



CANCER SERVICES  
ANNUAL REPORT | FY21

# TABLE OF CONTENTS

MESSAGE FROM ONCOLOGY ADMINISTRATION	3
2021 CANCER COMMITTEE MEMBERS	4
CANCER CARE IN 2021	5
RADIATION ONCOLOGY ADVANCEMENTS	6
CANCER RESEARCH AND CLINICAL TRIALS	7
CANCER REGISTRY REPORT	8
IMPROVING LUNG CANCER SCREENING AWARENESS	9
RETURN TO BREAST CANCER SCREENING	11
BREAST CANCER QUALITY IMPROVEMENT	13
REMOVING BARRIERS TO CANCER CARE	14
TREATING OBESITY IN CANCER PATIENTS	15
2019 CANCER REGISTRY DATA	16
NGMC'S TOP SIX CANCER SITES FOR 2019	18
CANCER DIAGNOSIS BY COUNTY	19
PULMONOLOGIST RECOGNIZED	20
BARROW COUNTY SCHOOLS NOMINATED	21
THE SISTERHOOD OF COVID-19	22

## MESSAGE FROM ONCOLOGY ADMINISTRATION



**Michele Fortner, MBA, MS, RT(R)(T)**  
Director of Oncology Services, NGMC

I'm excited to present Northeast Georgia Medical Center's (NGMC) 2021 Cancer Services Annual Report. This report contains information on our program activities in 2021 and presents data abstracted by our Cancer Registry in 2019.

As you review the report, you'll see that NGMC's Cancer Services program is truly extensive. We offer research-based cancer care and follow nationally approved treatment guidelines, allowing patients the opportunity to stay in their community while receiving the most current cancer treatment options.

As a program, we undertook many important and impactful initiatives in 2021 – all unified with a common goal of improving the health of the community in all we do. Several of our projects focused on increasing cancer screening and early detection. Through the use of collaborative and innovative approaches, our physician leaders and care teams were successful in increasing screening volumes for lung and breast cancers and have even shared some of these successes with other programs across the state and nation.

Additionally, our program also focused on two areas involving nutrition and cancer care. First, we identified food insecurity as a challenge for a certain subset of outpatients. To address this issue, our staff partnered with a local food bank to provide boxes of food for patients in need. Second, our team worked to identify risk factors and provide nutrition education to endometrial cancer patients who also have a BMI of 30 or greater.

We also focused efforts on providing education and support for adolescents and young adults with cancer, as well as the use of massage therapy to help improve quality of life for cancer survivors.

I believe these accomplishments truly highlight our goal of providing the highest quality cancer care possible for our patients throughout the area. And while it's been a year of learning and growing for our program, we're looking forward to what the future holds for our patients, community and collaborating physicians.

**all unified with a common goal of  
improving the health of the community in all we do**

# 2021 CANCER COMMITTEE MEMBERS

Geoffrey Weidner, MD – Cancer Committee Chairman  
Jaymin Jhaveri, MD – Cancer Liaison Physician  
Scott Stephen, MD – Diagnostic Radiologist; Jon Horn, MD (Alternate)  
Ezra Ellis, MD – Pathologist; Sumi So, MD (Alternate)  
Fernando Aycinena, MD – Surgeon; Emily Black, MD (Alternate)  
Charles Nash, MD – Medical Oncologist; Richard LoCicero, MD (Alternate)  
Frank Lake, MD – Radiation Oncologist; Craig Baden, MD (Alternate)  
Kevin Matson, VP of Oncology Services – Cancer Program Administrator  
Kim Tyner-Meeks, RN, OCN – Oncology Nurse; Alicia Harrison, RN (Alternate)  
Donna Moss, LcSW, CG-C, ACHP-SW – Social Worker; Ralph Ables (Alternate)  
Dianne Kosmala, BA, CTR – Certified Tumor Registrar; Cheryl Gantt, CTR (Alternate)  
Saloni Tanna, MD – Cancer Conference Coordinator  
Christina Saurel, MD – Quality Improvement Coordinator; Andrew Johnson, MD (Alternate)  
Ezra Ellis, MD – Cancer Registry Quality Coordinator; Sumi So, MD (Alternate)  
Andre Kallab, MD – Clinical Research Coordinator; Holly Jones, PhD (Alternate)  
Donna Moss, LcSW, CG-C, ACHP-SW – Psychosocial Services Coordinator  
Angie Caton, MSN, RN, OCN – Survivorship Program Coordinator; Ashley Deringer, NP (Alternate)  
Brad Auffarth, MD – Breast Program Medical Director  
Zameer Gill, MD – Palliative Care Professional  
Jennifer Butler, NP – Genetics Professional  
Wendy Tolbert, RD – Registered Dietitian Nutritionist  
Kim Parks, PT – Rehabilitation Services Professional; Donna Brooks (Alternate)  
Michelle Vu, PharmD – Pharmacist  
Christopher Jennings – Pastoral Care Representative  
Rachel Joiner – American Cancer Society Representative  
Penny McCall – Oncology Services Coordinator

# CANCER CARE IN 2021



## **Charles Nash III, MD, FACP**

Longstreet Clinic – Department of Medical Oncology & Hematology  
Medical Director, NGMC's Cancer Services

Northeast Georgia Medical Center (NGMC)'s Cancer Services program has continued its steady trend of growth and expanded services in 2021, both in the number of patients served and in the breadth of services provided. Our patients continue to choose NGMC for the advanced, yet personalized care which we continually strive to provide.

The year was highlighted by the opening of the Braselton Cancer Center – a new outpatient cancer center which houses both Longstreet Clinic's Medical Oncology and Hematology services and Northeast Georgia Physicians Group's Radiation Oncology services in a comfortable and collaborative space.

The Braselton Cancer Center also provides ease of access for patients through a dedicated entrance and gives medical providers the opportunity to participate in direct communication and consultation with their colleagues just down the hall, leading to more comprehensive and coordinated care for patients.

Our cancer patients at NGMC continue to have access to a growing number of the latest clinical trials available through our cancer research department, plus trials available through our network affiliation with

Winship Cancer Institute of Emory University. We have also continued our ongoing efforts to increase patient access to care and have achieved great success through community participation in two NGMC awareness-based projects for breast cancer and lung cancer screenings. Through these projects, we identified and treated numerous patients with early stage cancers, thus leading to improved cure rates.

Additionally, we continue to focus on enhancements in technology with increased integration of oncology records into the EPIC electronic medical record with a goal of improved data management and interpretation of patient outcomes.

Last but certainly not least, our Cancer Services program is pleased to collaborate with NGMC's Graduate Medical Education department on opportunities to participate in and design clinical trials going forward.

With optimism and anticipation, we look forward to a year of continued growth and success of NGMC's Cancer Services program, while holding steadfast to our mission statement of improving the health of the community in all we do.

# RADIATION ONCOLOGY ADVANCEMENTS



## Geoffrey Weidner, MD

Northeast Georgia Physicians Group Radiation Oncology  
Radiation Oncology Medical Director, NGMC

Northeast Georgia Medical Center (NGMC) has continued to offer advanced radiation oncology treatment in 2021 while adapting to the persistent shadow of the coronavirus pandemic. With prolonged experience, we have become more adept at safely delivering radiation therapy in the face of this pandemic, while also adding several new modalities to continue serving our patients with state-of-the-art cancer treatment.

The discipline of radiation oncology nationally has trended toward offering more hypofractionated treatments and NGMC has expanded the use of this technique for several treatment sites. Hypofractionation delivers fewer treatments at a higher dose per treatment frequently to a more conformal volume, which results in more convenience, less cost and often reduced side effects for our cancer patients.

There are specialized techniques that can be used in certain disease sites and allow us to achieve the advantages of hypofractionation. These include high dose rate (HDR) surface brachytherapy, which uses a radioactive source to deliver a precise superficial dose to cancers on the body's surface (such as skin cancers). Stereotactic techniques rotate the radiation beam around a single or small number of points, providing a high dose of radiation to a small area with a much lower dose to surrounding tissue, enabling the delivery of hypofractionated treatment as well. This modality, when used for meningiomas or cancers spread to the brain, is termed stereotactic radiosurgery (SRS), and for cancers that have started in or spread to the lung or other parts of the body, it is known as stereotactic body radiation therapy (SBRT).

Our department has also expanded the use of radiation therapy to treat benign conditions that can be life threatening, although not cancerous.

We have collaborated with NGMC's Interventional Neuroradiology specialists in Gainesville to treat vascular abnormalities such as arteriovenous malformations with SRS. Preparations are also underway to expand our SRS capabilities to treat trigeminal neuralgia, a painful condition of cranial nerves.

Brachytherapy treatments involve placing a radioactive source in close proximity to the cancer to target a high dose of radiation to the cancer, while sparing surrounding structures from significant radiation exposure. Our department's expertise in brachytherapy has advanced to the point that other regional radiation centers refer their patients to NGMC for these specialized procedures, particularly for gynecologic cancers. We have also started treating prostate cancer with HDR brachytherapy, which allows more control over the dose distribution in certain situations and additional convenience for patients.

Developments outside of our specialty have improved treatment as well. New systemic therapies such as antibodies and immune checkpoint inhibitors are being developed at a rapid pace and the physicians in our department are always cognizant of advantageous ways to combine these treatments with radiation therapy. On the molecular front, individual genetic analysis of each patient's cancer can help guide treatment, particularly for breast and prostate cancer.

At NGMC, we are proud of the work and protocols we've put into place to continue safely delivering radiation therapy to our patients throughout the pandemic. We will continue to grow with our patient population and advances in the oncology field and, in 2023, plan to add another linear accelerator treatment machine to our Braselton location. We look forward to continuing to provide quality radiation therapy to the northeast Georgia community in the years ahead.

# CANCER RESEARCH AND CLINICAL TRIALS



## Holly Jones, Ph.D.

Director of Research Administration, NGMC

After a year of navigating uncertainty and challenges amidst the COVID-19 pandemic, we entered 2021 with new insights, strength and opportunities. We have maintained our commitment here at Northeast Georgia Medical Center (NGMC) to providing the highest level of care and cutting-edge therapies for our patients within their local community.

Additionally, we engaged in research and clinical trials that offer our patients new options in cancer diagnosis and treatment. Throughout the year, we have continued to prioritize safety and innovation to ensure our patients have access to the quality cancer care they require. Through our participation in clinical trials and research, our program has access to an international community of cancer clinicians with whom we can collaborate to ensure that we're utilizing the latest techniques and most recent discoveries to improve patient care now and for generations to come.

Each year, we offer our cancer patients the opportunity to participate in around 40 clinical trials of the most promising, breakthrough new therapies. Our expert physician specialists in medical, surgical, radiation and gynecologic oncology offer leading trials involving new pharmaceutical agents and treatment methods for virtually all tumor sites including breast, lung and prostate cancers – three of the most commonly diagnosed cancer types.

In 2021, we expanded our clinical trial portfolio to include new enrollments in the NCI COVID-19 registry and several new drug treatment trials addressing outcomes in cancer types such as breast, lung and colorectal, as well as novel first-line treatments for ovarian cancer. NGMC was recognized as a top-enrolling site for the national TMIST breast cancer screening trial for the second year in a row. Additionally, our program was recently selected as one of the first ten sites in the world for a new advanced breast cancer drug treatment trial opportunity. NGMC's Cancer Services also met and exceeded the

research gold standard requirements for the American College of Surgeons Commission on Cancer (CoC) accreditation. Our clinical trial portfolio will grow over the next six months to include new industry sponsored trials and novel radiation therapy studies addressing patient outcomes in small-cell lung cancer, non-small-cell lung cancer and breast cancer therapies.

The majority of our research studies are supported by funding from the National Cancer Institute and top industry sponsors. Furthermore, NGMC is proud to be designated as a Research Network Member of the GA NCORP, Georgia's National Cancer Institute (NCI) Community Oncology Research Program. As one of only 34 NCI national, community-based research programs, the GA NCORP research network provides Georgians in urban and rural areas access to state-of-the-art cancer prevention, screening, control, treatment and post-treatment trials.

Additionally, NGMC has continued its network affiliation with Winship Cancer Institute of Emory University. As a network affiliate, our research team has collaborated with Emory leaders within a world-class, internationally recognized cancer program to implement new clinical trial options for our patients, align quality metrics related to clinical research and gain access to outstanding educational opportunities for patients, physicians and our research staff.

Winship Cancer Institute of Emory University is the state's only NCI-designated comprehensive cancer center. By aligning our cancer care services and innovative research programs, we are able to offer our patients at NGMC access to more than 275 clinical trials led by nationally recognized physician investigators.

We will continue to provide cancer care and research opportunities of the highest quality in our community, and we look forward to the year ahead.

# CANCER REGISTRY REPORT



**Dianne Kosmala, BA, CTR**

Cancer Registry, NGMC

2021 has been a year of ups and downs. In January, many of us were excited to receive our COVID vaccinations, in the hope we were on the downhill side of the pandemic, only to see it rear its ugly head with the Delta variant.

Northeast Georgia Medical Center's (NGMC) Cancer Registry continues to facilitate virtual Tumor Conference & Chest Board meetings with an average multidisciplinary attendance of 45 per meeting. These meetings have given our physicians the ability to present more than 500 cases so far between the two conferences.

Our Chest Board meets two Mondays per month, while our general Tumor Conference meets every Wednesday, giving our physicians ample opportunity to share and collaborate among cases. All cases are discussed using NCCN Treatment Guidelines, along with AJCC staging criteria and other needs such as genetic testing or supportive care.

We are very thankful to all who attend and present cases, as well as those who work behind the scenes to help our patients receive the best care possible. Our top goal was to complete all 2019 cases and, not only were we able to reach this goal, but we also completed all 2020 cases as well.

In 2019, our Cancer Services program treated more than 2,600 new cases of cancer at NGMC. The top sites treated were female breast, lung, prostate, colon, corpus uteri & thyroid, with the top two sites separated by only by 48 cases. In our 13-county service area, Hall had 802 cases, Jackson 276, Habersham 259, Gwinnett 195, Barrow 188, White 177 and Stephens 137 cases. There were also patients who traveled from North Carolina, South Carolina, Florida and Alabama for treatment at NGMC.

Many thanks to our Registry staff for all they do for the cancer program here at NGMC.

# IMPROVING LUNG CANCER SCREENING AWARENESS AND VOLUMES



## Rami Arfoosh, MD

Pulmonary and Sleep Specialists of Northeast Georgia  
Chest Board Chair, NGMC

We have noticed a significant decrease in healthcare screenings over the last two years. Both state and national data support this claim, noting that many people have avoided routine screenings, were unable to obtain appointments for screenings, or have been afraid to access healthcare facilities since the COVID-19 pandemic began in 2020.

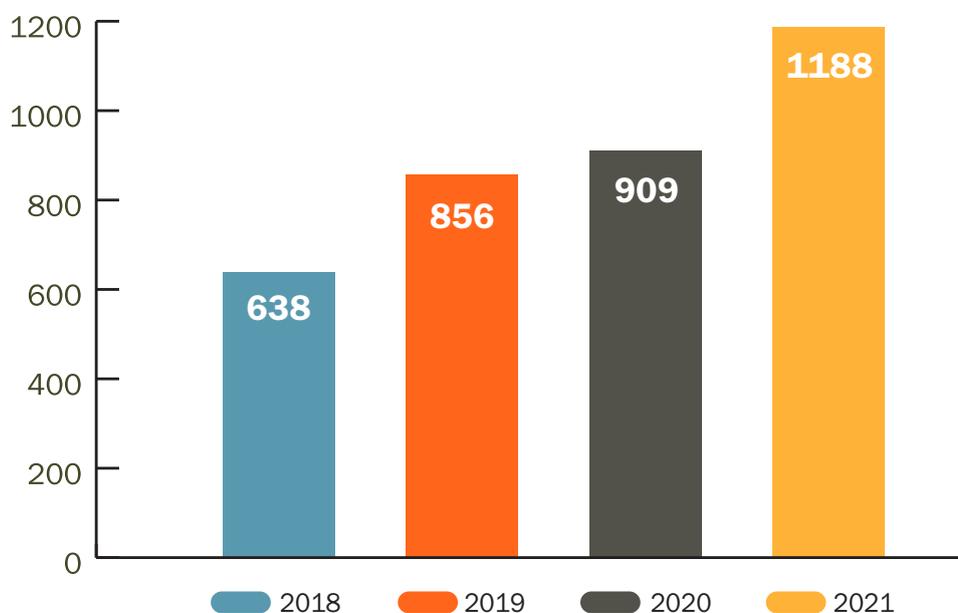
Recognizing the potential impact of decreasing screening volumes and the conceivable increases in late stage lung cancer diagnoses, Northeast Georgia Medical Center's (NGMC) Cancer Committee set a program goal for 2021 to increase the proportion of adults who get screened for lung cancer in our service area by 10% (from 2020 pandemic volumes).

Historically, the volumes of lung cancer screening exams have gradually increased each year since

2018, but the uncertainty of pandemic has caused concerns among providers involved in lung cancer care, as well as patients. We utilized evidence-based interventions to create increased public and provider awareness about the continued need for lung cancer screenings during the pandemic. Our methods included social media posts, radio and newspaper spotlights, employee screening days and health fairs throughout the year.

Despite the COVID-19 surges of 2021, we saw an increase in lung cancer screening exams at NGMC from both pre-pandemic and pandemic levels. Our program not only reached the goal of increasing lung cancer screening by 10% from pandemic volumes, but we also saw a 39% increase from the pre-pandemic volumes of 2019.

NGMC LDCT Screenings (2018-2021)

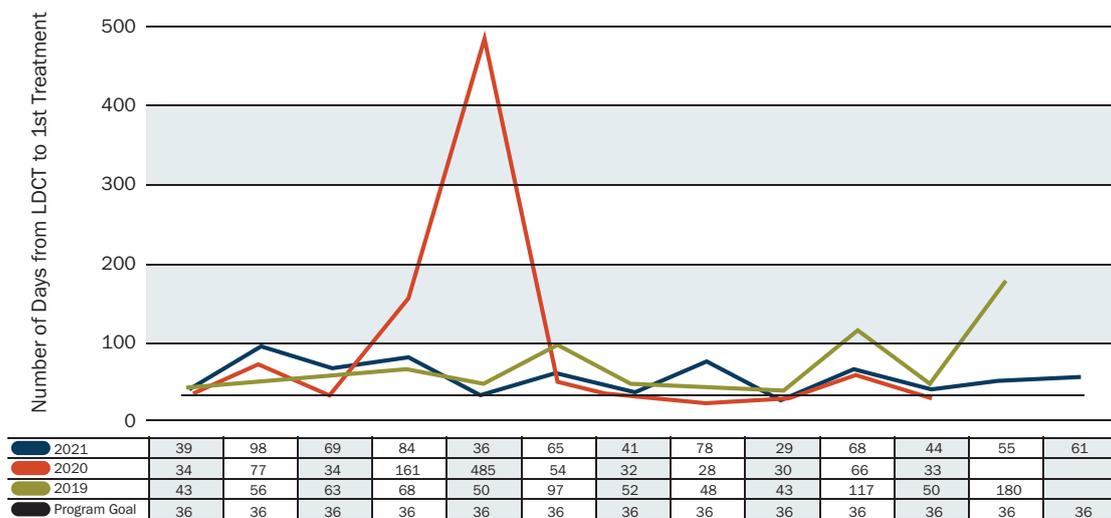


Continue on next page

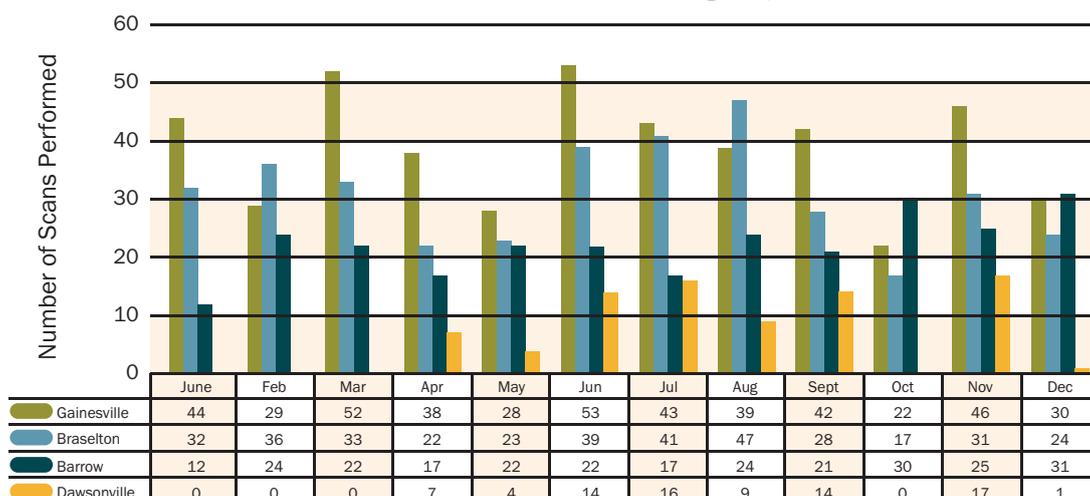
As a continuation of our 2020 cancer program goal, patients diagnosed with lung cancer in 2021 through the lung cancer screening program were reviewed for timeliness of treatment. Specifically, the goal for screening scan to treatment days was set at 36 days. At the end of 2021, the average number of days for screening scan to treatment was 59, as compared to the average of 94 days in 2020. Although this is a decrease from 2020, our providers, patients and others throughout the community continue to experience challenges caused by the COVID-19 pandemic.

Members of NGMC’s lung cancer screening program have worked to mitigate delays, successfully navigating 92 high-risk patients in 2021 from scan to diagnosis or from scan to follow-up scan by focusing on the barriers and trends identified in 2020. Purposely, the group continued to focus on timely pulmonary function testing, pre-operative clearance and time between multidisciplinary appointments to continue to reduce delays in care.

2019 - 2021 Time to Treatment LDCT Program



2021 NGMC LDCT Screenings by Site



# RETURN TO BREAST CANCER SCREENING COLLABORATIVE AND CLINICAL STUDY



**Shivang Danak, MD**

Internal Medicine Resident  
NGMC Graduate  
Medical Education

The early detection of cancer is essential to improving the length and quality of life for all populations (American Cancer Society, 2021). Unfortunately, as the American Cancer Society (ACS) reports, one of the most significant impacts of the COVID-19 pandemic has been the dramatic reductions of routine cancer screenings across the United States. Closures or limited hours of radiology departments, public fears of contracting COVID-19 at a medical facility, and loss of medical insurance and/or employment were a few of the major barriers for obtaining routine cancer screenings in 2020 (American College of Radiology, 2021). Overall, the reduction in screening and delays in treatment are estimated to result in 10,000 additional deaths from breast and colorectal cancers in the next many years across the United States (Sharpless, 2020) (DeGroff et al. 2021).

Closer to home, a study was conducted in 32 Georgia Community Health Centers comparing 2018-2019 mammography screening rates to 2019-2020. The study reflected similar results of national cancer organizations indicating that mammography screening rates dropped nearly 8% in 2020 in Georgia (Fedewa et al. 2021). Adding to the concerns of public health and oncology professionals across the nation were the potential for widening breast cancer screening and care disparities for vulnerable populations throughout the state of Georgia.

To help reverse the routine breast cancer screening losses experienced at the onset of the pandemic in 2020, Northeast Georgia Medical Center (NGMC) united with the ACS and the American College of Surgeons Commission on Cancer in a six-month quality improvement project and clinical study. The project's goal was to increase mammography screening rates by 10% over pre-pandemic/pandemic rates using evidence-based interventions. Specifically, our goal at NGMC was to perform 217 additional screening mammograms each month from Jun.1 through Nov. 30, 2021 and to directly target women and providers of women in rural, low-income and minority populations in the northeast Georgia area who may have been



**Celine Fadel, DO**

Internal Medicine Resident  
NGMC Graduate  
Medical Education

adversely affected by the pandemic. The quality improvement tool utilized during the Return to Breast Cancer Screening Collaborative was Plan, Do, Study, and Act or PDSA (Institute for Healthcare Improvement, 2021).

During the six-month project, we identified several positive outcomes. First, we developed and maintained effective partnerships with stakeholders. Despite competing clinical priorities, each stakeholder remained involved, innovative and passionate about the goal of increasing screening mammography in our community. As a way to reach various audiences, our physician leads recruited trusted providers to deliver messages promoting screening in several different languages. We worked with NGMC's public relations team to film and post these messages on our social media outlets.

Another successful strategy for the project included matching evidence-based interventions with stakeholders experienced in the work. During stakeholder discussions, the leads for specific interventions were established and collaboration with other stakeholders decided. For example, the physician leads worked on dissemination of guidelines, provider performance, group education and one-on-one education. The collaborating departments participating in these physician-led interventions included public relations, information technology, radiology and nursing, as well as community partners.

Third, with the changing social and health landscape, stakeholders had the ability to adjust and modify planned interventions quickly using the PDSA quality improvement model. In this case, mammography screening capacity was assessed each month.

As previously mentioned, a community event was converted to individual outreach when COVID-19 cases increased locally. Furthermore, we increased the use of social media, print and radio outreach to adjust for the decrease in public events.

Continue on next page

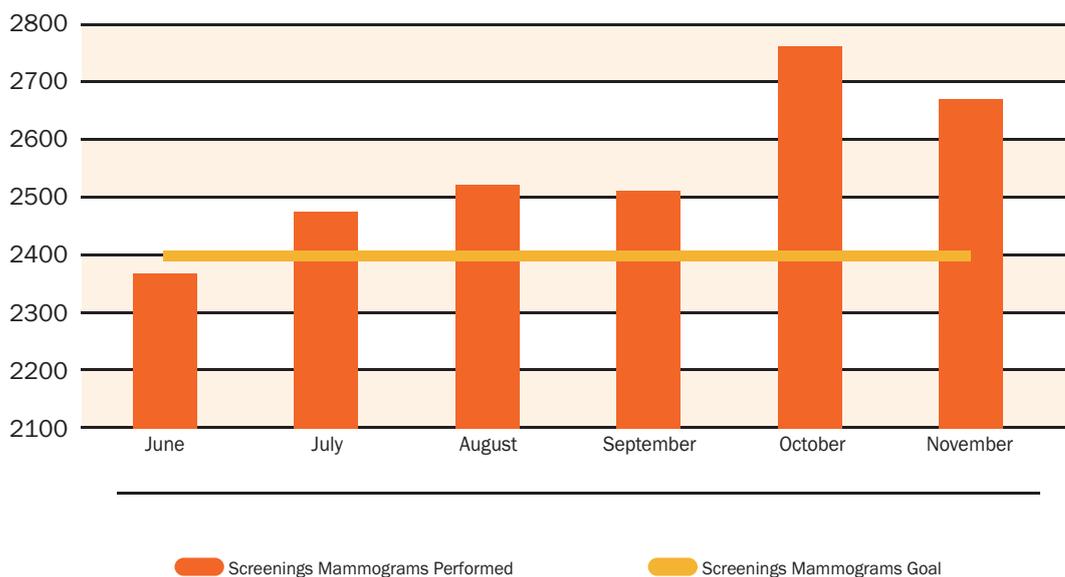
However, not all planned interventions were able to be modified. Our planned luncheons with community faith leaders were canceled due to COVID-19 and social distancing concerns, and nurse practitioners were unable to meet due to increased workloads.

Another successful approach for the project included frequent communication in many different paths to the oncology healthcare team not involved as stakeholders. Updates in tumor conference, metrics at huddle boards, staff meeting updates and Cancer Committee report-outs in April, August and December were some of the strategies employed by the project stakeholders to foster communication across oncology specialties.

As a result of the participation in our Return to Breast Screening Learning Collaborative and Clinical Study at NGMC, we achieved our goal of increasing screening mammograms by 10% of pre-pandemic/pandemic volumes.

Furthermore, we exceeded our six-month project goal of increasing screening mammograms to 1,302 by an additional 920 mammograms.

### Return to Screening: Breast Screening Mammograms 2021



Overall, disparities and barriers to screenings were addressed with the support of community partnerships and physician leads. Throughout the project timeline, interdisciplinary team members participated and presented in both national and state level learning collaborative sessions to learn from other teams and share best practices. Key factors for the success of the project include engaged and passionate stakeholders, the use of the PDSA quality improvement tool and the use of data to inform and adjust all aspects of the work, as needed.

# BREAST CANCER QUALITY IMPROVEMENT



**Priscilla Strom, MD**

Longstreet Clinic - Department of General Surgery

A quality metric in the surgical care of breast cancer is having the most appropriate procedure performed at the patient's initial operation. Key decisions include whether the procedure should be a lumpectomy or mastectomy, whether an excision with wide or narrower margins is appropriate and whether a sentinel node biopsy needs to be done. And, in the modern era of breast cancer care, it's just as important to consider the potential benefit of neoadjuvant chemotherapy either in place of or in addition to surgery.

To make these decisions, it is important to have an accurate diagnosis PRIOR to any surgical procedure. Accordingly, the American College of Surgeons (ACS) Commission on Cancer (CoC) established the following quality measure:

### ACS CoC Quality of Care 2017

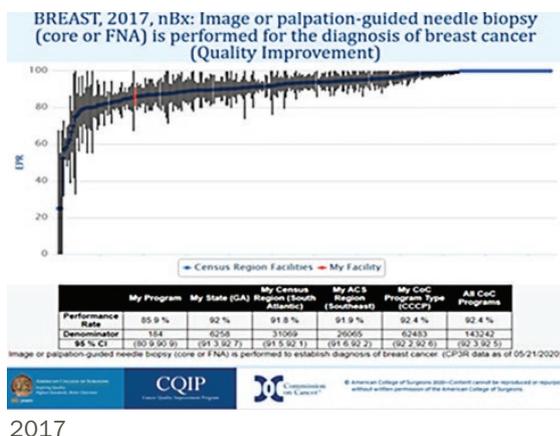
Image or palpation-guided needle biopsy (core or FNA) is performed for the diagnosis of breast cancer (Benchmark 80%)

NGMC's Cancer Services program does currently meet the benchmark requirement of 80%, but lags behind other programs. In 2017, NGMC's rate was 85.9%; and in 2018, 89.5%. We set a goal for 2021 of 92%. There are multiple reasons that a preoperative diagnosis of breast cancer may not be possible. Patients may refuse a needle biopsy; there may be

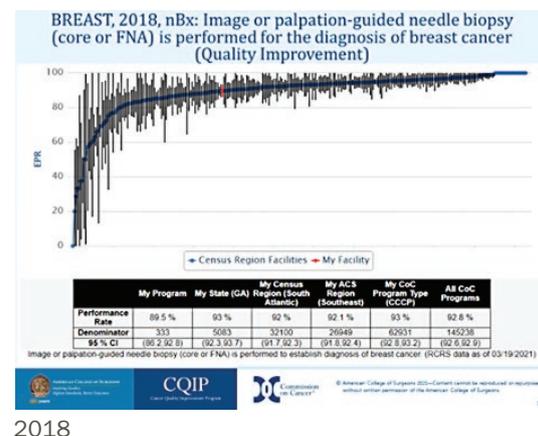
technical obstacles (lesion too close to skin or chest wall or inability to visualize lesion well enough for targeting); the biopsied lesion may be heterogenous (an atypical lesion may upgrade to in situ or invasive cancer with full excision); and so on. Other issues could be physician-specific (not aware of standard or simple non-adherence) or access-related (e.g., stereotactic biopsy not available in local community).

To identify the obstacles that may impact meeting/exceeding our goal, two surgical residents (Drs. Tyler Harvell and Dylan Schwindt) and a medical resident (Dr. Oluseyi Abidoye) have joined me in a quality improvement research project to review NGMC patients undergoing excisional breast surgery (excisional biopsy, lumpectomy or mastectomy). Utilizing the Plan-Do-Study-Act quality improvement tool, we will perform retrospective chart reviews to evaluate why patients who underwent surgery without a preoperative biopsy did so, as well as to evaluate the upgrade rate from benign to malignant disease depending on size of lesion and method of needle biopsy.

These results will guide our educational outreach to surgeons with a goal of having a diagnosis of breast cancer prior to surgical decision-making. It may also help increase the number of patients who can avoid surgery altogether by confirming a benign lesion by needle biopsy alone.



2017



2018

# REMOVING BARRIERS TO CANCER CARE



**Zameer Gill, MD**

Northeast Georgia Physicians Group Palliative Care

For people diagnosed with cancer, there can be unmet needs and potential barriers to care that impact treatment and survivorship. Each year, Northeast Georgia Medical Center's (NGMC) Cancer Committee strives to improve the lives of people with cancer by identifying barriers to care and working to remove them, when possible. For 2021, our committee chose to focus on barriers to care for adolescents and young adults, as well as food insecurity for underserved outpatients.

## **Barriers to Care for Adolescents and Young Adults with Cancer**

A review of current literature revealed that resources for adolescents and young adults with cancer (AYA) were not clearly identified in most hospitals that do not specialize in pediatric cancer. Additionally, a review of 63 patients diagnosed with cancer between the ages of 16 to 39 at NGMC in 2019 revealed that the most common diagnoses were cancers of the thyroid, breast and cervix -- and 75% of these identified as women. Last, less than half of the AYA patients had documented discussions or assessments by providers or nurses in the following domains: spiritual distress, personal relationships, survivorship concerns, body image concerns or practical concerns. Based on this literature and patient review, our program identified a lack of resources, healthcare provider knowledge deficits and insufficient support as barriers for AYA with cancer.

In 2021, we developed an interdisciplinary collaborative group to review current evidence-based screening tools, develop a referral process, identify metrics and suggest electronic medical record (EMR) changes to enhance collaboration between providers that care for AYA patients. We also provided three educational opportunities on the topics of survivorship, fertility and sexuality to our oncology providers.

These were held in conjunction with pre-existing tumor conferences, which helped maximize physician and staff time. Additionally, our team created an online repository of AYA resources on the Oncology Services intranet, as well as on our public-facing consumer website. Last, with the help of our Oncology Research team, we began to build the framework for the submission of a clinical study to take place in 2022.

## **Food Insecurity in Underserved Adults in Outpatient Infusion**

Historically, the patients receiving cancer care in NGMC's Outpatient Infusion department are underserved and at-risk for food insecurity. Reports from patients, social workers, dietitians and nurses have shown food needs for these patients were unmet on a consistent basis in 2020. During examination of patient charts, we determined that the assessment and communication of food needs were not regularly documented by nurses in the EMR. To protect patient privacy and dignity, we adjusted our EMR to include two food insecurity questions that would be answered by the patient via an iPad upon arrival to Outpatient Infusion. This information supplied by the patient would populate to the EMR, where the nurse would then review the questions and provide resources and help to the patient if a food insecurity was identified.

Additionally, we formed a partnership with a community food bank to deliver 35 emergent food boxes each month to NGMC's Oncology Services. The boxes are then distributed to Outpatient Infusion, Northeast Georgia Physicians Group's Gynecologic Oncology Infusion suite and other clinical areas where we have identified patients in need. The boxes also included the number and operational hours for the food bank.

# TREATING OBESITY IN ENDOMETRIAL CANCER PATIENTS



**Amy Smith, MSN, RN, ONC, CBN**  
Bariatric Services, NGMC

Endometrial cancer patients struggling with weight issues are at greater risk for cardiovascular disease, even after successful cancer treatment. In fact, cardiovascular disease is one of the leading causes of death among endometrial cancer survivors.

Not only is obesity linked to 13 types of cancers, it is also the leading risk factor for the development of endometrial cancer. This is partially because fat tissue increases estrogen levels.

Obesity is defined as a body mass index (BMI) of 30 or greater and is based on a person's height and weight, which can indicate the severity of the disease of obesity. The CDC reports that 35% of our population in the state of Georgia was obese in 2020.

Obesity is caused by many factors including genetics, metabolism, environment, hormones, medication side effects, emotional or stress eating and more. Obesity is linked to 40 to 60 other chronic health conditions, including both heart disease and cancers. By treating the root cause of obesity, we can improve or eradicate many of these issues and reduce the patient's risk of developing certain cancers, which also reduces their cardiac risk factors. Unfortunately, we tend to see a decrease in preventative health screenings in women with weight gain, which puts them at risk for missing early detection.

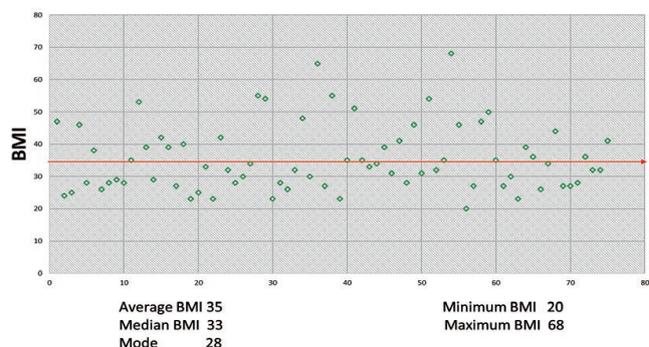


**Andrew Green, MD**  
Northeast Georgia Physicians Group Gynecologic Oncology

Given the risk factors Amy mentioned above, our Cancer Services program recommends obesity treatment for all women diagnosed and successfully treated for endometrial cancers who have a BMI of 30 or greater. Treatment may include nutritional counseling with a dietician, medical weight loss with a physician who is board certified in obesity medicine, or a consult with a metabolic and bariatric surgeon (for those with a BMI of 35 or greater and at least one health condition associated with obesity).

Most women with endometrial cancer related to obesity can be cured, as it is often the diseases associated with obesity that shorten life expectancy. By making efforts to assist these patients with weight loss, we're able to help improve their overall health, and can literally add back years of good, quality life.

The nutritional counseling and consultation program we've added to the treatment plan has greatly assisted us in this effort, and we look forward to seeing even more positive outcomes for our patients.



Prevalence of Obesity in Women with Endometrial Cancer at NGMC -  
January 2021- July 2021

# 2019 CANCER REGISTRY DATA

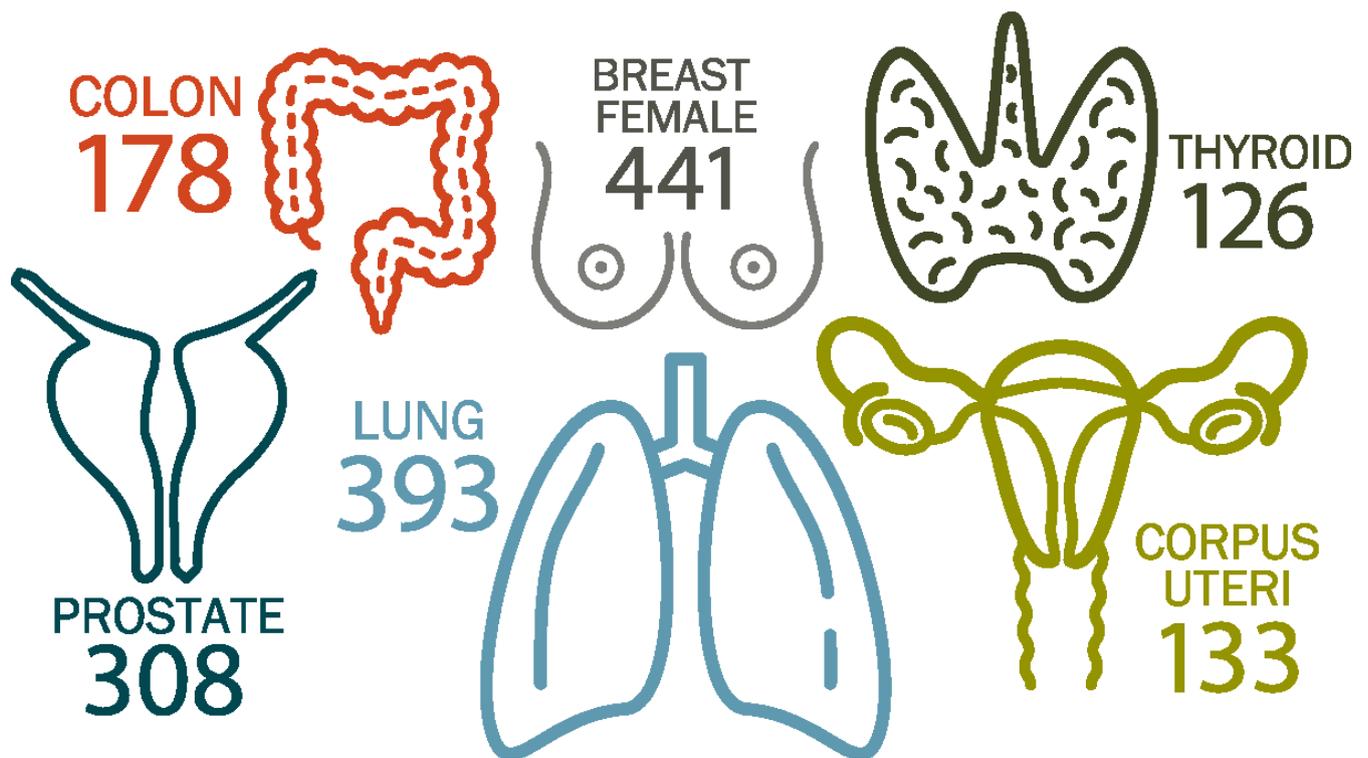
Site	Analytic	Non Analytic	Male	Female	AJCC Stage					NA	Totals
					0	I	II	III	IV		
<b>ORAL CAVITY, PHARYNX</b>	47	16	49	14	1	7	6	13	17	3	63
--Tongue	12	4	12	4	0	1	2	4	5	0	16
--Salivary Gland	7	2	8	1	0	0	0	4	3	0	9
--Gum, Other Mouth	6	7	8	5	1	0	0	1	4	0	13
--Tonsil	15	1	13	3	0	6	2	3	2	2	16
<b>DIGESTIVE SYSTEM</b>	413	99	304	208	9	73	75	87	104	19	512
--Esophagus	24	11	31	4	0	3	2	5	10	2	35
--Stomach	37	3	24	16	1	5	6	8	12	0	40
--Small Intestine	16	2	14	4	0	1	0	4	2	6	18
--Colon, Rectum, Anus	224	49	150	123	8	49	55	47	44	0	273
----Colon Excluding Rectum	171	27	102	96	5	44	41	30	37	0	198
-----Cecum	40	5	23	22	1	9	11	10	3	0	45
-----Appendix	16	0	6	10	0	7	1	1	5	0	16
-----Ascending Colon	34	2	18	18	2	5	12	6	6	0	36
-----Hepatic Flexure	10	0	3	7	0	2	4	2	2	0	10
-----Transverse Colon	11	4	10	5	0	3	2	2	2	0	15
-----Descending Colon	5	1	4	2	0	3	0	0	2	0	6
-----Sigmoid Colon	45	4	26	23	2	15	9	9	9	0	49
-----Large Intestine, NOS	6	11	11	6	0	0	0	0	6	0	17
----Rectosigmoid, Rectum, Anus	53	22	48	27	3	5	14	17	7	0	75
-----Rectosigmoid Junction	7	3	4	6	1	1	1	1	2	0	10
-----Rectum	42	13	40	15	2	4	11	14	5	0	55
--Liver, Gallbladder, Intrahep Bile Duct	52	14	46	20	0	7	6	12	12	7	66
----Liver	35	11	37	9	0	6	5	8	9	3	46
----Gallbladder	5	1	2	4	0	0	1	2	1	0	6
----Intrahepatic Bile Duct	6	1	3	4	0	0	0	1	2	2	7
----Other Biliary	6	1	4	3	0	1	0	1	0	2	7
--Pancreas	56	13	38	31	0	8	6	10	23	2	69
<b>RESPIRATORY SYSTEM</b>	403	43	224	222	1	91	40	72	152	23	446
--Larynx	11	3	10	4	0	2	2	3	2	0	14
--Lung and Bronchus	392	39	213	218	1	89	38	69	150	23	431
----Non-Small Cell	301	20	163	158	1	81	34	53	98	18	321
----Small Cell	67	11	31	47	0	2	4	15	40	3	78
----Other Lung	24	8	19	13	0	6	0	1	12	2	32
<b>SOFT TISSUE INCLUDING HEART</b>	8	4	10	2	0	1	1	0	2	4	12
<b>SKIN</b>	46	21	35	32	13	11	5	5	7	1	67
-- Skin: Melanoma	44	20	33	31	13	10	5	5	7	0	64

Continue on next page

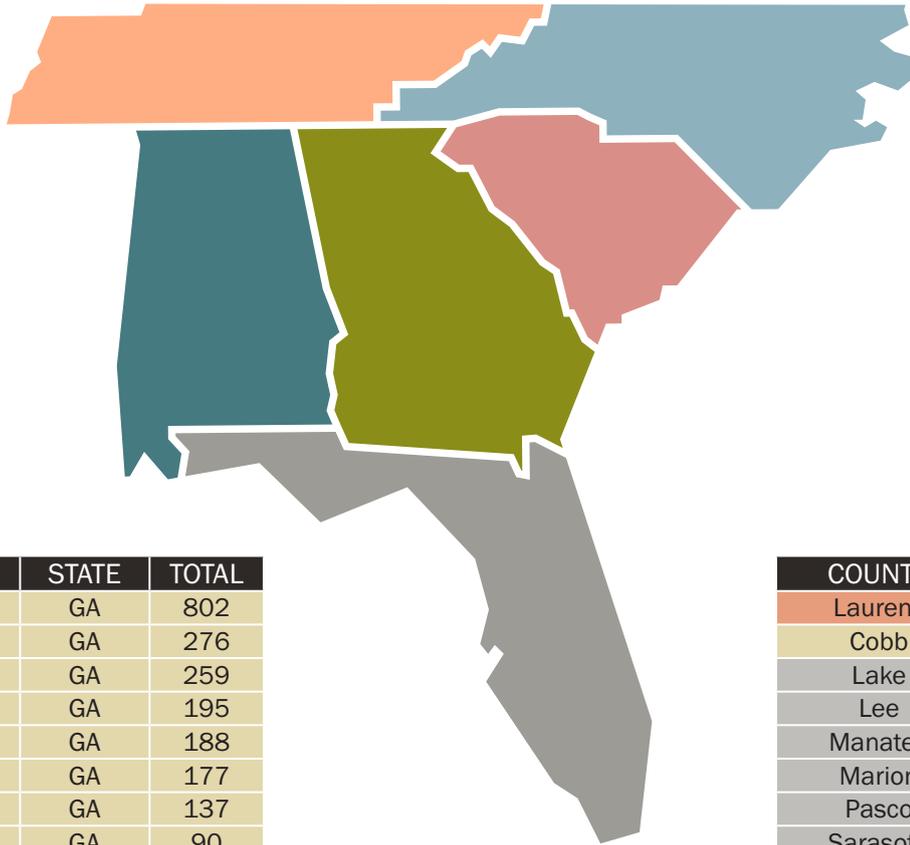
BREAST	451	46	11	486	76	260	56	20	16	7	497
--Female Breast	441	45	0	486	73	256	54	19	16	7	486
--Male Breast	10	1	11	0	3	4	2	1	0	0	11
FEMALE GENITAL SYSTEM	223	71	0	294	0	130	19	39	24	4	294
--Cervix Uteri	30	8	0	38	0	14	5	6	4	1	38
--Corpus, Uterus: NOS	133	6	0	139	0	100	7	10	12	0	139
----Corpus Uteri	132	6	0	138	0	99	7	10	12	0	138
--Ovary	44	18	0	62	0	10	5	21	5	1	62
--Vulva	12	35	0	47	0	6	2	1	1	2	47
MALE GENITAL SYSTEM	316	163	479	0	1	41	137	103	30	2	479
--Prostate	308	160	468	0	0	38	136	102	30	1	468
--Testis	6	0	6	0	0	3	1	1	0	0	6
URINARY SYSTEM	192	57	180	69	41	76	30	14	17	5	249
--Urinary Bladder	92	35	105	22	39	24	17	2	2	2	127
--Kidney	88	20	69	39	0	48	12	9	14	3	108
--Ureter	8	1	5	4	1	4	1	2	0	0	9
BRAIN, OTHER NERVOUS SYSTEM	91	43	44	90	0	0	0	0	0	91	134
--Brain: Malignant	31	4	17	18	0	0	0	0	0	31	35
--Brain-CNS: Benign, Borderline	59	39	27	71	0	0	0	0	0	59	98
ENDOCRINE SYSTEM	146	32	54	124	0	101	16	1	6	17	178
--Thyroid	126	5	36	95	0	101	14	1	5	1	131
--Endocrine: Benign, Borderline	14	25	13	26	0	0	0	0	0	14	39
LYMPHOMA	89	19	63	45	0	25	18	12	22	4	108
--Hodgkin Lymphoma	10	2	6	6	0	2	4	2	1	0	12
----Hodgkin - Nodal	10	2	6	6	0	2	4	2	1	0	12
--Non-Hodgkin Lymphoma	79	17	57	39	0	23	14	10	21	4	96
----NHL - Nodal	47	12	40	19	0	14	9	9	12	0	59
----NHL - Extranodal	32	5	17	20	0	9	5	1	9	4	37
MYELOMA	36	7	17	26	0	0	0	0	0	36	43
LEUKEMIA	38	28	34	32	0	1	0	0	2	31	66
--Lymphocytic Leukemia	11	15	17	9	0	1	0	0	2	4	26
----Chronic Lymphocytic Leukemia	7	15	15	7	0	1	0	0	2	0	22
--Non-Lymphocytic Leukemia	25	10	16	19	0	0	0	0	0	25	35
----Acute Myeloid Leukemia	16	3	8	11	0	0	0	0	0	16	19
----Chronic Myeloid Leukemia	7	7	8	6	0	0	0	0	0	7	14
MESOTHELIOMA	6	1	6	1	0	2	1	0	1	1	7
MISCELLANEOUS	100	106	116	90	0	0	0	0	0	100	206
TOTALS	2607	760	1629	1738	142	820	404	366	401	348	3367

\*Sites w/less than 5 cases removed

# NGMC'S TOP SIX CANCER SITES FOR 2019



# CANCER DIAGNOSIS BY COUNTY



COUNTY	STATE	TOTAL
Hall	GA	802
Jackson	GA	276
Habersham	GA	259
Gwinnett	GA	195
Barrow	GA	188
White	GA	177
Stephens	GA	137
Lumpkin	GA	90
Dawson	GA	77
Rabun	GA	77
Banks	GA	52
Towns	GA	44
Union	GA	44
Franklin	GA	22
Clarke	GA	18
Cherokee	NC	15
Forsyth	GA	15
Clay	NC	11
Elbert	GA	11
Hart	GA	11
Fulton	GA	10

COUNTY	STATE	TOTAL
Walton	GA	10
Fannin	GA	6
Macon	NC	6
Madison	GA	5
Oconee	SC	4
Gilmer	GA	4
Oconee	GA	4
Morgan	GA	3
Cherokee	GA	2
De Kalb	GA	2
Pinellas	FL	2
Wilkes	GA	2
Anderson	SC	1
Beaufort	SC	1
Candler	GA	1
Dale	AL	1
Anderson	SC	1
Beaufort	SC	1
Candler	GA	1
Dale	AL	1
Chatham	GA	1

COUNTY	STATE	TOTAL
Laurens	SC	1
Cobb	GA	1
Lake	FL	1
Lee	FL	1
Manatee	FL	1
Marion	FL	1
Pasco	FL	1
Sarasota	FL	1
Volusia	FL	1
Polk	TN	1
Lincoln	GA	1
Oglethorpe	GA	1
Paulding	GA	1
Pickens	GA	1
Putnam	GA	1
Dominican Republic	DR	1
Rockdale	GA	1
Spalding	GA	1
Telfair	GA	1
Washington	GA	1
Unknown		1

# PULMONOLOGIST RECOGNIZED AS CURE® LUNG CANCER HERO



**Nomination letter by Andria Caton, MSN, RN, CHPN, OCN**  
Cancer Services Administration, NGMC

Rami Arfoosh, MD, chair of Northeast Georgia Medical Center (NGMC)'s Chest Board and pulmonologist with Pulmonary and Sleep Specialists of Northeast Georgia, has been defending people with abnormal lung cancer screening exams for over four years in the northeast Georgia region. With high rates of incidence and mortality, lung cancer is a dangerous and often silent killer for the residents of our community. For Dr. Arfoosh, lung cancer screening, quick referrals and prompt treatment for newly diagnosed people are at the forefront of his daily work.

Under his leadership of Chest Board, an interdisciplinary team that reviews abnormal lung cancer screening exams, he has directed the evaluations of more than 200 abnormal lung scans, assisted with the identification of more than 50 early stage lung cancers, gradually improved the time to treatment for those newly diagnosed with lung cancer and facilitated prompt referrals for people during the pandemic. By the end of 2020, Dr. Arfoosh and the Chest Board team had completed more lung cancer screening exam evaluations than the previous year and cut the time to treatment almost in half. Dr. Arfoosh's achievements in early detection and prompt treatment of lung cancer are most certainly rooted in his ability to collaborate with the interdisciplinary team to identify the best evidence-based approaches to care.

His visionary concept of implementing a lung nodule clinic to detect earlier stage lung cancers for people in northeast Georgia that do not fit into the traditional lung screening guidelines is currently in the early phases of development.

## VISIONARY

a person that inspires others to pursue a long-term concept

## DEFENDER

a person that protects others from danger

Dr. Arfoosh cares about people after a lung cancer diagnosis. Dr. Arfoosh lends his assistance and backing to the monthly lung cancer support group in the community. Often patients in his practice, he frequently speaks to the group on survivorship issues and long-term side effects of lung cancer treatment.



In addition to his passion for early detection and prompt treatment of lung cancer, Dr. Arfoosh is a life-long learner. He takes time to mentor physician residents, physician assistant students and medical students in his daily pulmonary practice. During Chest Board discussions, he can be heard taking additional time to explain radiographic findings, review clinical data and reinforce evidence-based guidelines with the students. Dr. Arfoosh ensures the success of lung cancer care in the future by investing his time with residents and students today.

The people of northeast Georgia are fortunate to have Dr. Rami Arfoosh, a dedicated visionary defender in the fight against lung cancer.

**Dr. Arfoosh relentlessly strives to improve overall lung cancer care in the northeast Georgia community.**

# BARROW COUNTY SCHOOLS NOMINATED AS CURE<sup>®</sup> LUNG CANCER HERO



## **Nomination letter by Andria Caton, MSN, RN, CHPN, OCN**

Cancer Services Administration, NGMC

Educators, nurses, and community members can work together to accomplish great things in lung cancer prevention. In 2018, Ellen Petree, the Barrow County School System, and local healthcare leaders identified a serious health concern for the residents of Barrow County, Ga.

Based on data revealed in a regional Community Needs Assessment conducted by Truven Health Analytics, both death rates and incidence rates of lung cancer were identified as significant health concerns in Barrow County. Furthermore, the incidence and death rates of lung cancer were occurring at higher rates per 100,000 people than the state and national benchmarks. Knowing that tobacco use typically begins in middle and high school age youth, Ellen, the Barrow County School System and local healthcare leaders searched and reviewed evidence-based tobacco use prevention programs to implement in elementary schools.

Together the group selected TAR WARS, a tobacco use prevention program created by the American Academy of Family Physicians, as the intervention. The program was implemented by Ellen Petree, along with community nurses and local healthcare leaders, to reduce the number of future youth tobacco users in Barrow County. With Ellen's leadership and guidance, the Barrow County School System, teachers, school nurses and more than 2,000 4th and 5th grade students successfully participated in TAR WARS each year for the past three years, including the pandemic.

Prior to the pandemic, Ellen coordinated the presentation of the TAR WARS program by local nurses and school nurses in the 4th and 5th grade classrooms of each of the nine Barrow County elementary schools. Pre and post-tests were administered to assess learning gains and to refine future presentations. Concerned about losing momentum with the students during the pandemic, Ellen organized a virtual delivery of the TAR WARS program with local oncology nurses and worked to have the pre and post-tests administered online.

To peak interest, increase motivation and to fuel student participation, Ellen also coordinated a poster contest every year to showcase the students' learning after the TAR WARS presentations. Winning posters were selected through a Facebook public vote, and students were awarded cash prizes.

Unfortunately, personal habits that lead to the development of lung cancer start at an early age. To spare a future generation the burden and devastation of lung cancer, consistent early tobacco use prevention interventions are needed in our communities. Ellen Petree, local healthcare leaders and leaders of the Barrow County School System are inspired to improve the long-term health of the community in which they live and work by focusing on the youth today.

# THE SISTERHOOD OF THE COVID-19 ANTIBODY INFUSION CLINIC



**Andria Caton, MSN, RN, CHPN, OCN**

Cancer Services Administration, NGMC

At the height of the pandemic in 2020, there was an increased need for bamlanivimab therapy in the northeast Georgia community. Bamlanivimab, an experimental monoclonal antibody, was granted emergency use by the FDA for treatment of mild to moderate COVID-19 from November 2020 until emergency use approval ended in April 2021.

At the time, the drug was being administered in Northeast Georgia Medical Center's (NGMC) Emergency Department and one Urgent Care location, but the volumes of COVID-19 positive patients were exceeding the capacity of those clinical areas. NGMC's director of the pharmacy was charged with opening an area on the main campus at NGMC Gainesville to administer the infusions. Because of our expertise with monoclonal antibody infusions, the pharmacy director asked for my help, along with the lead oncology nurse from our infusion clinic, to manage this new infusion location.

We converted a vending area to a four-chair infusion clinic in approximately three weeks. Without an operational budget, the treatment chairs, IV poles, computers on wheels, air scrubber, shelving, portable sink, table, vital sign machine and privacy screens were borrowed from multiple clinical areas within NGMC. Many different areas were involved in the planning for this project, including clinic operations, IV pharmacy, plant operations, IT support, registration, infection control, security and environmental services.

As there were no FTEs allocated for the clinic, we sent messages to nurse managers across the organization for help to staff the clinic. The response was overwhelming. Nurses from hospital-based physician practices, resource pool, outpatient infusion, women and children's, clinical documentation, utilization review, medical nursing units and even the cardiac stress lab signed up to work in the clinic.

As oncology nurses with many years of familiarity administering monoclonal antibody infusions, we shared our personal experiences, provided education, resources and patient education materials to support the knowledge gaps of the nurses administering the infusion. After training and orientation, this group of diverse nurses donned N-95 masks, face shields and gowns to provide the infusions to people diagnosed with mild to moderate COVID-19 symptoms. We were able to keep the clinic open most weekdays and Saturdays for over 50 days in a four-month time period. Overall, there were 185 infusions administered in our four-chair clinic.

Skilled, fresh-faced, positive, upbeat, engaged, eager, compassionate, empathetic, agile and life-long learners are just a few adjectives to describe the qualities of these special nurses. There were countless stories of these special nurses finding warm blankets, helping patients to the restroom, waiting after clinic hours for the patient's ride home to arrive, assisting patients to their cars, swift wheelchair trips to the Emergency Department and helpful updates to worried families over the phone.

The positive patient outcomes these nurses helped achieve were truly amazing. After four full months of operation, the hospitalization rate for patients with COVID-19 complications after receiving the bamlanivimab infusion in the clinic was only 3%.

Although not a typical role or assignment, oncology nurses played an integral role and lead in mitigating COVID-19 hospitalizations in our community. After the pandemic fades into the past, the positive impact and memories of this special group of nurses will live on in the hearts and minds of the patients and families they touched, thanks to teamwork and a one-hour infusion.



Northeast Georgia Medical Center