WHITEPAPER

# Leveraging Breast Cancer Risk Assessments to Differentiate Breast Imaging Centers and Improve Patient Outcomes

The most effective breast cancer screening and prevention efforts identify cancers at an earlier, more treatable stage. Breast cancer risk assessment can play an important part in a well-designed screening program.

Given the current constraints on primary care capacity, many critical health risk assessments can prudently be shifted to other settings in order to improve accessibility. With respect to breast cancer risk assessment, breast imaging centers are in a unique position to set themselves apart in an increasingly competitive environment by integrating risk assessment services into their workflow, and by doing so will alleviate the burden currently felt by primary care providers. It has been estimated that it would take a primary care physician 7.2 hours per day just to follow various screening guidelines, with little time for diagnosis and treatment of acute and chronic disease[1]. This has led to concerns about the feasibility of individual breast cancer risk assessment in the primary care setting, especially because risk assessments are recommended for each screening visit. The literature on this topic indicates these concerns are valid.

Both the American Cancer Society (ACS) and the National Comprehensive Cancer Network (NCCN) guidelines suggest screening MRI of the breast in addition to mammography for women at greater than 20% lifetime risk of developing breast cancer as determined by one of the major risk models (BRCAPRO, Tyrer-Cuzick, Claus or BOADICEA), and the NCCN and the American Society of Clinical Oncology (ASCO) considers genetic testing for BRCA1 and BRCA2 to be medically necessary based on specific personal history and family risk criteria.

Recent data suggests these guidelines are often not making their way into clinical practice. For example, with respect to screening for breast cancer, 99% of eligible women do not get a screening MRI, while 75% of screening MRIs ordered fall outside of the guidelines[2]. Further, based on an estimated 40 million mammograms per year in the United States, nearly 6 million women are not getting a potentially lifesaving screening MRI, which has been shown to be highly sensitive and specific in numerous clinical studies.

The numbers for genetic testing for hereditary breast cancer suggest the available guidelines are also missing

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their mark. It is estimated that 95% of mutation carriers who have not yet developed cancer remain unaware of their BRCA1/BRCA2 status. Approximately 2 million women for whom genetic testing is considered medically necessary are not being tested and more than 200,000 women are not receiving the screening or preventive services that could save their lives[3].

Incorporating individual breast cancer risk assessment into the menu of services offered by breast imaging centers is an actionable solution to this problem. National guidelines vary, recommending the initiation of annual screening mammograms for healthy women between 40 and 50 years old. The breast imaging center is the healthcare service area utilized by the largest number of well women on a regular basis. Additionally, women who schedule routine mammograms are specifically interested in cancer screening and prevention, and thus are an ideal target population.

The statistics make the importance of a risk assessment program abundantly clear. For women with BRCA1 or BRCA2 mutations, the risk of developing breast cancer up to age 50 is 51%, and the risk up to age 70 is 87%.

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Additionally, the mutations are associated with a 44% risk of ovarian cancer in women up to age 70. The risk percentages of both cancers in the general population up to age 70 are dramatically lower at 7.3% for breast cancer and 0.7% for ovarian cancer.

Offering a robust breast cancer assessment strategy can facilitate early diagnoses and improve disease management. Additionally, offering resources for high-risk patients complies with accreditation standards set by the Commission on Cancer (CoC) and the National Accreditation Program for Breast Centers (NAPBC).

Each of these objectives can be achieved with the CRA Health cancer risk assessment software, which integrates seamlessly into the breast imaging center workflow. Upon arrival for their appointment, patients provide essential family history and risk information using a self-administered, iPad- or web-based questionnaire. The collected data is used to run the major cancer risk models. The software compares the risk model scores for each patient, against the established screening guidelines and flags patients who require breast-screening MRI and

those who should be considered for genetic testing. The system generates letters to patients and their providers with evidence-based management recommendations, and tracks uptake and compliance.

This streamlined process supports value-based, population health management by improving the identification of women who require more intensive intervention based on established guidelines and directing them to the appropriate services and resources. The Affordable Care Act (ACA) recognizes the importance of screening and prevention and is designed to shift compensation from treatment to this preemptive approach. In particular, the cost-efficiency of new payment and care delivery models, such as Accountable Care Organizations, is predicated on increased compliance with guidelines and the promotion of preventive health.

CRA Health's risk assessment solution complements this strategy by transferring the responsibility of data entry to the patient and relying on the software to complete the clinical decision support; this approach can easily be implemented in the breast imaging center. By improving compliance with screening guidelines without burdening primary care practices, imaging centers that adopt this approach can substantially improve the value of care being delivered, build patient loyalty and respect, and grow market share in an increasingly competitive environment. Most importantly, they can save lives.

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## RESOURCES


1 Yarnall et al. "Primary Care: Is There Enough Time for Prevention?" April 2003, Vol 93, No. 4 | American Journal of Public Health

2 Wernli KJ, DeMartini WB, Ichkawa L, et al. "Patterns of breast magnetic resonance imaging use in community practice" [published online November 18, 2013]. JAMA Intern Med

3 Drohan B, Roche CA, Cusack JC Jr, Hughes KS. "Hereditary breast and ovarian cancer and other hereditary syndromes: using technology to identify carriers." Ann Surg Oncol. 2012 Jun;19(6):1732-7