NATIONAL QUALITY FORUM

Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all yellow highlighted areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

C = Completely (unquestionably demonstrated to meet the criterion)

P = Partially (demonstrated to partially meet the criterion)

M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)

N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)

NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: PSM-041-10	NQF Project: Patient Safety Measures
MEASURE DESCRIPTIVE INFORMATION	
De.1 Measure Title: Maternal blood transfusion	
De.2 Brief description of measure: Number of wor the hospital admission during which they deliver	nen who receive a transfusion of blood or blood products during
1.1-2 Type of Measure: Outcome De.3 If included in a composite or paired with anotadverse Outcome Index, Weighted Adverse Outcome	ther measure, please identify composite or paired measure Score, Severity Index
De.4 National Priority Partners Priority Area: Safe De.5 IOM Quality Domain: Safety De.6 Consumer Care Need: Staying healthy	ty

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	NQF Staff
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available. A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): A.3 Measure Steward Agreement: Agreement will be signed and submitted prior to or at the time of measure submission A.4 Measure Steward Agreement attached:	A Y□ N□
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and	В

update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section	Y □ N □
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. Purpose: Public reporting, Internal quality improvement	
	C Y□ N□
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement.	
D.1Testing: Yes, fully developed and tested	D
D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? Yes	Y
(for NQF staff use) Have all conditions for consideration been met?	Met
Staff Notes to Steward (if submission returned):	Y□
	N
Staff Notes to Reviewers (issues or questions regarding any criteria):	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria) 1a. High Impact	Eval Rating
(for NQF staff use) Specific NPP goal:	
 1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, Patient/societal consequences of poor quality 1a.2 1a.3 Summary of Evidence of High Impact: Delivery is one of the highest volume reasons for a hospitalization; a higher than average rate of maternal blood transfusions may indicate an inability to prevent or manage blood loss during delivery. 1a.4 Citations for Evidence of High Impact: 	1a C□ P□ M□ N□
1b. Opportunity for Improvement	
1b.1 Benefits (improvements in quality) envisioned by use of this measure: Indentifying a higher than average rate of maternal blood transfusions over time and/or in comparison to other hospitals should encourage hospitals to review their practices/procedures for preventing hemorrhage.	
1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers: Blood transfusion itself may not be an indicator of poor performance. In fact, failure to transfuse has been cited as a leading cause of maternal death in the developing world. However, many of the obstetric complications leading to hemorrhage and thus the need for transfusion are preventable. Estimation of	1b C P M N

blood loss during delivery is inaccurate, and using transfusion as a marker for maternal hemorrhage gives an objective measure of both the incidence and severity of the event. This has previously been used as a marker for severe maternal morbidity.	
1b.3 Citations for data on performance gap: 1) Amos A. Akinbiyi, Olufemi A. Olatunbosun. Emergency Obstetric Hysterectomies (How Many Are Potentially Preventable?): A 28-Year Experience in Saskatoon. Journal of Gynecologic Surgery. September 1, 2004; 20: 81-87.	
2) Chanrachakul B, Chaturachinda K, Phuapradit W, Roungsipragarn R. Cesarean and postpartum hysterectomy. Int J Gynaecol Obstet. 1996; 54:109-13.	
3) Larsson C, Saltvedt S, Wiklund I, Pahlen S, Andolf E. Estimation of blood loss after cesarean section and vaginal delivery has low validity with a tendency to exaggeration. Acta Obstet Gynecol Scand. 2006; 85:1448-52.	
4) Oyelese Y, Scorza WE, Mastrolia R, Smulian JC. Postpartum hemorrhage. Obstet Gynecol Clin North Am. 2007; 34:421-41.	
5) S.Geller, D.Rosenberg, S.Cox, M.Brown, L.Simonson, S.Kilpatrick. A scoring system identified near-miss maternal morbidity during pregnancy. Journal of Clinical Epidemiology. 2004; 57:716-720.	
1b.4 Summary of Data on disparities by population group: Data exist suggesting that maternal hemorrhage is not more likely in black women, but that they are more likely to die from hemorrhage.	
1b.5 Citations for data on Disparities: Tucker MJ, Berg CJ, Callaghan WM, Hsia J. The Black-White disparity in pregnancy-related mortality from 5 conditions: differences in prevalence and case-fatality rates. Am J Public Health. 2007; 97:247-51.	
1c. Outcome or Evidence to Support Measure Focus	
1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population): Maternal hemorrhage is the leading cause of death world wide. It remains one of the leading causes of intra-partum death in the United States.	
1) Clark SL, Belfort MA, Dildy GA, Herbst MA, Meyers JA, Hankins GD. Maternal death in the 21st century: causes, prevention, and relationship to cesarean delivery. Am J Obstet Gynecol. 2008;199:36.e1-5.	
1c.2-3. Type of Evidence: Expert opinion	
1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome): not submitted	
1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom): not submitted	
1c.6 Method for rating evidence: not submitted	
1c.7 Summary of Controversy/Contradictory Evidence: blank	
1c.8 Citations for Evidence (other than guidelines): blank	1c C□
1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number): blank	P M N

1c.10 Clinical Practice Guideline Citation: blank 1c.11 National Guideline Clearinghouse or other URL: blank	
1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom): blank	
1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF): blank	
1c.14 Rationale for using this guideline over others: blank	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Importance</i> to Measure and Report?	1
Steering Committee: Was the threshold criterion, <i>Importance to Measure and Report</i> , met? Rationale:	1 Y□ N□
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
Extent to which the measure, <u>as specified</u> , produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)	Eval Rating
2a. MEASURE SPECIFICATIONS	
S.1 Do you have a web page where current detailed measure specifications can be obtained? S.2 If yes, provide web page URL:	
2a. Precisely Specified	
2a.1 Numerator Statement (<i>Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome</i>): All women who have a transfusion during their delivery hospitalization	
2a.2 Numerator Time Window (<i>The time period in which cases are eligible for inclusion in the numerator</i>):	
Occurring during delivery hospitalization only. Can be run for any period of time to determine rate	
2a.3 Numerator Details (All information required to collect/calculate the numerator, including all codes, logic, and definitions): 370-375 or MS DRG 765-768 and 774-775 with procedure code 99.0 (transfusion of blood and blood components)	
2a.4 Denominator Statement (Brief, text description of the denominator - target population being measured): All women who deliver an infant during period of evaluation	-
2a.5 Target population gender: Female 2a.6 Target population age range:	
2a.7 Denominator Time Window (The time period in which cases are eligible for inclusion in the denominator): Same as numerator	2a- specs C
2a.8 Denominator Details (All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions):	P M N

370-375 or MS DRG 765-768 and 774-775

2a.9 Denominator Exclusions (Brief text description of exclusions from the target population): none

2a.10 Denominator Exclusion Details (All information required to collect exclusions to the denominator, including all codes, logic, and definitions):

none

2a.11 Stratification Details/Variables (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions***)**: none

2a.12-13 Risk Adjustment Type: No risk adjustment necessary

2a.14 Risk Adjustment Methodology/Variables (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method*):

none

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion

2a.20 Interpretation of Score: Better quality = Lower score

2a.21 Calculation Algorithm (*Describe the calculation of the measure as a flowchart or series of steps*): a)identify delivered cases for the period b) scan the procedure codes for a transfusian code in the dx string c) create count of cases with blood transfusion during the delivery discharge. (This is a weighted adverse event that is part of the AOI, WAOS and SI composite measures. The weight assigned to this measure is 20 points. See AOI composite submission for details on composite measures.)

2a.22 Describe the method for discriminating performance (e.g., significance testing): A decreasing rate over time or a rate significantly lower than or not significantly different from an external benchmark will indicate improving/good quality performance

2a.23 Sampling (Survey) Methodology If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):

No sampling is required

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
Electronic administrative data/claims, Electronic clinical data, Electronic Health/Medical Record

2a.25 Data source/data collection instrument (*Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.*):

Administrative data set, UB 04 billing data

2a.26-28 Data source/data collection instrument reference web page URL or attachment:

2a.29-31 Data dictionary/code table web page URL or attachment: Attachment AOI GlossaryV2.1.doc

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)

Can be measured at all levels

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested) Hospital

2a.38-41 Clinical Services (*Healthcare services being measured, check all that apply*)
Clinicians: Nurses, Clinicians: PA/NP/Advanced Practice Nurse, Clinicians: Physicians (MD/DO), Other L&D team

TESTING/ANALYSIS

2b. Reliability testing

2b C[]

2b.1 Data/sample (description of data/sample and size): Administrative data for Beth Israel Deaconess Medical Center for the period Q 3, 2005- Q2 2006 was reconciled with abstracted data for the same period.	P M N
2b.2 Analytic Method (type of reliability & rationale, method for testing): Case by case review	
2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted): All valid cases were identified using procedure codes on the administrate data set.	
2c. Validity testing	
2c.1 Data/sample (description of data/sample and size): Beth Israel Deaconess Medical Center has been tracking this adverse event as part of their Adverse Outcome Index since early 2001.	
2c.2 Analytic Method (type of validity & rationale, method for testing): Chart review and analysis of the administrative data set for all deliveries during the period.	2c C□
2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): Tracking and monitoring maternal transfusions continues to improve patient safety during this period.	P
2d. Exclusions Justified	
2d.1 Summary of Evidence supporting exclusion(s): none	
2d.2 Citations for Evidence: blank	
2d.3 Data/sample (description of data/sample and size): blank	0.4
2d.4 Analytic Method (type analysis & rationale): none	2d C□ P□ M□
2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): none	N NA
2e. Risk Adjustment for Outcomes/ Resource Use Measures	
2e.1 Data/sample (description of data/sample and size): not applicable	
2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): not applicable	2e
2e.3 Testing Results (risk model performance metrics): not applicable	C P M N
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: not applicable	NA.
2f. Identification of Meaningful Differences in Performance	
2f.1 Data/sample from Testing or Current Use (description of data/sample and size): This measure has been individually tracked as part of a composite measure. It has been used in three published reports (see references), totalling more than 50,000 deliveries. In addition, the National Perinatal Information center has tracked this across a wide range of clinical settings, totally nearly 500,000 deliveries.	2f C□
1) Nielsen PE, Goldman MB, Mann S, Shapiro DE, Marcus RG, Pratt SD, et al. Effects of teamwork training on adverse outcomes and process of care in labor and delivery: a randomized controlled trial. Obstet Gynecol 2007; 109:48-55.	P M N

2) Pratt SD, Mann S, Salisbury M, et al. Impact of CRM-based team training on obstetric outcomes and clinicians' patient safety attitude. Joint Commission Journal on Quality and Patient Safety 2007; 33:720-5.	
3) Nicholson JM, Parry S, Caughey AB, et al. The impact of the active management of risk in pregnancy at term on birth outcomes: a randomized clinical trial. Am J Obstet Gynecol. 2008; 198:511.e1-15.	
2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):	
2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):	
2g. Comparability of Multiple Data Sources/Methods	
2g.1 Data/sample (description of data/sample and size):	
2g.2 Analytic Method (type of analysis & rationale):	2g C□ P□
2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):	M NO NA NA
2h. Disparities in Care	
2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): none reported	2h C□ P□
2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: blank	M NO NA
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Scientific Acceptability of Measure Properties?</i>	2
Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i> , met? Rationale:	2 C□ P□ M□
3. USABILITY	N
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rating
3a. Meaningful, Understandable, and Useful Information	
3a.1 Current Use: In use	
3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (<i>If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). <u>If not publicly reported</u>, state the plans to achieve public reporting within 3 years): Not currently reported publically</i>	20
3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). <u>If not used for QI</u> , state the plans to achieve use for QI within 3 years): Currently used by hospitals involed in Team Performance Plus (TPP) contracts, the Maryland Perinatal	3a C P M N

Patient Saftey Initiative, the Premier Perinatal Safety Initiative and individual hospital members of NPIC.	
Testing of Interpretability (<i>Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement</i>) 3a.4 Data/sample (<i>description of data/sample and size</i>): No sampling required; administrative data allows for 100% of delivered cases to be included in the calculation.	
3a.5 Methods (e.g., focus group, survey, QI project): Baseline and follow-up reporting to the QI project participants	
3a.6 Results (qualitative and/or quantitative results and conclusions): Tables and graphical display along with interpretive commentary allow QI participants to understand the baseline data and post-intervention data.	
3b/3c. Relation to other NQF-endorsed measures	
3b.1 NQF # and Title of similar or related measures:	
(for NQF staff use) Notes on similar/related endorsed or submitted measures:	
3b. Harmonization If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population): 3b.2 Are the measure specifications harmonized? If not, why?	3b C P M N NA
3c. Distinctive or Additive Value 3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF- endorsed measures:	_
5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality: MAternal transfusions is one of 10 outcome measures that are part of three composite measures - Adverse Outcome Index, Weight Adverse Outcome Score and Severity Index.	3c C P M N NA
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Usability?</i>	3
Steering Committee: Overall, to what extent was the criterion, <i>Usability</i> , met? Rationale:	3 C P M N
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes	
4a.1-2 How are the data elements that are needed to compute measure scores generated? Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition), Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry), Other Blood Bank data base if not coded as a procedure code	4a C P M N
4b. Electronic Sources	4b C□

Steering Committee: Overall, to what extent was the criterion, <i>Feasibility</i> , met? Rationale:	4 C P M N N N M M M M M M
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?	4
4e.4 Business case documentation:	P M N
4e.3 Evidence for costs:	4e C□
4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures): Minimal- uses administrative data; a secondary data set.	
4e. Data Collection Strategy/Implementation 4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: Administrative data has improved greatly over the years such that it is a very liable source for calculating quality measure/indicator rates. It is a standard data set across all health care facilities, maintains patient confidentiality, is cost effective to collect and analyze, and can be collected at reasonable intervals (monthly, quarterly etc) so as to identify improvements or deterioration in patient safety. As with any measuring system, facilities being measured should have the opprortunity to review and validate their data prior to their final rate calculations. Numerator case lists can be generated using medical record numbers present on most administrative data sets. Chart review to confirm or correct numerator cases has proven very effective in validating measure rates	N .
Having hospitals review their case counts helps to validate the count. A back up data source via the blood bank or revenue codes on the UB 04 can also be used to identify cases in the procedure code is no used. Results indicate that back- up data sources are available and accurate.	4d C P M
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences 4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. Hosptials may not use the procedure code (99.0) for blood transfusions, greatly understating the rate.	
4c. Exclusions 4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No 4c.2 If yes, provide justification.	4c C P N N N N N N N N N N N N N N N N N N
4b.2 If not, specify the near-term path to achieve electronic capture by most providers. Most hospitals capture the blood transfusion data electronically by ICD 9 code however some do not code therefore blood bank data must be used.	
4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims) No	P M N

RECOMMENDATION	
(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.	Time- limited
Steering Committee: Do you recommend for endorsement? Comments:	Y □ N □ A □
CONTACT INFORMATION	

Co.1 Measure Steward (Intellectual Property Owner)

Co.1 Organization

Department of OB/Gyn. Beth Israel Deaconess Medical Center, 330 Brookline Ave, Boston, Massachusetts, 02215

Co.2 Point of Contact

Janet, Muri, MBA, jmuri@npic.org, 401-274-0650-105

Measure Developer If different from Measure Steward

Co.3 Organization

Department of OB/Gyn. Beth Israel Deaconess Medical Center, 330 Brookline Ave, Boston, Massachusetts, 02215

Co.4 Point of Contact

Stephen, Pratt, MD, Dept Of Anesthesia, Beth Israel Deaconess Medical Center, 617-667-3353-

Co.5 Submitter If different from Measure Steward POC

Stephen, Pratt, MD, Dept Of Anesthesia, Beth Israel Deaconess Medical Center, 617-667-3353-, Department of OB/Gyn. Beth Israel Deaconess Medical Center

Co.6 Additional organizations that sponsored/participated in measure development

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

Peter E. Nielsen, MD; Marlene B. Goldman, ScD; Susan Mann, MD; David E. Shapiro, PhD; Ronald G. Marcus, MB, BCh; Stephen D. Pratt, MD; Penny Greenberg, RN; Patricia McNamee, RN, MS; Mary Salisbury, RN, MSN; David J. Birnbach, MD; Paul A. Gluck, MD; Mark D. Pearlman, MD; Heidi King, MS; David N. Tornberg, MD MPH; Benjamin P. Sachs, MB, BS; Lauren Bales, MD, Naval Medical Center Camp Pendleton; Ronald Burkman, MD, Baystate Medical Center; Cynthia Brumfield, MD, University of Alabama at Birmingham Hospital; Peter Cherouny, MD, University of Vermont-Fletcher Allen Health Care; Jack Cooley, MD, National Naval Medical Center; Harold Fox, MD, Johns Hopkins Medical Center; Elizabeth Golladay, MD, Tripler Army Medical Center; Lynn Leventis, MD, Naval Medical Center of San Diego; Robert Lorenz, MD, William Beaumont Hospital; William Lucky, MD, Baptist Hospital of Miami; Patrick Nugent, MD, South Shore Hospital; Spike Lipschitz, MD, South Shore Hospital; Chris Stolle, MD, Naval Medical Center of Portsmouth; Cosmas van DeVen, MD, University of Michigan Medical Center; Frank Witter, MD, Johns Hopkins Medical Center.

In addition, representatives from the American College of Obstetrics and Gyncology, the American Society of Anesthesiogists, Association of Women's Health Obstetric and Neonatal Nurses; the Society for Obstetric Anesthesia and Perinatology; the Armed Forces Institute of Pathology; the U.S. Navy Bureau of Medicine and Surgery; the Office of the Surgeon General, U.S. Army; and TRICARE Management Activity were present.

Consensus panels were developed for the indentification of measure to be included in the composite measure (AOI). This included vetting each of the individual measures. See reference for full description of panel process

1) Mann S, Pratt SD et al. Assessing Quality in Obstetrical Care: Development of Standardized Measures. Jt Comm J Qual Pt Safety. 2006; 32 (9):497-505.

Ad.2 If adapted, provide name of original measure:

Ad.3-5 If adapted, provide original specifications URL or attachment

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.6 Year the measure was first released: 2007

Ad.7 Month and Year of most recent revision: 04, 2008

Ad.8 What is your frequency for review/update of this measure? on-going

Ad.9 When is the next scheduled review/update for this measure?

Ad.10 Copyright statement/disclaimers: measure will be updated as appropriate with reconcile changes in coding or practice patterns.

Ad.11 -13 Additional Information web page URL or attachment:

Date of Submission (MM/DD/YY): 08/01/2010