaddle ML, Melnick A, Meier D. National Consensus Project Clinical Practice Guidelines for Quality Palliative Care, 4th ed. J Palliat Med 2018;21, https://doi.org/10.1089/jpm.2018.0431.

18. Leeflang MMG, Moons KGM, Reitsma JB, Zwinderman AH. Bias in sensitivity and specificity caused by data-driven selection of optimal cutoff values: mechanisms, magnitude, and solutions. Clin Chem 2008;54: 729–737.

19. Rhodes RL, Mitchell SL, Miller SC, et al. Bereaved family members' evaluation of hospice care: what factors influence

overall satisfaction with services? J Pain Symptom Manage 2008;35:365–371.

20. Finlay E, Shreve S, Casarett DJ. Nationwide Veterans Affairs quality measure for cancer: the family assessment of treatment at end of life. J Clin Oncol 2008;26:3838–3844.

21. Seamark DA, Gilbert J, Lawrence CJ, Williams S. Are postbereavement research interviews distressing to carers? Lessons learned from palliative care research. Palliat Med 2000;14:55–56.

22. Casarett DJ, Crowley R, Hirshman KB. Surveys to assess satisfaction with end-of-life care: does timing matter? J Pain Symptom Manage 2003;25:128–132.

23. Kutney-Lee A, Smith D, Thorpe J, et al. Racial and ethnic disparities in end of life care among Veterans. Med Care 2017;55:342–351.