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Preface

The Agency for Healthcare Research and Quality (AHRQ), through its Evidence-Based Practice Centers (EPCs), sponsors the development of evidence reports and technology assessments to assist public- and private-sector organizations in their efforts to improve the quality of healthcare in the United States. The National Cancer Institute, the Centers for Medicare & Medicaid Services, and the Centers for Disease Control and Prevention requested and provided funding for this report. The reports and assessments provide organizations with comprehensive, science-based information on common, costly medical conditions and new healthcare technologies. The EPCs systematically review the relevant scientific literature on topics assigned to them by AHRQ and conduct additional analyses when appropriate prior to developing their reports and assessments.

To bring the broadest range of experts into the development of evidence reports and health technology assessments, AHRQ encourages the EPCs to form partnerships and enter into collaborations with other medical and research organizations. The EPCs work with these partner organizations to ensure that the evidence reports and technology assessments they produce will become building blocks for healthcare quality improvement projects throughout the Nation. The reports undergo peer review prior to their release.

AHRQ expects that the EPC evidence reports and technology assessments will inform individual health plans, providers, and purchasers as well as the healthcare system as a whole by providing important information to help improve healthcare quality.

We welcome comments on this evidence report. They may be sent by mail to the Task Order Officer named below at: Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850, or by e-mail to epc@ahrq.gov.

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The authors of this report are responsible for its content. Statements in the report should not be construed as endorsement by the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services of a particular drug, device, test, treatment, or other clinical service.

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Structured Abstract

Context: It has been suggested that, on average, the quality of health care received by Americans, including breast cancer care in women, is less than ideal. Quality measurement can identify gaps in such patterns of care.

Objectives: The purpose of this systematic review of the scientific-medical literature was to survey the range of quality measures assessing the quality of breast cancer care in women, and to characterize specific parameters potentially affecting their suitability for wider use. Specific emphasis was placed on diagnosis, treatment (including supportive care), followup, and documentation of this care. Screening and prevention fell outside the review scope. Quality measures quantify adherence to standards of care, or quality indicators (e.g., percentage of women receiving radiotherapy after breast-conserving surgery), and can vary in terms of the extent of their scientific development.

Data Sources: A comprehensive literature search was conducted in: Medline, Cancerlit, Healthstar, Premedline, Embase, CINAHL, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effectiveness, Cochrane Central Register of Controlled Trials, and Health and Psychosocial Instruments. Search elements included: diagnosis and treatment of breast cancer; quality measures; systematic reviews; clinical practice guidelines; and, commentaries or editorials. Additional published and unpublished literature was sought through manual searches of reference lists of included studies and key review articles, web sites, and from the files of content experts. ASCO was asked to contribute quality measures currently under development.

Study Selection: Studies met eligibility criteria if they described evidence-based quality measures evaluating adherence to standards of breast cancer care. The population of interest was female adults diagnosed with, or in treatment for, any histological type of adenocarcinoma of the breast, including both in situ and invasive cancer. Three levels of screening, with two reviewers at each level, were employed. Disagreements between reviewers were resolved by forced consensus and, if necessary, third party intervention.

Data Extraction: Three reviewers independently abstracted data (i.e., characteristics of the report, study, population, quality indicators used in quality measurement [e.g., validational history, data sources used], and adherence rate [e.g., overall, by age and race]), and then checked each other's work. A scheme was developed, then applied independently by two assessors, to examine the extent, and soundness, of the scientific development of each quality measure.

Data Synthesis: Sixty relevant reports identified 58 studies and 143 quality indicators used to measure the quality of breast cancer care. Measures reflecting processes of care were the most frequently evaluated. Not all predefined types of care were assessed using quality measures. Only a qualitative synthesis was undertaken, given the virtual lack of scientifically developed quality measures (n = 12). Most of these assessed patient-reported quality of life.

Conclusions: While some studies revealed patterns of underuse of care, these and all other adherence data require confirmation using scientifically validated quality measures. Current

attempts by ASCO to formally develop a set of quality measures relating to breast cancer care may hold the key to conducting these definitive studies.

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Appendix I: Additional Acknowledgments

Appendixes and Evidence Tables are provided electronically at http://www.ahrq.gov/clinic/tp/brcantp.htm