Breast Cancer Screening
A Discussion Guide for Physicians and Patients

Explaining Risk and New Screening Guidelines
Both physicians and patients are being presented with new information that may change what has become an accepted preventative practice. When discussing mammography screening it is important to focus on the harm versus the modest benefit and recognize the uncertainty surrounding the relevant importance of each for individual patients [1].

Questions and answers to start the discussion [1]:

Q: It has been stated that mammography is not a perfect screening test. Why?
A: Mammography is not a perfect screening test because a review of the research has shown that:

- Not all cancers will be found
- Regardless of whether or not a woman is screened some women will still die
- Though cancer may be found, most diagnosed women will be cured regardless of whether or not the cancer was discovered by mammography
- Overdiagnosis may occur when some cancers are found that would never have caused problems
- False-positive results may occur because of a non-cancerous abnormality

Q: What are the harms of mammography?
A: Studies have shown that mammography does not come without risk or harm. These harms include the fact that:

- More than 50% of women who undergo mammography screening for 10 years will have a false-positive result. Of those with a false-positive result, 20% will need a biopsy.
- If a woman decides to have a mammogram, it is expected that she will have at least one false-positive result where she will be called back for

The number of women who die from breast cancer is decreased through mammography; however the benefit is greatest for those who are at a higher risk because of age or other risk factors.

The number of lives saved varies by age. Based on the best evidence available uncertainty remains about how exact this number is.

For every 10,000 women who undergo screening mammography for the next 10 years, the number of lives saved by age is estimated at:
- 5 of 10 000 women aged 40 to 49 years
- 10 of 10 000 women aged 50 to 59 years
- 42 of 10 000 women aged 60 to 69 years

If a woman’s risk for breast cancer is higher than the average patient, she may benefit more from a mammogram.

Q: What are the benefits of mammography?
A: Studies have shown several benefits to mammography. For instance,
additional imaging and perhaps a biopsy. Most times, nothing is found.

- Regular screening may result in overdiagnosis when the results reveal a noninvasive condition or a cancer that would never cause a problem. As it is not possible to tell which cancers will cause a problem and which ones won’t, all cancers are treated the same, which leads to unnecessary treatment for some women.

Q. How is the Decision Made?
A. The US Preventive Services Task Force offers the following guidance:

- Women aged 50-74 should have a screening mammography every two years
- The benefit of starting screening earlier depends on the patient’s individual risk factors, values, and preferences.
- The feeling of having a false-positive result from screening or being diagnosed with and treated for cancer that would never have caused a problem is different for each woman. Each patient should consider what the experience may mean for her.
- Consider what it might feel like to forgo screening and later be diagnosed with breast cancer, even when it is likely the mammography would have made little difference.

The decision to start biennial mammography screening before 50 years of age should be an individual one and should be made with consideration to the patient’s values [1]. The USPSTF states that “Women deserve to be aware of what the science says so they can make the best choice for themselves, together with their doctor.” [2]