

# Consensus Guideline on Breast Surgeon Quality Measurement

## Purpose

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To describe the principles of quality measurement and improvement endorsed by the American Society of Breast Surgeons (ASBrS)

## Associated ASBrS Guidelines or Quality Measures

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1. This Consensus Guideline replaces the ASBrS Position Statement on Breast Surgery Quality Measurement and Initiatives approved February 15, 2012
2. ASBrS Endorsed Quality Measures

## Methods

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1. Comprehensive, but not a complete systematic review of literature, for healthcare quality measurement
2. Comprehensive review of healthcare policy stakeholder recommendations for use of quality measures (QM) to identify quality gaps and aid quality improvement.
3. The ASBrS Patient Safety and Quality Committee developed a consensus document that was reviewed and approved by the ASBS Board of Directors.

## Summary of Data Reviewed

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1. Quality measurement policy recommendations of the Institute of Medicine, the National Quality Forum, the Agency for Healthcare Research and Quality, the Institute for Healthcare Improvement, The American College of Surgeons, the Commission on Cancer, the Surgical Quality Alliance, the American Society of Clinical Oncologists, the American Medical Association PCPI, the National Consortium of Breast Centers, the National Accreditation Program for Breast Centers, and the European Union of Breast Cancer Specialists.
2. Review of the National Quality Strategy, the National Quality Healthcare and Disparities Reports, and the ASCO report on “The State of Cancer Care in America 2015”
3. Publications regarding surgical and breast cancer quality measurement

## Recommendations

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1. **Breast surgeons should search for disparities, inequalities, and gaps in the quality of breast surgical care.** Gaps are identified when there is proof of variability of performance synchronous with evidence that good performance is possible; i.e. actual care does not match achievable care.
2. **Breast specific “quality measures” (QM) should be developed, then used for quality gap identification, peer performance comparison, and quality improvement initiatives.** QMs are an attempt to quantify quality of care in a specific domain of care. Post-operative general surgical morbidity and mortality outcome QM are important but not sufficient to measure breast surgical performance.
3. **QMs should be developed for multiple domains of care to include, but not limited to care structure, process of care, outcomes, patient experience, care coordination, affordability, access, and population health.**
4. **QMs require “specifications” - a specific numerator, denominator, exception and exclusion criteria.** These specifications improve fairness during peer comparisons because they differentiate between “quality” and “non-quality” reasons why performance for a specific QM was “not met.”
5. **New QMs should have “desirable attributes.”** These include relevancy, importance (gap between desired and actual care), scientific soundness, and feasibility of measurement.
6. **Peer performance comparison requires appropriate statistical risk adjustment for accuracy and fairness.**
7. **Programs designed for breast-specific QM reporting and peer performance comparison should be accessible for both general and breast specialty surgeons.** Attempts should be made to develop programs that limit the surgeon burden of data entry.
8. **Providers of care should not be expected to achieve 100% compliance with every QM.** There are justifiable reasons why performance may not be achieved to include patient refusal, significant co-morbidities, and limited life expectancy. In addition, performance for some QM can be dependent on multiple care providers and cannot be solely “attributed” to the surgeon.
9. **The developers of QM and improvement initiatives should seek multi-stakeholder input to include patients, payers, and policymakers, in addition to the providers of care and their professional organizations.**
10. **Programs that intend to use breast cancer QM for “accountability” should not be developed without breast surgeon stakeholder representation.** Accountability use includes public transparency, linking provider performance to financial compensation

(or penalty), patient steerage (eligibility to see a patient), and licensing or credentialing activities.

11. **QM program data should be reviewed periodically for effectiveness and contemporary relevancy.** The results will drive decisions to continue, modify, or retire specific QM or the entire program.
12. **The stewards of quality measurement must anticipate and monitor for unintended outcomes because quality initiatives may cause unintended and adverse consequences such as provider “risk aversion” to care for a patient or change their choice of procedure to meet a “performance requirement” of a QM.**
13. **Since there is ample evidence that variability of surgical care exists, all surgeons should participate in quality measurement and improvement activities at some level to determine their level of performance.**

## - References -

1. National Quality Measures Clearinghouse. Breast quality measures. Agency for Health Quality and Research.  
<http://www.qualitymeasures.ahrq.gov/search/search.aspx?term=breast> Accessed June 30, 2015.
2. National Quality Measures Clearinghouse. Tutorials on quality measures. Agency for Health Quality and Research.  
<http://www.qualitymeasures.ahrq.gov/tutorial/index.aspx> Accessed June 30, 2015.
3. National Quality Measures Clearinghouse. Uses of quality measures. Agency for Health Quality and Research.  
<http://www.qualitymeasures.ahrq.gov/tutorial/using.aspx> Accessed June 30, 2015.
4. National Quality Measures Clearinghouse. Desirable attributes of a quality measure. Agency for Health Quality and Research.  
<http://www.qualitymeasures.ahrq.gov/tutorial/attributes.aspx> Accessed June 30, 2015.
5. Measuring Performance. National Quality Forum.  
[http://www.qualityforum.org/Measuring\\_Performance/Measuring\\_Performance.aspx](http://www.qualityforum.org/Measuring_Performance/Measuring_Performance.aspx) Accessed June 30, 2015.
6. NQF endorsed Quality Measures. National Quality Forum.  
<http://www.qualityforum.org/QPS/QPSTool.aspx#> Accessed June 30, 2015.
7. National Healthcare Quality and Disparities Reports. Agency for Healthcare Research and Quality.  
<http://www.ahrq.gov/research/findings/nhqdr/index.html> Accessed June 30, 2015.
8. National Quality Strategy. Agency for Healthcare Research and Quality.  
<http://www.ahrq.gov/workingforquality/> Accessed June 30, 2015.
9. Institute for Healthcare Improvement. Quality, cost and value resources.  
<http://www.ihl.org/Topics/QualityCostValue/Pages/Resources.aspx> Accessed June 30, 2015.
10. Health and Medicine Division. Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis. The National Academies of Sciences, Engineering, Medicine.  
<http://www.nationalacademies.org/hmd/Reports/2013/Delivering-High-Quality-Cancer-Care-Charting-a-New-Course-for-a-System-in-Crisis.aspx> Accessed June 30, 2015.
11. American Society of Clinical Oncology Institute for Quality.  
<http://www.iom.edu/Reports/2013/Delivering-High-Quality-Cancer-Care-Charting-a-New-Course-for-a-System-in-Crisis/Report-Brief091013.aspx> Accessed June 30, 2015.
12. American Society of Clinical Oncology. Practice and guidelines.  
<http://www.instituteforquality.org/practice-improvement-resources> Accessed June 30, 2015.
13. American College of Surgeons. Quality programs.  
<https://www.facs.org/quality-programs> Accessed June 30, 2015.
14. American College of Surgeons. National Surgical Quality Improvement Program® (ACS NSQIP®).  
<https://www.facs.org/quality-programs/acs-nsqip> Accessed June 30, 2015.
15. American College of Surgeons. National accreditation program for breast centers.  
<https://www.facs.org/quality-programs/napbc> Accessed June 30, 2015.
16. American College of Surgeons. Commission on Cancer Program Standards. <https://www.facs.org/quality-programs/cancer/coc/standards> Accessed June 30, 2015.
17. Surgical Quality Alliance. Document on public reporting of surgical quality measures.

- <https://www.facs.org/advocacy/quality/surgical-quality-alliance> Accessed June 30, 2015.
18. American Medical Association Physician Consortium for Performance Improvement. Quality measure development. <http://www.ama-assn.org/ama/pub/physician-resources/physician-consortium-performance-improvement/pcpi-measures/about-measure-development.page?> Accessed June 30, 2015.
  19. National Consortium of Breast Centers. NQMBCTM program for quality measures and measurement. <http://www2.nqmbc.org/quality-performance-you-should-measure/> Accessed June 30, 2015.
  20. Europeans Society of Breast Cancer Specialists. Methods to address variability of breast cancer care. <http://www.eusoma.org/> Accessed June 30, 2015.
  21. Kohn LT, Corrigan J, Donaldson MS. Committee on Quality of Health Care in America, Institute of Medicine. *To Err is Human*. Washington, DC: The National Academy Press, 1999.
  22. Institute of Medicine Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: The National Academy Press;2001.
  23. Donabedian A. Evaluating the quality of medical care. 1966. *Milbank Q*. 2005;83:691–729.
  24. Donabedian A. The definition of quality and approaches to its assessment. Vol 1. *Explorations in Quality Assessment and Monitoring*. Ann Arbor, MI: Health Administration Press;1980.
  25. Hassett MJ, Hughes ME, Niland JC, et al. Selecting high priority quality measures for breast cancer quality improvement. *Med Care*. 2008;46:762–770.
  26. American Society of Clinical Oncology. The state of cancer care in America, 2015: a report by the American Society of Clinical Oncology. *J Oncol Pract*. 2015;11(2):79–113.
  27. Edge SB. Quality measurement in breast cancer. *J Surg Oncol*. 2014;110(5):509–517.
  28. Kaufman CS, Landercasper J. Can we measure the quality of breast surgical care? *Ann Surg Oncol*. 2011;18(11):3053–3060.
  29. Rose C, Stovall E, Ganz PA, Desch C, Hewitt M. Cancer Quality Alliance: Blueprint for a better cancer care system. *CA Cancer J Clin*. 2008;58:266–292.
  30. Whitacre E. The importance of measuring the measures. *Ann Surg Oncol*. 2009;16:1090–1091.
  31. Wilke LG, Ballman KV, McCall LM, et al. Adherence to the National Quality Forum (NQF) breast cancer measures within cancer clinical trials: a review from ACOSOG Z0010. *Ann Surg Oncol*. 2010;17:1989–1994.
  32. Warner ET, Tamimi RM, Hughes ME, et al. Racial and ethnic differences in breast cancer survival: mediating effect of tumor characteristics and sociodemographic and treatment factors. *J Clin Oncol*. 2015;33(20):2254–2261.
  33. Knutson AC, McNamara EJ, McKellar DP, Kaufman CS, Winchester DP. The role of the American College of Surgeons' cancer program accreditation in influencing oncologic outcomes. *J Surg Oncol*. 2014;110(5):611–615.
  34. Dimick JB, Greenberg CC. Understanding gaps in surgical quality: learning to count what cannot be counted. *Ann Surg*. 2013;257(1):6–7.
  35. Greenberg CC, Lipsitz SR, Neville B, et al. Receipt of appropriate surgical care for Medicare beneficiaries with cancer. *Arch Surg*. 2011;146(10):1128–34.
  36. Frasier LL, Greenberg CC, Neuman HB. Leveraging comparative effectiveness research to improve the quality of multidisciplinary care for breast cancer patients. *Cancer Treat Res*. 2015; 164:15–30.
  37. Winchester DP. The National Accreditation Program for Breast Centers: a multidisciplinary approach to improve the quality of care for patients with diseases of the breast. *Breast J*. 2008;14:409–411.
  38. Moran MS, Goss D, Haffty BG, Kaufman CS, Winchester DP. Quality measures, standards, and accreditation for breast centers in the United States *Int J Radiat Oncol Biol Phys*. 2010;76(1):1–4.
  39. Anderson BO, Carlson RW, Kaufman CS, Kiel KD. Ensuring optimal interdisciplinary breast care in the United States. *Breast J*. 2009;15(6):569–570.
  40. Kaufman CS, Shockney L, Rabinowitz B, et al. National Quality Measures for Breast Centers (NQMBCTM): a robust quality tool: breast center quality measures. *Ann Surg Oncol*. 2010;17(2):377–385.
  41. Greenberg CC, Lipsitz SR, Hughes ME, et al. Institutional variation in the surgical treatment of breast cancer: a study of the NCCN. *Ann Surg*. 2011;254(2):339–345.
  42. Adegboyega TO, Landercasper J, Linebarger JH, et al. Institutional review of compliance with NCCN guidelines for breast cancer: lessons learned from real-time multidimensional synoptic reporting. *J Natl Compr Canc Netw*. 2015;13(2):177–183.
  43. Efficace F, Fayers P, Pusic A, et al. Quality of patient-reported outcome reporting across cancer randomized controlled trials according to the CONSORT patient-reported outcome extension: A pooled analysis of 557 trials. *Cancer*. 2015;121(18):3335–3342.
  44. Brucker SY, Schumacher C, Sohn C, et al. Benchmarking the quality of breast cancer care in a nationwide voluntary system: the first five-year results (2003–2007) from Germany as a proof of concept. *BMC Cancer*. 2008;8:358.
  45. Chen F, Puig M, Yermilov I, et al. Using breast cancer quality indicators in a vulnerable population. *Cancer*. 2011;117:3311–3321.
  46. Dimick JB, Osborne NH, Hall BL, Ko CY, Birkmeyer JD. Risk adjustment for comparing hospital quality with surgery: how many variables are needed? *J Am Coll Surg*. 2010;210:503–508.
  47. El-Tamer M. Surgical options as quality of care indicators in breast cancer. *J Surg Oncol*. 2009;99:393–394.
  48. El-Tamer MB, Ward BM, Schiffner T, Neumayer L, Khuri S, Henderson W. Morbidity and mortality

- following breast cancer surgery in women: national benchmarks for standards of care. *Ann Surg.* 2007;245:665–671.
49. Neumayer L, Schiffner TL, Henderson WG, Khuri SF, El-Tamer M. Breast cancer surgery in Veterans Affairs and selected university medical centers: results of the patient safety in surgery study. *J Am Coll Surg.* 2007;204:1235–1241.
  50. Greenberg CC, Lipsitz SR, Hughes ME, et al. Institutional variation in the surgical treatment of breast cancer: A study of the NCCN. *Ann Surg.* 2011;254:339–345.
  51. Hall BL, Hamilton BH, Richards K, Bilimoria KY, Cohen ME, Ko CY. Does surgical quality improve in the American College of Surgeons National Surgical Quality Improvement Program: an evaluation of all participating hospitals. *Ann Surg.* 2009;250:363–376.
  52. Kaufman CS. Breast care is a team sport. *Breast J.* 2004;10:469–472.
  53. Kaufman CS. Validating quality breast care: three new validation programs for 2007. *Am J Surg.* 2007;194:515–517.
  54. Malin JL, Diamant AL, Leake B, et al. Quality of care for breast cancer for uninsured women in California under the breast and cervical cancer prevention treatment act. *J Clin Oncol.* 2010;28:3479–3484.
  55. Malin JL, O'Neill SM, Asch SM, et al. Quality of supportive care for patients with advanced cancer in a VA medical center. *J Palliat Med.* 2011;14:573–577.
  56. Malin JL, Schneider EC, Epstein AM, Adams J, Emanuel EJ, Kahn KL. Results of the National Initiative for Cancer Care Quality: how can we improve the quality of cancer care in the United States? *J Clin Oncol.* 2006;24:626–634.
  57. McCahill LE, Privette A, James T, et al. Quality measures for breast cancer surgery: Initial validation of feasibility and assessment of variation among surgeons. *Arch Surg.* 2009;144:455–462.
  58. Moran MS, Goss D, Haffty BG, Kaufman CS, Winchester DP. Quality measures, standards and accreditation for breast centers in the United States. *Int J Radiat Oncol Biol Phys.* 2010;76:1–4.
  59. Punglia RS, Hughes ME, Edge SB, et al. Factors associated with guideline concordant use of radiotherapy after mastectomy in the NCCN. *Int J Radiat Oncol Biol Phys.* 2008;72:1434–1440.
  60. Rothberg MB, Morsi E, Benjamin EM, Pekow PS, Lindenauer PK. Choosing the best hospital: the limitations of public quality reporting. *Health Aff (Millwood).* 2008;27:1680–1687.
  61. Veerbeek L, van der Geest L, Wouters M, et al. Enhancing the quality of care for patients with breast cancer: Seven years of experience with a Dutch auditing system. *Eur J Surg Oncol.* 2011;37:714–718.

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