Strategies to Improve Breast Cancer Screening Rates in Vulnerable Populations

- Mass General has introduced a number of new programs to boost breast cancer screening rates in a diversity of populations.
- Breast cancers in homeless patients are typically diagnosed at later stages than in the general population, suggesting the need to improve screening engagement in these individuals.
- Studies have shown disparities in the timing of breast cancer screening among racial and ethnic groups and point to a variety of possible reasons, including socioeconomic status and language differences.

Despite gains in recent decades, breast cancer screening rates in the United States remain relatively low, especially among the nation’s most vulnerable populations. Radiologists in the Breast Imaging Division at Mass General and other providers across the hospital have devised strategies to boost screening rates among economically disadvantaged patients and patients from underserved racial and ethnic groups, as well as among the general population in the Greater Boston area. The new initiatives encompass a range of programs, each designed to address a different root cause of the relatively low screening rates in the region and in the US generally.

Outreach to Homeless Patients Offers Increased Access to Breast Cancer Screening

Use Cancer is the second most common cause of death among homeless adults in Boston and the leading cause among those over the age of 45, according to a study by a team of researchers at Mass General and other institutions. The study focused on the Boston Healthcare for the Homeless Program (BHCHP), which serves more than 12,000 Boston-area homeless people each year through a network of sites based in social service settings, as well as through two hospital-based clinics: one at Mass General and the other at Boston Medical Center.

A follow-up study in 2015 showed that breast cancers found in BHCHP patients were diagnosed at more-advanced stages than those found in Massachusetts adults generally. This disparity suggests a need for additional strategies to improve screening engagement in this population, the researchers said. One of the potential health system interventions they suggested is a same-day or flexible scheduling model to improve access to screening.

Last month, Mass General and BHCHP launched a program to improve screening engagement and thus potentially find more cancers sooner. The hospital has partnered with BHCHP since its founding in 1985. BHCHP at Mass General offers primary care for homeless patients in the Medical Walk-in Unit and coordinates care throughout the hospital. Recuperative and rehabilitative care are available through the Barbara McInnis House in Jamaica Plain, and a Mass General-based street team provides direct care wherever they find people in need, including under bridges, on park benches, and in alleyways.
The new effort seeks to increase breast cancer screening rates by eliminating the need to schedule multiple visits—a substantial barrier for many women, especially those in vulnerable populations. With the new “pink card” program, when a patient goes to the Mass General BHCHP clinic for any reason and is identified as being overdue for screening or has any other breast issues or concerns, she is given the option of receiving a mammogram during her visit. A breast radiologist interprets her scan as she waits so she can undergo any additional testing needed on the same day. If a biopsy is recommended, the clinic will make every effort to schedule this on the same day as well. Offering all of these services in a single visit makes it easier for homeless patients to receive breast cancer screening and any necessary follow-up care, with the hope of improving screening rates and health outcomes for this population.

**Improved Breast Cancer Screening Rates and Racial and Ethnic Equity**

The new Mass General BHCHP program is one part of a broader initiative launched earlier this year at the hospital. The initiative was designed to increase breast cancer screening rates while achieving greater parity across patient populations, particularly with respect to the timing of detection and diagnosis.

In order to boost screening rates, Mass General is making screening more accessible both by implementing the pink card program hospital-wide and by offering expanded evening and Saturday hours and more “while you wait” reads. It is also revisiting its methods for reaching out to patients who are overdue for a mammogram. The traditional approach is to send reminders through the mail, but changes in technology, and in how we use technology, suggest a more fitting option: texting. Hoping to increase screening participation, Mass General is developing a texting system that should prove more effective in getting reminders to patients. This could be especially true for economically disadvantaged patients, who may not have a stable address.

The other piece of the initiative, achieving greater parity, means ensuring that all populations—including those that are most vulnerable—are accessing healthcare in the same ways. A growing body of literature reveals disparities in the timing of screening among ethnic groups. In a paper published online in June in the journal Cancer, for example, researchers reported that Asian women in San Francisco waited longer than non-Hispanic white women to have follow-up scans after an abnormal mammogram: 26 days as opposed to 15 days. Vietnamese and Filipina populations waited even longer. The findings were similar to those of previous investigations in African-American and Latina women.

The disparities described in these studies are due at least in part to differences in socioeconomic status and degree of acculturation. For example, the authors of the paper in Cancer noted that because of their patterns of immigration and acculturation, Vietnamese-Americans are more likely to have lower socioeconomic status and lower English proficiency than other Asian ethnic groups in the US and that both factors may contribute to their delays in seeking further care after an abnormal mammogram. Understanding and addressing how these factors influence women’s engagement with screening services are key to overcoming racial or ethnic inequalities in the timing of breast cancer detection and diagnosis.

Mass General is tackling the disparities among racial and ethnic groups in a number of ways, including improving access to screening services for vulnerable populations through the pink card program. In addition, the radiologists in the Breast Imaging Division are considering new ways to engage each patient in her language of choice, including extracting this information from her electronic medical record and using it for text-message reminders to come in for screening. They are also investigating other barriers faced by the hospital’s patient populations and how to address them while continuing to look for ways to improve screening rates throughout the Greater Boston area.

**Scheduling**

Breast cancer screening is performed on the main campus of Massachusetts General Hospital in Boston, as well as at Mass General Imaging locations in Waltham, Revere, Danvers, Nantucket, and Martha’s Vineyard, Massachusetts. Appointments can be made through Epic (inside the Partners network) or Physician Gateway (outside the Partners network) or by calling 617-724-9729.
Further Information

For further information about breast cancer screening, please contact Kimberly A. Russell, Breast Imaging Division, Department of Radiology, Massachusetts General Hospital, at 617-726-7958.

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