

Inter

# Leading efforts to improve access, timeliness, and coordination of breast care

e are experiencing a growing crisis surrounding disparities in breast cancer diagnosis, treatment, and survivorship. These ongoing disparities in cancer care delivery continue to impact patients and providers in our local communities, as well as our nation as a whole. Studies surrounding disparities in breast cancer care have been well documented and yet decades later we continue to struggle to improve these disparities through population-based healthcare efforts.

The breast program at Summa Health, Akron, Ohio, includes 2D and 3D mammography, breast magnetic resonance imaging (MRI), ultrasound, stereotactic and ultrasound breast biopsy, radioactive seed localizations, high-risk assessments, and survivorship surveillance. Patients typically access this care through preventative breast cancer screening. Eight Summa Health imaging sites offer patients access to screening services, with diagnostic services available at three centers. In 2013, Summa Health addressed disparity in breast cancer treatment head on with a 3-year process improvement project led by a dedicated multidisciplinary team of more than 30 participants.

Today, Summa Health is proud to offer *all* patients coordinated, timely access to high-quality, personalized care for any breast concern—from benign conditions to an abnormal mammogram, diagnosis, treatment, and survivorship—in a single location. New patients who are referred for a breast biopsy due to an abnormal breast finding at a diagnostic mammogram have access to specialty consults and care with a breast surgeon within 48 hours and *before biopsy*; remarkably, we have provided *same-day* surgical consults to 50 percent of the nearly 1,000 patients we see each year (Figure 1, page 37). Process improvement has allowed us to provide timely care for breast biopsies, averaging 11 total days between diagnostic mammogram and biopsy, a significant The population in the community served by Summa Health, which includes three northeast Ohio counties, is at a higher risk for cancer based on race, behavioral, social, and environmental factors.

improvement from 26 days in 2014 (Figure 2, page 40). These improvements have allowed us to increase breast patient referrals for pre-biopsy surgical consult by 35 percent and reduce outmigration of diagnostic and biopsy patients (Figure 3, page 40). Here's the story of why and how we did it.

## **Disparities in Northeast Ohio**

The American Cancer Society identifies Ohio breast and cancer mortality rates as higher than the national norm.<sup>1</sup> Ohio ranks above the national mortality rate for non-Hispanic black women who develop breast cancer. Additionally, women of Asian descent with breast cancer have a higher mortality rate in the state.

A 2015 Susan G. Komen Community Profile Report identified Ohio, most notably the northeast area of the state, as having a disproportionately high rate of breast cancer when compared to the rest of the states.<sup>2</sup> Northeast Ohio counties reported 3,470 new breast cancers, compared to 8,319 statewide, during the years 2006–2010. Fifty-three percent of the female population in northeast Ohio counties is over age 40, with mortality rates in breast cancer 42.4 percent higher for women in the northeast



In June 2015, Summa Health opened a new Breast Center designed to specifically deliver coordinated, patient-centered care where patients, families, and support persons could come together and participate in care planning and decision making. A specialty-trained breast-dedicated staff expedites diagnostic mammogram results, surgical consults and breast biopsies for all patients with a breast concern. Diagnostic and surgical suites interconnect to allow efficient and private patient flow between the suites.

part of Ohio compared the rest of the state. The Komen report highlighted possible barriers to access for breast screening, including a lack of awareness of the benefits of screening and resources for prevention, a lack of awareness of available resources for accessing care, a lack of transportation, and financial concerns.<sup>2</sup> The report suggested that these barriers could be impacted through patient navigation.<sup>2</sup>

Surveillance, Epidemiology, and End Results (SEER) data trends from 2010 to 2014 rank Ohio above the national rates for the following:<sup>3</sup>

- 1. Incidence of breast cancers for all races
- 2. Age-adjusted incidence for all ages
- 3. Age-adjusted mortality rates for breast/female cancers
- 4. Current smokers aged 18 and over
- 5. Lower reported figures for women aged 40–74 reporting having had a prior mammogram
- 6. Poverty for both families and individuals.

## **Disparities in Our Community**

The population in the community served by Summa Health, which includes three northeast Ohio counties, is at a higher risk

for cancer based on race, behavioral, social, and environmental factors. Updated 2017 SEER data on cancer trends shows a continued increase in breast cancer incidences for both sexes.<sup>4</sup> Cancers with the highest incidence rates in women are breast followed by lung and colorectal. The incidence is higher in black women. Mortality rates are highest for women with lung cancer, followed by breast cancer; white women have higher rates of mortality from lung cancer than black women, whereas breast cancer mortality remains higher for black women.

## System Redesign: Breast ACCESS Project

In 2013 the Summa Health breast program leadership identified mammogram low compliance rates as a key population health initiative and launched a program to educate and inform our local community of the benefits of preventative imaging. Education focused on how early detection of breast cancer was possible with mammography and why early detection results in improved survivorship and a decreased mortality rate. Summa Health sent out 90,000 educational mammogram mailers to women in our community who had not had a mammogram in 2 years. We saw a 2 percent response rate, and 1,909 screening mammograms

were performed on individuals who received a mailer. Of these mammograms, 16 resulted in a breast cancer diagnosis (0.84 percent of all who received a screening mammogram). This preventative outreach program, which continues today, was a foundational piece in the redesign of our breast care program and served to strengthen Summa Health's focus on quality breast health and care.

To coordinate, plan, implement, and evaluate process improvements to its breast program, Summa Health turned to the conceptual framework developed by the Institute of Medicine (now known as the National Academies of Sciences, Engineering, and Medicine) in its landmark report, *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis* (Figure 4, page 41).<sup>5</sup>

## The Planning Process

The planning and discussion phase of the breast program redesign began concurrently in 2013 with the educational program. Summa Health identified breast program leadership, and these individuals began meeting regularly in 2014. Key components of the breast program redesign included the following:

- Improved access
- Timeliness
- Coordination with respect to prevention, treatment, and survivorship.

The team identified the following areas for process improvement: cancer disparities, incidence, late-stage diagnosis, and mortality. Improving access for breast care required Summa Health to identify and address structural, sociocultural, personal, and financial barriers impacting breast care delivery.<sup>6</sup> The next step in the process was to survey patients and referring providers. Focus group discussions centered around challenges in breast care delivery, including timeliness, follow-up, care coordination, communication between providers, and difficulty in scheduling exams and time with specialists. Patients reported prolonged wait times between screening and diagnostic exams, exams and biopsy, biopsy and pathology, and pathology and surgical referral. Figure 5, page 41, highlights feedback from providers referring to Summa Health.

In 2014 Summa Health mined its data to create a baseline to be able to measure improvements. At that time, data revealed a 26-day wait from an abnormal diagnostic mammogram finding to the time a biopsy was performed (Figure 2, page 40).

## **Developing Program Goals**

Next the team developed a goal for what it now called the ACCESS project: to improve access to coordinated, high-quality, teambased care for women with a breast concern—an abnormal mammogram, a palpable breast mass, or an increased risk for breast cancer due to high-risk pathology or family history. Phy-

## Figure 1. Increase in Same-Day Surgical Consults



#### SAME DAY SURGICAL CONSULTS 50 PERCENT OF PATIENTS REFERRED FOR BIOPSY IN 2016 RECEIVED SAME DAY CONSULTS



Physician champions led efforts to meet program goals, including (L): Melanie Lynch, M.D. surgical oncologist, medical director Summa Health Breast Program; (R): Lauren Kinsell, M.D., radiologist, medical director of Summa Health Breast Imaging.

sician champions led efforts to meet this goal, including the new medical director of the Breast Center, Melanie Lynch, MD, and Lauren Kinsell, MD, medical director of breast imaging. The team then established specific targets. The 7 Day ACCESS Goal, for example, aimed to reduce wait time between abnormal diagnostic mammogram finding to biopsy from 26 to 7 days. To do so, the team sought to schedule patients for a surgical consult within 2 days and for a biopsy within 5 days after the surgical consult.

In June 2015 the new Breast Center opened on the Summa Health Akron City campus, designed specifically to deliver coordinated, patient-centered care where patients, families, and support persons can come together and participate in care planning and decision making.

In 2014 Summa Heath officially chartered a Breast Program Leadership Team. The team met monthly to coordinate plans for meeting the ACCESS project goals and to also improve accuracy and early detection and to reduce callback and error rates for exams. To achieve this, the team planned to leverage specialized breast care staff and new mammogram technology, including tomosynthesis and 3D mammography. With improved imaging technology and fellowship-trained or dedicated breast imaging radiologists reading all screening mammograms, Summa Health looked to realize earlier detection of abnormal findings.

# Process Redesign

Spearheaded by the Breast Program Leadership Team, the ACCESS Project redesign required process improvement across the entire breast care continuum. To address structural barriers that impacted access to breast care, Summa Health planned to:

- Open a new Breast Center in June 2015
- Improve and expand screening and diagnostic services
- Develop and implement a stratified Summa Health interdisciplinary breast model
- Use specialty-trained breast-dedicated staff
- Expedite surgical consults
- Assign a dedicated imaging navigator role
- Hire a survivorship nurse practitioner.

To address patient-reported lack of timeliness in scheduling referrals and biopsies and to improve coordination of services, Summa Health planned to:

- Improve referral to specialty providers with increased sameday follow-up
- Expand its navigation process
- Implement community and provider education and outreach using liaisons to communicate expanded services, redesign, and available resources
- Expand survivorship and high-risk supportive programming.

To address sociocultural, personal, and financial barriers, Summa Health planned to:

- Hold community stakeholder focus groups with patients and providers to increase engagement in redesign and process improvement planning
- Increase community outreach with an "always on" integrated cancer screening campaign

Breast care navigation is coordinated in the Summa Breast Center by (R): Sharon Lieb Inzetta, RN, MS, CBCN, CN-BN, ONN-CG the Nurse Coordinator Breast Health and (L): Heidi Eve-Cahoon MSN, CNP the Survivorship Navigator.



- Strengthen community partnerships to improve awareness of and coordinate resources for patients, for example, the Summa Screens Program through Susan G. Komen® Northeast, the Ohio and Pink Ribbon Summit County BCCP Provider, and the Summa Health Women's Board and Hospital Foundation
- Develop education materials that are culturally sensitive and evidence based.

## **Opening the New Breast Center**

In June 2015 the new Breast Center opened on the Summa Health Akron City campus, designed specifically to deliver coordinated, patient-centered care where patients, families, and support persons can come together and participate in care planning and decision making. At 5,000 square feet, the Breast Center features a "spa-like" atmosphere where patients have easy access to diagnostic, surgical, high-risk, and survivorship services. Six spacious exam rooms facilitate multidisciplinary care. The surgical space in the Breast Center can accommodate two surgeons and a nurse practitioner. The imaging suite is connected, allowing patients and staff easy access for questions and patient follow-up.

The diagnostic side of our Breast Center has registration and changing areas where patients can wait in comfortable, custom-designed robes. The Summa Health Women's Board provided funding for these robes, and patients have shared positive feedback on the comfort and "spa-like" feel they provide. Diagnostic services include four mammography and three ultrasound rooms. Stereotactic, ultrasound, and radioactive seed placements are done in the Breast Center. Two radiologists—one dedicated to diagnostics and screenings and one performing biopsies and placing radioactive seeds—see patients daily. An elevator located in the Breast Center connects to the MRI suite on the ground floor where MRI biopsies are performed. Open communication back and forth between diagnostic and surgical services promotes increased care coordination and patient-centered care.

In 2015 Breast Program leadership adopted a policy that required new patient referrals for a breast biopsy or patients with an abnormal breast finding to have access to surgical specialty care within 48 hours. To support this goal, the breast cancer is staffed daily with a surgeon. Summa Health tracked breast cancer patient data in 2015 and compared it to 2014 baseline to analyze the impact of its new Breast Center and progress toward ACCESS goals.

Breast Program leadership also received system leadership approval to expand navigation services in 2014. As a result, a dedicated imaging navigator and a breast care coordinator position was created that fall, and the team began tracking data related to these services in January 2015. This team was tasked with expanding services and improving the screening and diagnostic patient experience. To do so, the team:

- Implemented an oncology nurse navigation model of care that was grounded in the work of Katharine Kolcaba, PhD, MSN, RN, and her patient-centered theory of comfort model <sup>7</sup> (Figure 6, page 43)
- Created a diagnostic plan of care for any patient recommended for follow-up by our radiologist after breast imaging
- Developed culturally sensitive educational materials for breast health, abnormal breast findings, and breast biopsy
- Implemented ACCESS outcome measures for navigation including patient referral volume, days to surgical consult and outmigration care
- Developed metrics and analytics to monitor process involvement.

# **ACCESS Project Outcomes**

After only 3 months, the new navigation process resulted in significant improvements in patient volume, including a decrease

Figure 2. Reduced Wait Times from Mammogram to Biopsy Figure 3. Increased Referrals to Navigation



TOTAL # DAYS: BETWEEN DIAGNOSTIC MAMMOGRAM TO BIOPSY

# OF CASES REFERRED FOR NAVIGATION INCREASED + 32% IN 2015 AND +3% IN 2016



in patient outmigration and an increase in patients being referred to navigation. Prior to having a dedicated imaging navigator, a significant number of patients left the Summa Health system or were lost to follow-up. Outmigration declined from 5 percent of patients referred for biopsy to 0.6 percent (Figure 7, page 43). Summa Health also realized increases in overall volume for surgical referrals prior to biopsy during the first year of expanded navigation services with 951 patients referred a 31 percent increase, (Figure 3, above). All referrals were followed by tracking these metrics: follow-up for compliance surrounding biopsy, follow-up imaging, concordance, and pathology. Timeliness, care coordination, and satisfaction all improved. Time to surgical consult, time to biopsy, and time to pathology all showed significant improvement. Additionally, provider satisfaction improved.

Breast Program leadership received monthly navigation reports. Increases in overall volume after the first year of navigation demonstrated significant financial return to the Summa Health, allowing for the hiring of a second imaging navigator. Volume continues to increase in all areas, including timeliness in care delivery. By 2016, referrals had increased by 35 percent (Figure 3, above), and same-day surgical consults for patients recommended for biopsy at their diagnostic mammogram had increased almost 50 percent (Figure 1, page 37).

Timeliness for care has been demonstrated by continually increasing the number of patients presenting for imaging, seeing a breast surgeon, and having a biopsy within the same day (Figure 1, page 37). Total days between diagnostic mammogram and biopsy declined to 11.2 days, a significant improvement from 26 days in 2014 (Figure 2, above). Because days from surgical consult to biopsy consistently averaged to 7 to 8 days versus our target of 5 days, we conducted a patient and imaging technician survey to determine how to improve our timeliness in this area. We found that the delay in biopsy was due to patient preferences—not our ability to offer and schedule more timely appointments.

While the ACCESS Project was underway, our Breast Center transitioned to an electronic health record (EHR) in 2015 and flow sheets specific to cancer care were developed. The Breast Center adopted a screening and surveillance program built into Epic for the ongoing prevention of lymphedema throughout survivorship. The EHR is critical to providing patient-centered, coordinated healthcare among a multidisciplinary team of providers. It allows for more timely and accurate reporting for our interdisciplinary team. Primary care, surgical, oncology, pathology, radiology, navigation, survivorship, physical therapy, nutrition, social work, spiritual, palliative, genetics, and financial—all have access to the EHR.

In 2016 Summa Health expanded its survivorship services. Under the leadership of Dr. Lynch, a nurse practitioner now heads up our survivorship clinic. The nurse practitioner has a direct referral link in the EHR so that she can now receive referrals and bill for her services. During the survivorship visit, the nurse practitioner completes the survivorship care plan, reviews the plan with the patient, and makes surveillance recommendations. We have found that this survivorship nurse practitioner closes



Figure 4. IOM Conceptual Framework for Improving the Quality of Cancer Care

Figure 5. Question from Breast ACCESS Project Voice of the Customer and Referring Physicians Surveys



the loop at Summa Health, allowing us to provide well-coordinated, timely, and patient-centered breast care for all patients.

In February 2017, after 3 years of hard work by our team, our collaborative effort to implement process improvement was rewarded with NAPBC accreditation for the Summa Breast Program in Akron.

# A Look to the Future

A recent article discussed the challenges today's cancer programs face in providing access to high-quality patient-centered cancer care.<sup>8</sup> Health systems are beset by escalating costs while simultaneously shifting from fee-for-service to value-based payment models. Balancing costs while maintaining quality, though difficult, will ultimately be required of all cancer programs.

To continue to grow, our breast program will need to expand its outreach and access to counties with higher rates of late-stage diagnosis and aging populations. We will also continue to target disparities in the state and adapt to meet the needs of our aging population with multiple comorbidities. This population will require continued outreach and education targeting cancer prevention and healthy lifestyle behaviors.

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# **Our Program and Community At-a-Glance**

Summa Health is one of the largest integrated healthcare delivery systems in Ohio. Formed in 1989 with the merger of Akron City and St. Thomas Hospitals, the nonprofit system now encompasses a network of hospitals, community-based health centers, a health plan, a multispecialty group practice, an accountable care organization, research and medical education, and a foundation.

Today, Summa Health, the largest employer is Summit County, provides care to more than 1 million individuals across three northeast Ohio counties and covers nearly 74,000 people through our health plan. Summa Health contributes \$2.7 billion in business volume impact to the Ohio economy. With more than 1 million patients and more than 7,000 employees, Summa Health provides the highest quality patient-centered, compassionate care for our communities.

The 2016 U.S. Census figures reported for Akron, Ohio, show a population of about 197,000 individuals.<sup>1</sup> Akron is located in Summit County, the fourth-largest county in Ohio, and it is the fifth-largest city in the state. The population is 52 percent female, 62 percent white, and 32 percent African American. Most recent poverty figures are at 27 percent; the national poverty rate is 14 percent. Mean household income is reported at \$34,500, with median home values at \$81,000. Eight-six percent of the residents graduated high school, and the average household has 2.3 persons. Principal industries are manufacturing, healthcare, retail, and wholesale.

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