

# **CANCER SERVICES ANNUAL REPORT**

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#### Message from Cancer Services Steering Committee

Northeast Georgia Medical Center's (NGMC) Cancer Services Steering Committee is pleased to present our 2020 Cancer Services Annual Report. This report contains information on program activities in 2020 and presents data abstracted by our Cancer Registry in 2018.

As you explore the report, we believe you'll find that NGMC's Cancer Services program offers a level of technology and medical expertise that rivals just about any metropolitan cancer center. At NGMC, we offer research-based cancer care, as well as nationally approved treatment planning, allowing our patients the opportunity to stay local for their treatment and close to their family and support systems.

Two recent developments, however, will help fine-tune our goal of continually enhancing cancer care and availability for our patients: a network affiliation with Winship Cancer Institute of Emory University and the expansion of our cancer services in Braselton.

NGMC joined the Winship Cancer Network as an affiliate of Winship Cancer Institute of Emory University in October 2019. The Winship Cancer Network brings together an elite group of health systems and hospitals with Winship, Georgia's National Cancer Institute-designated comprehensive cancer center. Through this affiliation, our patients have access to some of the most effective cancer treatments and promising clinical trials – without having to leave our community. Additionally, our cancer physicians have opportunities to participate in collaborative tumor conferences with Winship.

Last fall, NGMC and Longstreet Clinic broke ground on a new, expanded cancer center. This integrated space will provide patients a convenient and advanced destination for comprehensive cancer care, while also increasing collaboration between physicians and staff. We're excited to open for full services by mid-year 2021.

It's been a challenging, yet exciting year at NGMC, and we look forward to what the future brings for our patients, community and collaborating physicians.





Emory Winship Cancer Institute Network Affiliates collaborate with Emory on quality and safety initiatives to improve care locally.

### 2020 Cancer Committee Members

Cancer Committee Chairman Cancer Liaison Physician **Diagnostic Radiologist** Medical Oncologist Pathologist/Cancer Registry Coordinator **Radiation Oncologist** Surgeon Cancer Program Administrator **Oncology Nurse** Social Worker/Social Services Coordinator Certified Tumor Registrar Cancer Conference Coordinator Quality Improvement Coordinator **Clinical Research Coordinator** Survivorship Program Coordinator Specialty Physicians Palliative Care Professional **Genetics Professional Registered Dietitian Nutritionist** Rehabilitation Services Professional Pharmacist Pastoral Care Representative **Oncology Services Coordinator** 

Geoff Weidner, MD Jaymin Jhaveri, MD Scott Stephen, MD; Jon Horn, MD (alternate) Charles Nash, MD; Richard LoCicero, MD (alternate) Ezra Ellis, MD; Sumi So, MD (alternate) Frank Lake, MD; Craig Baden, MD (alternate) Fernando Aycinena, MD; Emily Black, MD (alternate) Jayme Carrico, MBA Kim Tyner-Meeks, RN, OCN; Alicia Harrison, RN Donna Moss, LcSW, CG-C, ACHP-SW Dianne Kosmala, BA, CTR; Cheryl Gantt, CTR (alternate) Saloni Tanna, MD Christina Saurel, MD; Andrew Johnson, MD (alternate) Andre Kallab, MD; Holly Jones, Ph.D (alternate) Angie Caton, MSN, RN, OCN; Ashley Deringer, NP (alternate) Brad Auffarth, MD; Malay Rao, MD Zameer Gill, MD Mark Clark, DNP, FNP-BC, AGACNP-BC, AOCNP, OCN Lisa Gannon, RD; Deb Walls, RD (alternate) Kim Parks, PT; Donna Brooks, Speech Therapist Michelle Vu, Pharm D Jeff Thompson; Chris Jennings (alternate) Penny McCall





### Cancer Care in 2020

Charles Nash III, MD, FACP Longstreet Clinic – Department of Medical Oncology & Hematology Medical Director, NGMC's Cancer Services

Northeast Georgia Medical Center's (NGMC) Cancer Services completed a successful year in 2020 with significant successes despite strong headwinds that threatened to slow our progress toward yearly increases in patient diagnoses and treatments. The COVID-19 pandemic brought new challenges in our approach to patient care and affected the usual methods of patient access to care. While these challenges remain leading into 2021, I am heartened by the commitment and dedication of our staff, physicians, nurses and administrative leadership to continue forging a path forward for our program, while also understanding the needs of our patients and families during these unprecedented times.

The advent of telemedicine in patient care and the increased use of video conferencing for many of our meetings has helped limit face-to-face contact for the many hours of patient visits and administrative work needed to help our program run smoothly. At present, our weekly Tumor Conference meetings are held virtually, giving physicians the opportunity to collaborate with colleagues on important updates in cancer care and to help with difficult patient care treatment decisions. As you'll notice in this annual report, the actual number of cases discussed in 2020 was higher than usual. Most of the high-level physician national and regional educational meetings were also held virtually.

Patient participation in clinical research trials slowed as a result of the pandemic, but is now showing signs of increased activity once again. NGMC remains a national leader in participation for an important breast cancer imaging study that will help define the best way to screen patients for breast cancer. Additionally, our Cancer Services affiliation with Winship Cancer Institute of Emory University – initiated last year – remains a very positive source of collaboration for both institutions, making a vast array of cutting-edge clinical trials available for our patients.

In a collaborative partnership, NGMC and Longstreet Clinic broke ground on an expanded cancer center that will house Longstreet Clinic's medical oncology practice and NGPG's radiation oncology services in the same space. Designed specifically for the care of cancer patients, this new space will make it easier for patients who need to see both practices and allow for better care coordination and collaboration between cancer providers. This growth is accompanied by the addition of several new medical and radiation oncologists of whom will help meet our ever-expanding population and their cancer care needs going forward.

Through the challenges we have faced, we continue to keep our patients foremost in our minds and hearts, and we look forward to the coming year with great optimism.





#### Improving Access to Cancer Research and Clinical Trials

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

For many, 2020 has truly been a year of challenge, insight, innovation and opportunity – especially with the impacts of the COVID-19 pandemic. At Northeast Georgia Medical Center (NGMC), clinical trials provide new options in cancer diagnosis and treatment for patients in our community. Throughout the year, we prioritized safety in a climate of uncertainty to ensure that our patients still had access to the quality cancer care that they require.

Many of our clinical research operations at NGMC were directly affected by the impacts of the pandemic. Patients and clinicians had to adapt quickly to a new healthcare environment. We established clear measures to minimize the risk of avoidable COVID-19 exposure for staff and patients. Our providers and research team leveraged the use of technology to meet the needs of clinical trial operations and to provide remote patient consenting options for cancer patients. We remain dedicated to providing important clinical trial opportunities that complement NGMC's outstanding cancer care.

Each year, our patients have the opportunity to participate in some of the most promising clinical trials. 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 2020, we expanded our clinical trial portfolio to include the National Cancer Institute's (NCI) COVID-19

registry, as well as several new drug treatment trials addressing outcomes in cancer types such as triple negative breast cancer and colon cancer. Additionally, we added novel first-line drug and new device-based treatments for ovarian cancer. We were also recognized as a top-enrolling site for the national TMIST breast cancer screening trial, as Dr. Nash mentioned.

NGMC is proud to be a designated Research Network Member of the GA NCORP, Georgia's 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.

In addition, NGMC's network affiliation with Winship Cancer Institute of Emory University allows our research team to collaborate with Emory 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. By aligning our cancer care services and research programs, our patients have access to more than 275 clinical trials at Winship, 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.





#### Cancer Screening Initiatives

Celine Fadel, DO Internal Medicine Resident NGMC Graduate Medical Education

Due to many extenuating factors, routine cancer screening has declined in 2020. To help increase these numbers and provide important cancer screening information to our community, our staff at Northeast Georgia Medical Center (NGMC) has worked to develop some new partnerships and innovative solutions.

First, to help empower and encourage people to perform self-checks for skin, oral and thyroid cancers, we worked in partnership with NGMC's Employee Wellness department to develop free learning modules for NGMC employees. Each module featured online resources, charts and videos to help participants perform individual self-checks. Similarly, we created another series of modules to promote mammography, lung cancer screenings and colonoscopies for high-risk individuals. As you'll see in the adjacent chart, we believe these efforts were successful in reaching our employees.

Module	Number of Participants
Breast	324
Colon	474
Lung	472
Thyroid	638
Oral	466
Skin	518

Next, to reach a broader audience, we utilized social media to deliver messages about breast cancer and lung cancer screening guidelines. First, we aired a Facebook video physician panel discussion during October to coordinate with National Breast Cancer Awareness month. During this talk, which was a collaborative effort between NGMC and our Graduate Medical Education program, our panelists discussed breast cancer screening guidelines and options, the importance of early screening, and what to expect during the mammogram process.

Dr. Andrew Johnson, a hematologist and oncologist with Longstreet Clinic Cancer Center; and Kourtney Farrow, NGMC's Imaging Services supervisor; joined me as collaborators and presenters for this project. Though we spoke on video to the community, we also used a PowerPoint presentation to showcase key points and supporting literature. The video remains on Northeast Georgia Health System's (NGHS) Facebook page (@myNGHS) and has reached thousands of viewers.

We followed a similar format for our lung cancer screening initiatives, which we promoted in November to correlate with Lung Cancer Awareness month. Dr. Jon Horn, an interventional radiologist with Gainesville Radiology Group, and Andrea Queen, with NGMC's Imaging Services, collaborated with me on this project.

Continue on next page



Our talk highlighted the differences between lung nodules that may be seen on imaging through low-dose CT scans, as well as the subsequent steps that follow when nodules are identified. We also focused on tobacco cessation during the presentation and discussed cessation techniques and available resources for the community. The video, which aired on NGHS' Facebook page, was accompanied by a presentation that included the details and importance of screening on both a state and national level.

The initiative to promote screening and primary disease prevention is an active and ongoing goal throughout NGMC's Cancer Services. Screening in a timely manner can prevent disease and/or lessen the burden. Our goal is to encourage conversation between patients and their local providers, which we hope will spark action to seek available preventative screenings.

The use of social media ensures that preventative measures reach populations that are within screening age guidelines. Ultimately, we hope to provide a series of presentations with collaborations from residents, physicians and employees at NGMC who play an active role in screening at the hospital level. Each perspective is unique and promotes overall patient health and wellness.

#### Breast Cancer Screening Facebook Live Statistics:

Estimated Reach - 38,131 Unique Viewers - 16,454 Post Engagement - 157 Peak Live Viewers - 32 Minutes Viewed - 4,391

#### Lung Cancer Screening Facebook Live Statistics:

Estimated Reach - 3,294 Unique Viewers - 1,162 Post Engagement - 41 Peak Live Viewers - 37 Minutes Viewed - 869

Both videos can be accessed by visiting the NGHS Facebook page (@myNGHS).





#### Lung Cancer Prevention

Andria Caton, MSN, RN, OCN CHPN Cancer Services Administration, NGMC

According to Northeast Georgia Medical Center's (NGMC) most recent Community Needs Assessment conducted by Truven Health Analytics, public health indicators identified lung cancer death rates, as well as lung cancer incidence rates, as significant health concerns in Barrow County, Ga. In 2018, the National Cancer Institute reported that lung cancer incidence and death rates in Barrow were occurring at higher rates per 100,000 people than both the state and national benchmarks (when compared to surrounding counties).

We've identified key strategies, including raising awareness of novel nicotine products, the unique marketing strategies the tobacco industry uses and the long-term financial impact of nicotine addiction – as well as understanding the powerful impact of social influences – as methods to help reduce the number of future tobacco-related diseases in Barrow County's youth population.

In October 2019, NGMC helped implement a tobacco use prevention program for the second year within nine Barrow County elementary schools. The program, known as TAR WARS, uses curriculum based on the Centers for Disease Control's guidelines for youth tobacco prevention programs and focuses on evidence-based interventions targeted to 4th and 5th grade students. The program has impacted 2,000 students each year (2018 and 2019) and has seen favorable results. Knowledge gains were evaluated through preand post-program assessments and were compared to 2018 in the chart below.

	2018	2019
Total Pretest Responses	5,160	16,735
Total Pretest Correct	3,278	11,585
% Students Correct	64%	69%
Total Posttest Responses	5,021	13,783
Total Posttest Correct	4,251	11,767
% Students Correct	85%	85%
Total Average Knowledge Gain	21%	16%



With the uncertainty of school closures in Barrow County for the 2020-21 school year, the TAR WARS program will be delivered virtually, and students will continue to be evaluated for knowledge gains through pre- and post-program assessments.

One of the most popular tasks of the program is the poster contest. Below you'll see some of the winning submissions from our 2019 program, as well as a photo of the winning students with NGMC staff.











#### Improving Lung Cancer Screening to Treatment Time

Sameena Salcin, MD Internal Medicine Resident NGMC Graduate Medical Education

Lung cancer is often a challenging disease to diagnose, and delays in receiving necessary care can negatively impact survival once diagnosed. In 2019, Northeast Georgia Medical Center's (NGMC) patient outcomes data revealed a delay for patients diagnosed with lung cancer from the time of the screening examination to the time they received their first treatment. On average, patients who were screened as part of NGMC's Lung Cancer Screening Program waited 72 days after a scan to receive treatment. A literature review was conducted based on this observation, and evidence-based interventions and opportunities were identified to help improve the timely care of people with diagnosed with lung cancer.



**Time to Treatment LDCT Program** 

Armed with this data, NGMC's Cancer Committee set a program goal to reduce the time from lung cancer screening examinations to first treatment by 50% – or to 36 days – during 2020. The following program changes were implemented in the first quarter of 2020:

- Lung Cancer Screening Program coordination restructured
- Bi-monthly Chest Board conferences



Next, the ensuing communication and documentation interventions were instituted by the Program Coordinator:

- Documentation of Chest Board recommendations in the electronic medical record
- Patient messages sent through patient portal and/or letter regarding recommendations of Chest Board
- Letters and/or electronic medical record messages to primary care physicians with Chest Board recommendations
- Barriers and lung cancer findings to Chest Board each month

Subsequently, a medical record review of 2019 and early 2020 cases of lung cancer diagnosed through the Lung Cancer Screening Program was also conducted. Trends for 2019 data indicated several potential areas for improvement. First, the average time from initial scan to biopsy calculated for patients screened in 2019 was approximately 32 days. Time from biopsy to first treatment averaged 56 days. A deeper review of individual patient charts within the electronic medical record revealed the following four trends regarding delays in care:

- Time between appointments when a multi-disciplinary care team was involved
- Time involved in scheduling and undergoing pre-operative clearance
- Time involved in scheduling and executing pulmonary function testing
- Delays in initiation of care if patients were admitted to the hospital

These four areas offer a chance for our Lung Cancer Screening Program to create improvements in patient care by addressing delays and improving appointment availability and scheduling for lung cancer patients.

Our early 2020 data analysis was somewhat challenging given the COVID-19 pandemic. The average time from initial scan to biopsy for patients screened in 2020 was approximately 54 days. Although this average time to biopsy is longer than 2019, we saw improvements in time to biopsy towards the second half of 2020. Additionally, the average time from biopsy to first treatment averaged 31 days. Many of the delays involved centered on difficulties created by COVID-19, including the switch to virtual appointments, patient reluctance to seek care and scheduling delays.

While the COVID-19 pandemic still presents challenges for our health care system and patients, we continue to monitor and review data, and to make adjustments when possible to help meet our program goal.





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#### Genetic Risk Assessment for Cancer

Andrew Green, MD Northeast Georgia Physicians Group Gynecologic Oncology

Genetic predisposition to cancer is increasingly noted as a cause in many cancers – especially gynecologic oncology. In ovarian cancer, which is rare, all patients are recommended to undergo genetic testing – yet less than 60% of these patients in the U.S. have it done.

Endometrial cancer is the most common gynecologic cancer at Northeast Georgia Medical Center (NGMC), as well as nationwide. It is estimated that as many as 10% of endometrial cancers could be related to Lynch syndrome. 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 women with endometrial cancer.

The National Comprehensive Cancer Network (NCCN) recently changed its guidelines to dramatically increase indications for testing endometrial cancer for Lynch syndrome. Under the guidance and collaboration with the genetics program coordinator, NGMC's Cancer Committee selected endometrial cancer as a standard to review, identified the NCCN guidelines for Lynch syndrome risk evaluations and utilized medical records to confirm referrals for evaluation and/or genetic counseling. Lynch syndrome, which is caused by germline defects in DNA mismatch repair (MMR) genes, was first identified in people with cancers of the colon – but is often the sentinel cancer in women.

A baseline first quarter review of 19 endometrial pathology cases revealed a 25% compliance with NCCN guidelines and documentation of referrals for additional evaluations and/or genetic counseling.

Subsequently, the following interventions were implemented during the second quarter of 2020:

- Pathology championed the universal testing of all endometrioid pathologies for mismatched repair proteins
- · Genetic testing results were placed in the laboratory section of the electronic medical record
- Gynecologic oncology began including documentation of genetic testing/results in staging form or in office visit encounters
- · Genetics discussed in tumor conference when endometrial cancers were presented



Pathology and medical record reviews continued for 6 months following implementation of the above interventions. For the second quarter, a review of 37 endometrial pathology cases showed an improvement from 25% to 96% compliance with NCCN guidelines and appropriate referrals for cases positive for Lynch syndrome. Third quarter reviews of 21 endometrial pathology cases revealed consistent improvement at 91% compliance with guidelines and referrals. Of the patients who were not tested, these were mostly patient choice for either financial or personal considerations.

Through universal testing of all endometrioid pathologies for MMR proteins, improvements in the electronic medical record documentation and creating an increased awareness of Lynch syndrome, we saw a great improvement in the care of women diagnosed with endometrial cancer in 2020.









### Radiation Oncology Advancements

Frank Lake, MD Northeast Georgia Physicians Group Radiation Oncology

2020 was certainly a challenge for both patients and staff at Northeast Georgia Medical Center (NGMC), given the COVID-19 pandemic and its associated restrictions and precautions for delivering health care. Fortunately, we have been able to carefully provide necessary radiation therapy treatments for our patients while adhering to important safety protocols recommended by the CDC and our own COVID-19 task force at NGMC.

Radiation oncology treatments continue to advance in ways that benefit both our patients and providers. At NGMC, we've been using sophisticated treatment techniques that allow us to deliver radiation in higher ablative doses directly to the site of the tumor, while also minimizing radiation to critical surrounding normal structures. These techniques, also known as stereotactic radiosurgery and stereotactic body radiation, deliver treatment from multiple directions – through multiple changes in field sizes and shapes – and are constantly adapting during treatment delivery.

Stereotactic radiosurgery is used to treat brain tumors, while stereotactic body radiation is used to treat lesions and tumors in other parts of the body. Both have allowed us to treat the patients with much higher ablative radiation doses, which in general provides us with greater local control of the cancer while maintaining fewer side effects for the patients.

Certain cancers are amenable for this type of treatment, including early lung and kidney cancers, early tumors of the liver and tumors that have spread to the brain. This type of radiation delivery, however, is potentially adaptable to many – if not eventually all – tumor sites. We've also seen increasing data that patients with more advanced cancers that have spread to limited areas, often called oligometastatic lesions, may be treated with this stereotactic treatment with a greater chance of control, not only of the primary origin of the tumor, but also the sites of tumor spread.

Recent studies show patients with lung cancer that has spread to other sites may have a longer survival period if they receive this stereotactic ablative treatment. Additionally, patients with prostate cancer (with limited spread to other areas) who are treated with stereotactic ablative treatment have shown improvements in the possibility of diseasefree survival. The accuracy of this radiation has also been enhanced by imaging the



tumor each day on the treatment table through a process known as image guidance radiotherapy, which frequently employs real-time CT scans to pinpoint the beam's center.

There is also a new, rapidly evolving cancer drug therapy, commonly known as immunotherapy, that works by increasing the body's own innate defense mechanism to fight foreign invaders like cancer. These new immunotherapy drugs can also significantly enhance the effects of radiation. The antigens released after radiation induce the body to make antibodies that can attack tumor cells in the body, potentially eradicating them. This process is called radiation-induced immunotherapy and is available to our patients at NGMC.

We continue to offer state-of-the-art radiation therapy technologies at our three locations: Gainesville, Braselton and Toccoa. All three centers have the advanced technology necessary to accomplish the stereotactic treatment outlined.





#### The State of Lung Cancer Screening

Rami Arfoosh, MD Pulmonary and Sleep Specialists of Northeast Georgia Chair, NGMC's Chest Board

Lung cancer continues to be one of the top three cancers diagnosed at Northeast Georgia Medical Center (NGMC). For the last three years, approximately 65% of lung cancers were diagnosed in Stages 3 and 4. Supporting these outcomes, Cancer State Profile data from 2013 to 2017 reveals that 10 of the counties served by NGMC have higher incidence rates for late stage lung cancer than both the State of Georgia and the national rates.

Research demonstrates that lung cancer screening can detect tumors at earlier and more treatable stages. Unfortunately, the American Lung Association reports only 5.6% of Georgians at high risk for developing lung cancer were screened last year. Compared to the national average of 5.7%, Georgia ranks 31st among other states for screening. In northeast Georgia, there are identifiable opportunities for NGMC's lung cancer screening program to increase its overall screening rates.

To help increase both awareness of and the importance of lung cancer screenings in 2020, our physicians and staff have worked together to provide two educational programs for the public, which were delivered through social media. Additionally, our staff worked with NGMC's Wellness Program to deliver lung cancer awareness learning modules to employees. We also collaborated with local media to feature a news story highlighting lung cancer screening.

Despite the pandemic, NGMC's three screening facilities performed a total of 909 scans in 2020 – 63 of which were classified as abnormal LRAD 4. In total, our Lung Cancer Screening Program helped diagnose 11 lung cancers and two incidental cancers for the year.

Future work for the Lung Cancer Screening Program includes identifying populations at highest risk for developing lung cancer, engaging primary care providers as screening champions, increasing screening for the underserved and decreasing the time from screening scan to treatment.





#### **2019 LDCT Screenings**

### 2020 Stage of Lung Cancer Diagnosed through LDCT Screening Program

#### 2020 Histology of Lung Cancer Diagnosed through LDCT Screening Program







#### Nursing Improvements

Kimberly Tyner-Meeks, RN, OCN Cancer Services, NGMC

While there were many nursing challenges during 2020, there were also numerous opportunities for collaboration, innovation and teamwork for our staff here at Northeast Georgia Medical Center (NGMC).

First, as inpatient oncology beds were converted to intensive care beds to help meet the needs of the national COVID-19 crisis, oncology nurses and patients with cancer were sent to other clinical areas throughout the hospital. Building on last year's partnership with inpatient oncology nurse educators and the Outpatient Infusion department, additional inpatient nurses were trained and validated in the administration of chemotherapy, biotherapy and immunotherapy to provide support for our current oncology nurses. Clinical resources and evidence-based tools were placed on NGMC's intranet site for convenient access for the newly trained nurses. Outpatient infusion nurses and oncology nursing leadership continue to guide and support inpatient oncology nurses with the care of complex patient situations and less common protocols.

Next, first dose chemotherapy, biotherapy and immunotherapy education has been greatly impacted with the use of masks and social distancing during the pandemic. Both nurses and patients alike have reported difficulty communicating during first dose education. Evidence demonstrates that patients and caregivers who are better prepared for cancer treatments experience less anxiety, have fewer treatment delays and have less complications when proper education is provided.

To address the immediate need, outpatient infusion nurses formulated an innovative plan to provide virtual first dose education to patients and caregivers. The first step was to assess the department's current technology capabilities. After that, Oncology Nursing Society patient education standards were reviewed and a template for basic education was developed. Subsequently, the electronic medical record was slightly revised to capture important teaching points from the template, and a method of scheduling appointments was added. Lastly, the virtual education was trialed over the phone and through a webbased program.

Some of the barriers identified from virtual education included noise and lack of privacy for phone calls made at the nursing station, as well as the lack of cameras on stationary and rolling computers (which were necessary for face-to-face discussions). Armed with these findings, Outpatient Infusion nurses applied for and received a Change Grant through The Medical Center Foundation to supply the department with tablet devices for virtual education use. As the virtual first dose education is fully implemented in 2021, processes will be evaluated and feedback from patients, caregivers and nursing staff will be solicited.





NGMC's Outpatient Infusion staff celebrates approval of a change grant, made possible through The Medical Center Foundation, that provides staff with tablets to help improve communication with patients regarding their treatment process.

Additionally, our oncology nursing staff partnered with various organizations to provide virtual continuing education programs for both new and experienced oncology nurses to meet the learning needs of the nurses and the requirements of our program's initiatives. The following learning opportunities were provided to oncology nurses:

Date	Program	Education Hours
02/13/2020	The Ethics of Whistleblowing: To Tell or Not to Tell	0.5
03/12/2020	Ethics Theater: Group Think	0.5
04/15/2020	Advancing the Standard of Care for Relapsed/Refractory Follicular Lymphoma	1.0
05/13/2020	Exploring Emerging Antibody Drug Conjugates for HER2 Positive Metastatic Breast Cancer	1.0
05/14/2020	Ethics Theater: Ventilator Lotteries	0
06/11/2020	Ethics Theater: COVID Vaccinations - Ethical Considerations	0
07/09/2020	The Ethics of Contact Tracing	0
08/04/2020	Traversing New Terrain in CLL	1.0
08/13/2020	Ethics Theater: Being Old in a Pandemic	0.5
09/10/2020	Ethics Theater: Dying in Your Mother's Arms	0.5
9/29/2020	Unlocking the Benefits of Synergy Between Therapeutic Advances & Holistic Care in Gastric/GEJ Cancers Current Evidence, Practical Guidance and Point-of-Care Tools for Implementing a Multidisciplinary Approach to Modern Patient Care	1.0
10/19/2020	Research Week – live and online programs	0.5 - 6
11/3/2020	Building on Progress to Further Advance Care for Patients with EGFR Mutation- Positive NSCLC A Look at Emerging Precision Medicine Strategies Encompassing Acquired Resistance, Treatment Sequencing & Patient Considerations	1.0
11/12/2020	Ethics Theater: Resurrection Men	0.5
12/17/2020	Nursing Considerations for CAR T-Cell Therapy	1.0





#### Cancer Registry Update

Dianne Kosmala, BA, CTR Cancer Registry, NGMC

2020 has been a year of adjustment for so many, and NGMC's Cancer Registry team is certainly among those. While still learning and adjusting to the rule changes from our four standard setters in 2018, our team also faced new challenges and changes presented by the COVID-19 pandemic.

Adjusting to new ways of operation, we had several registrars working from home during the first surge from April through June. Others continued to work in the office. Our Registry staff also adapted to attend two important conferences this year virtually – our national Registry conference in late September and our Georgia Tumor Registrar fall meeting in November.

Additionally, we adjusted to present our Tumor & Chest Boards virtually with the utilization of Skype. Prior to the pandemic, we offered an online accessible option for participants through GoToMeeting, however most individuals still chose to attend in person. The pandemic and cancellation of some in-person meetings, of course, has changed the overall structure of our conferences. We're fortunate to have seen a positive change in our situation, with increased attendance and presentations. In fact, our cancer physicians presented more than 500 cases in 2020.

During these conferences, our radiation oncologists serve as our moderators, with the registry manager assisting to make sure all Commission on Cancer standards are met. Our Epic Beacon team has also been working on a platform for staff to complete check-offs of the required discussion points, which will help streamline the Cancer Committee's end-of-year reports. Leadership is also exploring outside vendors for Tumor Conference software.

Our total number of analytic cases for 2018 was 2,499 and the top six sites were breast, lung, prostate, colon, corpus uteri & thyroid. As you'll see to the right, Hall continues to dominate our service area, with Jackson and Habersham behind it. Given our advanced cancer care options, we have even had patients travel from Ala., Fla., N.C., Ohio, S.C. and Texas to receive care at NGMC.



## Cancer Diagnosis by County

County	State	% Frequency	Total
Hall	GA	33.68200837	805
Jackson	GA	10.46025105	250
Habersham	GA	8.661087866	207
Gwinnett	GA	7.071129707	169
White	GA	6.945606695	166
Barrow	GA	5.857740586	140
Stephens	GA	4.309623431	103
Lumpkin	GA	3.933054393	94
Rabun	GA	2.761506276	66
Banks	GA	2.30125523	55
Dawson	GA	2.175732218	52
Union	GA	1.589958159	38
Towns	GA	1.506276151	36
Franklin	GA	1.380753138	33
Forsyth	GA	1.0041841	24
Hart	GA	0.794979079	19
Clay	NC	0.669456067	16
Clarke	GA	0.585774059	14
Madison	GA	0.418410042	10

County	State	% Frequency	Total
Walton	GA	0.376569038	9
Cherokee	NC	0.334728033	8
Fannin	GA	0.334728033	8
Macon	NC	0.334728033	8
Oconee	GA	0.334728033	8
Fulton	GA	0.292887029	7
Pickens	GA	0.209205021	5
Cobb	GA	0.125523013	3
Elbert	GA	0.125523013	3
Cherokee	GA	0.083682008	2
DeKalb	GA	0.083682008	2
Gilmer	GA	0.083682008	2
Henry	GA	0.083682008	2
Newton	GA	0.083682008	2
Oglethorpe	GA	0.083682008	2
Aiken	SC	0.041841004	1
Bulloch	GA	0.041841004	1
Carroll	GA	0.041841004	1
Chatham	GA	0.041841004	1

County	State	% Frequency	Total
Clayton	GA	0.041841004	1
Coffee	GA	0.041841004	1
Greene	GA	0.041841004	1
Hillsborough	FL	0.041841004	1
Lancaster	PA	0.041841004	1
McDuffie	GA	0.041841004	1
Miami-Dade	FL	0.041841004	1
Morgan	GA	0.041841004	1
Oconee	SC	0.041841004	1
Okaloosa	FL	0.041841004	1
Okeechobee	FL	0.041841004	1
Perry	KY	0.041841004	1
Polk	FL	0.041841004	1
Polk	ΤN	0.041841004	1
Putnam	FL	0.041841004	1
Putnam	GA	0.041841004	1
Richmond	GA	0.041841004	1
Santa Rosa	FL	0.041841004	1



# 2018 Cancer Registry Data

				AJCC Stage							
Site	Analytic	Male	Female	0	I	П		IV	NA	UNK	Totals
ORAL CAVITY, PHARYNX	53	40	13	0	16	6	7	12	8	4	53
Tongue	12	9	3	0	2	2	2	4	1	1	12
Salivary Gland	6	4	2	0	2	1	1	1	0	1	6
Tonsil	13	9	4	0	4	3	1	1	3	1	13
Oropharynx	8	7	1	0	5	0	1	0	2	0	8
DIGESTIVE SYSTEM	346	190	156	4	59	71	83	84	13	32	346
Esophagus	23	19	4	0	3	0	12	2	6	0	23
Stomach	16	9	7	0	4	1	3	3	1	4	16
Small Intestine	9	4	5	0	2	1	3	1	1	1	9
Colon, Rectum, Anus	204	104	100	4	38	53	53	36	4	16	204
Colon Excluding Rectum	147	81	66	3	32	40	32	29	1	10	147
Rectum	37	19	18	0	2	8	17	4	2	4	37
Anus, Anal Canal, Anorectum	12	1	11	1	2	3	3	1	0	2	12
Liver, Gallbladder, Intrahep Bile Duct	30	23	7	0	3	5	3	15	1	3	30
Liver	22	20	2	0	1	5	2	12	0	2	22
Pancreas	61	31	30	0	9	11	6	27	0	8	61
RESPIRATORY SYSTEM	361	180	181	7	81	30	68	139	17	19	361
Larynx	19	11	8	2	1	2	5	4	2	3	19
Lung and Bronchus	342	169	173	5	80	28	63	135	15	16	342
Non-Small Cell	277	132	145	5	72	26	54	99	14	7	277
Small Cell	44	26	18	0	6	0	5	31	0	2	44
Other Lung	21	11	10	0	2	2	4	5	1	7	21
SOFT TISSUE	10	7	3	0	2	0	1	0	6	1	10
SKIN	44	33	11	4	14	4	6	8	2	6	44
Skin: Melanoma	40	31	9	4	13	4	5	8	0	6	40
BREAST	437	3	434	67	261	50	27	12	5	15	437
Female Breast	434	0	434	66	259	50	27	12	5	15	434
FEMALE GENITAL SYSTEM	224	0	224	0	127	20	49	19	4	5	224
Cervix Uteri	29	0	29	0	13	7	8	1	0	0	29
Corpus, Uterus: NOS	134	0	134	0	91	8	25	7	1	2	134
Ovary	38	0	38	0	14	2	13	7	0	2	38
Vagina	1	0	1	0	0	0	0	0	0	1	1
Vulva	21	0	21	0	9	3	3	3	3	0	21

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MALE GENITAL SYSTEM	312	312	0	0	82	133	59	25	3	10	312
Prostate	299	299	0	0	78	132	58	25	1	5	299
Testis	8	8	0	0	2	1	1	0	1	3	8
URINARY SYSTEM	192	141	51	52	71	25	13	22	1	8	192
Urinary Bladder	97	71	26	49	19	16	5	4	1	3	97
Kidney	83	62	21	0	49	7	8	16	0	3	83
Ureter	8	5	3	1	2	1	0	2	0	2	8
BRAIN, OTHER NERVOUS SYSTEM	92	37	55	0	0	0	0	0	92	0	92
Brain: Malignant	34	16	18	0	0	0	0	0	34	0	34
Brain-CNS: Benign, Borderline	56	19	37	0	0	0	0	0	56	0	56
ENDOCRINE SYSTEM	146	37	109	0	105	10	2	4	21	4	146
Thyroid	130	30	100	0	105	10	2	4	5	4	130
Endocrine: Benign, Borderline	15	6	9	0	0	0	0	0	15	0	15
LYMPHOMA	102	58	44	0	18	15	20	33	10	6	102
Hodgkin Lymphoma	14	9	5	0	0	4	4	6	0	0	14
Hodgkin - Nodal	14	9	5	0	0	4	4	6	0	0	14
Non-Hodgkin Lymphoma	88	49	39	0	18	11	16	27	10	6	88
NHL - Nodal	65	38	27	0	14	11	15	21	1	3	65
NHL - Extranodal	23	11	12	0	4	0	1	6	9	3	23
MYELOMA	31	17	14	0	0	0	0	0	31	0	31
LEUKEMIA	33	22	11	0	1	0	0	2	30	0	33
Lymphocytic Leukemia	7	2	5	0	1	0	0	2	4	0	7
Non-Lymphocytic Leukemia	24	18	6	0	0	0	0	0	24	0	24
Acute Myeloid Leukemia	17	14	3	0	0	0	0	0	17	0	17
Chronic Myeloid Leukemia	6	3	3	0	0	0	0	0	6	0	6
MESOTHELIOMA	3	2	1	0	1	0	1	0	1	0	3
MISCELLANEOUS	113	60	53	0	0	0	0	0	113	0	113
TOTALS	2499	1139	1360	134	838	364	336	360	357	110	2499

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# NGMC's Top Six Cancer Sites for 2018





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