



**American Society of Breast Disease**

ADVANCING MULTIDISCIPLINARY BREAST CARE

## **Ensuring Optimal Interdisciplinary Breast Care in the United States**

### **Gaps, Implications, and Potential Measures to Assess Optimal Care**

Early Detection and Diagnosis  
Local-Regional Treatment  
Systemic Treatment



### 14 Gaps in Early Detection and Diagnosis

Gaps	Implications	Potential Measures to Assess Optimal Care
1.1. Screening underutilization in target population	Significant missed opportunity to lower breast cancer mortality.	<ul style="list-style-type: none"> <li>• Percentage of women <math>\geq</math> 42 years of age who underwent mammograms in past 2 years</li> <li>• Percentage of women <math>\geq</math> 45 years of age who underwent more than one annual mammogram in last 5 years</li> </ul>
1.2. In women with a palpable lesion, a requisition noting “screening mammogram” rather than “diagnostic mammogram” leads to lack of proper imaging workup	Missed workup and delay or failure to diagnose a breast cancer	<ul style="list-style-type: none"> <li>• Percentage of women with clinical breast symptoms who has mammography ordered as a screening study</li> <li>• Percentage of women with clinical breast symptoms who undergoes mammography/ultrasound ordered as a diagnostic study</li> </ul>
1.3. High-risk patients who warrant specialized screening regimens are not identified	Lack of proper screening and management of increased breast cancer risk may result in delayed diagnosis and unnecessary morbidity and/or mortality from breast cancer	<ul style="list-style-type: none"> <li>• Percentage of women undergoing screening mammography who has lifetime breast cancer risk noted on the chart (may use any available risk program, e.g. Gail, BRCAPRO, Claus, etc.)</li> <li>• Percentage of screened women with elevated genetic risk who is provided high-risk information and education</li> <li>• Percentage of women having a lifetime breast cancer risk of 20% or higher based on significant family history who undergo screening MRI</li> </ul>
1.4. Lack of further workup or re-examination of women with palpable mass or thickening called normal due to negative imaging workup	Relying on negative/benign imaging findings in the presence of a palpable mass may lead to delay in diagnosis of breast cancer	<ul style="list-style-type: none"> <li>• Percentage of symptomatic women (noted to have a palpable mass/lump or thickening on the mammogram referral request) and negative mammogram is referred to a surgical specialist</li> </ul>
1.5. Screening clinical breast examination not performed in addition to mammography	Up to 19% of breast cancers not visible on mammography may be identified by thorough clinical breast examination	<ul style="list-style-type: none"> <li>• Percentage of mammography patients who has documented timely, clinical breast examination associated with screening</li> </ul>
1.6. Focused physical examination (CBE) of a suspicious mass seen on imaging is not performed prior to image-guided core needle biopsy	The surgeon rarely has the option of examining the image-identified “mass” prior to image-guided biopsy, before there is an iatrogenic hematoma or residual biopsy thickness, which may skew diagnostic findings and therapeutic decisions	<ul style="list-style-type: none"> <li>• Percentage of patients undergoing image-guided biopsy who has a directed examination of the biopsy area prior to biopsy noted in chart</li> <li>• Percentage of women with imaging-detected breast cancer who has seen a surgeon prior to diagnostic needle biopsy</li> </ul>



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1.7 Cyst aspiration completed but patient fails to get follow-up clinical examination within 6 months	Although rare, recurrent mass in the area of a previously aspirated cyst can be a sign of malignancy. Failure to reexamine the area may result in a failure to diagnose breast cancer	<ul style="list-style-type: none"> <li>Percentage of women with aspirated cysts who is seen in follow-up within 6 months to re-examine the area in question</li> </ul>
1.8 Tissue sampling of suspicious lesions obtained by surgical excision when needle biopsy was a feasible option	An increase in positive surgical margins and need for reexcision or mastectomy with increased cost and decreased patient satisfaction	<ul style="list-style-type: none"> <li>Percentage of breast cancer patients who did <i>not</i> undergo needle biopsy of suspicious areas prior to an open surgical procedure</li> </ul>
1.9 Pathology requisition sent with breast biopsy specimen does not include necessary clinical data including specimen mammogram when indicated.	Without a completed requisition, pathologists may produce an inaccurate report.	<ul style="list-style-type: none"> <li>Percentage of breast biopsy pathology requisition forms containing relevant findings from history, CBE, and imaging</li> </ul>
1.10 Pathology report does not contain all relevant findings necessary for comprehensive treatment.	As tumors decrease in size, the specific pathologic details determine both local and systemic treatment.	<ul style="list-style-type: none"> <li>Percentage of breast cancer pathology reports including all CAP recommended data</li> <li>Percentage of breast cancer pathology reports utilizing synoptic formatting</li> </ul>
1.13 Pathology concordance/accuracy of needle biopsy	Failure to recognize discordant findings can result in a delayed or missed diagnosis	<ul style="list-style-type: none"> <li>Percentage of documented radiology-pathology that is concordant with image-guided procedures</li> <li>Percentage of image-guided biopsy reports that has a post-procedure, post-pathology report addendum regarding concordance or discordance</li> </ul>
1.12 Newly diagnosed breast cancer patient waits days for biopsy result, and then waits longer for surgical consult.	An increased level of anxiety and a decreased quality of life for the patient and her family. Although survival may not be influenced by added days in the diagnostic process, delays are perceived as lower quality care and should be avoided	<ul style="list-style-type: none"> <li>Number of days between core needle performance and receipt of results</li> <li>Number of days pass between core needle biopsy results and the time of surgical consult</li> </ul>
1.13 Positive margins at initial surgical resection for breast cancer	May result in breast cancer recurrence and/or need for additional surgery or mastectomy. Higher healthcare management costs and decreased quality of life.	<ul style="list-style-type: none"> <li>Percentage of positive margins after initial surgical resection for breast cancer</li> </ul>



Gaps	Implications	Potential Measures to Assess Optimal Care
1.14 Inadequate reimbursement for breast specialists hampers optimal care for the breast cancer patient	Clinicians are not compensated for participation in multidisciplinary care conferences and do not communicate with each other regarding a patient's treatment plan. Pathologists are not compensated for the multiple cassette examinations of breast excisions required to obtain three-dimensional comprehensive size and margin information. General surgeons may limit lengthy post-excision breast cancer discussions and refer to oncologists rather than spend uncompensated time explaining pathologic findings and treatment implications. Plastic surgeons are not compensated adequately and refuse to offer breast reconstruction services. This encourages general surgeons to attempt basic plastic surgical techniques.	<ul style="list-style-type: none"><li>• Amount of unreimbursed time and conferences and procedures spent for breast cancer patients by individual breast specialists.</li></ul>



### 17 Gaps in Local-Regional Treatment

Gaps		Implications	Potential Measures to Assess Optimal Care
2.1	Patient fails to receive adequate information regarding planned treatment modalities.	Failure to receive information about treatment can increase anxiety and stress, and noncompliance.	<ul style="list-style-type: none"> <li>Percentage of patients who receive written or verbal communication describing treatment plan by each discipline</li> </ul>
2.2	Poor communication between pathology and radiology	Lack of communication between pathologist and radiologist can result in underreporting stage, tumor size, margins, multicentricity, or missing a cancer, leading to undertreatment, delayed treatment, or inappropriate management decisions with potential increased risk of recurrence	<ul style="list-style-type: none"> <li>Percentage of pathology reports that document review of breast imaging report</li> <li>Correlation between radiological size and pathological size</li> </ul>
2.3	Pathological reporting of DCIS is not standardized	May result in inappropriate treatment and potentially higher recurrence rates.	<ul style="list-style-type: none"> <li>Percentage of pathology reports that include parameters in established pathology guidelines</li> </ul>
2.4	Lack of axillary assessment on clinical or radiological examination	Obvious axillary metastases on breast imaging or clinical examination may preclude sentinel node biopsy. Neoadjuvant systemic therapy may be appropriate.	<ul style="list-style-type: none"> <li>Percentage of patients who receives clinical evaluation of the axilla</li> <li>Inclusion of axillary evaluation on diagnostic mammography reports</li> </ul>
2.5	Radiological assessment fails to report size (area of calcifications on mammograms, mass, or density measurements)	May result in inadequate surgery. Lack of size estimation prior to neoadjuvant chemotherapy may result in under or overuse of postmastectomy radiation therapy	<ul style="list-style-type: none"> <li>Percentage of imaging reports that indicates tumor size in 3 dimensions and location</li> </ul>
2.6	Failure to provide radiation therapy after excision of high-risk DCIS	May result in higher recurrence rates, increased morbidity and mortality from breast cancer, and a potential greater utilization of healthcare resources later due to high risk of recurrence	<ul style="list-style-type: none"> <li>Percentage of patients at high risk for recurrence after excision of DCIS who receives radiation therapy</li> </ul>
2.7	Appropriate use of radiation therapy following definitive surgery for invasive carcinoma in patients < 70 years	May result in increased local recurrence rates and risk of breast cancer-related death	<ul style="list-style-type: none"> <li>Percentage of patients &lt;70 years who receives radiation following definitive surgery</li> </ul>



Gaps	Implications	Potential Measures to Assess Optimal Care
2.6 Appropriate use of radiation therapy following definitive surgery for invasive carcinoma in patients > 70 years	May result in increased local recurrence rates. Radiation therapy in low-risk patients > 70 years may result in unnecessary treatment and morbidity risk	<ul style="list-style-type: none"><li>• Percentage of high-risk patients &gt; 70 years who receives radiation following definitive surgery</li></ul>
2.9 Inappropriate selection of patients for partial breast radiation	Failure to comply with eligibility requirements for treatment with partial breast radiation may result in high local recurrence rates	<ul style="list-style-type: none"><li>• Percentage of patients inappropriately treated with partial breast irradiation</li></ul>
2.10 Lack of multidisciplinary evaluation of locally advanced and inflammatory breast cancer	May result in inappropriate or possible under-treatment of disease	<ul style="list-style-type: none"><li>• Percentage of patients presented at a multidisciplinary conference or with documented visits with surgery, medical oncologist or radiation oncologist</li><li>• Percentage of patients who receives breast imaging pre- and post- chemotherapy</li></ul>
2.11 Failure to consider breast-conserving surgery, when appropriate, after neoadjuvant chemotherapy	May result in unnecessary mastectomies, especially if radiation therapy is already planned	<ul style="list-style-type: none"><li>• Percentage of patients who converts from initial plans for mastectomy to breast-conserving therapy, if appropriate, following neoadjuvant chemotherapy</li></ul>
2.12 Delays between neoadjuvant chemotherapy and definitive surgery and radiation therapy	May result in increased local recurrence rates as well as potential disease progression	<ul style="list-style-type: none"><li>• Length of time from neoadjuvant to surgery to radiation therapy</li></ul>
2.13 Delineation of tumor bed during breast conserving surgery	Poor delineation of the tumor bed may result in undertreatment of the tumor bed during breast irradiation or may require an increase in the size of boost fields to compensate for lack of surgical bed definition. Absence of target in radiation therapy planning may result in a higher risk of local recurrence. Inappropriately large target volumes for boost radiation result in fibrosis	<ul style="list-style-type: none"><li>• Percentage of patients with tumor bed not delineated by surgeon</li></ul>



Gaps	Implications	Potential Measures to Assess Optimal Care
2.14 Failure to coordinate timing and technique of reconstruction and postmastectomy radiation	May result in poor cosmesis, treatment related complications and diminished quality of life, and undertreatment with radiation therapy	<ul style="list-style-type: none"><li>• Percentage of patients who has complications following reconstruction and radiation therapy</li><li>• Percentage of patients who experiences local recurrences despite radiation therapy</li></ul>
2.15 Inadequate treatment of the axilla	Increased risk of axillary or supraclavicular node failure	<ul style="list-style-type: none"><li>• Percentage of patients with a positive sentinel node who undergoes axillary dissection</li><li>• Percentage of patients at risk for axillary recurrence who undergoes axillary irradiation</li></ul>
2.16 Failure to provide supraclavicular node radiation therapy in appropriate patients	Increased risk of supraclavicular node failure. When given to low-risk patients, supraclavicular node radiation may result in unnecessary radiation exposure and may increase the risk of lymphedema	<ul style="list-style-type: none"><li>• Percentage of patients who receives supraclavicular node radiation in LABC is treated with neoadjuvant chemotherapy</li><li>• Percentage of patients who is treated with supraclavicular node radiation with 4+ nodes</li><li>• Percentage of patients who experiences supraclavicular node failures</li></ul>
2.17 Positive margins after mastectomy	Positive margins at the pectoralis fascia, if dissected, may not have severe implications, whereas positive skin margins or deep margins without removal of adjacent pectoralis fascia or muscle may increase recurrence rates	<ul style="list-style-type: none"><li>• Percentage of patients who has positive margins without a description of extent of surgery or location</li></ul>

**12 Gaps in Systemic Treatment**

Gaps		Implications	Potential Measures to Assess Optimal Care
3.1	Biomarkers not available	Limits and/or precludes the options for optimal treatment of patients with invasive breast cancer	<ul style="list-style-type: none"> <li>• HER2 and hormone receptor testing done in a certified laboratory that maintains quality standards as defined by the College of American Pathologists</li> </ul>
3.2	Failure to consider an individual patient for systemic therapy	May result in unnecessary morbidity and mortality	<ul style="list-style-type: none"> <li>• Percentage of patients with invasive cancer who completes a consultation with a medical oncologist</li> <li>• Systems in place to follow up on each patient</li> </ul>
3.3	Chemotherapy not initiated in timely fashion	May have important negative consequences in terms of disease recurrence, morbidity, mortality and quality of life. This is particularly relevant to patients with high-risk primary breast cancer	<ul style="list-style-type: none"> <li>• Percentage of patients for whom systemic therapy is indicated who begins systemic therapy within 12 weeks of definitive surgery</li> <li>• Systems in place to follow patients</li> </ul>
3.4	Neoadjuvant systemic therapy not given for locally advanced breast cancer (LABC)	May result in lower rates of local control, increased morbidity and decreased quality of life	<ul style="list-style-type: none"> <li>• Percentage of patients with LABC who receives neoadjuvant systemic therapy</li> </ul>
3.5	Post therapy follow-up not performed	May result in undetected and untreated recurrence or new breast cancer; poorly tolerated side effects of treatment; decreased quality of life	<ul style="list-style-type: none"> <li>• Percentage of patients who receives appropriate follow-up care</li> <li>• Percentage of asymptomatic patients who DOES NOT undergo routine tumor marker assays, liver function tests, radiologic evaluation (other than breast imaging), transvaginal ultrasounds, and/or endometrial biopsy</li> </ul>
3.6	Poor patient communication/shared decision making	May interfere with patient compliance, satisfaction with care and quality of life	<ul style="list-style-type: none"> <li>• Percentage of patients with documentation that multidisciplinary care and options were discussed and questions were answered prior to surgery, radiation therapy, and systemic therapy or that written materials were provided</li> </ul>



Gaps		Implications	Potential Measures to Assess Optimal Care
3.7	Failure to provide multidisciplinary supportive care and symptom management	May result in greater patient distress and decreased quality of life as well as increased morbidity and utilization of health care resources	<ul style="list-style-type: none"> <li>Percentage of patients who receives appropriate symptom evaluation</li> </ul>
3.8	Failure to provide endocrine therapy for stage I-III hormone receptor positive breast cancer	Increased risk of disease recurrence, morbidity, and mortality and increased utilization of healthcare resources	<ul style="list-style-type: none"> <li>Percentage of patients with ER+ and/or PR+ invasive ductal (NOS) or lobular carcinoma &gt;1 cm who receives endocrine therapy</li> </ul>
3.9	Patient fails to receive chemotherapy for hormone receptor negative stage I-III breast cancer	Increased risk of breast cancer recurrence, morbidity, mortality, and utilization of healthcare resources	<ul style="list-style-type: none"> <li>Percentage of patients who receives chemotherapy given for hormone receptor negative stage I-III breast cancer</li> <li>Percentage of patients with stage I-III breast cancer who completes a discussion about adjuvant chemotherapy with a medical oncologist</li> </ul>
3.10	Patients with high-risk HER2+ stage I-III breast cancer fail to receive trastuzumab	Increased risk of breast cancer recurrence, morbidity and mortality and may increase utilization of healthcare resources	<ul style="list-style-type: none"> <li>Percentage of patients with high-risk HER2- positive invasive breast cancer who receives trastuzumab</li> </ul>
3.11	Failure to address psychosocial distress	Can adversely impact patient compliance with treatment and quality of life	<ul style="list-style-type: none"> <li>Percentage of patients who is evaluated for psychosocial distress</li> <li>Percentage of patients with psychosocial distress who is referred for intervention</li> </ul>
3.12	Failure to select appropriate patients for adjuvant endocrine therapy	May induce reactivation of an otherwise silent ovary, the use of aromatase inhibitors in pre- and peri-menopausal women has not been adequately studied, and the aromatase inhibitors cause benign ovarian pathology in the premenopausal woman	<ul style="list-style-type: none"> <li>Percentage of premenopausal patients who inappropriately receives adjuvant aromatase inhibitor therapy</li> <li></li> </ul>