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Patient Safety Spring 2022 Cycle: Public and Member Comments

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Post-Evaluation Measure-Specific Comments on Patient Safety Spring 2022 Submissions

NQF #3671 Inappropriate diagnosis of community-acquired pneumonia (CAP) in hospitalized medical patients; Abbreviated form: Inappropriate diagnosis of CAP (Recommended)

Dr. Timothy Hofer

Comment ID#: 8093 (Submitted: 06/09/2022)

Council / Public: Public

Level of Support: N/A

Comment

It is incorrect to say that a measure has insufficient reliability by just looking at the intra-class correlation coefficient which is an estimate of the reliability of using a single observation (or patient outcome) to distinguish between the objects of measurement (in this case hospitals). Using the spearman-brown prophecy formula is a standard way of estimating the reliability of a measurement averaged, as in this example, over multiple measurements of the same hospital as represented by an average of multiple patient outcomes within that hospital. As noted in a classic text, The Statistical Evaluation of Measurement Errors (2nd Ed) by Grahm Dunn Arnold, London, 1989 (p 27-28), as well as countless other places: "The reliability of a randomly-selected subject [in this case a hospital] by a randomly selected rater [in this case a patient] is an intraclass correlation... If this reliability is not sufficiently high, then we can replicate [make multiple] measurements, and the reliability of the mean of the assessments of m independent [patients] on a given [hospital] ...can be calculated using the Spearman-Brown formula." This is the argument behind using mortality rates to assess hospitals (where the ICC is often less than 0.01 for using a single patient survival or death to measure the hospital mortality rate) but with sufficient cases the reliability of the hospital average mortality can approach 0.70-0.80. It is also the rationale for all psychometric scales, where the ICC of using a single randomly selected item from the scale to measure the trait is low but when a sum or mean of the N items in the scale is used the reliability approaches or exceeds 0.80. The technique is widely cited in the medical literature relating to quality measures. It is surprising that the NQF review did not seem to appreciate this argument and rated the reliability as insufficient stating that: "... the intraclass correlation coefficient is well below 0.5, a range generally agreed to show poor reliability. It is not clear from the submission how applying the Spearman Brown prophecy formula leads to an overall reliability of 0.9." By this reasoning you would consider every psychometric scale ever constructed as unreliable. You certainly would never consider using readmission rates or mortality rates or basically any patient outcome a reliable measure of hospital performance. Again, the ICC is *not* the relevant reliability estimate to refer to in assessing the reliability of this measurement as defined when it is not intended that a hospital measure will be based on a single measurement (or patient outcome). The relevant calculation for the measure reliability must take into account the expected number of measurements (patients) per hospital that will be used to construct the measure. I work on clinical and performance measurement and have over 20 years of experience and publications on this topic and have advised the team constructing this measure.

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

NQF #3450 Practice Environment Scale - Nursing Work Index (PES-NWI) (composite and five subscales) (previously NQF#0206 - Undergoing Maintenance) (Recommended)

Ann Kutney-Lee
Comment ID#: 8160 (Submitted: 09/02/2022)

Council / Public: Public

Level of Support: N/A

Comment

The PES-NWI is one of the most widely used and well-known instruments for measuring the quality of nurse work environments. For over 15 years, I have used the PES-NWI in my research on the relationship between nurse work environments and nurse job (e.g., burnout) and patient outcomes that has spanned both academic and government settings. For example, in a national study of Veterans Affairs Medical Centers, we found that better nurse work environments (as measured by the PES-NWI) were associated with more favorable bereaved family reports of the quality of end-of-life care that Veterans received (Kutney-Lee et al., J Pain Symptom Manage. 2015). More recently, my work has examined the high-priority issue of electronic health record usability. Using a large multi-state survey of nurses that included the PES-NWI, our team found that variations in nurse work environments were associated with nurses' evaluations of EHR usability, and that the quality of the work environment plays a significant role in whether EHRs exert their intended effects on improving quality and safety of care (Kutney-Lee et al., Appl Clin Inform. 2019). As current reports of nurse burnout and poor working environments continue to increase, re-endorsement of the PES-NWI is critical so that researchers and healthcare systems can continue to rely upon this invaluable, mainstay measure to track changes over time in nurse work environments and identify targets for improvement. Thank you for your consideration, Ann Kutney-Lee, PhD, RN, FAAN

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Bernadette Melnyk, The Ohio State University
Comment ID#: 8183 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am recognized nationally and globally for my clinical knowledge, expertise in evidence-based practice, and innovative approaches to a wide range of health care challenges – including nurse wellness. My extensive research in clinician burnout and well-being has demonstrated that the environment in which a nurse practices not only impacts their personal wellness, but also has a significant impact on the occurrence of medical errors and other patient safety measures. The PES-NWI is invaluable as it has low respondent burden and satisfactory psychometric properties. As the most used nursing practice environment measure, the PES-NWI helps our organization and researchers monitor nursing performance and compare with the performance of our peers. Further, with the ongoing nurse staffing shortage, is of upmost importance to have an accurate tool that measures staffing and resource adequacy. I recommend re-endorsement of all criteria in the PES-NWI.

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Caitlin Campbell
Comment ID#: 8141 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

Thank you for seeking feedback on this measure. As a new nurse scientist, I've had the opportunity to become extensively familiar with the PES-NWI and its use. The instrument remains the most frequently used measure of the nurse work environment globally, allowing for the comparison of nurse work environments across settings and cultures. Additionally, prior research has supported

the PES-NWI's association with both patient and nurse outcomes. The COVID-19 pandemic has illuminated many concerns within the healthcare environment, but especially pertaining to the role of nurses. The PES-NWI and its subscales provide a measure of the nurse work environment and provides leaders with information that can allow them to specifically target deficits within the environment. Ultimately, the PES-NWI can be used to help identify work environments that enhance or inhibit nurses' ability to safely provide patient care. While the dust is still settling around the result of pandemic to healthcare workers, it is evident there are concerns about nurse recruitment, retention, and the provision of patient care. The PES-NWI has been associated with variables such as these for years, and can continue to be used to identify work environments in which nurses want to work. Therefore, I recommend continuing the endorsement of the PES-NWI by the NQF. Thank you for your time.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Cheryl Peterson, American Nurses Association; Submitted by Ms. Cheryl Peterson, MSN, RN

Comment ID#: 8174 (Submitted: 09/06/2022)

Council / Public: HPR

Level of Support: Supported

Comment

The American Nurses Association (ANA) continues to focus on the need for strong work environments to support and retain the nursing workforce. ANA strongly supports NQF re-endorsement of the Practice Environment Scale of the Nursing Work Index. This instrument is the most widely used and respected for measuring the nurse work environment. In recent work by the Nurse Staffing Think Tank (https://www.nursingworld.org/~49940b/globalassets/practiceandpolicy/nurse-staffing/nurse-staffing-think-tank-recommendation.pdf) (2022) has endorsed creating a Centers for Medicare and Medicaid Services (CMS) Condition of Participation that requires organizations to regularly assess/measure the health of the work environment and demonstrate evidence of continual improvement. The continued endorsement of the PES-NWI is essential to the success of our recommendations

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Christopher Friese, University of Michigan School of Nursing

Comment ID#: 8138 (Submitted: 08/31/2022)

Council / Public: Public

Level of Support: N/A

Comment

NQF #3450 - Practice Environment Scale - Nursing Work Index (PES-NWI) (composite and five subscales) (previously NQF#0206 - Undergoing Maintenance) As a nurse scientist and clinician, I support re-endorsement of the Practice Environment Scale of the Nursing Work Index (PES-NWI). In 2022, there is a heightened concern for the quality of inpatient care across the United States and nurses are the fulcrum for that care delivered. Without valid and reliable measures endorsed by NQF to measure the nursing practice environment, I fear there will be a missed opportunity to identify targets for improving the clinical environment and ultimate quality of care delivered. Importance. There is ample evidence to support the use of the measure and its relevance to clinical quality improvement. In work cited by the National Academy of Medicine Future of Nursing Report, Friese and colleagues (2008) identified the quality of the nursing practice environment as a significant and independent predictor of 30-day mortality and failure to rescue (death following a postoperative complication). More recently, my team has adapted the PES-NWI slightly for use in the ambulatory oncology setting, and have used the measure to identify targets for quality improvement in a large multi-site NCI-designated comprehensive cancer center (Friese, et al., 2016). Friese, C. R., Lake, E. T., Aiken, L. H., Silber, J. H., & Sochalski, J. (2008). Hospital nurse practice environments and outcomes for surgical oncology patients. Health services research, 43(4), 1145-1163. Friese, C. R., Siefert, M. L., Thomas-Frost, K., Walker, S., & Ponte, P. R. (2016). Using data to strengthen ambulatory oncology nursing practice. Cancer nursing, 39(1), 74. I would also ask the committee to strongly consider the alternatives available to reliably measure and discriminate across nurses' practice environments. There are none that would meet NQF standards. Our work has shown that Magnet hospital recognition is a proxy measure for pre-existing excellence and many institutions with excellent environments forgo the fees and effort of voluntary Magnet recognition (Friese, et al., 2015). Therefore, direct measurement of the practice environment, by those directly in the field, using a valid, reliable, and discriminatory measure, is far preferable and has greater likelihood to improve structure, processes, and outcomes of hospital care. Friese, C. R., Xia, R., Ghaferi, A., Birkmeyer, J. D., & Banerjee, M. (2015). Hospitals in 'Magnet' program show better patient outcomes on mortality measures compared to non-'Magnet' hospitals. Health Affairs, 34(6), 986-992. Thank you for the opportunity to provide this feedback. Christopher R. Friese, PhD, RN, AOCN® (he/him/his) Elizabeth Tone Hosmer Professor of Nursing, Health Management & Policy Director: Center for Improving Patient and Population Health Associate Director for Cancer Control and Population Sciences University of Michigan Rogel

Cancer Center University of Michigan 400 North Ingalls, Suite 1174, Ann Arbor, MI 48109-5482 734-647-4308

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Connie Barden, American Association of Critical-Care Nurses ; Submitted by Dr. Melissa Jones
Comment ID#: 8136 (Submitted: 08/30/2022)

Council / Public: Public

Level of Support: N/A

Comment

The American Association of Critical-Care Nurses (AACN) strongly supports continued National Quality Forum (NFQ) endorsement of the Practice Environment Scale of the Nursing Work Index (PES-NWI), which measures the nurse work environment. The PES-NWI is a highly utilized, validated tool for measuring the nurse work environment. The establishment of widespread healthy nurse work environments is a major initiative for AACN, and this instrument is essential to the evidence base connected with our work. The metric is key to measuring and assuring work environments are positioned to provide the safest possible care to patients. In addition, AACN is a founding co-convener of the Nurse Staffing Think Tank, along with the American Nurses Association, The American Organization of Nursing Leadership, the Healthcare Financial Management Association, and the Institute for Healthcare Improvement. The Think Tank's goal was to identify recommendations that can be implemented within 12-18 months to improve nurse staffing. Improving the health of nursing work environments was a key priority identified by the Think Tank and this will require empirical measurement of factors that directly influence nurses' willingness to stay and work in patient care areas. The PES-NWI solidly provides such a measure. The Think Tank endorsed creating a Centers for Medicare and Medicaid Services (CMS) Condition of Participation that requires organizations to regularly assess/measure the health of the work environment and demonstrate evidence of continual improvement. The continued endorsement of the PES-NWI is essential to the success of our recommendations. We strongly support NQF re-endorsement of the entire PES-NWI. This instrument is the most widely used and respected for measuring the nurse work environment.

Developer Response
N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Aoyjai Prapanjaroensin Montgomery

Comment ID#: 8146 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

Thank you for the opportunity to comment on re-endorsement of the PES-NWI. I recommend continuing the endorsement of the PES-NWI because of this measure helps healthcare organization to monitor, provide baseline of many interventions to improve the work environment for nurses, and compare the work environment before and after the intervention(s) as well as compare to other national and international healthcare organizations. Drs. Patrician and Montgomery have been using the PES-NWI in several projects as follows 1) Alabama nurse staff study in 2018 which was a statewide study examining how work environment impacts quality of nursing care, patient safety, and patient outcomes (such as mortality rates, hospitalized-acquired infections, and patient experience). Based on this study, we published 3 peer-reviewed articles that related to PES-NWI and 3 more articles that are in progress. A total of 25 either podium or poster presentations in both national and international conferences; 2) Workforce Engagement for Compassionate Advocacy, Resilience, and Empowerment (WE CARE) which is funded by Heath Resources & Services Administration (HRSA) for 3 years (2022-2025). This study aims to develop, deliver, spread, and sustain an evidence-based training program for nurses, clinical support staff, and nursing students. We are using the PES-NWI to evaluate what issues in the work environment that nurses are facing to help develop what types of interventions are needed in the organization. Also, we will use the PES-NWI to measure the change in the work environment every year. Based on the Alabama nurse staff study in 2018, we found that Alabama nurses rated work environments differently based on the hospitals. Overall, Alabama nurses rated poor work environments when compared to other states or countries. Also, we found that poor work environments were related to high burnout, high missed nursing care, high medication administration errors, poor patient safety grade, and poor patient outcomes. We were able to present these findings the Alabama nurse leaders. Based on the Workforce Engagement for Compassionate Advocacy, Resilience, and Empowerment (WE CARE), we found that nurses reported work environments differently based on their work divisions. Therefore, we are able to focus on the divisions that are in crisis. We are considering specific interventions by divisions based on how nurses rated work environment.

Developer Response

N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Blake McGee
Comment ID#: 8175 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment
The Practice Environment Scale of the Nursing Work Index (PES-NWI) is a reliable and valid measure that captures how the wide variation in nurses' work environments affects patient outcomes, among other things. For example, a 2019 meta-analysis published in Medical Care found that better work environments as measured by the PES-NWI were associated with lower odds of poor safety or quality ratings (average OR of 0.65) and negative patient outcomes (average OR of 0.93), and higher odds of patient satisfaction (OR of 1.16). As a registered nurse and PhD-prepared health services researcher myself, I can personally attest to how much variability there is in nurses' workplace environments and how that directly affects the quality and safety of patient care, to say nothing of nurses' well-being. Therefore, I recommend continued endorsement of this measure.

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Carol Susan Johnson, RN
Comment ID#: 8188 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment
I have used the PES-NWI and believe it is vital in evaluating nursing practice. It is particularly important to identify performance gaps in clinical practice and diverse work environments. This is a vital aspect of the PES-NWI and I recommend re-endorsement of all criteria in the PES-NWI. Nurses

currently are frustrated with less than optimal work environments and we must use the PES-NWI to improve work environments for all nurses and other employees. This is essential for individuals to receive the highest possible health care. Identifying performance gaps and addressing them enables organizations to monitor their performance and compare that performance with peers. The PES-NWI requires all components to be successful. Since 5 of the 6 criteria have been endorsed, I ask you to endorse the Performance Gap criterion also. It is essential to obtain a complete picture of the current nusing work environment. Thank you!

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Catherine H. Ivory

Comment ID#: 8157 (Submitted: 09/02/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am a nurse executive with strategic oversight for nursing practice at a large academic health system in the southeast. Save and effective nurse staffing, and nurse well-being are the two most important issues facing the nursing profession and the importance of both issues has only intensified during the pandemic. PES-NWI is a valuable tool for quantifying the work environment of nurses. Results give valuable insight in support of various care models, and give objective voice to the nurse. Our health system, like most since the pandemic began, is understaffed for nursing and must evaluate new and different care models that will impact the work environment of nurses. The PES-NWI is valuable in helping us evaluate such models. For organizations who are Magnet designated for nursing excellence, like ours, the PES-NWI is a toll that permits us to measure and report how nurses perceive their work environment. Please re-endorse the PES-NWI.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Eileen Lake, PhD, RN, University of Pennsylvania, Center for Health Outcomes and Policy Research
Comment ID#: 8178 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

I submit this additional information on measure #3450, which I steward, as public comment on the spring 2022 Patient Safety Consensus Development Process. _Performance Gap_ Regarding criterion 1b: Performance Gap, the committee questioned why the submission did not provide data more recent than 2016 showing a continued performance gap. Here, more recent data are provided, as described in text and table below and presented in figures online: www.nursing.upenn.edu/live/files/2029-nqf-public-comment-figure-sep-2022pdf Figures are not compatible with the public comment platform. Figure 1 online and Table 1 below display the variation in hospital-level PES-NWI scores across general acute care hospitals in two large U.S. states (NY, IL) in two survey waves: pre-pandemic Wave 1: December 2019 through February 2020 (265 hospitals) and Wave 2: April – June, 2021 (217 hospitals). These data were collected in research conducted by the Center for Health Outcomes and Policy Research, funded by the National Council of State Boards of Nursing (Linda H. Aiken, PI). The online pdf figures are box-and-whisker plots depicting the sample median at the center of each box, the 25th and 75th percentiles at the edges of each box, and the maximum and minimum at the whiskers of each diagram. The left diagram is the composite score. The remaining diagrams are the subscale scores. Similar statistics are displayed in Table 1. Here we see the performance gap at the hospital level continues to be large as compared to Figure 2, from 2015, which provides data from four other states. In Figure 1, we see composite values nearly identical to the 2015 values reported in Figure 2, although the Figure 2 values were five years earlier in four different states from these. Additionally, the Figure 1 Wave 2 during-pandemic data exhibit greater variation in the first (Nurse Manager Ability and Support - maroon) and fourth (Staffing and Resource Adequacy - aqua) subscales than the same states' pre-pandemic data. Furthermore, in NY/IL in recent years, three of the five subscales exhibit worse (lower) median/IQR, and minimum and maximum as compared to the Figure 2 data from five years earlier. These worse values likely represent overall deterioration nationally in work environments over this period. Interestingly, the two subscales with favorable values from the 2015 sample have even better values in this sample. These comparisons demonstrate the capacity of the instrument to discriminate across the various domains of importance to assuring patient safety through nursing care. Clearly, a large fraction of hospitals have suboptimal work environments for their nurses. Here is a table with the NY/IL data: Table 1. PES-NWI Summary Statistics from two waves of NY and IL Registered Nurse Survey data Wave 1 survey: December 2019 - February 2020 (n = 265 hospitals) Wave 2 survey: April to June 2021 (n = 217 hospitals) Wave 1 Wave 2 Mean SD IQR Min Max Mean SD IQR Min Max Composite 2.67 0.27 0.41 1.90 3.60 2.62 0.29 0.40 1.94 3.36 Hospital Affairs 2.42 0.34 0.50 1.38 3.36 2.30 0.39 0.53 1.18 3.24 Nurse Manager 2.81 0.30 0.36 1.75 3.62 2.79 0.32 0.41 1.89 3.67 RN-MD Collegiality 3.10 0.23 0.29 2.42

3.82 3.21 0.21 0.29 2.64 3.83 Staffing/Resource Adequacy 2.23 0.38 0.54 1.20 3.80 2.01 0.42 0.62 1.00 3.55 Nursing foundations for Quality 2.80 0.32 0.44 1.89 3.80 2.76 0.34 0.46 2.00 3.64 Note. Average number of respondents per hospital = 58. Figure 2 online displays the variation across 525 general acute care hospitals in four large U.S. states (CA, PA, NJ, FL) in 2015. These data were collected by the Center for Health Outcomes and Policy Research, funded by the National Institute of Nursing Research (R01-NR014855, Linda H. Aiken, PI). The performance gap at the hospital level is large, ranging for the composite from a score of about 2.00 (equivalent to nurses on average "disagreeing" that the organizational traits are present in their current job) to 3.50 (the midpoint between "agree" and "strongly agree.") Among the five subscales, only two have values that are considered favorable: (nurse-physician collegiality [orange] and nursing foundations for quality [pink]). The remaining three diagrams exhibit very wide variation. _Disparities Data_ On p. 26, the report states "the Standing Committee was concerned with the lack of disparities data provided as a whole and thus did not reach consensus on performance gap." The published disparities data described below are from 5 to 15 years ago. This evidence gap derives from requiring nurse survey data to be linked for each hospital to patient race data to evaluate potential disparities. The data sources for the PES-NWI are grants and benchmarking databases such as the NDNQI. Contractual restrictions, however, prevent linkage by external researchers of the NDNQI data to hospital administrative databases, which contain patient's race data. Researchers at the University of Pennsylvania Center for Health Outcomes and Policy Research (CHOPR), the measure steward, conduct NIH-funded multistate surveys of random samples of licensed registered nurses, on which the publications below are based. Presently CHOPR researchers are funded to conduct the next waves of this series in 2023 and 2026. Therefore, the hypothesized ongoing disparities in nurse work environments and their association to disparities in patient outcomes will be reevaluated in the future. Note that in the pre-evaluation public comment period (see below dated June 17, 2022), as measure steward I presented data from a 2015 publication documenting statistically significant differences in the work environment in hospitals caring for low, medium, and high proportions of very low birthweight (VLBW) infants of Black race. Here is additional detail: In Lake et al (2015) the terciles from the distribution of percent of VLBW infants of Black race across hospitals comprised these groups: low (<11% infants of Black race), medium (11–31%), and high (>31%). These classifications were derived from national data on the distribution of VLBW infants of Black race obtained from the Vermont Oxford Network, which maintains a clinical registry of nearly all neonatal intensive care units in the United States. Therefore, these terciles represent the national distribution of VLBW infants of Black race at the hospital level, which implies that significant differences in the work environment in neonatal intensive care units classified according to VLBW infants of Black race are nationally representative. For this Sept 2022 public comment, here are additional publications providing evidence of racial disparities in the nurse work environment more broadly, i.e., in nursing units throughout a hospital. Brooks-Carthon et al (2016) report data from 2006 and 2007 from 69,065 patients in 253 hospitals in three large states (CA, NJ, PA). The patient sample was aged 65 to 90 with a principal diagnosis of Acute Myocardial Infarction. The hospitals were classified based on the PES-NWI into three groups, labelled Poor, Mixed, and Good work environment. The proportions of patients of Black and White race differed significantly across these work environment categories. Whereas 48% of all patients were cared for in hospitals with "poor" work environments, among patients of Black race, this proportion was 51%. Conversely, 26% of patients overall were cared for in hospitals with "good" work environments, but this proportion for patients of Black race was 21%. These data from 15 years ago

demonstrate racial disparities in access to good work environments. Brooks-Carthon et al (2011) report data from 2006 and 2007 from 568 hospitals in four large states (CA, NJ, PA, FL). These researchers classified hospitals into three groups of better, mixed and poor work environments. They also classified hospitals into three groups of high, medium, and low concentration of Black patients: low (<11% patients of Black race), medium (11–23%), and high (>23%). Although 26.6% of hospitals overall had "good" work environments, this fraction was 28.5% in the low-concentration Black hospitals as compared to 20.6% in the high-concentration Black hospitals. That is, about 3 in ten as compared to 1 in five. Clark et al (in preparation) reports data on disparities in cesarean delivery among low-risk women from 2016 from 258 hospitals in four large states (PA/NJ/FL/CA). It is notable that, despite racial groups having equivalent low-risk status, women of Black race still have higher rates of cesarean delivery than women of White race. Only women without any comorbidities or other known risk factors are included in this rate. The authors classified hospitals into three categories based on percentages of birthing women of Black race: low (0-15.2% Black women; n = 185), medium (15.3% - 40.8%; n = 57), and high (41.2% - 69.6%; n = 16). The work environment as measured by the composite score of the PES-NWI was best in the low concentration women of Black race (2.80), moderate in the middle category (2.73) and worst in the high-concentration of Black race (2.64). Although these differences were not statistically significant (p = .13) the trend suggests the possibility that poorer work environments in high percentage of women of Black race may contribute to poorer care quality and disparities in the cesarean delivery rates. References: Brooks-Carthon, M., et al. (2011). "Quality of Care and Patient Satisfaction in Hospitals With High Concentrations of Black Patients." Journal of Nursing Scholarship 43(3): 10. Brooks-Carthon, J. M., et al. (2016). "Unmet Nursing Care Linked to Rehospitalizations Among Older Black AMI Patients A Cross-Sectional Study of US Hospitals." Medical Care 54(5): 457-465. Clark, R.S., Srinivas, S, and Lake, E.T. (in preparation). Disparities in Low-Risk Cesarean Delivery Linked to Variation in Nursing Resources. Lake, E. T., et al. (2015). "Disparities in perinatal quality outcomes for very low birth weight infants in neonatal intensive care." Health Services Research 50(2): 374-397.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Elisabeth Brie Thumm

Comment ID#: 8186 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

Perinatal workforce development is an essential strategy to addressing the racialized disparities in matermal health outcomes in the US. In my work as a perinatal workforce well-being researcher, my findings consistently demonstrates that the work environment is a driver of workforce stability and inproved outcomes. The PES-NWI served as the foundation for my team's midwifery work environment scale: the Midwifery practice Climate Scale. Items derived from the PES-NWI demonstrated strong reliability and validity in a midwifery population, supporting the psychometric soundness of the PES-NWI. Thumm, E. B., Shaffer, J., & Meek, P. (2020). Development and initial psychometric testing of the midwifery practice climate scale-part 2. Journal of Midwifery & Women's Health, 65(5), 651-659. Thumm, E. B., & Meek, P. (2020). Development and initial psychometric testing of the midwifery practice climate scale. Journal of Midwifery & Women's Health, 65(5), 643-650.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Ernest Grant

Comment ID#: 8162 (Submitted: 09/03/2022)

Council / Public: Public

Level of Support: N/A

Comment

"As president of the American Nurses Association, I am personally concerned about how the COVID-19 pandemic has disrupted the work environment in health facilities, to the detriment of patient safety and nurse wellbeing. Without this tool to systematically measure nurses' work environments at this precarious time, I fear that crucial guidance to our health system administrators and managers will be lost. The track record of this instrument is impeccable, demonstrating sizable advances in nursing knowledge and clinical practice over two decades. I strongly support the re-endorsement by the NQF of the Practice Environment Scale of the Nursing Work Index."

Developer Response

N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Heather Brom
Comment ID#: 8161 (Submitted: 09/02/2022)

Council / Public: Public

Level of Support: N/A

Comment
I am a health services researcher and nurse scientist. My work centers on how variations in nursing (like the practice environment) influence patient outcomes. One key measure in my research has been the Practice Environment Scale of the Nursing Work Index (PES-NWI), which I have used for the past several years. This valid and reliable measure of the nursing practice environment has allowed me to examine how variations in practice environments across hospitals are associated with patient outcomes. Measured as an organization construct, the practice environment is something that hospital administrators can influence and change and therefore can be a powerful level to improving a variety of patient outcomes and I support its re-endorsement. Specifically, I have found in my research that hospitals with more favorable practice environments experienced fewer 30-day readmissions and shorter lengths of stay for ischemic stroke patients. These findings have implications for patients, nurses, and hospital administrators alike (Brom, H. Brooks Carthon, J.M. McHugh, M., Sloane, D. Aiken, L. (2021). Better Nurse Work Environments Associated with Fewer Readmissions and Shorter Length of Stay Among Adults with Ischemic Stroke: A Cross-Sectional Analysis of United States Hospitals, Research in Nursing & Health, 44:525-533). I have previous experience in hospital administration and know firsthand the importance of the nursing practice environment in creating a positive culture for nurses to be able to practice to the top of their abilities, make clinical decisions and have good working relationships with physicians and colleagues. Understanding and measuring the practice environment is more important than ever in the context of the COVID pandemic and ongoing threats to public health that all nurses will continue to face. With this in mind, I ask that you endorse this valuable measure. Thank you, Heather Brom, PhD, RN

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Jack Needleman, PhD, FAAN, University of California, Los Angeles School of Public Health
Comment ID#: 8177 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am a Professor in the Department of Health Policy and Management, UCLA Fielding School of Public Health. For reference, I am a member of the NQF Scientific Methods Committee and the NQF Standing Committee on Admissions and Readmissions, and previously served on the NQF Cost and Efficiency Measures Committee and its predecessors. I was also a member of the Technical Expert Panel for the NQF committee that reviewed the National Voluntary Consensus Standards for Nursing Sensitive Care and endorsed a 15-item Performance Measure Set. The PES-NWI was part of that initial measure set. I offer this comment in support of the reendorsement of the Practice Environment Scale of the Nurse Work Index. The PES-NWI is a component measure in the National Database of Nursing Quality Measures, used by the American Nurse Credentialling Center in its Magnet designation program, widely used in internal monitoring by health facilities of their nurse environment. It is an important measure, found to be independently associated with important patient outcomes, including mortality, and nurse outcomes, such as burnout and intent to leave. It has also been shown to interact with and modify the positive effects of higher staffing levels on these outcomes. That is, when work environment is poor, the impact of higher staffing levels on outcomes is reduced. The PES-NWI is one of the most frequently used measures to study the delivery of safe and reliable nurse staffing in hospitals, not only in practice, as discussed above, but in research as well. My quick PubMed Search on PES-NWI (ignoring other variants in how the measure might be cited), identified 14 articles using this measure nationally and internationally: Mihdawi, M., R. Al-Amer, R. Darwish, S. Randall, T. Afaneh. The Influence of Nursing Work Environment on Patient Safety. Workplace Health Saf. 2020;68(8):384-90. Yuan, L., C. Yumeng, Z. Chunfen, F. Jinbo. Analyzing the Impact of Practice Environment on Nurse Burnout Using Conventional and Multilevel Logistic Regression Models. Workplace Health Saf. 2020;68(7):325-36. Al-Ghraiybah, T., J. Sim, L. Lago. The relationship between the nursing practice environment and five nursing-sensitive patient outcomes in acute care hospitals: A systematic review. Nurs Open. 2021;8(5):2262-71. PMCID: PMC8363353. Falguera, C. C., J. A. A. De Los Santos, J. R. Galabay, C. N. Firmo, K. Tsaras, R. A. Rosales, E. C. Mirafuentes, L. J. Labrague. Relationship between nurse practice environment and work outcomes: A survey study in the Philippines. Int J Nurs Pract. 2021;27(1):e12873. Fu, C. M., J. Ou, X. M. Chen, M. Y. Wang. Potential effects of the nursing work environment on the work-family conflict in operating room nurses. World J Clin Cases. 2021;9(26):7738-49. PMCID: PMC8462227. Intas, G., M. Simeon, L. Eleni, C. Platis, E. Chalari, P. Stergiannis. Investigating Nursing Leadership in Intensive Care Units of Hospitals of Northern Greece and Its Relationship to the Working Environment. Adv Exp Med Biol. 2021;1337:227-35. Kritsotakis, G., E. Andreadaki, M. Linardakis, G. Manomenidis, T. Bellali, P. Kostagiolas. Nurses' ehealth literacy and associations with the nursing practice environment. Int Nurs Rev. 2021;68(3):365-71. Lucas, P., E. Jesus, S. Almeida, B. Araújo. Validation of the Psychometric Properties of the Practice Environment Scale of Nursing Work Index in Primary Health Care in Portugal. Int J Environ Res Public Health. 2021;18(12). PMCID: PMC8296248. Malinowska-Lipień, I.,

A. Micek, T. Gabryś, M. Kózka, K. Gajda, A. Gniadek, T. Brzostek, J. Fletcher, A. Squires. Impact of the Work Environment on Patients' Safety as Perceived by Nurses in Poland-A Cross-Sectional Study. Int J Environ Res Public Health. 2021;18(22). PMCID: PMC8623184. Ogata, Y., K. Sato, Y. Kodama, N. Morioka, K. Taketomi, Y. Yonekura, K. Katsuyama, S. Tanaka, M. Nagano, Y. M. Ito, K. Kanda. Work environment for hospital nurses in Japan: The relationships between nurses' perceptions of their work environment and nursing outcomes. Nurs Open. 2021;8(5):2470-87. PMCID: PMC8363352. Naseri, S., M. Ghafourifard, A. Ghahramanian. The Impact of Work Environment on Nurses' Compassion: A Multicenter Cross-Sectional Study. SAGE Open Nurs. 2022;8:23779608221119124. PMCID: PMC9411735. Patrician, P. A., D. M. Olds, S. Breckenridge-Sproat, T. Taylor-Clark, P. A. Swiger, L. A. Loan. Comparing the Nurse Work Environment, Job Satisfaction, and Intent to Leave Among Military, Magnet®, Magnet-Aspiring, and Non-Magnet Civilian Hospitals. J Nurs Adm. 2022;52(6):365-70. PMCID: PMC9154298. Rodríguez-García, M. C., I. M. Martos-López, G. Casas-López, V. V. Márquez-Hernández, G. Aguilera-Manrique, L. Gutiérrez-Puertas. Exploring the relationship between midwives' work environment, women's safety culture, and intent to stay. Women Birth. 2022. Sarıköse, S., N. Göktepe. Effects of nurses' individual, professional and work environment characteristics on job performance. J Clin Nurs. 2022;31(5-6):633-41. My understanding is that the measure was not endorsed for use because there were questions about whether the Performance Gap criterion was met. Research suggests significant variations exist, and variations of sufficient magnitude to influence outcomes. Recent literature by Aiken and Lasater has not reported actual scores for the PES-NWI but has divided scores into Low (bottom quartile), Medium (middle two quartiles) and High (top quartile) and found these differences significantly correlated with differences in both nurse and patient outcomes. This argues for a performance gap. The Patrician article cited above, reports scores across its subgroups of its sample of 87 hospitals. Among Military hospitals, the mean on a 5 point scale was 2.97, and the standard deviation 0.22. The 5%-95% range would be 2.5-3.4, nearly a one-point spread across a five point scale. The 22%-67% range (+/- 1 SD) would be 2.75-3.19, nearly a half-point spread in a five-point scale. And these differences have been shown in other research to be meaningfully associated with patient and nurse outcomes. Furthermore, the mean level of work environment found through the use of this measure is not where we should want nurses work environments to be. Some measures, like CLABSI rates, can be driven to zero, and whether there is variation across performance within a cohort, if the rate is not zero, there is a performance gap. Similarly, while the PES-NWI may not have a natural top of 5, the median and mean scores reported of around 3 are well below where work environment should be. Endorsement is justified not only by the variation in performance reported in the literature but the performance gap between typical work environments and the aspirational work environment we should be encouraging through measurement. It is premature to end endorsement of the PES-NWI because there is no performance gap. There are substantial performance gaps both among hospitals and between where the work environment for nurses is at the typical hospital and where it should be. Continued endorsement will encourage the continued use of this important measure for improvement in nurse work environments and, through this improvement, in patient safety and quality of care.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Margo Brooks Brooks Carthon, PhD, APRN

Comment ID#: 8159 (Submitted: 09/02/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am a nurse scientist who has used the Practice Environment Scale of the Nursing Work Index (PES-NWI) for the past decade to investigate the association between the work environment and patient outcomes. Having published widely, we have come to rely on the validity and reliability of the PES and strongly support its re-endorsement. The PES-NWI offers superior advantages in distinguishing excellent work environments from those that are unfavorable, and the subscales provide targeted opportunities for system-level interventions. Our team has repeatedly used the PES-NWI to evaluate the association between the work environment and a range of outcomes. In each study, we have found notable improvements in missed nursing care, burnout, and patient satisfaction when the organizational factors measured in the PES (e.g. managerial support, the adequacy of resources, nurse's involvement in organizational decision making) are sufficiently present. Brom, H. Brooks Carthon, J.M. McHugh, M., Sloane, D. Aiken, L. (2021). Better Nurse Work Environments Associated with Fewer Readmissions and Shorter Length of Stay Among Adults with Ischemic Stroke: A Cross-Sectional Analysis of United States Hospitals, Research in Nursing & Health, 44:525-533. Brooks Carthon, J.M., Hatfield, L., Brom, H., Kelly-Hellyer, E., Houton, M. Schlak, A., Aiken, L. (2021). System-level improvements in work environments lead to lower nurse burnout and higher patient satisfaction. Journal of Nursing Care Quality, 6(1):7-13. Brooks Carthon, J.M., Lassater, KM, Sloane, D.M. Kutney-Lee, A. (2015). The quality of hospital work environments and missed nursing care are linked to heart failure readmissions: A cross sectional study of U.S. hospitals, BMJ Qual Saf, 24 (4), 255-263. PMCID:PMC4440316 From a clinical perspective, our findings suggest that investments in work environments provide nurses with the time and support necessary to attend to the multifaceted needs of an increasingly complex patient population. Such investments may also reduce the emotional and cognitive burden that nurses experience when working in unsupportive environments. Given the toll that the past 2 years of the pandemic has taken on nurses and the health care system, a continued focus on ways to measure and improve working environments for nurses remains of continued importance. With these considerations in mind, we strongly support the re-endorsement of this measure. Thank you for your consideration. Margo Brooks Carthon, PhD, APRN, FAAN

Developer Response

N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Pamela F. Cipriano
Comment ID#: 8163 (Submitted: 09/04/2022)

Council / Public: Public

Level of Support: N/A

Comment

As president of the International Council of Nurses, comprising over 130 national nurses associations, and a member of the U.S. Nurse Staffing Think Tank, I strongly support the re-endorsement by the NQF of the Practice Environment Scale of the Nursing Work Index. The worldwide empirical evidence that this instrument has provided, which demonstrates that better work environments are significantly associated with patient safety, patient satisfaction, patient health outcomes, and nurse burnout and turnover, is so extensive, that our Think Tank this year (2022) has endorsed creating a Centers for Medicare and Medicaid Services (CMS) Condition of Participation that requires organizations to regularly assess/measure the health of the work environment and demonstrate evidence of continual improvement. The Practice Environment Scale has two decades of global use on which to build such a Condition of Participation. Re-endorsement is crucial to continued assessment and improvement of the nurse work environment in health facilities. As a former member of the NQF Consensus Standards Approval Committee, I appreciate the rigor of review for endorsement and re-endorsement. Measure #3450-PES-NWI is vital to the global measurement of nursing work environments and must be maintained.

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Rebecca Clark
Comment ID#: 8170 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am a health services researcher and midwife whose work focuses on birth outcomes and racial disparities in those outcomes. In addition to being an Assistant Professor, I am the Nurse Scientist for a large, urban, community hospital. The PES-NWI, therefore, is critical for my own research, as well as for the benchmarking (and QI and research initiatives) at my hospital. I have used the PES-NWI in examining variation in the quality and safety of maternity units, as well as variation in maternity nursing resources across the country, and in hospitals serving greater proportions of Black women. In recent qualitative work I've been conducting, I've seen PES-NWI concepts emerge organically from comments made by maternity nurses, reinforcing the importance of measuring these concepts (e.g., having supportive management - or not, having collegial relationships with physicians - or not, having adequate staffing and resources, etc.), especially as nurses connect these concepts directly to patient care and outcomes (in my case, maternity care and outcomes, including healthy inequities). These nurses highlight the existence of many maternity units with sub-optimal work environments. In some of my quantitative research, poorer work environments are associated with poorer safety and quality of maternity care. My work around racial disparities shows a trend to worsening work environments in hospitals where Black women are more likely to receive care, especially poorer staffing and resources. From my personal experience as a clinician in a variety of places, I can attest to the existence of less than optimal work environments (no opportunity for professional development, limited ability to shape policies directing the care we provided, lack of collegial relationships with physicians, etc.). Finally, as I mentioned, I'm the Nurse Scientist at a hospital and the PES-NWI is crucial for allowing our hospital to compare units to each other, identifying units that need special attention/intervention to improve work environments, as well as to other hospitals (for Magnet accreditation, to see whether hospital-wide initiatives are needed and in what areas, etc.). I strongly urge the NQF to maintain Measure #3450.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Sharon Pappas

Comment ID#: 8189 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

The NQF Measure #3450 is an essential measure that reports the strength of the nursing work environment. The environment is a known variable in nurse engagement and most of all patient safety. The measures are also an essential part of the Magnet program accreditation and advancing nursing science in areas of leadership and culture. The PES-NWI has been in place for many years and is sensitive to variation in function and impact of the work environment across hospitals. It has recently been effectively used in the ambulatory environment. I serve as the Chief Nurse Executive of Emory Healthcare at Emory University, and we have five Magnet organizations in the system including the first stand-alone ambulatory site, The Emory Clinic. I also serve as a Commissioner for the Magnet program where we see monthly of the sizable variation across facilities in the work environment that is captured by this instrument through nurse surveys. This instrument helps organizations monitor performance, compare with peers, and for CNOs to create a roadmap for improvement. Never in my 40+ year career has nurse engagement been more important, and work environment is a key lever to that engagement. Please endorse.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Sunny Hallowell

Comment ID#: 8185 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

For more than two decades the PES-NWI has guided the development of interventions to improve the quality of nursing practice in a variety of healthcare settings. My research using this measure focuses on the outcomes of infants and families in the neonatal intensive care unit (NICU). Limited improvements related to significant shifts in the survival and outcomes of very-low birth weight and premature infants in the NICU have occurred since the late 1990's ; yet, there remains sizable variation across facilities related to the nurse work environment and patient outcomes in the NICUs that this instrument captures through a nurse survey. Outcome variation has long been linked to the quality of nursing care as measured by the PES-NWI which quantifies the often overlooked contributions of nursing practice and the work environment that directly influence patient outcomes. I have been able to use the PES-NWI to describe the associations between nursing care and breastfeeding support, successful discharge of very low birthweight infants on human milk, and parental support in the NICU. The PES-NWI has been instrumental to identifying the association

between robust nursing leadership, higher quality of care, implementation of hospital lactation policy, and patient safety. The clinical significance of these associations is related to the ability for nursing practice leaders to advocate for funding, implementation of interventions, and shifts in evidence-based practice to improve patient care. The continued endorsement of the PES-NWI measure by the NQF is necessary to allow hospitals to continue to measure and compare hospital, nursing, and infant outcomes in order to deliver optimal care to the most vulnerable patients in a hospital, premature infants admitted to the NICU. Hallowell, S.G. (2022). An Exploratory Study of the Associations Between the Hospital Work Environment and Implementation of Baby-Friendly Hospital Policy. Journal of Perinatal Education.31 (3): 142-50, doi: 10.1891/JPE.31.3 Hallowell, S.G., Lake, E.T., Rogowski, J.A. (2017). How Nurse Work Environments Relate to the Presence of Parents in Neonatal Intensive Care. Advances in Neonatal Care. (Published online ahead of print 09.23.17) doi: 10.1097/ANC.0000000000000431 Hallowell, S.G. Spatz, D.L., Hanlon, A.L., Rogowski, J.A., Kenny, M., Lake, E.T. (2015). Factors associated with infant feeding of human milk at discharge from neonatal intensive care: Cross-sectional analysis of survey and infant outcomes data. International Journal of Nursing Studies. 53: 290-203 doi: 10.1016/j.ijnurstu.2015.09.016 (Epub. Ahead of print October 9, 2015) Lake, E.T., Hallowell, S.G., Kutney-Lee, A., Hatfield, L.A., DelGuidice, M., Boxer, B.A., Ellis, L.N., Verica, L., Aiken, L.H. (2015). Higher Quality of Care and Patient Safety Associated with Better NICU Work Environments. Journal of Nursing Care Quality. 31(1): 24-32 (Epub. Ahead of print August 8, 2015). Hallowell, S.G., Spatz, D.L., Hanlon, A.L., Rogowski, J.A., Lake, E.T. (2014). Characteristics of the NICU Work Environment Associated with Breastfeeding Support. Advances in Neonatal Care. 14(4): 290-300. doi: 10.1097 ANC.0000000000000102. Published online July 31, 2014.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Dr. Vallire Hooper

Comment ID#: 8143 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

Thank you for the opportunity to comment in support of re-endorsement of the Practice Environment Scale of the Nursing Work Index (PES-NWI). The PES-NWI has served as a valid and reliable instrument for the assessment of the nursing work environment for almost 20 years and continues to remain relevant and essential in the monitoring and evaluation of the ever-evolving

performance evaluation and research exploration of the post-COVID nursing practice environment. As a Clinical Nurse Scientist, I have used the PES-NWI in the study of nursing workforce issues across both for-profit and non-profit healthcare systems over the last 11 years. The PES-NWI provides an accurate assessment of evolving pracitce environment issues across all facets of nursing care, both in large tertiary care hospitals as well as small, rural Critical Access hospitals. The instrument has also been essential in supporting measurement of the impact of COVID on the practice environment and how this might impact nursing intent-to-stay in the workforce across multiple high-risk nursing specialties, to include perioperative/perianesthesia nursing. NQF re-endorsement of this measure assures the maintenance of a consistent, national measure of the ongoing status and quality of the nursing practice environment across the nation, thus enabling a comprehensive assessment of practice environment issues across like healthcare systems, hospitals, hospital units, and specialty nursing populations. The criticality of the re-endorsement of this measure has never been more urgent. I wholeheartedly endorse the measure and support its re-endorsement by the NQF. Cordially, Vallire Hooper PhD, RN, CPAN, FASPAN, FAAN

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Eileen Lake, University of Pennsylvania School of Nursing ; Submitted by Emma L. Kurnat-Thoma

Comment ID#: 8192 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

To Whom It May Concern at NQF, I am writing per multiple nursing policy advocacy group requests to support NQF's current review of the Practice Environment Scale of the Nursing Work Index (PES-NWI). Specifically, that PES-NWI is in need of public comment from a variety of nurse scientist stakeholders to better support NQF's Importance/Performance Gap evaluation and approval for this endorsement review cycle. The PES-NWI is an unparalleled tool for supporting healthy work environments of professional nurses, for not just the US, but globally. Frankly, the SOS emails sent to various nursing policy groups that the PES-NWI was in need of additional public comment support as to its importance was surprising. I've personally evaluated this tool for its optimal use in Magnet accreditation processes while working in the clinical setting. I've also reviewed research manuscripts referencing and using the PES-NWI. Post-COVID-19 recovery, the PES-NWI becomes that much more important for protection of the integrity and resilience of our profession. This is due to its well-established psychometric properties in a wide variety of clinical settings (adult,

neonatal, peds ICUs; medical surgical, combined, oncology, ER, ortho, mental health, etc.) and contexts (nursing homes, nursing support staff, domestic and global-international applications) for the 5 subscales: Nurse Participation in Hospital Affairs, Nursing Foundations for Quality of Care, Nurse Manager Ability, Leadership & Support of Nurses, Staffing and Resource Adequacy, and Collegial Nurse-Physician Relations (Swiger et al, 2017). Due PES-NWI's unique historical significance and importance in the standardized evaluation of nursing work environments, it also provides a reliable and valid mechanism for which to examine multiple system, patient, quality, and nursing outcomes at a greater scale, such as that which is performed in meta-analyses (Lake, et al, 2019; Zangaro & Hones, 2019). For this reason, I strongly support the renewal endorsement and inclusion of the PES-NWI in NQF's repertoire for evaluating excellence and high quality in nursing care performance. Thank you for your kind attention in this regard and for making the PES-NWI available as a trusted instrument of high quality for ensuring public accountability. Best Regards, Emma Kurnat-Thoma, PhD, MS, RN, FAAN Adjunct Associate Professor Georgetown University School of Nursing St. Mary's Hall 3700 Reservoir Rd, NW Washington, DC 20057 Email: elk65@georgetown.edu References Lake, E., Sanders, J., Duan, R., Riman, K., Shoenauer, & Chen, Y. (2019). A meta-analysis of the associations between the nurse work environment in hospitals and 4 sets of outcomes. Medical Care, 57(5), 353-361. doi: 10.1097/MLR.0000000000001109 Swiger, P., Patrican, P., Miltner, R., Raju, D., Breckenridge-Sproat, S., & Loan, L. (2017). The practice environment scale of nursing work index: An updated review and recommendations for use. International Journal of Nursing Studies, 74, 76-84. https://doi.org/10.1016/j.ijnurstu.2017.06.003 Zangaro, G. & Jones, K. (2019). Practice environment of the nursing work index: A reliability generalization meta-analysis. Western Journal of Nursing Research, 41(11), 1658-1684. https://doi.org/10.1177/0193945918823779

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Elizabeth Madigan

Comment ID#: 8142 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

The PES-NWI is widely used in research. It is widely known among nurse scientists and health services researchers and easily allows for comparison across studies. In this era where the nursing

workforce is severely impacted and there are dire predictions of nurses exiting the workforce, it is a critical measure for comparing pre- and post-pandemic as well as between different kinds of institutions/health systems. It also allows for measure of change over time, again critical as the health care system looks to see what workforce interventions are effective. The value of this measure is high and it is easy to use, accessible and valuable. I would encourage full endorsement of this measure.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Jessica Smith

Comment ID#: 8140 (Submitted: 08/31/2022)

Council / Public: Public

Level of Support: N/A

Comment

As a health services researcher who has been using the PES-NWI since 2016, I am in strong support of its re-endorsement as a highly reliable and valid measure essential for tracking correlations between the nurse work environment and nurse well-being and patient outcomes. I have conducted research linking better nurse work environment scores (as measured by the PES-NWI) with lower workplace incivility scores among nurses in the hospital setting. It is important to understand the relationship between the nurse work environment and workplace violence and incivility over time, and re-endorsement of this measure would help provide hospitals with support to more broadly adopt this measure and understand how the work environment could relate to to workplace violence and incivility as it affects nurses. Thank you for considering this comment. Jessica G. Smith, PhD, MSN, RN, CNE Assistant Professor University of Texas at Arlington College of Nursing and Health Innovation Email: jessica.smith2@uta.edu

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Joseph Potts
Comment ID#: 8187 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

As a nurse, a front-line hospital leader, and the husband of a bedside nurse I feel confident in stating that this is an extremely difficult time in healthcare. Hospitals are facing unprecedented staff shortages resulting in unsustainable turnover and labor budgets. One of the most important factors cited by nurses for staying with an organization is a favorable work environment. The Practice Environment Scale-Nursing Work Index (PES-NWI) has been an invaluable tool for nurse leaders and accreditation bodies to objectively measure the work environment. These measurements then allow nurses to differentiate between organizations with positive and negative practice environments as well as assisting healthcare organizations in target practice environment improvements. The loss of this long-utilized tool would be detrimental to both nurses and healthcare organizations. I implore the committee to endorse the PES-NWI.

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Karen Lasater
Comment ID#: 8150 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am a health services researcher who has published research for a decade in high-impact peer-reviewed interdisciplinary journals using the PES-NWI. The PES-NWI has been an important instrument for measuring the nurse work environment, its variation across hospitals, and its association with patient outcomes, safety/quality of care, and nurse job outcomes such as burnout and intent to leave. The nurse work environment continues to be an important area of study since

my ongoing multi-state survey efforts shows wide variation in the quality of nurse work environments across hundreds of hospitals, with some hospitals reporting less-than-optimal work environments that are strongly associated with poor nurse outcomes (higher rates of burnout, job dissatisfaction, and intent to leave) and worse quality of care for patients. The subscales and items of the PES-NWI point to actionable areas for organizational improvement that may be central to organizational evidence-based efforts to attract and retain nurses in the workforce amid the ongoing COVID pandemic and the chronic understaffing of nurses in hospitals. Continued NQF endorsement of the PES-NWI will support efforts to study how organizational nurse work environments have changed (improved, worsened, stayed the same) over time, including during major public health emergencies like the COVID pandemic.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Kathleen Rosenbaum

Comment ID#: 8191 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

As a predoctoral fellow at the Center for Health Outcomes and Policy Research at the University of Pennsylvania School of Nuring, I have been able to utilize data collected through the Practice Environment Scale-Nursing Work Index (PES-NWI) to inform my research and further my scholarly development. As part of multiple research teams collecting data from across the country, I have seen the associations between the nurse work environment and patient outcomes, such as patients cared for in hospitals with better nurse work environments, tend to have better patient outcomes. The inverse of these associations has also been seen with data showing nurses working in poor nurse work environments have higher rates of burnout, job dissatisfaction, and intent to leave. Additionally, variation in the nurse work environment has been associated with variation across hospital patient satisfaction. Studying these variations in the nurse work environment across hospitals enables us to study what organizational factors contribute to better nurse work environments; thereby, providing the necessary data to develop and implement timely and critical interventions to improve the nurse work environment, patient outcomes, nurse wellbeing, and patient satisfaction.

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Kathryn Riman
Comment ID#: 8156 (Submitted: 09/02/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am a practicing intensive care unit (ICU) nurse and postdoctoral research fellow. My work largely focuses on designing, implementing, and testing novel organizational strategies to improve critical care outcomes. With the invaluable tool, the Practice Environment Scale of the Nursing Work Index (PES-NWI), researchers across the globe have been able to obtain objective measurements of ICU work environments and benchmark their performance relative to others. With 66% of nurses feeling their experiences during the pandemic have caused them to consider leaving nursing (American Association of Critical Care Nurses, 2021), it imperative that we have the tools to accurately measure and optimize ICU work environments. Thank you for your time and consideration. Please feel free to reach out with any questions.

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Ms. Lillee Smith Gelinas, DNP, RN, CPPS, FAAN, University of North Texas Health Science Center at Fort Worth
Comment ID#: 8176 (Submitted: 09/06/2022)

Council / Public: Public

Level of Support: N/A

Comment

Thank you for the opportunity to comment on the re-endorsement of the PES-NWI. As Editor-in-Chief of American Nurse Journal, the official, peer reviewed publication of the American Nurses Association, current member of the CMS Hospital Harms Technical Expert Panel and with Dr. Mary Naylor, co-chair of the original NQF Nursing Care Performance Measures Steering Committee whose work was published in 2004 (https://www.qualityforum.org/Publications/2004/10/National_Voluntary_Consensus_Standards_for_Nursing-Sensitive_Care__An_Initial_Performance_Measure_Set.aspx, I strongly support the re-endorsement of the Practice Environment Scale of the Nursing Work Index (PES-NWI). I have served as a nursing and healthcare system executive for 30+ years, using the PES-NWI in numerous practice settings. These data were enlightening as to the state of the work environment, allowing targeted action planning for quality improvement. The valuable, longitudinal learning over many years from use of the PES-NWI cannot be over emphasized. As a former member of several NQF committees, including most recently the Patient Safety Standing Committee, I have witnessed firsthand the rigor and thoroughness of the NQF evidence-based measure endorsement and re-endorsement process, which is considered the gold standard for healthcare quality and safety measurement. The focus of the work on the PES-NWI by the original NQF Nursing Care Performance Measures Steering Committee has continued to be strengthened and enhanced by numerous qualitative and quantitative research studies for the past 20+ years, resulting in one of the most valid instruments for measuring the nursing work environment and impact on patient outcomes. The PES-NWI is recently highlighted in the NQF Patient Safety Steering Committee's report: Patient Safety Final Technical Report published August 9, 2019 https://www.qualityforum.org/Publications/2019/08/Patient_Safety_Final_Technical_Report_-_Fall_2018_Cycle.aspx Today, we witness the variability of the nursing work environment due to several factors, including COVID-19, a worsening nursing shortage and the rise of violence in the workplace. Therefore, the continued use of the PES-NWI could not be more urgent to measure these factors and support health system actions to improve care, enhance transparency and support the nursing workforce. Re-endorsement is critical. I would be happy to provide any follow-up to the committee needed. Thank you. Lillee Gelinas, DNP, RN, CPPS, FAAN

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Ms. Rosemary Kennedy, PhD, MBA, RN, FAAN, eCare Informatics

Comment ID#: 8139 (Submitted: 08/31/2022)

Council / Public: Public

Level of Support: N/A

Comment

I have been using the Practice Environment Scale of the Nursing Work Index since 2015. This instrument helps me to measure the nursing practice environment [defined as factors that enhance or attenuate a nurse's ability to practice nursing skillfully and deliver high quality care. I use this measure to assess the current state practice environment BEFORE implementing practice change or technology. If the scale is less than adequate, changes are implemented within the practice environment before implementing technology. I have used this scale in practice and research. There are many less than optimal work environments and this instrument helps me quantify the environment so when technology and process change is implemented we have better outcomes.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Ms. Tilithia McBride, GlaxoSmithKline

Comment ID#: 8137 (Submitted: 08/31/2022)

Council / Public: SPI

Level of Support: N/A

Comment

The Federation of American Hospitals (FAH) believes that this measure provides information that is useful and linked to improved patient outcomes. While the measure developer may not have been able to provide a robust set of data addressing potential disparities, a continued gap in care was demonstrated. In addition, future reporting of this measure by the Leapfrog Group will also provide opportunities to understand potential workforce issues in the future. We recommend that the committee pass the measure on performance gap.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Patricia Patrician, UNiversity of Alabama at Birmingham
Comment ID#: 8145 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am a nurse scientist who has used this measure throughout my entire research career (since 2000) to investigate work environments and to improve them. This instrument is spot on in distinguishing excellent work environments from those that are unfavorable, and perhaps more importantly, the subscales and individual items can pinpoint areas for improvement. We have used this instrument in military environments and its psychometric properties hold up extremely well. My PhD student recently completed her dissertation evaluating whether the items in the PES-NWI remain important to the job satisfaction of nurses today and their ability to deliver quality patient care (questions upon which the original items are based) and it is striking that the vast majority of the items remain relevant to contemporary nursing, with some minor language modifications. Her work will be published very soon. This instrument is truly one-of-a-kind in evaluating the work environments of acute and critical care nurses. It has certainly stood the test of time. It correlates very strongly with a variety of patient quality measures, such as patient experience scores, hospital acquired infection rates, and other quality indicators that we know are sensitive to nursing care. It would really be a terrible disservice to nurse scientists everywhere not to endorse this measure. I ask you to please fully endorse the PES-NWI - its composite and five subscales. Endorsing this measure supports ongoing work to improve work environments of nurses everywhere, something so badly needed in our post-COVID world. I humbly ask you to fully endorse this measure! - Pat Patrician, PhD, RN, FAAN, Professor, School of Nursing, University of Alabama at Birmingham

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

NQF #3690 Inappropriate diagnosis of urinary tract infection (UTI) in hospitalized medical patients; Abbreviated form: Inappropriate diagnosis of UTI (Recommended)

Dr. Timothy Hofer, University of Michigan Health System
Comment ID#: 8094 (Submitted: 06/09/2022)

Council / Public: PRO

Level of Support: N/A

Comment

It is incorrect to say that a measure has insufficient reliability by just looking at the intra-class correlation coefficient which is an estimate of the reliability of using a single observation(or patient outcome) to distinguish between the objects of measurement (in this case hospitals). Using the spearman-brown prophecy formula is a standard way of estimating the reliability of a measurement averaged, as in this example, over multiple measurements of the same hospital as represented by an average of multiple patient outcomes within that hospital. As noted in a classic text, The Statistical Evaluation of Measurement Errors (2nd Ed) by Grahm Dunn Arnold, London, 1989 (p 27-28), as well as countless other places: "The reliability of a randomly-selected subject [in this case a hospital] by a randomly selected rater [in this case a patient] is an intraclass correlation... If this reliability is not sufficiently high, then we can replicate [make multiple] measurements, and the reliability of the mean of the assessments of m independent [patients] on a given [hospital] ...can be calculated using the Spearman-Brown formula." This is the argument behind using mortality rates to assess hospitals (where the ICC is often less than 0.01 for using a single patient survival or death to measure the hospital mortality rate) but with sufficient cases the reliability of the hospital average mortality can approach 0.70-0.80. It is also the rationale for all psychometric scales, where the ICC of using a single randomly selected item from the scale to measure the trait is low but when a sum or mean of the N items in the scale is used the reliability approaches or exceeds 0.80. The technique is widely cited in the medical literature relating to quality measures. It is surprising that the NQF review did not seem to appreciate this argument and rated the reliability as insufficient stating that: "... the intraclass correlation coefficient is well below 0.5, a range generally agreed to show poor reliability. It is not clear from the submission how applying the Spearman Brown prophecy formula leads to an overall reliability of 0.9." By this reasoning you would consider every psychometric scale ever constructed as unreliable. You certainly would never consider using readmission rates or mortality rates or basically any patient outcome a reliable measure of hospital performance. Again, the ICC is *not* the relevant reliability estimate to refer to in assessing the reliability of this measurement as defined when it is not intended that a hospital measure will be based on a single measurement (or patient outcome). The relevant calculation for the measure reliability must take into account the expected number of measurements (patients) per hospital that will be used to construct the measure. I work on clinical and performance measurement and have over 20 years of experience and publications on this topic and have advised the team constructing this measure.

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

NQF #3658 Adult Blood Culture Contamination Rate; A national measure and standard for clinical laboratories and antibiotic stewardship programs (Recommended)

Barbara DeBaun, Cynosure Health ; Submitted by Kathy Lester

Comment ID#: 8152 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

I write in support of NQF Measure # 3658 : Adult Blood Culture Contamination Rate; A national measure and standard for clinical laboratories and antibiotic stewardship programs. Given the enormous implications of blood culture contamination on patient safety, antibiotic stewardship, and antibiotic-resistance, I write to express strong support for the approval, adoption, and national implementation of this important new quality measure. As brief context, I have worked in the field of Infection Prevention and Quality Improvement for over 40 years. In my current role as Improvement Advisor with Cynosure Health, I promote processes and strategies designed to prevent patient harm and improve patient outcomes. During my tenure I have personally observed the serious consequences of blood culture contamination on unnecessary and prolonged broad-spectrum antibiotic therapy, C. difficile infection, MDROs, acute kidney injury, extended length of hospital stay, readmissions, and significant avoidable hospital costs. These observations and other direct personal experience have motivated me to advocate for the establishment of a new blood culture quality measure including a significantly reduced blood culture contamination benchmark of 1%. As you know, the Clinical Laboratory Standards Institute (CLSI) has long supported a target benchmark of "3% or below" contamination rate for hospitals nationwide. Recently, CLSI adopted their new M47 2nd Edition, 2022 Principles and Procedures for Blood Cultures. Importantly, a new blood culture contamination rate goal of 1% using best practices is now advocated in these new guidelines. In February of last year, many of my colleagues in the disciplines of clinical microbiology, infectious diseases and infection prevention joined me in signing a letter that was sent to Dr. Lee Fleisher, Chief Medical Officer of CMS in February of 2021. Our goal was to summarize the on-going broad and meaningful impacts of blood culture contamination. I enclose that letter here and encourage each member of the patient safety committee to review the details contained in this letter as well as associated references prior to your June 23rd meeting. I applaud CDC 's efforts in crafting and submitting this new blood culture contamination quality measure application and strongly support NQF's approval and adoption of this important new measure. Should you have any questions and/or if additional input based on my experience associated with the significant consequences of blood culture contamination would be helpful, please don't hesitate to contact me. Respectfully, Barbara DeBaun, MSN, RN, CIC Improvement Advisor Cynosure Health

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Deborah Campbell, Kentucky Hospital Association; Submitted by Kathy Lester

Comment ID#: 8151 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

I support NQF measure 3658 : Adult Blood Culture Contamination Rate; A national measure and standard for clinical laboratories and antibiotic stewardship programs. Given the clinical importance that accurate blood culture results have on patient safety, diagnostic and antibiotic stewardship, I am writing today to express my strong support for the approval and implementation of this important new quality measure. As an Infection Prevention Professional and a Certified Professional in Healthcare Quality, with over 30 years of experience and as Vice President Quality and Health Professions at the Kentucky Hospital Association, I have seen first-hand the clinical and economic consequences of contaminated blood culture results within our state hospitals. Due to the clinical significance of accurate blood cultures, and the critical need for combating antibiotic resistance, we are in the process of instituting a state blood culture contamination reportable metric of 1% within our association of hospitals. We have experienced the clinical cost of inaccurate blood cultures leading to unnecessary antibiotics increasing the potential for driving antimicrobial resistance, acute kidney injury, and antibiotic associated infections. The use of any antimicrobial has the potential for causation of Clostridium difficile infection, which results in the death of 15,000 + Americans each year, within the first 30 days of onset. Other clinical consequences include dysregulation of the immune system due to antibiotic therapy, delays in establishing a definitive diagnosis and substantial prolongation in hospital stays. My personal experiences as a nurse executive, certified in quality, have convinced me that a 1% goal is now possible with the combination of evidence-based techniques and evidence-based technology solutions. As you may know, recently, the Clinical and Laboratory Standards Institute (CLSI) published its Blood Culture guidelines in the form of the M47 2nd Edition, 2022 Principles and Procedures for Blood Cultures. Within these guidelines, CLSI has adopted a new blood culture contamination goal of 1% using best practices. In closing, I would like to commend CDC ‘s efforts in spearheading this new blood culture contamination quality measure and strongly support NQF’s approval and adoption of this measure. Should you have any questions and/or the need for additional information on the consequences of blood culture contamination and the specific methods we implemented to dramatically reduce our blood culture contamination rates, please do not hesitate to contact me. Respectfully, Deborah Campbell, RN-BC, MSN, CPHQ Vice President, Quality and Health Professions Kentucky Hospital Association dcampbell@kyha.com 502.992.4383

Developer Response
N/A

NQF Response
Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response
N/A

Dr. Jacob Sramek, UnityPoint Health; Submitted by Stephanie Collingwood

Comment ID#: 8144 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: Supported

Comment
UnityPoint Health is supportive of NQF measure 3658 with additional considerations as outlined below. Tracking the blood culture contamination rate is accepted as an evidence-based intervention which is important to positive patient outcomes. Reduction in blood culture contamination rates reduces unnecessary antibiotic exposure and prevents prolonged length of hospitalization. Our organization does not track the single set blood culture rate, as our EMR order sets require providers to order blood cultures x 2. Regarding tracking the blood culture contamination rate, we suggest there exists a disconnect between patient care and the reported metric of 'overall contamination rate' as currently defined. We acknowledge this overall contamination rate is a normal metric shared and compared in literature, but question Its utility. As an example, of the patients in one of our hospitals with positive blood cultures, 2 out of the 5 patients are growing contaminants, and thus 40% of our patients with positive blood cultures had antibiotics initiated inappropriately. That number resonates with clinicians and more accurately encompasses the complexities of blood culture ordering. Inpatients routinely will have several sets of blood cultures ordered in an inpatient stay, per patient, and thus the denominator (total blood cultures) can become diluted in non-ED or non-outpatient settings. We encourage NQF to acknowledge this discrepancy by considering a metric like "% of positive blood cultures judged to be contaminants" or "% of patients in whom any blood cultures were ordered and were deemed to have 1 or more contaminants". This would: 1. Better reflect the number of patients at risk for inappropriate antibiotic prescribing 2. Be a better education piece for providers; "40% of all positives are false positives, and this is better than the national average" is helpful for providers needing to decide whether or not to start ABX. "< 3 % of all blood culture orders are a false positive" is not helpful. 3. Better signal for when an institution may have a process-related problem with collection.

Developer Response
N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Gary Doern, University of Iowa College of Medicine ; Submitted by Kathy Lester

Comment ID#: 8154 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

I am writing to support NQF Measure # 3658 : Adult Blood Culture Contamination Rate; A national measure and standard for clinical laboratories and antibiotic stewardship programs. Given the enormous implications of blood culture contamination on patient safety, I write to express strong support for the approval, adoption, and national implementation of this important new quality measure. As brief context, I spent over 30 years as a clinical microbiologist. During my tenure as Director of the Clinical Microbiology Laboratories at the University of Massachusetts and Professor of Pathology at the University of Iowa College of Medicine & Director of the Clinical Microbiology Laboratories at the University of Iowa Hospital and Clinics, I saw first-hand the serious consequences of blood culture contamination on patient safety, unnecessary and avoidable laboratory resource consumption as well as our hospital's budget. These observations and other direct personal experience have motivated me to advocate for the establishment of a new, significantly reduced blood culture contamination performance standard. As you may be aware, the Clinical Laboratory Standards Institute (CLSI) has long supported a target benchmark of "3% or below" contamination rate for hospitals nationwide. Recently, CLSI adopted their new M47 2nd Edition, 2022 Principles and Procedures for Blood Cultures. Importantly, a new blood culture contamination rate goal of 1% using best practices is now advocated in these new guidelines. In February of last year, many of my colleagues in the disciplines of clinical microbiology, infectious diseases and infection prevention joined me in sending a letter to Dr. Lee Fleisher, Chief Medical Officer of CMS. Our goal was to summarize the on-going broad and meaningful impacts of blood culture contamination. I enclose that letter here and encourage each member of the patient safety committee review the details contained in this letter as well as associated references prior to your June 23rd meeting. We applaud CDC 's efforts in crafting and submitting this new blood culture contamination quality measure application and strongly support NQF's approval and adoption of this important new measure. Should you have any questions and/or if additional input based on my experience associated with the compelling consequences of blood culture contamination would be helpful, please don't hesitate to contact me. Best regards, Gary V. Doern, PhD Emeritus Professor of Pathology University of Iowa College of Medicine

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Lucy Tompkins, Stanford University School of Medicine/Stanford University Hospital ; Submitted by Kathy Lester

Comment ID#: 8155 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

It is my understanding that review of a new proposed quality measure for Blood Culture Contamination developed by the CDC was recommended for endorsement by the NQF Patient Safety Committee back in June and will be voted on for endorsement by NQF in early September. Given the enormous implications of blood culture contamination on patient safety, antibiotic stewardship, and antibiotic-resistance, false-positive CLABSI reporting, I write to express strong support for endorsement, approval, adoption, and national implementation of this important new quality measure. As brief background, I have worked in the fields of Infectious Diseases, Clinical Microbiology, Epidemiology, and Infection Prevention and Control for over 40 years. In my current roles as Professor of Medicine and Infectious Diseases and Professor of Microbiology and Immunology at Stanford University School of Medicine, and Hospital Epidemiologist and Medical Director of the Infection Prevention and Control Department at Stanford HealthCare I promote processes and strategies designed to prevent patient harm and improve antimicrobial stewardship and patient outcomes. During my tenure I have personally observed the serious consequences of blood culture contamination on unnecessary and prolonged broad-spectrum antibiotic therapy, C. difficile infection, MDROs, acute kidney injury, extended length of hospital stay, readmissions, false-positive CLABSI reporting and its impacts on CMS reimbursement, and significant avoidable hospital costs. These observations and other direct personal experience have motivated me to advocate for the establishment of a new blood culture quality measure including a significantly reduced blood culture contamination benchmark of 1%. When we combined best practice technique with evidence-based technology to collect blood cultures we dramatically reduced blood culture contamination and clearly demonstrated that getting to 0% contamination is achievable. As a result of our experience, we join others in the national movement to establish a goal of 0.0% blood culture contamination starting with a new national benchmark of less than 1.0% as the new standard of care. As you know, the Clinical Laboratory Standards Institute (CLSI) has long supported a target benchmark of “3% or below” contamination rate for hospitals nationwide. Recently, CLSI adopted their new M47 2nd Edition, 2022 Principles and Procedures for Blood Cultures. Importantly, a new blood culture contamination rate goal of 1% using best practices is now advocated in these new guidelines. Additionally, just last month, the CDC published their new guidelines to reduce blood culture contamination reinforcing CLSI’s 1% goal for blood culture contamination and highlighting the evidence-based guidelines to achieve it. In February of last

year, many of my colleagues in the disciplines of clinical microbiology, infectious diseases and infection prevention joined me in signing a letter that was sent to Dr. Lee Fleisher, Chief Medical Officer of CMS in February of 2021. Our goal was to summarize the on-going broad and meaningful impacts of blood culture contamination. I enclose that letter here and encourage each member of the NQF quality measure committee to review the details contained in this letter as well as associated references prior to the vote to endorse the CDC's blood culture quality measure. I applaud CDC 's efforts in crafting and submitting this new blood culture contamination quality measure application and strongly support NQF's formal endorsement, approval, and adoption of this important new measure. Should you have any questions and/or if additional input based on my experience associated with the significant consequences of blood culture contamination would be helpful, please feel free to contact me. Respectfully, Lucy S. Tompkins, MD, PhD Lucy Becker Professor of Medicine (Division of Infectious Diseases and Geographic Medicine) Professor of Microbiology and Immunology Stanford University School of Medicine Hospital Epidemiologist and Medical Director, Infection Prevention and Control Department Stanford University Hospital Stanford CA 94305

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Mark Povroznik, WVU Medicine – United Hospital Center ; Submitted by Kathy Lester

Comment ID#: 8153 (Submitted: 09/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

I support NQF Measure # 3658 : Adult Blood Culture Contamination Rate; A national measure and standard for clinical laboratories and antibiotic stewardship programs. Given the role of accurate blood culture results on patient safety and antibiotic and diagnostic stewardship, I am writing today to express my strong support for the approval and implementation of this important new quality measure. As an Infection Prevention Professional with over 20 years of experience and the Chairman of the Infection Control Committee for WVU Medicine, the largest health system in Kentucky, I have personally observed the clinical and economic consequences of a contaminated blood culture result within a major health system. In 2019, I collaborated with Infection Prevention professionals across WVU Medicine to decrease blood culture contamination rates by over 50%. At United Hospital Center, the institution for which I have direct oversight, we piloted various methods before achieving success by combining best practice techniques for blood culture

collection and an engineered technology solution. Today, I am proud to share that we have sustained a contamination rate well below the national average of 3% and are trending toward a 1% rate. My personal experiences at United Hospital Center have convinced me that a sustained 1% or less blood culture contamination rate is achievable with best practice techniques and evidence-based technology solutions. Most recently, the Clinical and Laboratory Standards Institute (CLSI) published its Blood Culture M47 2nd Edition, 2022 Principles and Procedures for Blood Cultures. Within these guidelines, a new blood culture contamination goal of 1% using best practices was adopted. In closing, I would like to commend CDC 's efforts in spearheading this new blood culture contamination quality measure and strongly support NQF's approval and adoption of this measure. If you have any questions and/or I can provide any additional information regarding the consequence of blood culture contamination and the specific methods we implemented to dramatically reduce our rates, please do not hesitate to contact me. Best regards, Mark D. Povroznik, PharmD VP, Quality and Safety / CQO Chairman, Infection Control Chairman, System Infection Control Affinity WVU Medicine – United Hospital Center

Developer Response

N/A

NQF Response

Thank you for your comment. It has been shared with the Standing Committee and the measure developer.

NQF Committee Response

N/A

Public Comments on Patient Safety Spring 2022 Draft Report

No comments received.

Pre-Evaluation Measure-Specific Comments on Patient Safety Spring 2022 Submissions

NQF #3671 Inappropriate diagnosis of community-acquired pneumonia (CAP) in hospitalized medical patients; Abbreviated form: Inappropriate diagnosis of CAP (Recommended)

Valerie M. Vaughn, Dr., Michigan Hospital Medicine Safety Consortium
Comment ID#: 8087 (Submitted: 06/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

This public comment is to address concerns about reliability testing at the accountable entitle level. There are concerns that our ICC appears low (0.0525). We would like to clarity that the ICC of 0.0525 applies only if a single case were obtained from each hospital. This indicates that if each hospital performed 1 case abstraction, there would be high variability and poor reliability. However, we do not suggest each hospital only conduct 1 case abstraction. The Spearman Brown Prophecy provides an estimation of reliability after adjusting the number of measurements. When the median number of case counts for the entire cohort (N=184 median cases in measure development hospitals) is applied to the Spearman Brown formula, the overall reliability was 0.911 (well above the 0.5 threshold noted for "poor reliability"). The 0.911 was calculated as follows: Median case abstractions: 184 (IQR 153-201) Reliability or ICC for 184 cases (i.e., ICC/reliability for a typical HMS hospital): (184*0.0525169)/(1+(184-1)*0.0525169)=0.911 Through this same calculation, using the Spearman Brown Prophecy, we calculated the number of annual cases needed to achieve each reliability threshold: Reliability---Number of annual cases needed 0.6---28 0.7---43 0.8 (standard)---73 0.9---163 Thus, we attain reliability of 0.8 (standard reliability for a quality metric of this stakes) with 73 cases per hospital which is our suggested target number of cases for the measure.

Valerie M. Vaughn, Dr., Michigan Hospital Medicine Safety Consortium
Comment ID#: 8085 (Submitted: 06/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

This public comment is to address concerns about reliability and validity testing at the critical data element level. We did not include data element validity testing in the original submission but rather reported encounter level validity. We also have data element validity available and include it here: SUMMARY: Critical data element validity testing was conducted by a senior project manager who reviewed all critical data elements from 50 abstracted cases (representing 33 hospitals). Overall, the percent agreement for abstractor and auditor for critical data elements for radiographs ranged

from 86% to 91% for chest X-rays and 88% to 92% for chest CTs and for signs/symptoms ranged from 86% to 100%. This suggests that data element validity is high and adds to our already submitted information that encounter level validity is high. DETAILS: Critical data elements for chest radiographs (x-ray and CT) and signs/symptoms of pneumonia were examined by the senior project manager in blind audits of 50 consecutive patients with a diagnosis of CAP (appropriate or inappropriate) from 33 hospitals. Data elements were scored based correctness of data abstraction (1 point received if data element was answered correctly, 0 points if there was disagreement). The proportion of cases in which there was agreement for each data element were tabulated for clinical findings, chest x-ray findings, chest CT data, and overall abstraction accuracy. Audit findings were as follows: Chest X-ray: Percent agreement between abstractor and auditor for critical data elements Air Space Density/Opacity/Disease 86% Aspiration 91% Aspiration Pneumonia 91% Bronchopneumonia 91% Cannot Rule Out Pneumonia 91% Cavitation 91% Consolidation 91% Ground Glass 91% Infection (cannot rule out infection, likely infection) 89% Infiltrate (Single Lobe) 91% Infiltrate (Multiple Lobes) 86% Interstitial lung disease/interstitial disease 91% Interval improvement or resolution 89% Loculations 91% Mass 91% Necrotizing Pneumonia 91% Neoplasm/Metastatic Disease/Malignancy 91% New or Worsening Infiltrates 91% Nodular Airspace Disease 91% Nodules 91% Pleural Effusion 91% Pneumonia 86% Pneumonitis 91% Post Obstructive Pneumonia 91% Pulmonary Edema 88% Pulmonary Vascular Congestion 91% No Evidence of Pneumonia 91% No Change from Previous/No Interval Change 91% Normal/No Abnormalities 91% Chest CT: Percent agreement between abstractor and auditor for critical data elements Air Space Density/Opacity/Disease 92% Aspiration 92% Aspiration Pneumonia 92% Bronchopneumonia 92% Cannot Rule Out Pneumonia 92% Cavitation 92% Consolidation 92% Ground Glass 92% Infection (cannot rule out infection, likely infection) 92% Infiltrate (Single Lobe) 88% Infiltrate (Multiple Lobes) 92% Interstitial lung disease/interstitial disease 92% Interval improvement or resolution 92% Loculations 92% Mass 92% Necrotizing Pneumonia 92% Neoplasm/Metastatic Disease/Malignancy 92% New or Worsening Infiltrates 92% Nodular Airspace Disease 92% Nodules 92% Pleural Effusion 92% Pneumonia 83% Pneumonitis 92% Post Obstructive Pneumonia 92% Pulmonary Edema 92% Pulmonary Vascular Congestion 92% No Evidence of Pneumonia 92% No Change from Previous/No Interval Change 92% Normal/No Abnormalities 92% Signs/Symptoms: Percent agreement between abstractor and auditor for critical data elements New or Increasing Cough 98% New or Increasing Dyspnea/Shortness of Breath 88% Increased/Changed Secretions or Sputum Production 92% Chills 96% Rales 94% Bronchial Breath Sounds 100% Rhonchi 86% Dullness on Percussion 100% Crackles 90% Tachypnea 90% Leukocytosis 100% Abnormal Temperature 91% Hypoxemia 93% Leukopenia 100%

NQF #3690 Inappropriate diagnosis of urinary tract infection (UTI) in hospitalized medical patients; Abbreviated form: Inappropriate diagnosis of UTI (Recommended)

Valerie M. Vaughn, Dr., Michigan Hospital Medicine Safety Consortium

Comment ID#: 8086 (Submitted: 06/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

This public comment is to address concerns about reliability and validity testing at the critical data element level. We did not include data element validity testing in the original submission but rather reported encounter level validity. We also have data element validity available and include it here: SUMMARY: Critical data element validity testing was conducted by a senior project manager who reviewed all critical data elements from 50 abstracted cases (representing 33 hospitals). Overall, the percent agreement for abstractor and auditor for critical data elements for signs/symptoms of UTI ranged from 94% to 100%. This suggests that data element validity is high and adds to our already submitted information that encounter level validity is high. DETAILS: Critical data elements for clinical signs/symptoms of UTI were examined by the senior project manager in blind audits of 50 consecutive patients with a diagnosis of UTI (appropriate or inappropriate) from 33 hospitals. Data elements were scored based correctness of data abstraction (1 point received if data element was answered correctly, 0 points if there was disagreement). The proportion of cases in which there was agreement for each data element were tabulated for clinical signs/symptoms of UTI and overall abstraction accuracy. Audit findings were as follows: Signs/Symptoms of UTI: Percent agreement between abstractor and auditor for critical data elements: Urgency 100% Rigors 98% Frequency 96% Dysuria 94% Suprapubic Pain or Tenderness 96% Acute Hematuria 94% Costovertebral or Flank Pain Tenderness 100% Fever (>38°C) 98% Altered Mental Status 96% Temperature >38.0 98% Temperature <36.0 98% Heart Rate >90 BPM 96% Respiratory Rate >20 br/min 98% White blood count >10K/µL 98% Hypotension (SBP < 90 mmHg) 96%

Valerie M. Vaughn, Dr., Michigan Hospital Medicine Safety Consortium

Comment ID#: 8088 (Submitted: 06/01/2022)

Council / Public: Public

Level of Support: N/A

Comment

This public comment is to address concerns about reliability testing at the accountable entitle level. There are concerns that our ICC appears low (0.0641). We would like to clarity that the ICC of 0.0641 applies only if a single case were obtained from each hospital. This indicates that if each hospital performed 1 case abstraction, there would be high variability and poor reliability. However, we do not suggest each hospital only conduct 1 case abstraction. The Spearman Brown Prophecy provides an estimation of reliability after adjusting the number of measurements. When the median number of case counts for the entire cohort (N=133 median cases per hospital in measure development hospitals) is applied to the Spearman Brown formula, the overall reliability was 0.901 (well above the 0.5 threshold noted for "poor reliability"). The 0.901 was calculated as follows: Median case abstractions: 133 (IQR 92-154) Reliability or ICC for 133 cases (i.e., ICC/reliability for a typical HMS hospital): (133*0.0641)/(1+(133-1)*0.0641)=0.901 Through this same calculation, using the Spearman Brown Prophecy, we calculated the number of annual cases needed to achieve each reliability threshold: Reliability---Number of annual cases needed 0.6---22 0.7---35 0.8 (standard)---59 0.9---132 Thus, we attain reliability of 0.8 (standard reliability for a

quality metric of this stakes) with 59 cases per hospital which is our suggested target number of cases for the measure.

Eileen Lake, University of Pennsylvania School of Nursing
Comment ID#: 8116 (Submitted: 06/17/2022)

Council / Public: Public

Level of Support: N/A

Comment

This is clarifying information as a public comment on measure #3450, which I steward. The clarifying information is submitted as part of the pre-evaluation commenting period of the spring 2022 Patient Safety Consensus Development Process. Regarding the staff's preliminary ratings assigned in the Preliminary Analysis, please note the following: For Criteria 1. Importance to Measure and Report. 1a. Evidence, The Analysis notes "However, the developer does not provide any further detail regarding how nursing work environment applies within the logic model." My reply is "The work environment is considered an organizational concept within the system. The work environment is considered to moderate the relationship between an intervention and an outcome. Or stated another way, the effect of an intervention depends on the context of the work environment." Under Changes to evidence from last review, there is an error: It states "In the current submission, the developer reports that there are 15 new empirical publications with evidence for the PES-NWI." The correct number is 35 new empirical publications. 1b. Gap in Care/Opportunity for Improvement / 1b. Performance Gap: Bullet 2 states: "However, the time period for these data were not reported." The clarification is: "These data were collected in 2005 through 2008 sequentially in four large states." Bullet 2 also states "Variance around these point estimates was not provided." The clarification is: "In Lake, Riman, & Sloane (2020), Table 2 on page 2159 reports the PES-NWI mean across a panel of 458 hospitals in 2006 and 2016. The means and SDs were: 2006 2.70 (0.22) 2016 2.77 (0.25) These values demonstrate that although the work environment has improved modestly over the ten year period, there is even greater variation in 2016 across hospitals than there was in 2006." 1b. Disparities. The analysis notes: "The developer states that disparities data are not applicable to this measure." The clarification is: "There is one study that demonstrates poorer PES-NWI scores in hospitals that serve disproportionately more patients of Black race: 1. Lake et al (2015) in Health Services Research, in data from 2008, shows in Table 3 on page 386 this PES-NWI mean and SD distribution across a sample of 98 hospitals nationally classified into categories of low, medium, and high percentages of very low birthweight infants of Black race: Low: 3.16 (0.27) Medium: 3.07 (0.21) High: 2.95 (0.24) These differences were statistically significant p = .004. I had not included this information because I am not sure if this is the proper interpretation of disparities for structure measures." For Criteria 2: Scientific Acceptability of Measure Properties 2.a.2. Reliability testing. Specifications Bullet 2 notes: "It is unclear from the cited literature whether the testing data include this minimum response size." The clarification is "In Zangaro & Jones (2019) of the 51 studies included in the reliability generalization meta-analysis, Table 2 on pages 1665 - 1667 shows a range of respondents of 35 to 33,845. Thus, all of these studies meet the minimum sample size." Regarding Questions for the Committee regarding reliability: Bullet 2 states "The Standing Committee should consider whether the cited

studies have applied the minimum sample requirement of 30 surveys." The response is "see above comment: all 51 studies exceeded the minimum requirement." For Criterion 4: Use and Usability 4a.1.Accountability program details. Here is an additional program detail that was not listed: "The Leapfrog group plans to begin surveys using the PES-NWI in the 2023 survey year for payors and health plans to include in their value-based purchasing programs." 4b.1 Improvement. Under Improvement Results. Bullet 1 states "concerns exist...minimum recommended number of responders." Clarifying comment is: "The minimum was reached in 51 studies compiled for the Zangaro & Jones (2019)meta-analysis, suggesting that this minimum is routinely met." 4b.2. Benefits versus Harms includes the statement "(if such evidence exists)." The clarifying comment is: "There has been no evidence of unintended negative consequences to individuals or populations from use of the measure." Preliminary Rating for Usability X Insufficient Rationale "concerns exist related to whether the studies cited are actually showing improvement on the measure over time, and are providing performance results of the measure as specified using the recommended minimum number of surveys." Clarification is "The two panel studies (Lake et al (2020); Sloane et al (2018) of 452 hospitals were designed to show changes in the same group of hospitals over a ten year period." and "As per Zangaro & Jones (2019), we assert that the minimum is routinely met."