

CANCER SERVICES ANNUAL REPORT | FY22

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MESSAGE FROM ONCOLOGY ADMINISTRATION



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

I'm very pleased to present Northeast Georgia Medical Center's (NGMC) 2022 Cancer Services Annual Report. This report contains detailed information showcasing the activities of our program as a whole.

As you review the report, you'll see that NGMC's Cancer Services program covers many aspects. We offer research-based cancer care and follow nationally approved treatment guidelines, allowing patients the opportunity to remain close to home while receiving the most current cancer treatment options.

In 2022, there were many important and impactful initiatives undertaken by our cancer services team to improve the health of the community. Several of our projects focused on increasing cancer screenings and early detection. Much effort was spent on improving documentation of a person's

smoking history to help identify qualified patients for lung cancer screenings. We focused our attention on specific patient populations, such as adolescents and young adults, to assess the level of care the patient population received and how each patient's needs were met.

We developed strategies to address any current barriers of care for our colorectal patients. In addition, we improved our support services to ensure we are offering these important aspects of care.

Each of these accomplishments highlights our goal of providing the highest quality cancer care possible for our patients throughout the region.

While it's been an exciting year for us to look back on, we are already looking forward to what the future holds for our patients, community and collaborating physicians.

Each of these accomplishments highlights our goal of providing the highest quality cancer care possible for our patients throughout the region.

2022 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)

Richard LoCicero, MD - Medical Oncologist; Andrew Johnson, MD (Alternate)

Craig Baden, MD - Radiation Oncologist; Adnan Elhammali, MD (Alternate)

Michele Fortner, MBA, MS, RT(R)(T), 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; Dusty Call, 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; Charles Nash, MD (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

MaySarih Ndobe - American Cancer Society Representative

Penny McCall - Oncology Services Coordinator

CANCER CARE IN 2022



Charles Nash III, MD, FACP
Medical Director, NGMC's Cancer Services

Northeast Georgia Medical Center (NGMC)'s Cancer Services Program continues its growth towards becoming the preferred regional destination for comprehensive cancer screening, diagnostic and treatment services. The details shared in the articles included in this annual report are provided by an extraordinary and capable team of individuals at NGMC to whom we are so grateful. But our emphasis is surely the personalized care our patients have come to expect.

The year 2022 brought a renewed effort to expand genetic testing for patients and families at high risk for a cancer diagnosis as well as to explore new and innovative treatment options for patients with advanced or complicated cancers. A multidisciplinary team of physicians from medical oncology, gynecologic oncology, radiation oncology and pathology worked to implement standardized genetic testing protocols to improve our understanding of patient risk and treatment planning decision making.

An exciting marker of program health is the development and education of new and youthful health care providers.

Several internal medicine residents currently serving in the post-graduate medical education program at NGHS worked with our Cancer Services team to assist in cancer research and cancer control activities. Publications in the medical literature have come out of their work. Several of these physicians are moving on from NGMC to further their subspecialty education in medical oncology and hematology in fellowship programs such as the University of Florida, Virginia Commonwealth University and the Mayo Clinic. We are encouraged by their passion and desire to progress in our field.

NGMC has a very active research program that gives our patients access to advanced modern clinical trial opportunities from several sources including the National Cancer Institute Community Oncology Research Program (GA-NCORP), Emory Winship Cancer Center and multiple pharmaceutical firms. Our clinical research team meets monthly to update our research protocol offerings to make sure patients have access to the latest advances available.

With excitement and anticipation, we look forward to a year of continued growth and success through our new initiatives — all while continuing our mission of improving the health of our community in all we do.

CANCER RESEARCH AND CLINICAL TRIALS



Holly Jones, Ph.D.Director of Research Administration, NGMC

As a native resident of Northeast Georgia, I am fully invested in the mission of Northeast Georgia Health System (NGHS) and the important role we each play in improving the health of our community in all we do. It is truly exciting to see and support the growth of the health system and witness our cancer patients receiving the best care they can receive.

Throughout 2022, we maintained our commitment to offering the highest level of care and cutting-edge therapies for patients in our local community. We engaged in research and clinical trials that offered new options in cancer diagnosis and treatment for our patients. Throughout the year, we prioritized safety and innovation to ensure that our patients had access to the quality cancer care that they require. We invested in new state-of-the-art technology and launched a new clinical trial management system, allowing for custom management of patient care on a clinical trial. We implemented a new eRegulatory system that allows for paperless management of clinical trial regulatory and compliance files. In addition, we adopted the use of a new mobile app called HighEnroll® for any staff or community member to download and view the current clinical trial offerings available to patients at NGHS. By participating in clinical trials and research, our team

gained access to an international community of cancer clinicians – ensuring our access to the latest techniques, trials and discoveries and improving our patient's care for generations.

In 2022, we offered patients the opportunity to participate in more than 25 clinical trials involving some 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 the most commonly diagnosed breast, lung and prostate cancers. We expanded our clinical trial portfolio to include new enrollments in several new drug treatment trials addressing outcomes in breast, lung and colorectal cancer as well as novel first-line treatments for ovarian and lung cancer. We were recognized as a top-enrolling site for the national TMIST breast cancer screening trial for the third year in a row. Our site was recently selected to host the statewide Annual Investigators and Administrators Meeting of the GA NCORP, Georgia's National Cancer Institute (NCI) Community Oncology Research Program. We met and exceeded the research standard requirements for our American College of Surgeons Commission on Cancer (CoC) accreditation. Our clinical trial portfolio will grow over the next 6 months to include new industry sponsored drug treatment trials and novel radiation therapy studies addressing patient outcomes in prostate cancer, non-small-cell lung cancer, ovarian cancer, and advanced breast cancer therapies. In addition, we plan to expand the number of national (NCI Sponsored) cancer care delivery research (CCDR) studies designed to improve clinical outcomes and patient well-being. For example, one such study will address improvements in head and neck cancer survivor care. A second study will address the financial impacts of cancer care on individuals and families.

The majority of our research studies are supported by funding from the National Cancer Institute and top pharmaceutical industry sponsors. Furthermore, NGMC is proud to be designated a Research Network Member of the GA CORE and the GA NCORP, Georgia's National Cancer Institute (NCI) Community Oncology Research Program.

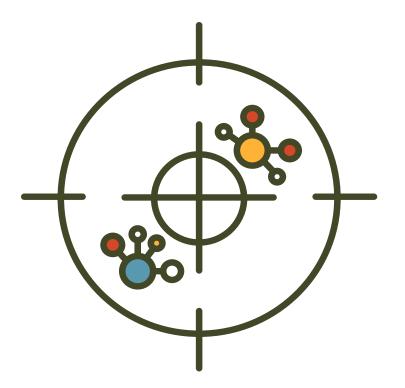
I am fully invested in the mission of Northeast Georgia Health System (NGHS) and the important role we each play in improving the health of our community in all we do.

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.

In addition, Northeast Georgia Medical Center (NGMC) continued the alignment of research goals with the Winship Cancer Institute of Emory University. Our research team 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 to gain access to outstanding educational opportunities for patients, physicians, and our research staff.

Emory Winship is the state of Georgia's National Cancer Institute-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 over 300 clinical trials led by nationally recognized physician investigators.

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



RADIATION ONCOLOGY ADVANCEMENTS



Geoffrey Weidner, MDNortheast Georgia Physicians Group Radiation Oncology Radiation Oncology Medical Director, NGMC

Radiation oncology treatments at Northeast Georgia Health System (NGHS) have continued to advance in 2022. The coronavirus pandemic once presented a challenge for our operations but with the ebbing of the pandemic we shifted toward a normal routine. We continue to offer high quality, advanced radiation techniques with a focus on individualized patient care.

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

In several disease sites there are specialized techniques that allow us to achieve the advantages of hypofractionation. Stereotactic techniques rotate the radiation beam around a single or small number of points providing a high dose 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 termed stereotactic body radiation therapy (SBRT).

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

We have collaborated with Interventional Neuroradiology specialists at Northeast Georgia Medical Center (NGMC) in Gainesville to continue to treat vascular abnormalities such as arteriovenous malformations with SRS. We have also

expanded our SRS capabilities to treat trigeminal neuralgia, a painful condition of the nerve that supplies sensation to the face which has been successfully treated with SRS. 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. In 2022, we began treating prostate cancer with high dose rate brachytherapy. This procedure involves guiding radioactive sources into catheters in a specific pattern, giving a very precise and focused dose of radiation.

Our department has welcomed a new radiation oncologist this year, Dr. Brooke Leachman, who has extensive experience with HDR for prostate cancer. Through collaboration with our neurosurgery colleagues, we added a new modality called GammaTile to our brachytherapy repertoire. GammaTile involves placing radioactive sources in the walls of the cavity created when a metastasis is surgically removed from the brain, delivering a localized dose of radiation to patients who may have had prior radiation to the brain.

At NGMC, we are proud of the work of our team to safely deliver radiation therapy 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 department. We look forward to continuing to provide high quality radiation therapy to the Northeast Georgia community in the years ahead.

CANCER REGISTRY REPORT



Dianne Kosmala, BA, CTR Lead Tumor Registrar, NGMC

As we wrap up 2022 and get ready for 2023, we can look at our data from the first year of COVID-19, 2020. We were able to close out our abstracting of 2020 data in December of 2021.

Comparing the data from 2019 to 2020, we observed a drop of 200 total cases as expected due to the COVID-19 pandemic. With the Covid-19 pandemic and the closure of facilities for over a month, this reduced the number of screening procedures, surgeries and other day to day processes.

In 2020, our Cancer Services program treated 2,415 new cases of cancer at NGMC.

The interesting comparison in the statistics was in the numbers for our top six sites. Breast cases dropped 7%, Lung dropped 13%, Prostate 13%, Colon 28%, Thyroid 3.9% & Corpus Uteri 4.7%, with Thyroid & Corpus Uteri swapping positions, as they have the last few years.

We are looking to closing our 2021 cases in late December to early January.

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 team recently acquired two remote abstractors from Texas and Mississippi. This year, our on-site abstractor passed her CTR exam and began working full time. I also work beside them as an abstractor. We have two staff members working on case follow-ups, averaging over a thousand cases each month. Both are studying to become Certified Registrars.

In 2022, we continued our remote Tumor Conference and Chest Boards with great attendance for both conferences. We added a GYN conference which meets the 1st & 4th Wednesdays and is lead by Dr Green.

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

BREAST CASES DROPPED 7%

COLON CASES DROPPED 70%

DROPPED 13%

HYROID CASE DROPPED 3.9%

PROSTATE CASES DROPPED 13%

CORPUS UTERI CASES DROPPED 4.7%

NUTRITION INTERVENTION



Chrissy Williams, RDOncology Dietician

Whether you have just received a new diagnosis of cancer, are a survivor or have family members with cancer, nutrition is an essential part of one's health journey. Nutrition plays an important role impacting a patient's quality of life, treatment tolerance, hospital admissions/readmissions, admission length of stay and mortality. The role of nutrition is one that can look different across the continuum of care and is not always as simple as "eat better, feel better."

It is the dietitian's role to assess nutrition related factors and conditions that change throughout the course of treatment for a patient and guide the patient accordingly. The dietitian provides support to the patient and family members by educating, assessing nutrition's impact symptoms, providing medical nutrition therapy, understanding the patient's nutrition past and present, monitoring malnutrition risk, initiating enteral intervention and guiding the patient to optimize their nutrition status throughout the course of treatment. All NGMC Radiation Therapy patients are screened for nutrition risk on a set of developed criteria and seen by the dietitian per RN/MD consult and patient request. Patients at the greatest risk of developing nutrition impact symptoms are those diagnosed with cancer to the Head and Neck, Lung, Esophagus, Pancreas, Gastrointestinal Tract and undergoing concurrent chemo-radiation.

The dietitian is present weekly at the NGPG Radiation Therapy Centers in Toccoa, Braselton and Gainesville. Between March and November 2022 there were over 1,025 patient visits inclusive of phone consults, in person initial assessments, follow ups and post treatment nutrition counseling. The RD is also available to Outpatient Infusion per consult basis.

Individualized nutrition intervention is vital for improving quality of life before, during and after treatment as well as supporting survival. We encourage everyone to adopt a healthy-balanced diet, consume less processed meat, minimize alcohol intake and consume more plant-based foods.

Nutrition plays an important role

impacting
a patient's
quality of life

ONCOLOGY REHABILITATION



Heather Wilsey, PT, DPTOutpatient Rehabilitation Supervisor

Cancer, and the treatment of cancer, often results in changes that can be addressed and improved through efforts of rehabilitation professionals. The reality is that most cancer survivors can benefit from a referral to a rehabilitation professional at some point in their cancer journey related to pain, swelling, mobility limitations, swallowing dysfunction, cognitive changes, and numerous other issues.

Northeast Georgia Medical Center's (NGMC) physical, occupational and speech therapists have experience serving cancer survivors throughout the continuum of care. In FY22, NGMC Rehabilitation Services provided therapy to all types of cancer survivors, in every setting of the organization, with focus on enhancing care in three areas: lymphedema therapy, head and neck cancer therapy, and pelvic floor therapy.

Lymphedema affects approximately 1 in 5 patients treated for breast cancer, and has a significant negative impact on patients' quality of life after breast cancer treatment. NGMC has Certified Lymphedema Therapists (CLTs) in both the inpatient and outpatient settings. Our cancer survivors receiving physical therapy for lymphedema increased by 20% during FY22.

NGMC now has two PORi Certified Oncology Rehabilitation Therapists (SLP's) who offer advanced clinical care to head and neck cancer survivors.

Survivors receiving speech therapy has increased 15% during FY22 including interventions such as:

- treatments to address the impact of surgical changes including laryngectomies, radical neck dissections, glossectomies, etc. and impact on swallowing/speaking functions
- swallowing imaging to establish safe diet levels and provide compensatory swallowing strategies
- treatment of dysphagia related to radiation fibrosis, lymphedema, and trismus
- manual lymphatic drainage for lymphedema to reduce impact on swallowing skills.

As of FY22, NGMC now has two outpatient, pelvic floor physical therapists with advanced training who can offer rehabilitation services for individuals who have undergone medical treatments for breast, prostate, gynecological, and colorectal cancers. Pelvic floor physical therapy works on addressing and minimizing urinary incontinence, bowel dysfunction, sexual function/dysfunction, pain, cancer related fatigue and osteoporosis.

Oncology rehabilitation is a necessary component to maximize quality of life for many cancer survivors, and NGMC is proud to be growing and developing therapy providers in the areas described above.

ONCOLOGY NAVIGATION

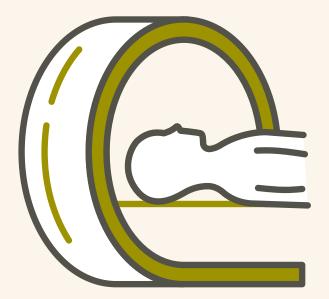


Alicia Harrison, RN
Navigation & Radiation Therapy Supervisor

Cancer diagnoses and care did not stop during the COVID-19 pandemic and the need for support greatly increased. The oncology navigator program helps ensure patients and caregivers have the guidance they need from initial diagnosis to survivorship. Oncology navigators help patients with coordination of care, address barriers to care, and empower patients and caregiver to actively participate in their care by providing education and help with understanding of their diagnosis.

In 2022, oncology navigation assisted over 2,700 patients. When a patient is diagnosed with cancer they can be overwhelmed, frightened and unsure of their next steps. The oncology navigators use a distress tool developed by the National Comprehensive Cancer Network to determine the patient's greatest need and how to best address these needs. Distress can affect everyone on a daily basis, but a cancer diagnosis can compound day to day distress. There are many different sources of distress including emotional, physical, practical, and social determents in patient's lives. The distress tool allows navigation to identify and address these needs by providing the resources, referrals, and education needed to decrease distress and help patients cope through their cancer diagnosis and treatment.

In 2022, oncology navigation 2,700 patients. assisted over



ONCOLOGY NURSING



Kimberly Tyner-Meeks, RN, OCN
Outpatient Infusion Coordinator

Prior to the pandemic, people receiving intravenous treatments for cancer were admitted to a 42-bed inpatient unit or treated in a 13-chair outpatient infusion unit at Northeast Georgia Medical Center. During 2020, COVID-19 care at NGMC displaced the inpatient oncology unit and clinical staff. Many experienced oncology nurses in both areas either transferred permanently to other units or to private physician practices. In 2021, the medical oncology unit (S4D) was re-established, and positions were filled in the outpatient unit. The challenge of staffing both units with competent oncology nurses began to evolve quickly. First, an assessment of experience and learning needs of the nurses was conducted. As anticipated, over 50% of the nurses were identified as being a novice to oncology care. Although nurses administering chemotherapy and immunotherapy had completed the ONS/ONCC Chemotherapy Immunotherapy course, most nurses felt ill-equipped to manage the care of people with cancer. Safe handling, medication administration, and side effect management were also identified as learning needs.

The S4D Nurse Educator, Outpatient Infusion Coordinator, and Assistant Nurse Manager for Oncology services conducted a review of evidence-based information that supported the use of multiple strategies in the development and implementation of oncology competency validation.

With the learning needs information and the literature review, the inpatient educator, outpatient infusion coordinator, and oncology assistant nurse manager, collaborated with the simulation team to help better prepare nurses for the challenges faced in clinical practice.

Next, workshops were developed with the objectives of accomplishing the following:

- Improve teamwork dynamics between novice and proficient oncology nurses from inpatient and outpatient settings
- Standardize and advance organizational oncology nurse competency, enhance patient safety, and improve oncology patient outcomes
- Create a non-threatening way of skill acquisition and confirmation of oncology competency for nurses of all stages of clinical proficiency

Workshops included the topics of oncology emergencies, hazardous spill management, hypersensitivity reactions, extravasation management, and oncology quality improvement projects. The methods of learning included simulation with standard patients, escape boxes, lecture, post simulation debriefing, and learner evaluations.

Project objectives were realized, and the outcomes achieved included five workshops held with 23 nurses attending. Learner evaluations reflected that 95% strongly agreed that the objectives had been met.

Based on post assessment review and participant input, future workshop enhancements for 2023 include:

- Increasing the complexity of simulations and escape room boxes for proficient nurses.
- Continued and more frequent collaboration between inpatient and outpatient units.





2022 ONCOLOGY EDUCATIONAL OFFERINGS



Kimberly Tyner-Meeks, RN, OCN Coordinator Outpatient Infusion

Date hours	Title of Program	CME/NCPD
1.6.2022	Ethics Theater - Fair Innings	0.5
1.7.2022	Emerging Cellular & Targeted therapy options for the management of Large B-Cell Lymphoma	1.0
2.15.2022	Understanding Evolving Treatment Strategies in the Newly Diagnosed multiple myeloma patients	1.0
4.14.2022	Ethics Theater - When a medical error becomes a crime	0.5
5.3.2022	Ethics - How we get caught up in Ethical Violations	1.0
5.17.2022	A New Chapter for Oral Precision Therapies in Thyroid Cancer: RET Inhibitors	1.0
6.30.2022	Jewish Cultural Awareness and Sensitivity	1.0
7.14.2022	Ethics Theater - Blurred Lines	0.5
7.26.2022	ONS Genomics Chapter Program	0
8.11.2022	Ethics Theater - I do Solemnly Swear?	0
8.18.2022	Raising the Bar for Patient Outcomes With Transcription Inhibition and Other New Options in the Treatment Arsenal for SCLC: Rationale, Mechanisms of Action, Latest Data, and Practicalities of Clinical Use in Oncology Practice	1.0
9.15.2022	Improving Interprofessional Management of Sickle Cell Disease (SCD) with Disease- Directed Therapies	1.0
10.10.2022	A Multidisciplinary Approach to Research	1.0
10.13.2022	Ethics Theater: Errors Under the Sea	0
11.8.2022	Practice Changing Advances with Selective MET Inhibitors in METex14-altered NSCLC	1.0
11.10.2022	Ethics Theater: Mississippi Appendectomy	0
12.9.2022	Advances in Cervical Cancer: Addressing Unmet Needs in an Evolving Therapeutic Landscape	1.0

PROSTATE CANCER



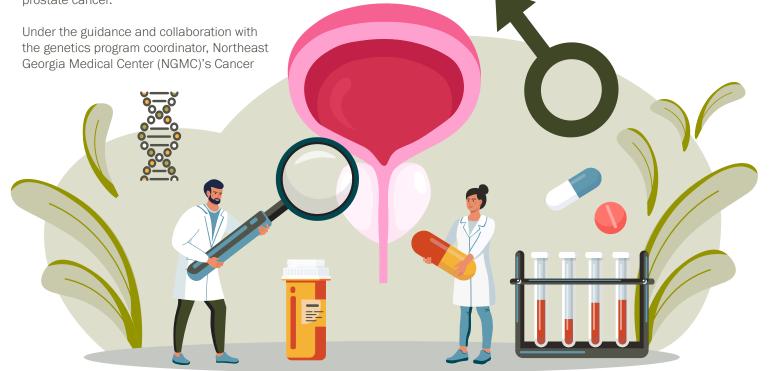
Oluseyi Abidoye, MD Internal Medicine Resident

Prostate cancer is the most common cancer among men and is the second leading cause of cancer deaths in American men. Genetic predisposition to cancer is increasingly noted as a cause in many cancers, including prostate cancer. Genetic testing and counseling are recommended in certain groups of men with or without a personal family history of prostate, breast, colon, ovarian, or pancreatic cancers - especially those diagnosed under age 50 or men with metastatic prostate cancer.

A recent study of 3,600 men with prostate cancer found that 17% had inherited genetic mutations that may have contributed to their cancer. Of those men, 31% of the mutations were found in the BRCA genes. Because of this, familiarity and understanding of the most current clinical guidelines for genetic risk assessment are of great importance in the survivorship care of men with prostate cancer. The National Comprehensive Cancer Network (NCCN) guidelines recommends genetic assessment/counseling for genetic/familial high-risk individuals diagnosed with prostate cancer.

Committee selected prostate cancer as a standard to review, identified the NCCN guidelines for risk evaluations and utilized medical records to confirm referrals for evaluation and/or genetic counseling. A total of 42 cases for prostate cancer were reviewed in 2020. All 42 of the cases were under the age of 60 at diagnosis. A total of 13 of the cases met the genetic/familial high-risk assessment based on NCCN guidelines. Of the 13 of the cases, only 1 case was referred for genetic counseling which was 7% compliance with NCCN guidelines for genetic counseling/referral. In terms of high-penetrance prostate cancer risk screening, none of the 13 cases meeting genetic/familial high-risk were screened.

Based on our findings, it is clear we are not meeting our goal of referring high risk patients for genetic testing and counseling. With increased referrals and improved documentation with increased awareness, we should be able to achieve 100% compliance in the future.



PANCREATIC CANCER



Pancreatic cancer is the fourth leading cause of cancer related death in the United States. The 2021 National Comprehensive Cancer Network (NCCN) guidelines for pancreatic adenocarcinoma recommend the evaluation, diagnosis, treatment and post treatment follow up for patients with pancreatic cancer. The NCCN recommends patients diagnosed with pancreatic adenocarcinoma have tumor gene profiling, germline testing done in addition to microsatellite instability testing in all patients with locally advanced, recurrent or metastatic adenocarcinoma. However, compliance with the testing guideline is variable and not strictly adhered to and followed.

NGMC's Cancer Committee selected pancreatic cancer to review, assessed the NCCN guidelines for risk evaluation, analyzed medical records to confirm referrals for evaluation, genetic counseling and testing. This quality improvement retrospective review identified patients diagnosed with pancreatic adenocarcinoma from January 2020 to December 2020 at NGMC to assess the germline testing and microsatellite instability.

There were a total of 37 patient cases identified with pancreatic adenocarcinoma at NGMC in 2020. All 37 cases were within the ages of 40-90 years at diagnosis and had a median age of 70.

A total of six cases or 16% of the disease population met the genetic and familial high-risk assessment based on the NCCN guideline stated above. Of the six cases, one patient received germline testing which was 16% compliance with NCCN guideline for genetic counseling/referral.

Based on these findings, it is evident that the NCCN recommendations of referring high risk patients for genetic testing and counseling was not met. There was a significant number of patients for whom tumor gene profiling or germline testing had never been attempted as per recommended NCCN guidelines. However, it should also be noted that 60% of the diagnosis were over the age of 70 years old and most presented with painless jaundice and advanced pancreatic cancer. A majority of patients were referred to palliative and hospice medicine after declining further treatment due to age and advanced stage of pancreatic cancer at the time of diagnosis.

Potential limitations that could be further explored in future studies include willingness of the patient to undergo genetic testing or counseling, and whether there are other clinical reasons to not pursue further testing.

JUST ASK

ASSESSMENT OF SMOKING IN NEW CANCER PATIENTS PDSA QUALITY IMPROVEMENT PROJECT AND CLINICAL STUDY AT NGMC



Nicole McGuire, MD
Internal Medicine Resident

Evidence demonstrates that smoking cessation improves the prognosis and all mortality causes up to 45% for people with cancer. Successful models for smoking cessation interventions like the "5 As" (ASK, Advise, Assist, Assess, and Arrange follow-up) and brief interventions (ASK, Advise, Refer) have been available to healthcare providers for many years. Unfortunately, many healthcare providers do not routinely assess smoking status in people with cancer and do not routinely offer smoking cessation interventions. Apart from the potential adverse health outcomes, smoking at the time of a cancer diagnosis is also estimated to add over 3 billion dollars in additional cancer treatment costs for patients and healthcare organizations annually. To help address smoking in cancer care, the Cancer Program at NGMC participated in the CoC quality improvement project and clinical study, Just ASK, with goals to assess smoking status and to have complete documentation of smoking assessments reinforced as a standard of care for all patients presenting with a new cancer diagnosis.

To begin the study, initial data was collected for 2020 using the Epic Slicer/Dicer tool. Smoking assessments were incomplete on approximately 35% of newly diagnosed patients with cancer. Additionally, it was discovered that approximately 3% had no documentation of tobacco history.

Next, team members for the project were recruited and included Oncology Registry, Oncology Research, Nicole McGuire, MD, Internal Medicine Resident, Dr. Swathi Kanakamedala, MD, Internal Medicine Resident, and Andria Caton, MSN, RN, OCN, CHPN. To better understand the specific issues of documentation, smoking assessment documentation was reviewed for each newly diagnosed patient with cancer in 2022. Using the PDSA model of quality improvement and evidence-based strategies and guidelines, the team developed and implemented several interventions over the course of the year to target specific findings of the real time smoking assessment reviews. Interventions included provider education at tumor conferences, oncology nurse education at staff meetings, peri-op and pre-op nurse education, review of each newly diagnosed patient with cancer for smoking assessment completion in 2022 with monthly updates on smoking assessment completion, recognition of providers that consistently have complete tobacco history documentation in tumor conference, in-person rounding with physicians and physician staff at local practices, and tobacco history upgrades in Epic. In-person rounding, tobacco history Epic upgrades, and reinforcing the importance of smoking history documentation were most instrumental for the project and study's success.

Below are the monthly results of smoking history documentation for the newly diagnosed patients with cancer. Over the year, the percentage of incomplete smoking histories has decreased to 20%. Additionally, the number of patients without absent documentation of smoking history was reduced from 3% to 2%.



IMPROVING LUNG CANCER SCREENING Utilization through a National collaborative effort



Swathi Kanakamedala, DO
Internal Medicine Resident

Lung cancer is the leading cause of cancer deaths in the United States. Over 50% of patients are diagnosed at an advanced stage, corresponding to a 5-year survival of less than 20%, compared to 56% for early stages. Thus, early identification and screening of high-risk individuals is vital. Lung cancer screening (LCS) with low dose computed tomography (LDCT) was introduced in 2013 and updated in 2021. Current guidelines recommend annual LDCT screening in adults aged 50 to 80 years who have a 20 pack-year or more smoking history and are current smokers or quit in the last 15 years. In 2015, the National Health Interview Survey showed only 3.9% of eligible adults underwent screening.

The underutilization of LDCT is seen nationwide, with Georgia ranked poorly amongst other states. According to the CDC, Georgia fell below the national average for 5-year survival rates and lung cancer was determined to be the leading cause of death in 2018. The primary barriers identified in literature include failure of electronic medical records (EMR) to notify providers of eligible patients, concerns of high false positive rates, patient refusal and lack of patient and provider awareness. The purpose of this quality improvement project was to improve LCS in primary care clinics at Northeast Georgia Medical Center (NGMC) by addressing these barriers.

Over the past two years, the cancer program at NGMC has increased its focus on LCS. The 2020 cancer program goal was to decrease the time from scan to first treatment, and the 2021 cancer program goal was to increase the number of LCS by 10%. Building on these previous efforts and coordinated by the American College of Radiology, a multidisciplinary organizational team was formed in March 2022 to participate in a year-long national collaborative to improve LCS utilization. Team members included oncology leadership, pulmonologists, radiologists, internal medicine residents, radiology leadership, quality specialists, clinical informatics, operational excellence, public relations, and patient access. Specifically, the team's overall goal was to

increase the number of LDCT performed, from an average of 28 scans per week to an average of 42 scans per week (50%) by December 2022.

Through cause-and-effect learning, the team identified four key drivers impacting organizational utilization of LCS: consistent way to identify eligible patients, understanding the process/value of lung cancer screening among providers and patients, flexible access options for rural areas, and streamlined order process (initial and subsequent). Next, interventions and countermeasures were explored for each key driver using the PDSA method. Then, the selected interventions and countermeasures were implemented by the team over a six-month period and evaluated weekly.

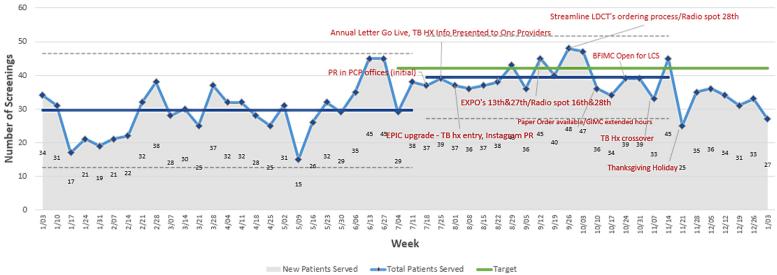
Multi-modal interventions included: creating a provider reference guide, updating public facing LDCT materials with QR code to check eligibility, updating the LDCT paper order, participating in community health fairs, multiple social media posts, radio programs, increasing LDCT materials in primary care offices, upgrades to tobacco history collection fields in the EMR, recording tobacco history in the EMR at the time of LDCT scan, educating providers and nurses about tobacco history collection, instituting an annual reminder letter for returning patients, and involving internal medicine residents in their clinics.

Internal medicine residents were instrumental in creating the provider reference guide and public facing materials, creating provider awareness, and public awareness through social media. Specifically, in the primary care resident clinics, the goal was to double monthly LDCT rates from an average of $8\ to\ 16\ scans$.

After five months of implementation, average monthly LDCTs had increased to 37 scans monthly. For the overall project, the average number of LDCT scans surpassed the starting average of 28 scans each week for 39 weeks and exceeded the goal of 42 scans each week for 7 weeks.







This multi-modal approach to increase LCS with LDCT scans in a single healthcare system is feasible and associated with short-term improvements. Analysis is ongoing along with mechanisms to maintain sustainability of these improvements.









(Left to right) Oncology Research, Registry, and Administration celebrating Lung Cancer Awareness Month. Dr. Swathi Kanakamedala, Angie Caton, and Dr. Nicole McGuire participating in the Georgia Lung Cancer Roundtable. Outpatient Infusion Nurses receive 2022 ONS Team Achievement Award in recognition for work with food insecurity. Blowing bubbles, not smoke campaign, one intervention to increase community awareness of lung cancer screening.

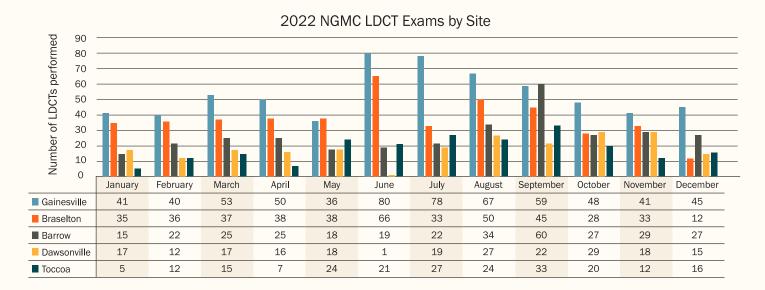
LUNG CANCER SCREENING UPDATE



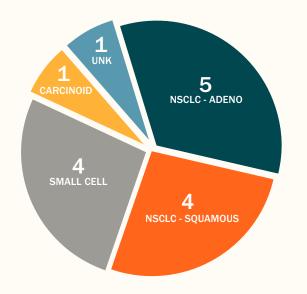
Rami Arfoosh, MD

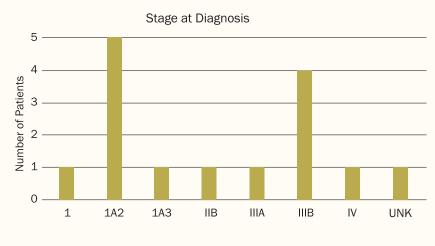
Pulmonary and Sleep Specialists of Northeast Georgia
Chest Board Chair, NGMC

The lung cancer screening program has experienced another successful year in volumes and outcomes. With the participation in the American College of Radiology National Collaborative to increase lung cancer screening utilization, the volumes have increased by 75% in 2022. Below, the numbers of LDCT scans and LRAD 4 results by imaging site are listed.



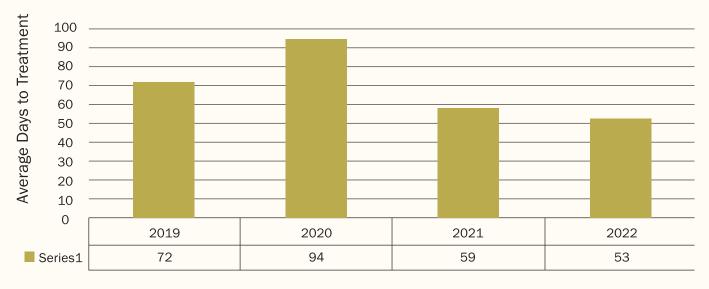
Fifteen lung cancers and one incidental cancer was diagnosed in 2022. The average age at diagnosis was 68, men accounted for 60% of the cases, and there was one African American patient with the remainder of patients being Caucasian. Below are the types and stages at diagnosis.





Continue on next page

Average Time to Treatment LDCT Program 2019-2022



CARE OF ADOLESCENTS AND YOUNG ADULTS



Andria Caton, MSN, RN, OCN, CHPN Assistant Nurse Manager, Oncology Services

The care of Adolescents and Young Adults (AYA) with cancer in an adult acute care setting can be challenging. Often, adult cancer team members do not have the tools necessary to manage the needs of AYAs. AYAs with cancer have different physical, emotional, social, and practical needs than pediatric or geriatric patients we serve. Most AYAs will be cured of their cancers, but many will experience short and long-term side effects of cancer treatments that can impact survivorship. A holistic approach to specific needs of the AYA cancer population is needed in hospitals with acute care adult populations (Miller et al, 2020). According to 2019 and 2020 organizational cancer registry data, around 75 AYAs were diagnosed and treated at NGMC annually. The top three cancer diagnoses were breast, thyroid, and endometrial, and 75% were female. In 2021, the committee determined that there were opportunities for improvement when it came to AYA barriers to care.

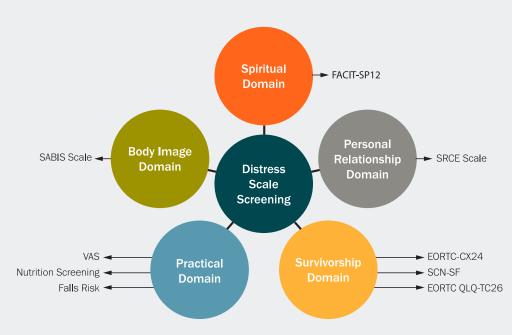
To help address the gaps in the survivorship care of AYAs with cancer, a team of oncology and supportive care professionals developed a study that would explore a referral system in the EMR that uses validated scales for assessing AYA cancer survivor needs. Expressly, the referral system would utilize existing organizational resources in palliative care, chaplaincy and social work to help address AYA needs. A mixed qualitative/quantitative observational study was constructed and received NGMC Professional Nursing Governance Council and organizational IRB approval in August 2022.

Utilizing the National Comprehensive Cancer Network (NCCN) guidelines for distress management and adolescent and young adult oncology as the foundation for the project, evidence-based validated scales were selected and matched to domains of care. For the study, the five domains selected were as follows: spiritual, personal relationships, survivorship, practical concerns and body image

The aims of the study are the following:

- Describe the development of a referral system that uses validated scales for assessing AYA cancer survivor needs and referring them to appropriate resources in palliative care, chaplaincy, and social work within a large adult health system.
- Evaluate the implementation and effectiveness of the screening and referral process from a provider and patient perspective.

The Committee will report on its progress throughout 2023 at the quarterly Cancer Committee meetings and release the final results in January 2024.



CANCER PROGRAM GOAL

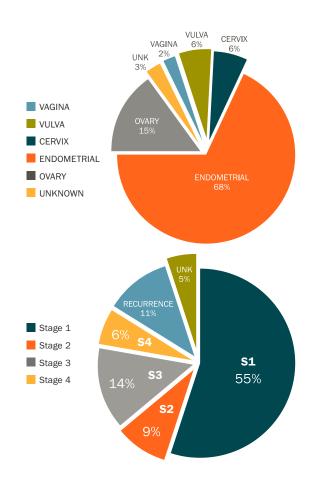


Andrew Green, MD NGPG Gynecologic Oncology

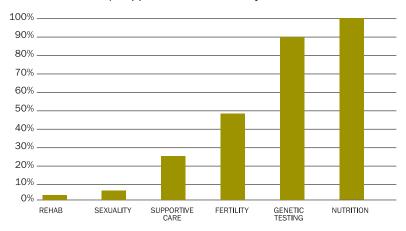
Women experiencing gynecological (GYN) cancers have the potential to experience significant long-term declines in quality of life and psychosocial well-being during survivorship. For example, although 5-year survival rates are high for endometrial cancer, women may experience weight gain, bowel and bladder issues, lymphedema, and sexual dysfunction after successful treatment.

The 2022 cancer program goal, in collaboration with the GYN Oncology practice of Dr. Andrew Green and Dr. Chelsea Chandler, was to have at least 75% of women experiencing GYN cancers during 2022 have access to supportive care programs, referrals and interventions. As a first step, bi-monthly GYN specific multidisciplinary tumor conferences were organized and scheduled. Next, referrals and interventions for nutrition, genetics, sexual dysfunction, rehabilitation, supportive care services, and fertility were discussed and recorded during the GYN specific multidisciplinary tumor conferences. The following were women were not included in the overall denominator for discussion: age 50 and over for fertility; cervix, vulva, or vaginal cancers for genetics; BMIs less than 32 for nutrition. Support care services included any additional specialty care active in the patient's care like wound care, social work, spiritual care, mental health, pain, or palliative care.

During the first six months of 2022, eighty-six women with new or recurrent GYN cancers were presented at multidisciplinary tumor conferences. See the charts below for types and stages of GYN cancers discussed.



Percentage of Patients with GYN Cancers Receiving Referrals/Support Services January - June 2022



The cancer program goal was achieved in the areas of nutrition (95%) and genetics (85%). Although the areas of fertility (44%), supportive care (20%), sexuality (7%), and rehabilitation (2%), did not meet the program goal of 75%, the GYN specific multidisciplinary tumor conferences were successful in highlighting these areas for increased support and focus for women with GYN cancers.

THE LANDSCAPE OF HEMATOLOGY AND ONCOLOGY



Andrew T. Johnson, MD

Medical Oncologist and Hematologist, Longstreet Clinic

It has been an exciting year in the field of hematology and medical oncology. There have been many advancements made over the past decade, and this past year was no exception.

Here at Longstreet Clinic, in collaboration with Northeast Georgia Health System, we continue to advocate for a multidisciplinary approach for all our cancer patients. Each week, one of several multidisciplinary tumor boards takes place, with radiologists, pathologists, radiation oncologists, surgeons, medical oncologists, research staff, and other supporting staff all discussing the patients' clinical course, imaging, and pathology.

We use this information to derive the best treatment plan for each patient. We feel that a multidisciplinary approach for all of our cancer patients offers a tremendous benefit and allows for consensus recommendations amongst many providers for each case presented.

We can offer patients both cutting-edge clinical trials and the most advanced standard of care treatment options. Our team remains dedicated to providing high-quality evidence-based therapy using the most recent data to support our decision-making.

The landscape of hematology and oncology changes rapidly—and we are dedicated to providing the most up-to-date therapy options for our patients.

In 2022, there have been many additions to the indications for immunotherapy and targeted therapy in both benign and malignant hematology as well as medical oncology. "Immunotherapy" defines a group of medications that allows for your immune system to recognize a cancer cell as foreign and attack it. "Targeted therapy" refers to using a molecular marker as a target to fight cancer. This is also defined as precision medicine, using DNA-level changes to guide our therapeutic decision making.

Here at Longstreet Clinic, we added several new physicians—Dr. Venu Kotla, Dr. Kelly Anderson, and Dr. Devi Sampat. We have also expanded access in Braselton and Toccoa in addition to our clinic in Gainesville.

We are excited about the coming year and the wonderful team assembled through collaboration with NGHS and Longstreet Clinic. We remain dedicated to improving the lives of patients in our community.



Northeast Georgia Medical Center