

Closing the Loop with a Post-Biopsy Breast Clinic

In early 2013 members of the Gwinnett Medical Center Breast Program Leadership Team voiced a need to reorganize and realign the care continuum for patients undergoing breast biopsies. The team saw an opportunity to create a more comprehensive diagnostic care pathway to include more timely results to breast biopsy patients, streamlined access to treatment specialists, and improved processes and communication with referring physicians. This vision of the Breast Program Leadership Team came at an opportune time, on the heels of great expansion and investment into the breast imaging and cancer care infrastructure at Gwinnett Medical Center (GMC), Lawrenceville, Ga., which positioned the NAPBC-accredited program to achieve a new level of service. The journey to our current patient-centered program was multifaceted.

Setting the Stage

In 2007 and 2008 GMC-Duluth opened its Center for Screening Mammography and Center for Women's Diagnostic Imaging which, like all of Gwinnett Medical Center's mammography centers, is an all-digital facility accredited by the American College of Radiology. At the new center, patients experience soothing music in a spa-like setting and relaxing environment covering just under 7,000-square-feet. But the primary benefit of GMC's all-digital technology is that diagnostic studies are completed quickly, offering clearer and faster results.

Then, in 2011, our community celebrated the grand opening of the 17,584-square-foot, all-digital, state-of-the-art Gwinnett Breast Center at GMC-Lawrenceville. The all-digital breast imaging center offers the convenience of having diagnostic and screening services in one location, as well as a 5,000-square-foot procedure suite. More importantly, the breast center has a distinctly patient-centered approach to delivering care, providing an access navigator to coordinate patient care. This process is designed to ease patient anxiety and help patients and families negotiate the multiple aspects of follow-up care.



At the same time, members of the GMC multidisciplinary support team realigned their focus on a more patient-centered program. In December 2012, the infusion centers of Suburban Hematology Oncology Associates P.C., located in Lawrenceville, Duluth, and Snellville, became the Center for Cancer Care at GMC. This newly-formed center was the result of a strengthened relationship between GMC and the physicians of Suburban Hematology Oncology Associates P.C. "The venture allows us to build on our individual strengths and together set new goals for continuing to improve our services for patients living with cancer and their families. Over time we hope this takes the form of a more seamless system of care and also additional access to services that are needed in our region," said medical director, Anthony M. Landis, DO, in a news release.

In October 2014, a new Cancer Support Center opened, adjacent to the Gwinnett Breast Center in Lawrenceville. The new



Table 1. Goals & Measure of Success	
Broad Goals of the Breast Program Leadership Team	
• Improve quality of care	
• Increase market retention of surgical cases	
• Increase breast imaging volumes	
• Increase breast program integration and physician engagement	
Patient-Centered Goals	
• Timely service along the continuum of care: Screening-Diagnostic-Biopsy-Result-Surgery	
• Personal service	
✦ Personal rendering of biopsy results to patients	
✦ Biopsy site evaluation and care (also helpful for American College of Radiology accreditation outcomes and complication rate calculations)	
✦ Assistance with surgical consultation scheduling	
✦ Scheduling of follow-up imaging	
• Support increased nurse navigation to be available during the diagnostic process	
Physician-Centered Goals	
• Increase communication between radiologists and referring physicians	
• Act as liaison between patients and referring physicians	
• Support referring physicians in the care process of their patients	
• Increase image-guided needle biopsy rates	
• Increase market retention of surgical cases	

Cancer Support Center offers patient navigation, social work, nutrition, and hereditary cancer risk assessment services. With the appropriate infrastructure in place to ensure provision of smooth coordination of care for breast cancer patients, the stage was set to take on an important process improvement initiative.

Getting Started: Post-Biopsy Breast Clinic

A multidisciplinary workgroup was convened to plan for implementing a post-biopsy breast clinic. Group members included physician leadership from radiology, primary care, surgery, medical oncology, radiation oncology, and pathology, as well as key staff members, such as the breast health nurse navigator and leadership from imaging services. The workgroup developed goals to work from and measure success (Table 1, left). Next, the workgroup set out to envision an ideal process for the timely and supportive rendering of breast biopsy results (Figure 1, right), which centered on a core principle of communication with patients and referring physicians at every step of the process. During this exercise, the post-biopsy breast clinic quickly took shape.

To reduce patients’ “sleepless nights” from the point of biopsy to definitive diagnosis, the workgroup set targets: a two-day turnaround of biopsy results from pathology and a three-day turnaround from biopsy procedure to post-biopsy clinic appointment. The workgroup established routine availability for biopsy procedures on the same day as the diagnostic mammogram—for both patient convenience and to expedite care. The workgroup also made pre-scheduled appointments with a surgeon for the same day as the post-biopsy clinic or within 24 to 48 hours a priority as well.

The workgroup felt strongly that the post-biopsy visit should be a no-charge encounter, and the radiologists of North Metropolitan Radiology Associates, LLP, (a private practice affiliated with the hospital) and GMC’s administration agreed. The shared commitment to ensuring optimal continuity of care through the diagnostic service rendered was easy to support. The workgroup also anticipated that a comprehensive and timely diagnostic process would likely lead to downstream market capture for breast surgery and other services.

Operationalizing the Vision

An additional .9 FTE breast nurse navigator was necessary to establish the post-biopsy breast clinic at two locations (Gwinnett Breast Center in Lawrenceville and the Center for Women’s Diagnostic Imaging in Duluth). An additional key duty for the new navigator was to become a super-user of the breast imaging information system, gathering key metrics (NQMBC, ACR) to share with the Breast Program Leadership Team to measure clinical quality and aid in continued accreditation efforts.

Next, a multidisciplinary team was formed to spearhead planning efforts. Members were comprised of imaging leadership, breast center staff, nurse navigators, and radiologists representing the breast centers on the two campuses. Clinic flow and scheduling, as well as radiologist communication and dictation, were all carefully planned, trialed, and evaluated during the pilot phase. The team met for three months to iron out operational issues and fine tune the process, seeking constant feedback from patients, breast center staff, and referring physicians to create the overall flow of the diagnostic experience, including the new post-biopsy breast clinic (Figure 2, page 24).

Today, the post-biopsy breast clinic is offered at two locations, providing ease of access and a private setting in close proximity to radiologist work areas. Initially, the team planned to “soft launch” the clinic at one location and for select referring physicians,

but quickly learned that serving all patients in both locations was much easier to operationalize. The team also originally envisioned that the new nurse navigator would serve as the “diagnostic navigator” staffing the clinics, while the second navigator would aid patients during active treatment and into survivorship. However, this idea evolved into both navigators providing services spanning the entire continuum of care to afford the most staffing flexibility and optimal service to patients and to avoid a navigator “handoff” after diagnosis.

The breast health nurse navigator sees all patients who return to clinic, while the radiologist sees primarily patients with a positive diagnosis or with questions that the navigator cannot effectively answer. While the post-biopsy breast clinic was initially envisioned as requiring the breast radiologist to personally render all results in the company of a breast health nurse navigator, over time this practice evolved to the radiologist rendering all positive pathology, and the breast navigators informing patients of non-cancerous findings.

“It’s really been amazing to see the reaction of patients when we tell them that we will see them back in a few days to give them their results and help with any plans that may need to be made. They are so appreciative that they know what to expect and when to expect it,” says Gretchen Hayward, RN, CBPN-IC, breast health nurse navigator. “What surprised us the most was

Figure 1. Initial Concept Post-Biopsy Breast Clinic & Breast Navigation Workflow

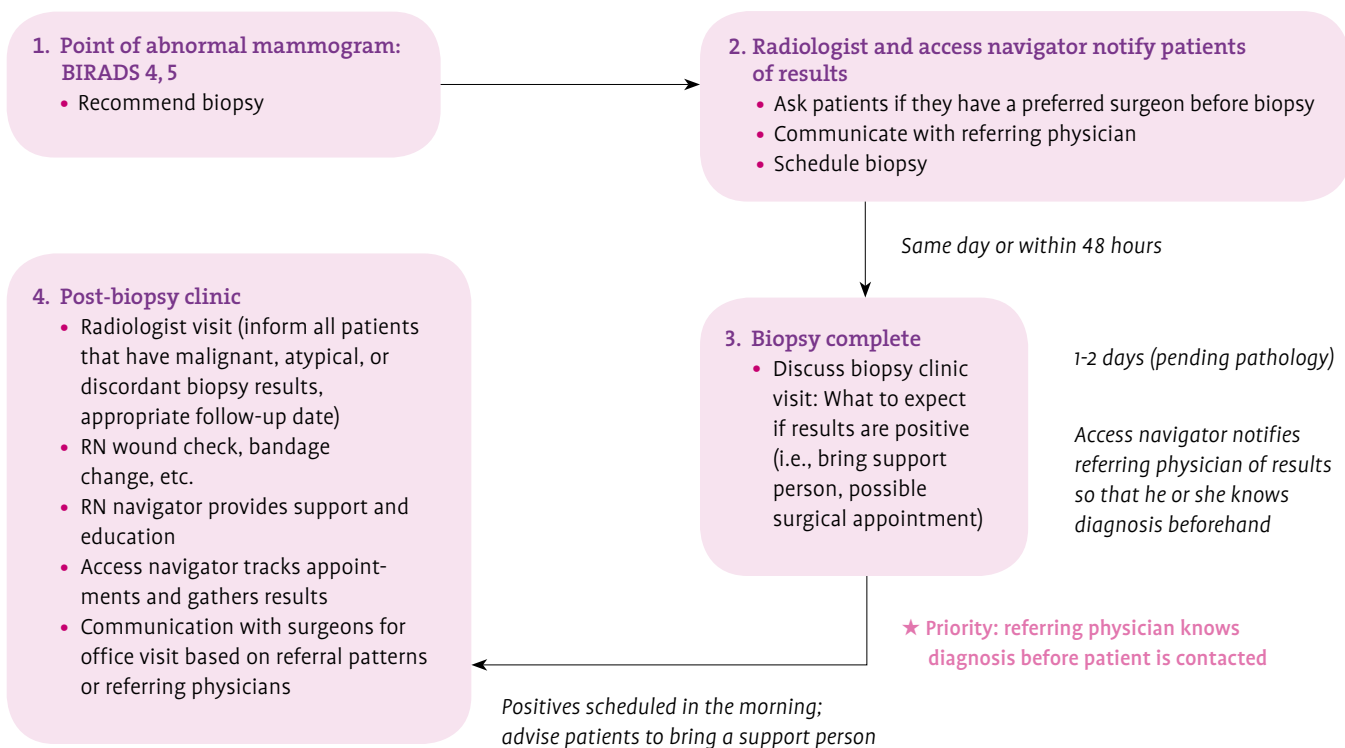
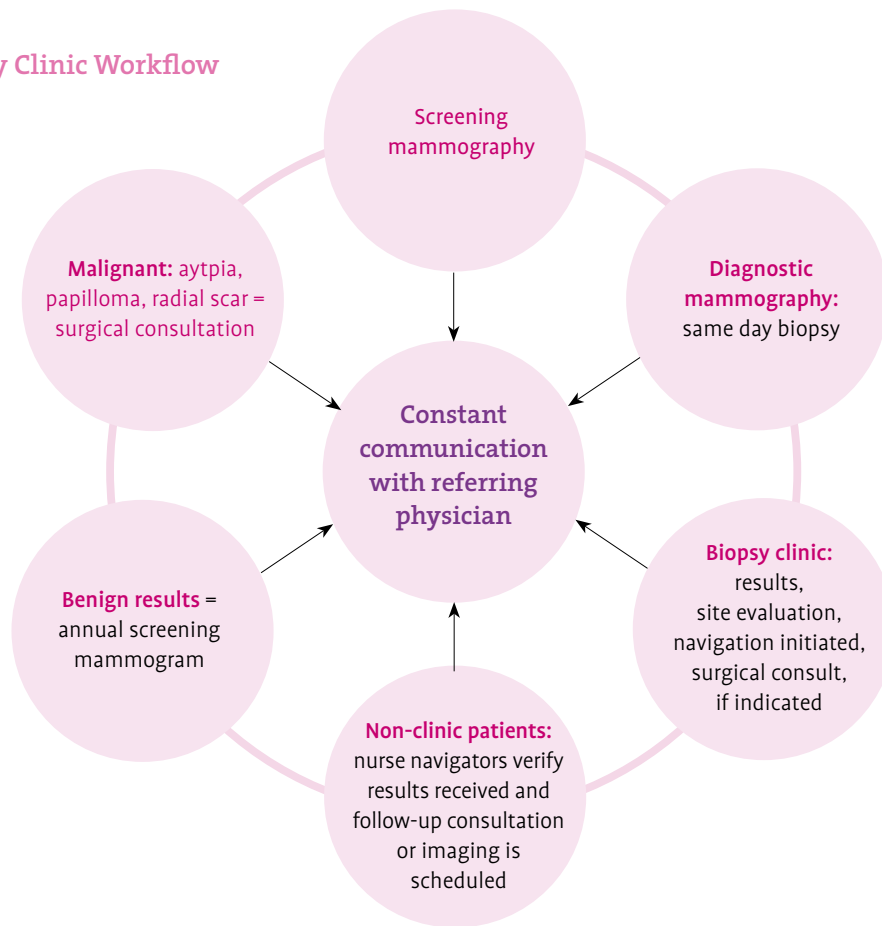


Figure 2. Post-Biopsy Clinic Workflow



...although patients may already know their results, they can still come to the clinic for biopsy site care and to access the supportive services...

that the patients who receive benign results from us are actually the ones who many times have the biggest emotional reaction. We are honored to be there for them, in person, to be sure that all of their questions are answered whether they receive a diagnosis of cancer or not.”

Clinic Success Factors & Utilization

Ultimately, a key success factor was the flexibility of the post-biopsy breast clinic. Some referring physicians prefer to render biopsy results themselves, rather than using the post-biopsy breast clinic for their patients. The breast health nurse navigators still follow cases that do not come to clinic to ensure appropriate follow-up and identify ways to help ease any barriers to care patients

may experience. Specifically, navigators call patients and, in some cases, the referring physician office. Furthermore, although patients may already know their results, they can still come to the post-biopsy breast clinic for biopsy site care and to access the supportive services, for example, to make an appointment with the American Cancer Society patient navigator or the hospital’s oncology social worker or to borrow educational materials from the resource library.

Communication has been another key success factor. Initially, communication with referring physicians about the post-biopsy breast clinic was in the form of face-to-face office visits with primary care, surgical, and OB/GYN practices. GMC also developed a flier to market the program to referring physicians. Once referring physicians were made aware of the post-biopsy breast clinic, the team established processes for ensuring that referring physicians received communication about specific patients every step of the way. To meet this goal, the team developed dictation templates for the five dedicated breast imaging and interventional radiologists to employ as a cornerstone of communication—both within the breast center and to referring providers (see Figure 3, right).

The clinic is held daily at the Gwinnett Breast Center in Lawrenceville and three times weekly at the Center for Women’s Diagnostic Imaging in Duluth. Across the two locations, the
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Table 2. Post-Biopsy Breast Clinic Press Ganey Survey Patient Satisfaction Results

Location	Year Prior to Clinic (FY 2013)	1st Year of Clinic (FY 2014)
Duluth diagnostic mammo	89th Percentile	93rd Percentile
Duluth screening mammo	88th Percentile	99th Percentile
Lawrenceville diagnostic & screening	84th Percentile	99th Percentile

Figure 3. Dictation Templates for Radiologists


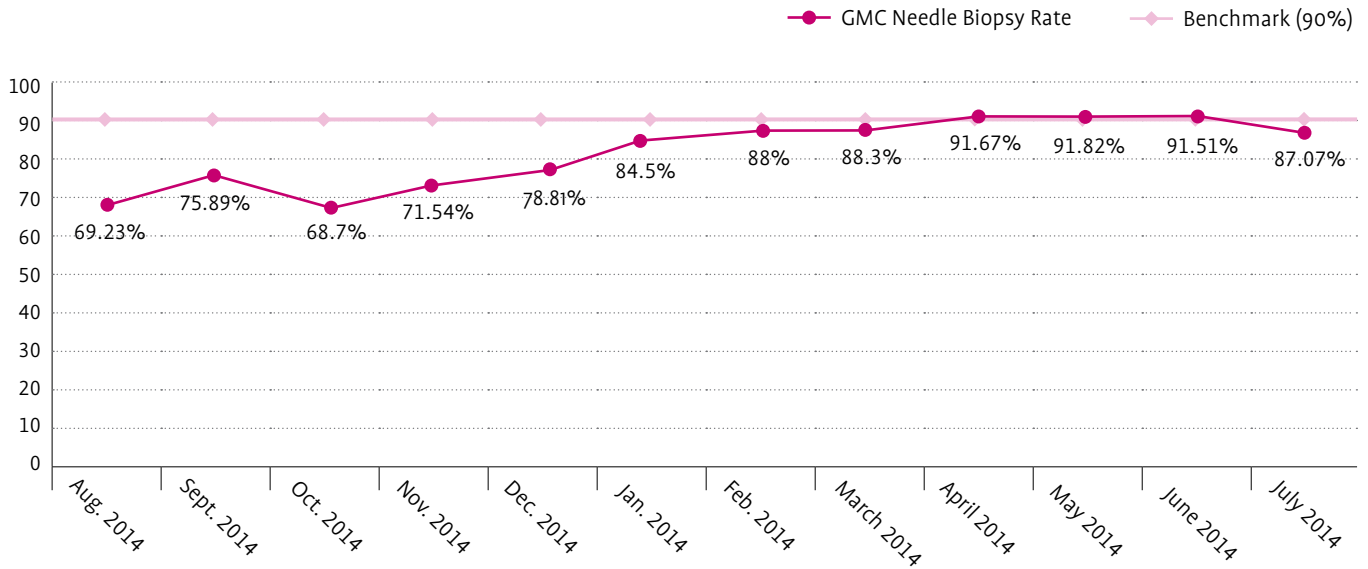
<p>Radiologist Communications (Procedure dictation)</p> <p>Scheduled Breast Clinic</p> <p>POST-BIOPSY BREAST CLINIC: The pathology results and recommendation will be reviewed with the patient in Breast Clinic. The patient has a scheduled appointment on [date] at [time].</p>	<p>Radiologist Communications (Procedure dictation)</p> <p>No Breast Clinic</p> <p>POST-BIOPSY BREAST CLINIC: The patient declined to schedule for the post-biopsy breast clinic. [Referring physician] will notify the patient of the pathology results and recommendations and evaluate the post-biopsy changes.</p>
<p>Radiologist Communications (Radiology/Pathology correlation)</p> <p>ADDENDUM: The pathology results from the [US, ST, MRI] guided vacuum-assisted core biopsy of the [mass/calcifications] in the [o'clock] position of the [right/left] breast revealed [pathology results]. The pathology results are in concordance with the imaging findings.</p> <p>The breast imaging access navigator notified [nurse] at [referring physician]'s office of these findings and recommendations on [date] at [time]. [Nurse] will notify [referring physician] when the pathology results and recommendations are available for review.</p> <p>POST-BIOPSY BREAST CLINIC: The pathology results and recommendations will be reviewed with the patient in Breast Clinic. The patient has a scheduled appointment on [date] at [time].</p> <p>OR</p> <p>The patient declined to schedule for the post-biopsy Breast Clinic. [Referring physician] will notify the patient of the results and recommendations and evaluate the post-biopsy changes.</p> <p>RECOMMENDATIONS: [Annual/Surgical consultation]. The patient has a surgical consultation scheduled with [surgeon] on [date] at [time].</p>	<p>Radiologist Communications (Clinic visit dictation)</p> <p>POST-BIOPSY BREAST CLINIC: The patient presented to the post-biopsy breast clinic to discuss the pathology results and to evaluate the biopsy site from the image-guided breast procedure performed on [date].</p> <p>The pathology results were discussed with the patient by [radiologist] and [navigator]. Assessment of the biopsy site by the nurse navigator revealed expected post-biopsy changes. No significant hematoma or signs of infection were identified. The breast health nurse navigator provided oncology support and resource information.</p> <p>RECOMMENDATIONS: Annual mammogram/Surgical referral/ Risk-reduction referral</p> 

Figure 4. Gwinnett Medical Center Needle Biopsy Rate



About Gwinnett Medical Center

Gwinnett Medical Center is a 553-bed nationally-recognized, not-for-profit healthcare network with acute-care hospitals in Lawrenceville and Duluth, Ga. Offering oncology, cardiovascular, orthopedic, and neuroscience specialty care, as well as a full continuum of wellness services, GMC’s 5,000 associates and 800 affiliated physicians serve more than 400,000 patients annually. To learn more about how GMC is transforming healthcare, visit gwinnettmedicalcenter.org or follow us on at facebook.com/gwinnettmedical, twitter.com/gwinnettmedical, or youtube.com/gwinnettmedical.

- 2015 Women’s Choice Award America’s Best Hospitals-Obstetrics
- Georgia Trend-Top Large Hospital
- Organizational Commitment to Safety, HPI Partnership
- CoC Accredited Comprehensive Community Cancer Program
- Accredited Breast Program (NAPBC)
- ACR Breast Imaging Center of Excellence
- Certified Oncology Rehabilitation Program (Oncology Partners)
- Lung Cancer Screening Center of Excellence (Lung Cancer Alliance)
- Chest Pain Center Accreditation
- Primary Stroke Certification



- Beacon Award in Critical Care Nursing Excellence
- Best Nursing Home – *U.S. News and World Report*.

Our Community At-a-Glance

Gwinnett County is located in the northeast suburbs of the metropolitan Atlanta area and boasts the second largest county population in the state of Georgia with 859,304 residents in 2013. Home to more than 600 foreign-owned companies, Gwinnett County is very diverse, with more than 150 languages spoken at Gwinnett county public schools. Gwinnett is the 61st largest county population in the United States with a 6.7 percent population growth from April 1, 2010 to July 1, 2013.

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average monthly number of patients returning for clinic is 46 (of 81 biopsy recommendations). The Center for Women's Diagnostic Imaging, while seeing less breast biopsy volume overall, is more heavily utilized by patients and referring physicians for clinic. Roughly 70 percent of breast biopsy patients return to the post-biopsy breast clinic at the Center for Women's Diagnostic Imaging, while only about 40 percent return to the Gwinnett Breast Center. This finding is attributed to the fact that our Duluth community is more primary care driven in terms of referrals, while our Lawrenceville community is more heavily populated with surgeons who refer to Gwinnett Medical Center for breast image-guided diagnosis, but may prefer to render their own results.

Outcomes

The post-biopsy breast clinic has brought anticipated gains in patient satisfaction, as well as increased breast surgery volumes and market retention. In a study comparing a six-month snapshot one year before clinic implementation to the same six-month period during the implementation year, the program saw both a 21 percent increase in surgical breast cases overall, and a 26 percent reduction in outmigration of surgical breast cases operated on at competing hospitals. Compared to the prior year, patient satisfaction increased significantly—particularly at the Gwinnett Breast Center—the year the clinic was implemented (Table 2, page 25).

Patient satisfaction with the post-biopsy breast clinic comes as no surprise to Christopher Hagenstad, MD, medical oncologist and hematologist and medical director of the Cancer Genetics and Risk Assessment Program. “The positive impact I see is the clinic reducing the time patients spend waiting for results and, in turn, they can more quickly begin any needed steps to start cancer treatment. The clinic provides great information to patients and does an excellent job of also communicating with ordering physicians, which makes the overall process of care work well,” he said.

GMC saw a major quality of care improvement from the enhanced collaboration and communication the post-biopsy clinic brought to the broader Breast Program—a 21 percent increase in image-guided core biopsy rates. This quality of care indicator was a separate but related concern that program leadership was studying at the same time that the post-biopsy breast clinic was implemented. Figure 4, left, shows the marked improvement in image-guided core biopsy rates since initiation of the post-biopsy breast clinic in the fall of 2013.

The post-biopsy breast clinic has broadly impacted Gwinnett Medical Center's cancer program and breast programs alike. It has set the bar for how a comprehensive approach to care—well communicated and coordinated—can benefit our patients in ways they can see and feel. 

Kimberly C. Hutcherson, MD, is the medical director of Breast Imaging and Intervention at Gwinnett Medical Center in Lawrenceville and Duluth, Ga. She is an associate with North Metropolitan Radiology Associates, LLP. Katie S. Michaud, MPA, former director of Oncology at Gwinnett Medical Center, is currently director, Oncology Services, University of Vermont Medical Center, Burlington, Vermont.

Patient Education Tool

Women's Imaging Radiologists

North Metropolitan Radiology Associates (NMRA), LLP, is proud to partner with Gwinnett Medical Center. Each radiologist is board-certified and provides sub-specialty reading and interpretation to ensure that your diagnosis is made in the most accurate and timely fashion. To better assist you in identifying NMRA radiologists who are included on your insurance plan, and because insurance plans typically list individual physicians rather than physician groups, NMRA's women's imaging radiologists are listed below. Please check with your insurance plan to verify that the NMRA radiologists are participating providers on your plan. NMRA radiologists are not individually employed by Gwinnett Medical Center. Women's imaging radiologists are listed in alphabetical order by last name after Medical Director Kimberly C. Hutcherson, MD.

Kimberly C. Hutcherson, MD, is the medical director of Breast Imaging and Intervention at Gwinnett Medical Center in Lawrenceville, Ga. She is an associate with North Metropolitan Radiology Associates, LLP, and has been in her current position at Gwinnett Breast Center since 1999. Dr. Hutcherson is a frequent guest expert on breast health, and has been featured on national radio and television shows. She has also been an honorary and keynote speaker at Gwinnett's American Cancer Society Gala, in recognition of her leadership in the battle against breast disease.

Fellowship: Magee Women's Hospital—University of Pittsburgh Medical Center (Women's Imaging)

Residency: University of South Alabama

Internship: Baptist Medical Center, Birmingham, Ala.

Medical School: Meharry Medical College

Mark Ferrara, MD

Fellowship: Emory University (Breast Imaging)

Residency: Indiana University School of Medicine

Internship: Deaconess Medical Center

Medical School: University of Nevada

Jennifer Gillis, MD

Fellowship: Emory University (Breast Imaging)

Residency: University of Virginia (Radiology)

Internship: University of Virginia (Surgery)

Medical School: University of Vermont

Stephanie Roberson, MD

Fellowship: Northwestern University (Women's Imaging)

Residency: University of Texas—Houston/MD Anderson Cancer Center

Internship: Washington Hospital Center

Medical School: Howard University College of Medicine

Cynthia Robinson, MD

Residency: Michael Reese Hospital

Internship: Hennepin County Medical Center

Medical School: University of Minnesota

Gwinnett Breast Program Highlights

State-of-the-art, spa-like breast imaging centers in Lawrenceville, Duluth, and Dacula (Hamilton Mill), Ga. Services include:

- Screening and diagnostic digital mammography in five locations, including a mobile mammography unit
- Breast ultrasound
- Bone densitometry
- Breast MRI
- Imaged-guided needle localizations (for surgery)
- Image-guided biopsies
 - ❖ Stereotactic-guided core biopsy
 - ❖ Ultrasound-guided fine needle aspiration
 - ❖ Ultrasound-guided core biopsy
 - ❖ MRI-guided core biopsy
- Tomosynthesis.

Breast Clinic scheduled with the patient, radiologist, and nurse navigator to review test results within three days of diagnosis. Breast Program features include:

- Well-trained and experienced surgeons, nurses, and technologists.
- Access to the Center for Cancer Care that offers medical oncology services, including chemotherapy infusions and injections in Lawrenceville, Duluth, and Snellville, Ga.
- Weekly pre-treatment multidisciplinary breast conferences to review and discuss patient cases and develop individualized treatment plans.
- Clinical trials information and enrollment.
- Women's Cancer Support groups offered in English and Spanish.
- Chaplaincy services to provide spiritual support.
- Pain Management Center offers individualized pain treatment plans.
- Certified oncology rehabilitation services including lymphedema and occupational and physical therapy.



- Access to services at the Cancer Support Center, including:
 - ❖ Certified breast health nurse navigators dedicated to helping patients and their families every step of the way.
 - ❖ An array of information to help educate and support men and women diagnosed with cancer.
 - ❖ Hereditary Cancer Risk Assessment Services and High Risk Clinic.
 - ❖ Cancer survivorship services, including Cancer Transitions® classes focusing on topics such as nutrition and exercise.
 - ❖ Nutrition counseling with a registered dietitian.
 - ❖ Oncology social work services.
 - ❖ ACS Look Good...Feel Better® sessions and other appearance services.
 - ❖ Twisted Sisters Yoga for breast cancer survivors.