

# Breast cancer screening: patient's and provider's approach to recommendations

## Abstract

There are currently many different mammographic screening recommendations available. However the number and variability of these recommendations may often lead to a state of confusion rather than conviction. In this setting it is our role to confidently guide our patients to the best individual recommendations. Our expertise is especially valuable in the setting of multiple conflicting recommendations and the noise created by non-expert advice.

**Keywords:** breast cancer, screening, recommendations, guidance

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## Introduction

The number and variability of recommendations regarding screening mammography for breast cancer detection has undoubtedly left even the most educated patients and physicians in a state of confusion. Unfortunately, confusion often leads to paralysis rather than conviction. In this setting it is our role to confidently guide our patients. We are accustomed to making medical decisions on a daily basis in areas without perfect data, and our guidance is especially important with the proliferation of non-medical experts issuing opinions. The most recent recommendations for breast cancer screening from the most relevant groups are summarized in an easy to understand format. Also a few points of analysis and recommendations for patient guidance are discussed. The aim of this article is not to perform a deep dive in to the data or to debate the validity of any recommendations. Rather the focus is to present some common recommendations in a concise format so that the reader may easily compare and contrast. Although this article will focus on mammographic screening, patient should be aware of breast-self exams as well as discuss clinical breast exams with their physicians.

## Body

All of the consensus recommendations try to balance the benefits against the harms of screening. The benefits of breast cancer screening include more cancers detected, less morbidity with earlier detection, and increased overall survival. Harms include increased cost, false positive exams (patients recalled for additional testing who do not have cancer), and unnecessary biopsies. However, just as we acknowledge that false positive exams create anxiety, we must also acknowledge that true negatives provide peace of mind. Most patients prefer the inconvenience of additional testing in the setting of an abnormal screening mammogram to gain the peace of mind that comes from knowing they are likely cancer free. The American Cancer Society's Breast Cancer Facts and Figures document is full of insightful data.<sup>1</sup> Interestingly 25% of breast cancer deaths are women diagnosed in their 40's. Unfortunately these women often develop more aggressive cancers. These women also have the most life-years to potentially lose

and often still have dependents relying on them. This is significant because much of the controversy regarding breast cancer screening involves the appropriate time to begin testing. Data suggests that the minority populations are particularly disadvantaged by delaying screening: Breast cancer is the leading cause of cancer death in Hispanic women, and black women are more likely to be diagnosed with aggressive disease at a younger age than white women. Another topic that is becoming increasingly discussed is the phenomenon of "over diagnosis" which is the concept that some cancers that are diagnosed will not be the ultimate cause of death. Are there cancer that do not need treatment? Possibly. However as a scientific community we are currently unable to identify those patients. Any decision to avoid imaging surveillance should be made by an informed patient after we offer them all available information about their particular case. A cancer that is not detected early likely will present later with more advanced symptoms (Table 1).

Each physician who councils patient must determine their approach to breast cancer screening and accept the medical outcomes resulting from that decision. The data clearly shows that the more screening performed, the more cancers diagnosed. However nothing comes for free, and in order to achieve additionally detected cancers there will be extra expense and unnecessary testing. It seems there is a cleavage plane based on whether the recommending body has direct face-to-face interaction with patients. The government USPSTF group contains no breast cancer screening specialists and approaches the problem from a population level making a financially weighted argument. On the other hand subspecialty groups such as ACOG, ACR, and SBI approach the problem from an individual level with the mindset to treat each patient individually. In spite of the controversy and wherever you may fall on the spectrum of screening mammography, patient are best served by unambiguous guidance from their physicians. We should all adopt a position and recommend it with conviction to our patient. Our expertise is especially valuable in the setting of multiple conflicting recommendations and the noise created by non-expert advice.

**Table 1** Summary of breast cancer screening recommendations from various medical groups

Organization	Begin and frequency	End
ACR, <sup>2</sup> SBI, <sup>3</sup> ACOG <sup>4</sup>	40: Annual	Individually decided
	40-44: Optional	
ACS <sup>5</sup>	45-54: Annual	Life expectancy <10years
	55: Annual or biennial	
USPSTF <sup>6</sup>	40-49: Individual choice	75
	50-74: Biennial	

ACR, American college of radiology; SBI, society of breast imaging; ACOG, American congress of obstetricians and gynecologist; ACS, American cancer society; USPSTF, US preventive services task force

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### Conflict of interest

The author declares no conflict of interest.

### References

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