BREAST CANCER SCREENING IS A CHOICE

by ELAINE SCHATTNER, MD
Typical headlines focus on controversy

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Elaine Schattner, MD
Data:

Invasive tumors* (up):

Deaths* (down):

Screening Debate Key Question:

Is the decline in breast cancer deaths due to
- Early detection?
- Better treatment?
- Both?

NCI/SEER population data, *rates are per 100,000 U.S. women
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Questions to Consider for an Informed Decision:

- **If** — Do you want to get screened for breast cancer?
  
  Consider your risk: • Female • Age • Family history
  
  • BRCA or other gene disposition • prior cancer?

- **How?** • Mammography is “gold standard” • Ultrasound • MRI

- **When?** • Age to begin? • Age to stop screening? • How often?

- **Why?** — (not) motivating factors:
  
  • Risks and Benefits
  
  • Fear vs. Reason
  
  • Uncertainty vs. Information and Control
What is Breast Cancer Screening?

Screening is a way to detect breast cancer before it causes symptoms or serious health problems.
It is not preventive. It is not full-proof.

- Physical examination • clinical • self-exam (out of favor)

- Mammography
  • Traditional x-rays (film) • Digital (2-D) • Tomosynthesis (3-D)

- Supplemental imaging:
  • Magnetic Resonance Imaging (MRI); mainly for high-risk
  • Breast Ultrasound (sonograms); useful in evaluating dense breasts
  • Molecular Breast Imaging (MBI); new, not much data

There is no blood test to detect breast cancer.
# Breast Cancer Screening Guidelines for Women at Average Risk:

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Risks of Breast Cancer Screening:

- False alarms: extra imaging, biopsies ("false positives")
- Missed cases: when screening fails to catch early breast cancer (false negatives)
- Overdiagnosis refers to finding an abnormality that is unlikely to cause harm.

Controversial – examples may include:

- slow-growing tumors in people who are likely to die of something else;
- Stage 0 or non-invasive tumors, like DCIS (ductal carcinoma in situ);
- Atypical findings, like LCIS (lobular carcinoma in situ).

Research is needed and ongoing to determine best management of low-grade conditions.

Overdiagnosis ≠ Overtreatment

- Overtreatment happens when doctors give more therapy than is needed.

  can be:  
  - surgical  
  - medical (chemo, other)  
  - radiation

Education of doctors and patients is key to avoiding overtreatment.
Reasons to Choose Screening:

- Breast cancer is common:
  - 260,000 invasive cases in the U.S. each year • 1.7 million worldwide

Breast cancer can be lethal:

- Malignancy is the leading cause of death in U.S. women ages 35 – 60 (CDC);
- Most frequent cancer form and killer in women under age 60;
- 41,000 U.S. deaths each year (113 every day, avg.) • many more worldwide

- Benefit 1: Screening reduces a woman’s chances of dying from breast cancer and may prolong survival (studies vary);

- Benefit 2: Early detection permits women with cancer to choose less treatment.
  - reduced or no chemo • smaller surgery

- Benefit 3: Avoid harms and costs of delayed diagnosis:
  - Treatment of advanced disease: prolonged, more intensive, toxic and expensive.
  - Stage 4 (metastatic) breast cancer remains incurable; treatment is lifelong.

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3 Things to Keep in Mind about Breast Cancer Screening:

1. Most published studies and popular infographics reflect outcomes of very old mammograms (1960s – 1980s). Imaging **advances since 2000** render those data obsolete:
   - **digital** mammography instead of film (2-D and 3-D)
   - **supplemental** imaging – sonograms, MRI have improved.

2. **Pathology tools** have improved; overtreatment is less likely.
   - Genetic and other molecular tests—now in everyday practice—enable doctors to determine if cancer is fast-growing and likely to cause harm;
   - Tumor subtype and molecular details should guide treatment choices.

3. **Radiologists vary** in experience and skill; screening quality varies.
How To Get the Best Screening Possible if You Choose to Get Screened:

1. Check that the screening facility is certified by the FDA’s Mammography Quality Standards Act and Program (MQSAP)

2. If possible, have the procedure done by a breast imaging specialist.
   - Be aware that quality varies among radiologists;
   - Consider traveling for the procedure to a facility with expertise.

3. Stay informed!
   - Know about dense breasts (http://densebreast-info.org/)
   - Radiologists (www.rsna.org and www.acr.org)
   - Radiation doses (www.nrc.gov and www.hps.org)

4. Talk to your doctor and other women in your community.

Thank you!

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