



**EFFECTIVE DATE:** 01|01|2015  
**POLICY LAST UPDATED:** 01|07|2020

## OVERVIEW

Digital breast tomosynthesis uses modified digital mammography equipment to obtain additional radiographic data that are used to reconstruct cross-sectional “slices” of breast tissue. Tomosynthesis may improve the accuracy of digital mammography by reducing problems caused by overlapping tissue. Tomosynthesis typically involves additional imaging time and radiation exposure, although recent improvements may change this.

## MEDICAL CRITERIA

Not applicable

## PRIOR AUTHORIZATION

Not applicable

## POLICY STATEMENT

### BlueCHiP for Medicare and Commercial Products

Digital breast tomosynthesis is a covered service but providers will not be separately reimbursed for this service.

## COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for applicable radiology services/benefits.

## BACKGROUND

Conventional mammography produces 2-dimensional (2D) images of the breast. Overlapping tissue on a 2D image can mask suspicious lesions or make benign tissue appear suspicious, particularly in women with dense breast tissue. As a result, women may be recalled for additional mammographic spot views. Inaccurate results may lead to unnecessary biopsies and emotional stress, or to a potential delay in diagnosis. Spot views often are used to evaluate microcalcifications, opacities, or architectural distortions; to distinguish masses from overlapping tissue; and to view possible findings close to the chest wall or in the retro-areolar area behind the nipple. The National Cancer Institute reports that approximately 20% of cancers are missed at mammography screening. Average recall rates are approximately 10%, with an average cancer detection rate of 4.7 per 1000 screening mammography examinations. The Mammography Quality Standards Act (MQSA) audit guidelines anticipate 2 to 10 cancers detected per 1000 screening mammograms. Interval cancers, which are detected between screenings, tend to have poorer prognoses.

Digital breast tomosynthesis (DBT) was developed to improve the accuracy of mammography by capturing a group of tomograms of the breast, further clarifying areas of overlapping tissue. Developers proposed that its use would result in increased sensitivity and specificity, as well as fewer recalls due to inconclusive results. DBT produces multiple low-dose images per view along an arc over the breast. During breast tomosynthesis, the compressed breast remains stationary while the x-ray tube moves approximately 1° for each image in a 15° to 50° arc, acquiring 11 to 49 images. These images are projected as cross-sectional “slices” of the breast, with each slice typically 1-mm thick. Adding breast tomosynthesis takes about 10 seconds per view. In 1 study in a research setting, mean time (SD) for interpretation of results was 1.22 (1.15) minutes for digital mammography and 2.39 (1.65) minutes for combined digital mammography and breast tomosynthesis. With

conventional 2D mammography, breast compression helps decrease tissue overlap and improve visibility. By reducing problems with overlapping tissue, compression with breast tomosynthesis may be reduced by up to 50%. This change could result in improved patient satisfaction.

A machine equipped with breast tomosynthesis can perform 2D digital mammography, DBT, or a combination of both 2D mammography and DBT during a single compression. Radiation exposure from tomosynthesis is roughly equivalent to mammography. Therefore, adding tomosynthesis to mammography doubles the radiation dose, although it still is below the maximum allowable dose established in the Mammography Quality Standards Act.

Studies typically compare 1-view (ie, mediolateral oblique view), or more commonly, 2-view (mediolateral oblique plus craniocaudal view) breast tomosynthesis either alone or combined with standard 2D mammography, against standard 2D mammography alone. A TEC Assessment (2014) focused on 2-view tomosynthesis. The U.S. Food and Drug Administration (FDA), which reviewed this new modality in 2011, recommended that 2-view breast tomosynthesis is preferable to 1-view tomosynthesis (both used in combination with full-field DM).

The FDA (2013) approved new tomosynthesis software that permits the creation of 2D images (called C-View) from images obtained during tomosynthesis. As a result, the performance of separate 2D mammography may become unnecessary, thereby lowering radiation dose. It is too early to gauge how conventional 2D mammography plus tomosynthesis compares with C-View plus tomosynthesis.

## **CODING**

### **BlueCHiP for Medicare and Commercial Products**

The following services are covered and providers will not be separately reimbursed:

**77061** Diagnostic digital breast tomosynthesis; unilateral

**77062** Diagnostic digital breast tomosynthesis; bilateral

**G0279** Diagnostic digital breast tomosynthesis, unilateral or bilateral (list separately in addition to CPT code 77065 or 77066 for BlueCHiP for Medicare)

**77063** Screening digital breast tomosynthesis, bilateral (List separately in addition to code for primary procedure)

## **RELATED POLICIES**

None

## **PUBLISHED**

Provider Update, March 2020

Provider Update, April 2018

Provider Update, May 2017

Provider Update, May 2016

Provider Update, January 2015

Provider Update, May 2013

## **REFERENCES**

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