Breast cancer screening technologies continue to improve at a dramatic rate. In many countries, digital mammography systems have all but replaced screenfilm systems, yielding significant improvements in imaging performance in women under the age of 50, women with radiographically dense breasts, and premenopausal or perimenopausal women [1].

Today, digital systems are quickly being replaced by tomosynthesis systems, like the Hologic Selenia® Dimensions®. Clinical studies have shown that the addition of Hologic tomosynthesis to digital mammography technology is associated with a significant decrease in recall rates and a significant increase in invasive cancer detection rates across all breast densities [2].

Despite the dramatic improvements in screening technologies, we continue to debate how often to screen and what age screening should begin. Conflicting guidelines lead to confusion among women—not only about when to screen, but whether her insurance will cover it. This is troubling, especially knowing that early detection represents the best opportunity to survive fast growing cancers.

A main criticism of mammography is that it leads to false positives, which cause anxiety and stress among women. However, better technology is making a significant impact. For example, more than 100 published peer-reviewed research papers have examined the clinical benefits of Hologic tomosynthesis exams, including the fact that the technology leads to fewer unnecessary biopsies and follow-up tests [3]. Yet, we continue to weigh the benefits versus risks of screening largely based on studies done before breast tomosynthesis was available.

Screening guidelines are based almost exclusively on age. Yet breast cancer is complex; age is only one of many variables that impact a woman's chance of getting the disease. We also know that there are significant differences in the benefits of screening from technology to technology and even clinical differences in how a technology performs from vendor to vendor.

No woman should ever have to forego a mammogram because of conflicting and confusing guidelines or whether she can afford screenings. Instead we must allow them to articulate their values and preferences, so that clinicians can help them make well-informed decisions about when to be screened and with which technology. In addition, we must continue to take the steps necessary to ensure that women don't face economic or other barriers when their healthcare providers recommend screening.

References