Breast Cancer Screening Options for Women with Dense Breast Tissue

Has your doctor told you that you have dense breast tissue? Having dense breast tissue does not mean your breasts are abnormal. Almost half of all women have dense breast tissue, which means that they have more of a certain kind of tissue in their breasts than women with average density.

Why is this important? Because sometimes, dense breast tissue can make it hard to see a small cancer in a mammogram.

To be sure nothing has been missed, some women with dense breast tissue get additional screening (also called supplemental screening) after their mammogram. But not every woman with dense breast tissue needs more screening. For most women, it’s best to have additional screening only if they’re at high overall risk for breast cancer.

If you have dense breast tissue, what are the most important factors to consider when deciding whether you need additional screening? If you do decide to get additional screening, what are the risks and benefits of the different options?

This guide will help you prepare to talk with your doctor and decide what’s best for you. Your doctor can explain your risk for developing breast cancer and help you choose the best option based on your risk and other factors.

What is a Proven Best Choice?
The Proven Best Choice® rating considers these factors:

- **How well one choice works** compared to others based on scientific evidence

- **How much one choice costs** in relation to its benefits: The cost information that is used is the total cost of the test or other procedure (the total amount that is billed to your insurance company), which may not reflect what you pay for the test out of pocket.

Making decisions about your health care may not be as easy as deciding whether to buy a household item like a TV. But knowing your Proven Best Choice is a good place to start.

PROVEN BEST CHOICES

- Digital Mammograms on a Regular Schedule
- MRI

LOWER-VALUE OPTIONS

- Ultrasound
- Digital Breast Tomosynthesis (DBT)
## YOUR PROVEN BEST CHOICES FOR BREAST CANCER SCREENING

<table>
<thead>
<tr>
<th>Digital Mammograms on a Regular Schedule</th>
<th>MRI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women with Dense Breast Tissue and a Low Overall Risk of Breast Cancer</strong></td>
<td><strong>Women with Dense Breast Tissue and a High Overall Risk of Breast Cancer</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What is it?</strong></td>
<td>An MRI is a different kind of imaging that can create clearer pictures than a digital mammogram. Talk with your doctor if you have a family history of breast cancer or other factors that would put you at especially high risk of developing breast cancer. If you are at high risk, your doctor may tell you that you need additional screening even after you have a normal mammogram. If you choose additional screening, an MRI is your Proven Best Choice.</td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td>• Digital mammograms are better at showing cancer in dense breast tissue than regular mammograms.</td>
</tr>
<tr>
<td></td>
<td>• Most insurance plans pay for a regular digital mammogram. Check with your insurance company to find out what it covers and what you have to pay.</td>
</tr>
<tr>
<td></td>
<td>• An MRI can find small cancers that might be missed with a digital mammogram.</td>
</tr>
<tr>
<td></td>
<td>• It has a lower chance of mistaking something normal for cancer (known as “false positive results”) than other types of additional screening, like ultrasound.</td>
</tr>
<tr>
<td></td>
<td>• An MRI does not use radiation.</td>
</tr>
<tr>
<td><strong>Risks</strong></td>
<td>• There's a small chance that a digital mammogram won't find a very small cancer that is hidden behind dense breast tissue.</td>
</tr>
<tr>
<td></td>
<td>• Digital mammograms use a small amount of radiation. While the risks of these small doses are not well understood, repeated mammograms may pose a long-term cancer risk.</td>
</tr>
<tr>
<td></td>
<td>• There is still some risk that the MRI will mistake something normal for cancer. This may mean you’ll need more tests, like a breast biopsy.</td>
</tr>
<tr>
<td></td>
<td>• Insurance doesn’t always cover MRIs for breast cancer screening. Check with your insurance company first to find out what it covers and what you have to pay.</td>
</tr>
</tbody>
</table>
How do my doctor and I decide whether I need more screening?

First, talk with your doctor about your risk for breast cancer. Having dense breast tissue does not automatically mean that you are at high risk. Other factors such as age, family history, and lifestyle all play a role. Knowing your risk will help you and your doctor decide whether you should get more screening.

Why shouldn't every woman with dense breast tissue have additional screening?

For many women who have dense breast tissue, additional screening may do more harm than good. For example, screenings like an MRI or ultrasound come with the risk of false positive results. This means that the screening finds something that looks like cancer, but with more testing, it turns out to be something else that is harmless and nothing to worry about.

False positive results can lead to more screenings and tests that are costly, time-consuming, and stressful. Some women may even need to have a breast biopsy.

Now that you know your Proven Best Choices, talk to your doctor about which option is best for you. See the list on page 4 for the kinds of questions to ask. Getting input from family and friends may also help you choose what's right for you.

In addition, it’s important to remember that not all insurance companies cover supplemental screening. If you need additional screening, contact your insurance company to find out what it covers and what you will pay in copayments and other expenses.
These questions are meant to be a starting point for a conversation you have with your doctor. You may have other questions.

Digital Mammograms on a Regular Schedule

Women with Dense Breast Tissue and a Low Overall Risk of Breast Cancer
- Have I been getting regular mammograms or digital mammograms?
- Can I get a digital mammogram where I usually get my mammogram?
- Given my breast density and overall risk for breast cancer, what are the benefits and risks of getting a regular digital mammogram and not getting additional screening?
- How often should I get a regular digital mammogram? Every year or every two years?
- If the digital mammogram finds something that is of concern (often called a "positive result"), what happens next?

MRI

Women with Dense Breast Tissue and a High Overall Risk of Breast Cancer
- Given my breast density and overall risk for breast cancer, what are the benefits and risks of having additional screening with an MRI?
- How often should I have an MRI?
- What happens during an MRI?
- If the MRI finds something that is of concern (often called a "positive result"), what happens next?

For many women who have dense breast tissue, additional tests may do more harm than good. It’s best to have additional tests only if you’re at high overall risk for breast cancer.

Additional Information

To learn more about your overall risk for breast cancer:

American Cancer Society
What are the risk factors for breast cancer?

National Breast Cancer Foundation
Risk Factors
http://www.nationalbreastcancer.org/breast-cancer-risk-factors

To learn more about dense breast tissue:

American Cancer Society
Breast Density and Your Mammogram Report

Mayo Clinic
Tests and Procedures—Mammogram
www.mayoclinic.org/tests-procedures/mammogram/in-depth/dense-breast-tissue/art-20123968?pg=2
## LOWER-VALUE OPTIONS FOR ADDITIONAL SCREENING

### Ultrasound

**What it is:** A type of imaging that uses sound waves. It’s the same kind of imaging that is used when pregnant women get regular exams to look at the fetus.

During the ultrasound, your doctor will place a gel on each breast and move a small, handheld device over the skin. Ultrasounds are generally painless and take about 30 minutes.

**Benefits:** Ultrasound is effective in detecting breast cancer in women with dense breast tissue and does not involve radiation.

**Risks:** Ultrasounds have a high risk of false positives. As a result, you may end up getting additional testing that you don’t need.

**Why its value is lower:** Ultrasound is less effective than MRI at finding true cases of breast cancer. That means that it misses some cases of breast cancer but finds more false positives.

- For additional information about breast ultrasound, see [Breast Ultrasound](http://www.radiologyinfo.org/en/info.cfm?pg=breastus#part_four).

### Digital Breast Tomosynthesis (DBT)

**What it is:** A newer type of mammogram that can create 3D images of your breast. This allows your doctor to see into your breast tissue from many different angles.

**Benefits:** DBT provides clearer images of breast tissue than digital mammography.

**Risks:** Since DBT is new, it has not gone through much testing as a method of additional screening for women with dense breast tissue. Like digital mammography, DBT uses more radiation than other screening methods, which may be harmful. And it’s not always covered by insurance, so you may have to pay more.

**Why its value is lower:** While DBT shows promise, there is not yet enough evidence to prove that it’s one of the best choices compared to other options.

- For additional information about DBT, see [Digital Tomosynthesis](http://www.breastcancer.org/symptoms/testing/types/dig_tomosynth).

---

## Methodology

The Proven Best Choice rating system considers many factors, including measures of comparative clinical effectiveness (how well a treatment works compared to another treatment), cost, cost-effectiveness (how much something costs compared to the long-term benefits it creates), long-term outcomes, and resource constraints (for example, if there are a limited number of health care providers that offer the specific treatment). To inform these ratings, ICER performs in-depth evidence reviews and economic analyses. It also convenes public meetings of research methodologists, clinical experts, and public and patient representatives to examine rigorous, high-quality evidence, information on costs, and measures of long-term outcomes and impact.

Content presented in this guide is based on academic analyses completed by ICER. Input on communicating with patients and families was provided by Families USA.

The Institute for Clinical and Economic Review (ICER) is an independent, nonprofit research institute that produces reports analyzing the evidence on the effectiveness and value of drugs and other medical services. ICER’s reports include evidence-based calculations of prices for new drugs that accurately reflect the degree of improvement expected in long-term patient outcomes while also highlighting price levels that might contribute to unaffordable short-term cost growth for the overall health care system. ICER’s reports incorporate extensive input from all stakeholders and are the subject of public hearings through three core programs: the California Technology Assessment Forum (CTAF), the Midwest Comparative Effectiveness Public Advisory Council (Midwest CEPAC), and the New England Comparative Effectiveness Public Advisory Council (New England CEPAC). These independent panels review ICER’s reports at public meetings to deliberate on the evidence and develop recommendations for how patients, clinicians, insurers, and policymakers can improve the quality and value of health care. For more information about ICER, please visit ICER’s website at www.icer-review.org.

Families USA is a national nonprofit, nonpartisan organization dedicated to the achievement of high-quality, affordable health care for all Americans. It champions the preservation and improvement of health insurance programs that provide coverage to those who need it the most—the young, those with disabilities, the elderly, and the economically disadvantaged. It partners with organizations and individuals across the spectrum of the health care community to achieve these goals. Visit Families USA’s website at www.familiesusa.org.

Publication ID: 001HST040716
This publication was written by
Dr. Steven Pearson, President, Institute for Clinical and Economic Review (ICER)

The following ICER staff contributed to the preparation of this material (in alphabetical order):
Sarah Emond, Chief Operating Officer
Dan Ollendorf, Chief Review Officer
Mitchell Stein, Policy and Communications Director

Erin Lawler, Program Coordinator, Institute for Clinical and Economic Review (ICER)

The following Families USA staff contributed to the preparation of this material (in alphabetical order):
Nichole Edralin, Senior Designer
Caitlin Morris, Program Director, Health System Transformation
Evan Potler, Art Director
Ingrid VanTuinen, Director of Editorial