

Preoperative Diagnosis of Breast Cancer

National Quality Strategy Domain

- Effective Clinical Care

Measure Type

- Process

Description

The percent of patients undergoing breast cancer operations who obtained the diagnosis of breast cancer preoperatively by a minimally invasive biopsy method.

Numerator

The number of patients aged 18 and older undergoing breast cancer operations who had breast cancer diagnosed preoperatively by a minimally invasive biopsy.

Definition

Minimally invasive biopsy methods — Includes fine needle aspiration, percutaneous core needle biopsy, percutaneous automated vacuum assisted rotating biopsy device, skin biopsy, skin shave or punch biopsy.

Denominator

The number of patients aged 18 years and older with invasive cancer on date of encounter undergoing initial lumpectomy (partial mastectomy) breast cancer operations.

Denominator Exclusion

Minimally Invasive Biopsy Method attempted but not diagnostic of Breast Cancer (e.g., High Risk Lesion of Breast such as atypical ductal hyperplasia, lobular neoplasia, atypical lobular hyperplasia, lobular carcinoma in situ, atypical columnar hyperplasia, flat epithelial atypia, radial scar, complex sclerosing lesion, papillary lesion, or any lesion with spindle cells).

Denominator Exception

Documentation of reason(s) for not performing minimally invasive biopsy to diagnose breast cancer preoperatively (e.g., lesion too close to skin, implant, chest wall, etc., lesion could not

be adequately visualized for needle biopsy, patient condition prevents needle biopsy [weight, breast thickness, etc.], duct excision without imaging abnormality, prophylactic mastectomy, reduction mammoplasty, excisional biopsy performed by another physician).

Rationale

Percutaneous biopsy of breast lesions provides timely accurate diagnosis of breast cancer and avoids surgical procedures for benign lesions. A preoperative diagnosis allows for decisions regarding need for additional breast imaging or workup, consideration of neoadjuvant systemic therapy, and consultations with other disciplines such as plastic surgery, genetics and reproductive endocrinology. Studies comparing percutaneous biopsy to open surgical biopsy have shown improved cosmesis, reduction in positive margins and fewer surgical procedures, resulting more efficient care. As a result, specialty societies such as the American Society of Breast Surgeons, the American College of Radiology, the European Society of Breast Cancer Specialists, and the National Comprehensive Cancer Network recommend all patients should undergo minimally invasive biopsy rather than surgical excision. This standard has been established as a quality measure by the National Accreditation Program for Breast Centers and National Consortium of Breast Centers.

Date Endorsed

Initially Endorsed: Dec 15, 2010

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- References -

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2. James TA, Mace JL, Virnig BA et al. Preoperative needle biopsy improves the quality of breast cancer surgery. *J Am Coll Surg* 2012; 215(4):562-8.
3. Bruening W, Fontanarosa, Tipton K, Treadwell JR, Lauenders J, Schoelles K. Systematic Review: comparative effectiveness of core needle and open surgical biopsy to diagnose breast lesions. *Ann Intern Med* 2010; 152(4):238-36.
4. Silverstein MJ, Lagios MD, Recht A et al. Image-detected breast cancer: state of the art diagnosis and treatment. *J Am Coll Surg* 2005; 201:586-597.
5. American Society of Breast Surgeons. Consensus guideline on image-guided percutaneous biopsy of palpable and nonpalpable breast lesions. <https://www.breastsurgeons.org/docs/statements/Consensus-Guideline-on-Image-Guided-Percutaneous-Biopsy-of-Palpable-and-Nonpalpable-Breast-Lesions.pdf>. Accessed April 29, 2020.