



Cancer care
close to home

 **BAPTIST** | CANCER
CENTER

2016 CANCER PROGRAM ANNUAL REPORT

Get Better.



Ann Bishop, MSN, FACHE
Oncology Administrator
Baptist Cancer Center

During 2016, Baptist Cancer Center has worked to develop the Baptist Cancer Center Physicians Foundation. This physician partnership brings together some of the most trusted names in cancer care including the Family Cancer Center Foundation, Boston Baskin Cancer Foundation, Integrity Oncology Foundation, and the Jones Clinic.

This has been an exciting year for Baptist Cancer Center. Many individuals have dedicated their time and effort to achieving our vision of providing integrated multidisciplinary cancer care to adult cancer patients across the Mid-South. During 2016, Baptist Cancer Center has worked to develop the Baptist Cancer Center Physicians Foundation. This physician partnership brings together some of the most trusted names in cancer care including the Family Cancer Center Foundation, Boston Baskin Cancer Foundation, Integrity Oncology Foundation and the Jones Clinic. This unprecedented collaboration will bring cancer patients in the Mid-South greater resources and combined expertise in a larger geographic region.

Equally significant, is the appointment of key physician leaders to focus on advancing the work of our disease specific multidisciplinary teams. The following physicians are serving in these leadership roles: Breast – Alyssa Throckmorton, M.D.; Lung – Raymond Osarogiagbon, M.D. and Todd Robbins, M.D.; Gastrointestinal – Steve Behrman, M.D.; Neuro-oncology – Aleksander Jankov, M.D.; and Malignant Hematology/Stem Cell Transplant – Salil Goorha, M.D. These physicians work with a multidisciplinary team of physicians and clinicians to establish the infrastructure to address the needs of patients, including evaluation and treatment planning, research, and outcome-oriented results.

The Baptist Cancer Center clinical research program aligned with the Baptist Clinical Research Institute under the direction of Maggie DeBon, PhD. Dr. Raymond Osarogiagbon was appointed as the principal investigator for the recently awarded NCI Community Oncology Research Program (NCORP) grant which focuses on minority and historically underserved populations. Dr. Donald Gravenor serves as the chairperson of the BCC Clinical Research Committee. Under their leadership, and with the support of many physicians and clinical staff, the Baptist Cancer Center is focused on providing access to cancer clinical trials, as well as cancer care delivery research (CCDR) across the entire Baptist Memorial Health Care system. The intent is to provide care to individuals in their own communities, thus generating a broadly applicable evidence base that contributes to improved patient outcomes and a reduction in cancer disparities.

In July of 2016, Baptist Cancer Center signed a participation agreement with the Centers for Medicare Services (CMS) Oncology Care Model. Participants in this pilot project will be working with CMS to evaluate the impact of an Oncology Medical Home model on the outcomes for cancer patients. We are extremely grateful for the opportunity to work with an excellent team of physicians and staff who serve our patients and families. It is with gratitude that we highlight a few of the advancements of the Baptist Cancer Center. Our programs are made possible by the dedication of so many who approach each day with passion and empathy for cancer patients under their care.

A handwritten signature in black ink that reads "Ann Bishop". The signature is written in a cursive, flowing style.

Ann Bishop, MSN, FACHE
Oncology Administrator
Baptist Cancer Center

Baptist Cancer Center Physicians Foundation



This year, Baptist led an unprecedented consolidation of oncology groups, bringing together some of the best minds in cancer care to operate as one oncology voice. Members of Boston Baskin Cancer Foundation, Family Cancer Center, Integrity Oncology and The Jones Clinic joined Baptist Cancer Center—laying the foundation for greater collaboration for treatment, research and clinical trials.

With a connected network of physicians providing advanced cancer care, Baptist Cancer Center can now reach patients in multiple locations in Tennessee, Arkansas and Mississippi, especially residents living in rural areas. With greater access to care and clinical trials, patients and families can reduce travel and time away from work and family.

Working closely with referring physicians, Baptist Cancer Center provides a connected network of resources such as referrals, technology, second opinions, and financial assistance and guidance for patients. Baptist Cancer Center offers patients and physicians a succinct and convenient way to communicate through Baptist OneCare to manage electronic health records. Not only does it pave the way for easy physician-to-physician communication, this advanced technology enhances the patient and doctor relationship.

Through Baptist Cancer Center, patients and physicians can access breakthrough procedures like the haploidentical stem cell transplant, a procedure only available at a handful of hospitals across the country. With the new seed localization surgery, breast cancer patients have another treatment option performed by breast surgeons.

This oncology consolidation allows Baptist to continue to provide leading cancer care in the Mid-South, positioning the region for even greater cancer advances—and bringing more hope to patients.

Pictured Front Row L to R:

Donald Gravenor, MD; David Sullivan, MD; C. Michael Jones, MD, F.A.C.P.; Peter W. Carter, MD; Syed Azmi, MD and Sadanand Patil, MD

Back Row L to R:

Shailesh Satpute, MD, PhD; Sohail Minhas, MD; Salil Goorha, MD; Aleksander Jankov, MD; Raymond Osarogiagbon, MD; Margaret Gore, MD; Michael Magee, MD; Drew Dill, MD; Sal Vasireddy, MD; William Walsh, MD.

Not pictured:

Reed Baskin, MD; Dennis Morgan, MD; Brent A. Mullins, MD; Muhammad Raza, MD; Kirby Smith, MD; Kathleen Spiers, MD and Paschal Wilson, MD

As an integrated cancer program, our first priority is to bring exceptional cancer care and expanded access to our patients.



Baptist Cancer Center represents the Mid-South's first adult, integrated cancer program designed as a regional resource for cancer patients and their families. With facilities in Tennessee, Arkansas and Mississippi, patients' needs are better served by receiving care close to home.

These services include:

Multidisciplinary Care: An increasing body of evidence shows that the most effective cancer treatment is achieved through the coordination of care between physicians and other professionals of multiple disciplines. Baptist Cancer Center is actively engaged in the expansion of our multidisciplinary cancer care programs, incorporating specialists from various fields into one treatment regimen. Conferences are held with specialty physicians, nurse navigators, dietitians, and other health care professionals to determine optimal treatment plans for cancer patients. Multidisciplinary clinics include Breast MultiD, Thoracic MultiD, GI MultiD, and Malignant Hematology/StemCell Transplant MultiD.

Infusion Services are available in the respective local communities to help ensure patients can receive their chemotherapy infusions and injections close to home.

Radiation Oncology Services provide treatment options, including conventional radiation therapy, intensity-modulated radiation therapy, image-guided radiation therapy, stereotactic radiosurgery, low-dose rate brachytherapy, and high-dose rate brachytherapy.

Clinical Research Services help ensure new treatment options are available to patients in the communities Baptist serves. These clinical trials are not only beneficial in the care and treatment of the patient; they also help to develop new ways of detecting, preventing, and treating cancer.

Disease specific clinical trials focus on breast, lung and malignant hematology.

Stem Cell Transplants, specifically autologous and allogeneic transplants, are offered through the Baptist Cancer Center and patients receive specialized care in the 19-bed acute hematology/oncology unit, which employs the strictest of infection control policies.

Women's Health Center, a place for complete breast care, offers a comprehensive breast care program including 3D mammography, screening and diagnostic breast ultrasound, biopsies, pre-surgical localization procedures, DEXA bone scan screening, and nursing navigation by registered nurses who are breast health specialists. The Women's Health Center is accredited by both the ACR (American College of Radiology) as a Center of Excellence and by the NAPBC (National Accreditation Program for Breast Centers), placing it in the top 5% nationally for quality breast care.

In 2015, Baptist Memorial Hospital for Women installed ABUS (Automated Breast Ultrasound Screening), a diagnostic screening tool designed specifically to exam dense breast tissue. The ABUS is the only one in West Tennessee, which gives patients better breast care options.

Cancer Support Services



Important to patients are services that support mind, body and spirit. Baptist Cancer Center aims to make these services available at all of its practice sites.

Surgery, radiation and chemotherapy are only one part of cancer care. Baptist also offers services to support the mind, body and spirit of each patient.

These services include:

Genetics: Cancer treatments and decisions may be influenced by a patient's genetic traits. The Baptist genetics department participates in community and physician outreach programs to raise awareness of hereditary cancer syndromes. Our genetic counselors are available to help identify patients who have hereditary risks. We also coordinate genetic testing to identify patients who may benefit from increased screening or cancer prevention strategies.

Social Work: A cancer diagnosis and cancer treatment can profoundly impact a patient's life. Social workers assist the patient, family and caregivers with solving problems, accessing resources, communication and emotional concerns.

Navigation: Cancer care is often bewildering to patients, and they may have difficulty finding their way around the care system. Patient navigators work with the patient and the entire care team to help them navigate the system and identify necessary services and resources.

Nutritional Support: Maintaining good nutrition is important for all of our cancer patients. A special nutrition team includes a Certified Specialist in Oncology Nutrition (CSO) who works with outpatients in infusion and radiation departments. In 2015, the CSO worked with more than 700 patients and families. Patients admitted to our inpatient hematology unit will see a registered dietitian within 72 hours of admission. All hospital oncology patients receive a nutrition screening upon admission.

Rehabilitation: Physical, occupational and speech therapy are tailored to address a wide array of cancer-related indications, including lymphedema, joint and soft tissue restrictions, nerve entrapment or injury, swallowing/aspiration issues, cognitive and communicative disorders, and fatigue and deconditioning that may occur because of a cancer diagnosis or treatment.

Financial Counseling: A cancer diagnosis can result in financial challenges and added stress during a difficult time. Our team of financial counselors and patient assistance coordinators help patients with various financial support options such as our financial assistance program, external patient assistance programs, as well as counseling for insurance benefits as it relates to cost of treatment.

Support Groups: Provides emotional support for cancer patients throughout their course of treatment and through survivorship.

Palliative Care: Services are focused on the relief of suffering throughout the course of the patient's illness, including aggressive pain and symptom management; assistance with completing life plans for medical decision-making; interventions to reduce family member stress; and coordination of health services to help ensure alignment with the patient's choices.

Hospice Services: An interdisciplinary team of health care professionals provides aggressive pain and symptom management, emotional and spiritual support, grief counseling, and bereavement support for patients, their families and caregivers.

Breast Care Services

Left: The Baptist Women's Health Center mobile mammography van provides screening mammography to area corporations, groups and medically underserved in the Mid-South since 1989.



2015 TOTALS

- 1,778 Mammography screenings
- 454 New patients
- 248 2+ years without a mammogram
- 152 Received their first screening ever
- 70 Screenings at no cost through grant funding
- 2 Breast cancers found from grant-funded patients

Strong evidence exists that underserved and uninsured groups in Shelby County do not receive optimal screenings which contributes to the documented wide disparities in breast cancer mortality between African-American and Caucasian women in the metropolitan area. To help address this issue, Baptist continues to provide grant-funded screenings mammograms and diagnostic exams to these populations in part through grant funding from the Mid-South Susan G. Komen Foundation. In 2015, the Baptist Women's Health Center mobile mammography van performed 1,778 screening mammograms, of which 248 were for women who had not had a mammogram in more than two years, and 152 for women who had never had a mammogram.

Community-wide collaboration is key to addressing these disparities. In 2015, Baptist joined with other health care organizations and community groups to form the Memphis Breast Cancer Coalition to address disparities in breast cancer treatment and mortality. The focus of this group is to increase the use of mammography screening among underinsured and uninsured African-American women to reduce the mortality disparity through awareness, education, access and collaboration.

In 2016, Baptist Women's Hospital hired a disparity coordinator whose primary role is to work with underserved women. By connecting women early to breast services, Baptist strives to save lives through early detection and education.

For the third year in a row, Alyssa Throckmorton, MD, FACS and Lindi VanderWalde, MD, breast oncology surgeons with BMG Memphis Breast Care, were awarded funding from the Mid-South affiliate of the Susan G. Komen Foundation to make breast care available to uninsured and underinsured women. The funding allows area women the opportunity to receive the full continuum of breast care at Baptist, and complements the funding for mammography provided by the Baptist Women's Health Center. This includes breast exams, ultrasounds, biopsies and treatment for women who are uninsured or underinsured and at <250% of the Federal Poverty Index (based on household income).

Nursing and Outpatient Services



Above: Staff prepares an IV bag for dispensing patient medication.

Right: Cancer Center staff lift the spirits of a patient undergoing chemotherapy.

Baptist Cancer Center provides outpatient oncology services throughout the metro-Memphis, Tenn. area including Memphis, Bartlett, Union City, Tenn. and DeSoto County, Miss., as well as across the Baptist Memorial Health Care network in Arkansas, Tennessee and Mississippi. Specialty multidisciplinary services are provided in lung cancer, breast cancer, and malignant hematological conditions in Memphis.

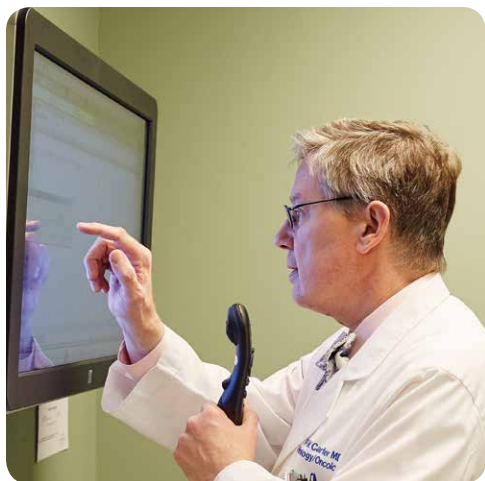
In collaboration with 36 medical, radiation and surgical oncologists, along with nine nurse practitioners, a nursing staff of over 40 specially-trained RNs provide therapy to cancer patients from diagnosis and treatment to survivorship and life planning. Research staff are also readily available to provide access to clinical trials. Chemotherapy, biotherapy, supportive care, symptom management, and all related education are provided to patients, families, and caregivers. All of the nurses receive an individualized in-depth oncology orientation. Within a year of orientation, they are required to successfully complete the Oncology Nursing Society Chemotherapy/Biotherapy course. Oncology specific competencies are evaluated annually. Malignant hematology clinic nurses have additional training and minimum-yearly objectives related to their specialty, and many of the nursing staff also obtain oncology nursing certifications. Baptist Cancer Center also provides comprehensive cancer care in key clinical programs such as cancer genetics, nutrition, social work, care navigation and palliative care.

36 Medical, radiation and surgical oncologists

40+ Specially-trained RNs in metro-Memphis area

9 Nurse practitioners

Care Planning and Coordination



Above: Peter W. Carter, MD, carefully reviews a patient's chart to determine the best course of treatment.

Right: Dr. Carter, known for his caring and empathetic demeanor, counsels a patient and family member.

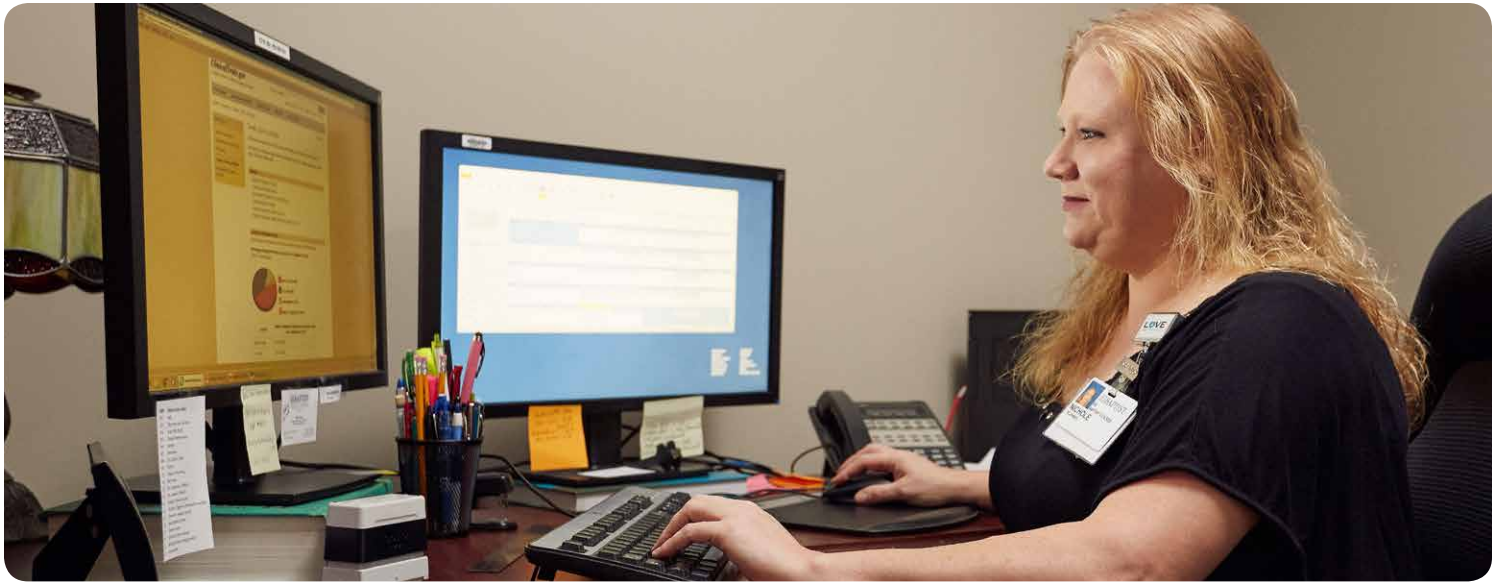
The “Journey” binder and its online counterpart are provided to all Baptist Cancer Center patients and includes a full treatment care plan, information on specific treatments and side effects, key contacts, and community resources.



Baptist Cancer Center is working to establish an Oncology Medical Home to enhance the quality of care and the experience of patients undergoing care. One key component of OMH is to improve care planning and coordination for patients which helps them better understand their treatment. The BCC Patient Engagement Committee offers a program called “My Personal Baptist Treatment Journey,” to provide core educational materials for newly-diagnosed patients, personalized care plans, and a comprehensive list of community resources for cancer patients. Nurses and other representatives from each BCC site meet to discuss what educational information should be included, and what format should be used for maximum benefit to patients and caregivers.

Patients and their caregivers are engaged by questionnaires and focus groups to determine their needs and what they feel will be useful. The “Journey” binder and its online counterpart are provided to all Baptist Cancer Center patients. They both include a full treatment care plan, information on specific treatments and side effects, key contacts, and community resources. Additional information can be added by any BCC provider during a patient's treatment “journey,” and will ultimately become a guide to survivorship.

Enhancing Clinical Research



Above: A clinical researcher helps manage clinical trials data.

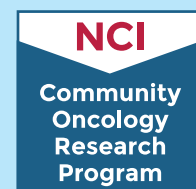
The Mid-South region, particularly the Memphis area, has the highest disparities in the United States when it comes to cancer mortality rates. With a firm commitment to changing this reality, Baptist is focused on dynamic clinical research that affects all populations and begins in our own communities.

With the 2014 announcement that Baptist Cancer Center would serve as the lead site for the National Cancer Institute Community Oncology Research Program (NCORP), cancer patients in the Mid-South now have unprecedented access to clinical trials and research. As only one of 12 designated centers in the country, Baptist Cancer Center is the only program within a seven-state region (Oklahoma, Arkansas, Kentucky, Tennessee, Mississippi, Alabama, and West Virginia) to provide access to lifesaving trials.

Through NCORP, new clinical trial sites include Memphis, Tenn., Oxford, Miss, Columbus, Miss., and Jonesboro, Ark. and a strong working partnership with Meharry Medical College in Nashville. The NCORP announcement follows Baptist's tradition of building strong research partnerships such as the National Cancer Institute, Vanderbilt-Ingram Cancer Center (VICC) and the industry to provide research and clinical trial opportunities. Baptist's investigators hold research grants from the Patient Centered Outcomes Research Institute (PCORI) and the National Cancer Institute (NCI), among others.

The clinical research operations office provides centralized management and support of clinical trials for Baptist Cancer Center. The office supports the ongoing research efforts by ensuring that our trials are conducted according to federal regulations, Good Clinical Practice (GCP), and Human Subjects Protection guidelines with the highest research standards.

The NCORP clinical trials, spearheaded by the Baptist Cancer Center, drastically change the research opportunities in this part of the country. Positively affecting patients, doctors, and our health care system, these trials bring leading, lifesaving research to new areas of the Mid-South.



Malignant Hematology and Transplant Program



Above: Baptist Cancer Center nurses confer about the next steps for a patient.

Right: Dr. Salil Goorha offers new hope to cancer patients facing stem cell transplants.



Baptist Cancer Center's Malignant Hematology & Transplant Program is accredited by the Foundation for the Accreditation of Cellular Therapy (FACT) for autologous and allogeneic transplants. The program is listed as an approved center through the National Marrow Donor Program (NMDP).

In 2015, the program performed 31 stem cell transplants. Nine were allogeneic transplants and 22 were autologous transplants. All patients were engrafted per Center for International Blood and Marrow Transplant Research (CIBMTR) criteria. The program had excellent results as measured by the key outcome of survival at 100 days post-transplant – 100% for both allogeneic and autologous patients.

The program provides full support and consultation for patients with malignant hematologic conditions. A coordinated team of physicians, nurses, nurse practitioners, nutrition support, genetic counselors, social workers and others address both medical and emotional needs in the coordinated program. The program provides services for patients in Memphis, from across the Baptist system and the entire tri-state region.

HAPLOIDENTICAL STEM CELL TRANSPLANT

In early 2015, Baptist cancer patients who needed stem cell transplants received even greater hope with the arrival of the haploidentical, or half-matched transplant. Under the leadership of Dr. Salil Goorha, medical director of Baptist Cancer Center's Malignant Hematology and Transplant Program, Baptist became one of a handful of centers across the nation to perform this new procedure. With haploidentical, a patient can receive bone marrow or stem cells from a relative who is only a 50 percent match to the patient—instead of a 100 percent match.

2015 TOTALS

31 Stem cell transplants

22 Autologous transplants

9 Allogeneic transplants



Above: Dr. Salil Goorha, medical director of Baptist Cancer Center's Malignant Hematology and Transplant Program, brought the new haploidentical procedure to Baptist.

Left: Pioneered at Johns Hopkins, the haploidentical procedure has been performed at only a handful of centers across the country, now including Baptist Cancer Center.

"In stem cell transplants, we first look for a 100 percent match. With haplo, we can rely on a 50 percent genetic similarity from a relative," says Dr. Goorha.

In February 2015, Dr. Goorha performed the first adult haploidentical for a cancer patient diagnosed with an aggressive form of leukemia. As an African-American woman, her case was even more complex due to the limited donor pool mix. Without a lifesaving stem-cell transplant, her survival was estimated at only six months.

"We perform transplants to save lives, and we want to match the human leukocyte antigen (HLA). When we look at a match, genetics and ethnicity are key factors. Asians and African-Americans are particularly vulnerable when finding a match because the donor population pool for those races is smaller," said Goorha.

Haploidentical was originally used for sickle cell anemia patients but now includes cancer patients. Stem cells live in donor bone marrow. By transplanting stem cells, the idea is to give new life to a sick immune system trying to fight disease. Researchers discovered when patients received cyclophosphamide, a chemotherapy drug, it not only kills the cells that cause graft-versus-host disease, but it preserves the stem cells and the cells that destroy the cancer.

"I was led here for a purpose.
And that purpose is to give
great care." – Dr. Goorha

Thoracic Oncology Program



Above: Raymond Osarogiagbon, MD, co-director, Multidisciplinary Thoracic Oncology program

The multidisciplinary team's manuscript, "Deploying Team Science Principles to Optimize Interdisciplinary Lung Cancer Care Delivery: Avoiding the Long and Winding Road to Optimal Care", was published in the *Journal of Oncology Practice*.

The Thoracic Oncology Program, under the direction of Dr. Raymond Osarogiagbon and Dr. Todd Robbins, has two branches: a clinical program to provide and improve the patient care quality, and a research program focused on providing evidence to improve clinical practice. Clinical care is provided through a multidisciplinary center where patients are evaluated by a team of physicians and professionals from many disciplines.

During 2015, there were more than 342 new patients discussed by the team and 177 new clinic patients. The National Comprehensive Cancer Network guidelines are used to develop recommendations of care for each case presented. The overall rate between recommendations for care and delivered care is 92 percent.

Two facets of this program are key:

1. This is a very high level of guideline-appropriate care compared to national benchmarks
2. The program reports these data to all users and the public.

INCIDENTAL PULMONARY NODULE PROGRAM

A major development in 2016 centered on an exciting new expansion with the Incidental Pulmonary Nodule Program, led by Dr. Todd Robbins. Opened in January 2016, the program goal is to help assure systematic follow-up of incidental chest findings from radiographic chest scans (X-rays, CT scans and other imaging) in the metro Memphis region. Following a systematic process ideally would allow for earlier detection of any potentially malignant lung disease. The program, funded through a grant provided by the Baptist Memorial Health Care Foundation, aligns closely with Baptist's mission to provide high-quality, timely care in the community.

Since its inception, the nodule program has reviewed an average of 250 radiographic reports with an incidental pulmonary nodule per month and staff have seen 110 patients in the physical clinic location. Forty-five patients have undergone subsequent pulmonary nodule biopsies; 35 patients have been diagnosed with lung cancer, with 29 referred for surgery, and 34 referred to the Thoracic Multidisciplinary Clinic.

LEADING RESEARCH

The research program continues work on an ongoing regional quality of surgical resection project funded by the National Cancer Institute. During the project, Baptist collaborated with hospitals throughout the Mid-South and partnered with the American Cancer Society's division of Surveillance and Health Services Research to produce publications.

Our work to date is producing international interest in lung cancer staging practice disparities. This work includes a commentary in the *Journal of Thoracic Oncology* featuring members of the research group and the International Association for the Study of Lung Cancer (IASLC) staging committee.

The research group also had a strong presence at oncology meetings throughout the year, including:

- Two abstracts at the American Society of Clinical Oncology (ASCO) Quality Care Symposium
- Six abstracts at the 2016 ASCO annual meeting
- Three abstracts at the 9th Annual Conference on the Science of Dissemination and Implementation in Health
- Two abstracts at the 2016 Multidisciplinary Symposium in Thoracic Oncology
- Eleven abstracts at the 2016 World Conference on Lung Cancer in Vienna, Austria. One of these abstracts reported on the impact of the thoracic oncology program's continued work and recognition by the Bonnie J. Addario Lung Cancer Foundation as a "Community Hospital Center of Excellence." This abstract was selected for press conference coverage on the first day of the meeting. During the conference, Dr. Osarogiagbon reported that using a Center of Excellence model that focuses on underserved areas contributed to early diagnosis and high-quality treatment for lung cancer patients.

Dr. Osarogiagbon serves as the chair-elect of the International Association for the Study of Lung Cancer Membership Committee, and is a standing member of the Southwest Oncology Group, the NCI Cancer Care Delivery Research committees, and the NIH Health Services Organization and Delivery study section.

The multidisciplinary team's manuscript, "Deploying Team Science Principles to Optimize Interdisciplinary Lung Cancer Care Delivery: Avoiding the Long and Winding Road to Optimal Care", was published in the Journal of Oncology Practice

Out of their work, the thoracic oncology research group has published 12 research pieces in oncology journals during 2016.

The collective efforts of those clinicians, especially Drs. Osarogiagbon and Robbins, have led to improvements in patient outcomes, shortening the time required to start treatment, and improving the experience and satisfaction with care for both patients and their providers.



Above: Todd Robbins, MD, chair of the Thoracic Surgery/Pulmonary Medicine program

2015 TOTALS

342 Patients discussed by the team

177 New clinic patients

92% of cases in sync with conference and national guideline recommendations



Left: Sanjeev Kumar, MD

Center: Ahmad Azari, MD

Right: Stephen Behrman, MD

Our surgical oncologists continually search for leading cancer treatments. As physician leaders, they have been recognized for clinical research, minimally-invasive surgical techniques and participation in clinical studies.

Baptist Cancer Center's surgical oncologists serve patients both in the surgery suite and as physician leaders. Focused on new techniques and therapies, these surgeons continue to innovate and search for leading treatments.

GYNECOLOGIC ONCOLOGY

Dr. Sanjeev Kumar, a gynecologic oncologist, cares for patients in both Memphis and north Mississippi. Spending about 70 percent of his time in the operating room, Dr. Kumar practices minimally-invasive techniques, including the use of robotic technologies for gynecologic cancers.

This year, he has focused his research on Hyperthermic Intraperitoneal Chemotherapy (HIPEC), a newer form of chemotherapy. New to the U.S., the chemotherapy treats ovarian cancer and represents one of Baptist's newest services. During 2016, Dr. Kumar participated in research studies connected to the NCORP grant and expects 2017 to bring even more research studies centered on ovarian and cervical cancer. With genetics playing a larger role in preventive care, Dr. Kumar also performs minimally-invasive preventive procedures. He believes strongly in bringing care to where patients live, "I've really been excited to extend care to the Oxford (Miss.) patients."

Dr. Ahmad Azari, a gynecologic surgeon, focuses on single-incision laparoscopy gynecology surgery. In 2011, he performed the region's first single-incision laparoscopy hysterectomy surgery, and in 2013 his practice was recognized as Tennessee's first "Center of Excellence for Minimally Invasive Gynecology Surgery." Specializing in complicated, complex pelvic cancer cases including pelvic masses, thyroid and precancerous procedures Dr. Kumar's work includes expanding minimally-invasive techniques. He is always focused on the patient's experience and says, "I consider my ability to operate on a patient as a privilege."

GASTROINTESTINAL SURGERY

Surgeon Dr. Stephen Behrman focused in 2016 on the continued development of a Gastrointestinal multidisciplinary program designed to offer patients a "one-stop" experience when facing cancer treatment. "Via our outstanding nurse navigator we

are busy consolidating our multi-D conference with the clinical care rendered by gastroenterology, radiation and medical oncology and surgery. The advantage of this program is that a patient has necessary studies completed, is seen and discussed by all specialists, and leaves our clinic with a treatment plan all within one or two days,” according to Dr. Behrman.

Baptist participated in a national, multi-institutional randomized controlled study focused on whether drains are necessary following pancreatic surgery to enhance the safety of these complex operations. “Due to our high volume of pancreatic surgery and the expertise of our clinical research nurses, Baptist recruited the third highest volume of patients for these ground breaking studies that are unlikely to be duplicated,” Dr. Behrman added. Both studies will be published in the highest tier peer reviewed surgical journals and will/have been presented at the most prominent surgical forums in the United States.

BREAST SURGERY

Breast surgeons at Baptist play an important role, not only in surgery, but as leaders and innovators for patient care, treatment advances and increased access. Early detection and prevention of breast cancer across all communities, particularly for uninsured women, continues to be a priority for our breast specialists.

SEED LOCALIZATION

At Baptist, seed localization is changing the landscape for breast cancer treatment. This new seed procedure contains a small amount of radioactivity and is used differently for various types of cancer. For prostate cancer patients, these seeds are distributed in large numbers, typically 50 to 60 at a time. For breast cancer patients, the seed is used instead of a wire to help the surgeon localize the part of the breast that needs to be removed during surgery.

“The seed emits a tiny amount of radiation, which can be identified and tracked using a handheld gamma probe – like a Geiger counter,” said Dr. Alyssa Throckmorton, a Baptist surgeon specializing in oncology and breast cancer. “This localization technique can be used for not only small cancers, but also small benign masses, micro-calcifications, or even axillary lymph nodes that require removal.

Most patients tolerate the placement of this seed very well. In fact, there is often less pain than would be experienced with a needle biopsy or wire localization. Additionally, the seed can be placed up to five days before surgery occurs.

“This is more convenient for many patients compared to a wire localization, which must be done on the day of the surgery,” said Dr. Throckmorton. “The radiation exposure, if the seed is placed five days before surgery, is the equivalent of a mammogram. Most patients have their seed placed less than five days in advance so for most, the radiation exposure is even less.”

Baptist is only one of two radioactive seed localization programs in the state of Tennessee and the only one in the Mid-South, including Mississippi and Arkansas.



Above: Alyssa Throckmorton, MD, FACS and Lindi Vanderwalde, MD, breast oncology surgeons with BMG Memphis Breast Care, were awarded funding from the Mid-South affiliate of Susan G. Komen to make breast care available to uninsured and underinsured women.

Baptist is one of only two radioactive seed localization programs in Tennessee and the only one in the Mid-South.



Vanderbilt-Ingram Cancer Center (VICC) and Baptist launched a community assessment tool. Its purpose is to evaluate the educational and support needs of patients and caregivers through a survey of providers and more than 500 patients in the Baptist system.

Baptist Cancer Center's affiliation with the Vanderbilt-Ingram Cancer Center (VICC) continues to grow since its inception in 2012. The goals of this academic affiliation are to enhance cancer care throughout the region served by Baptist and to enhance the cancer prevention, treatment and research mission of the VICC. The affiliation provides a number of key programs including joint cancer disease-specific conferences, shared education programs, joint grant applications for research funding and academic training opportunities, joint clinical research, and sharing of tissue resources on specific clinical trials.

Beginning in 2013, Baptist and the VICC implemented a monthly, joint breast conference primarily to discuss complex cancer cases. Baptist Cancer Center physicians are able to consult with other disease-specific specialists to provide patients with additional expert opinions at no additional cost.

In 2014 and 2015, the affiliation continued to strengthen. The VICC staff provided invaluable expertise and support for obtaining and implementing the National Cancer Institute (NCI) Community Oncology Research Program (NCORP) and for re-engineering the clinical trials infrastructure at Baptist. In addition to the Baptist Cancer Center, the NCORP program includes partners from Nashville Breast and Meharry Medical College.

VICC and Baptist launched a community assessment tool. Its purpose was to evaluate the educational and support needs of patients and caregivers by surveying more than 500 patients in the Baptist Memorial Health Care system, VICC and Nashville General Hospital. The results provided important information to guide the development of comprehensive educational and support programs to better serve patients and caregivers.

The affiliation with VICC offers ongoing access to key educational programs for physicians and clinicians such as the VICC Annual Research Retreat and expert resources for accreditation and implementation of new services. In addition, VICC experts participate regularly in Baptist's journal club series, and in the annual Mid-South Cancer Symposium.

Quality Measures and Accreditation

As part of the Commission on Cancer accreditation for its cancer program, Baptist Memorial Health Care submits information to the National Cancer Data Base (NCDB). The NCDB includes key information on more than one million new cancer cases per year in the United States. It allows for measurement of the quality of care provided at Baptist using nationally-accepted standards compared to other cancer programs around the country. To achieve Commission on Cancer accreditation, Baptist must meet performance standards on each of these measures. The information is also used to assess care and improve the cancer programs and processes to help facilitate the best possible care.

Many hospitals in America are reluctant to share this information with the public, but Baptist is committed to reporting data and using the data to continuously improve cancer care. Below are data from the most recent reported years (because of the nature of the NCDB and the time it takes for a patient to complete cancer care, it takes up to 18 months to get complete data for a year, so the most recent data as of fall 2016 was for 2014). Baptist performed as well as or better than other cancer programs. The data also clearly show Baptist's lung multidisciplinary program, directed by Dr. Raymond Osarogiagbon, as facilitating significant improvement on markers over the designated three-year time period.



Above: Committed to raising the bar of care, Aleksander Jankov, MD, leads the gastrointestinal malignancy program and moderates Baptist's multidisciplinary gastrointestinal tumor board. A well-respected physician and a sub-investigator, Dr. Jankov is recruiting patients in several clinical trials available through the Baptist Cancer Center.

Performance on Key Nationally Recognized Quality Measures Commission on Cancer – National Cancer Data Base (for Baptist Memorial Hospital–Memphis, Women's and Collierville)

	2012	2013	2014
BREAST CANCER			
Needle biopsy to establish diagnosis of breast cancer	86.50	94.10	93.50
Anti-estrogen therapy with hormone receptor positive breast cancer	96.40	97.60	95.70
Radiation therapy administered after mastectomy for women with 4 or more positive lymph nodes	88.90	100.00	88.90
Radiation with breast conservation surgery	95.10	90.80	91.70
Chemotherapy with hormone receptor negative breast cancer	89.70	100.00	100.00
COLON CANCER			
Chemotherapy Stage III colon cancer	100.00	85.70	85.70
LUNG CANCER			
At least 10 regional lymph nodes examined for Stage IA, IB, IIA, IIB lung cancer	68.30	69.10	78.50
Surgery is not the first course treatment for cN2, M0 lung cancer	90.00	77.80	100.00
Chemotherapy is administered for lymph node positive lung cancer	75.00	83.30	86.70

Performance similar or above national benchmark comparisons for all measures

Quality of Cancer Care – Measuring and Reporting

Right: Raymond Osarogiagbon, MD, discusses a patient's case with one of his team members.



The cancer registry is a key component of the Baptist Cancer Center program. The registry is a tool designed specifically to track any patient diagnosed or treated at the hospital. It includes detailed information like the type of cancer, the extent or “stage” of the cancer, the types of treatments received, plus an annual review to see if the cancer has recurred, and how the patient is doing. Collecting this data is done with privacy protections and full approval under all applicable regulations, policies and laws.

Baptist Cancer Center regularly uses the information to assess the quality of care and to provide physicians with information about treatment and the care they administer. Without a registry of cancer cases, we would not have any information to determine how we are performing or how to improve our cancer care. Maintaining a cancer registry is also a central requirement for cancer program accreditation by the Commission on Cancer. Baptist has held this accreditation for many years.

Cancer registries in America have provided key insights to direct cancer research and are partly responsible for many advances made in cancer care.

Specialized teams maintain the Baptist Cancer Registry, specifically nine Certified Tumor Registrars (CTR) and two coordinators. All CTRs acquire certification through specialized training, passing a rigorous examination, and meeting ongoing educational requirements.

2015 Baptist Cancer Data Analysis - Primary Site Table

Memphis, Collierville, Women's Hospital

PRIMARY SITE	TOTAL	CLASS		SEX		AJCC STAGE						
		A	N/A	M	F	0	I	II	III	IV	UNK	N/A
ALL SITES	2527	2056	471	1012	1515	108	554	304	301	493	410	357
ORAL CAVITY	49	33	16	43	6	1	2	5	5	23	12	1
LIP	0	0	0	0	0	0	0	0	0	0	0	0
TONGUE	19	12	7	17	2	1	1	1	3	9	4	0
OROPHARYNX	0	0	0	0	0	0	0	0	0	0	0	0
HYPOPHARYNX	3	2	1	3	0	0	0	1	0	2	0	0
OTHER	27	19	8	23	4	0	1	3	2	12	8	1
DIGESTIVE SYSTEM	452	366	86	244	208	6	63	78	85	139	73	8
ESOPHAGUS	35	29	6	26	9	0	3	5	11	6	10	0
STOMACH	30	24	6	19	11	0	3	5	3	13	6	0
COLON	136	111	25	72	64	2	29	21	35	38	11	0
RECTUM	67	59	8	33	34	1	7	14	14	13	18	0
ANUS/ANAL CANAL	12	7	5	3	9	1	1	2	1	5	2	0
LIVER	30	24	6	20	10	0	7	4	4	7	6	2
PANCREAS	91	71	20	47	44	1	8	21	11	42	8	0
OTHER	51	41	10	24	27	1	5	6	6	15	12	6
RESPIRATORY SYSTEM	448	369	79	236	212	0	87	41	81	195	44	0
NASAL/SINUS	2	2	0	1	1	0	0	0	0	2	0	0
LARYNX	20	13	7	15	5	0	4	1	3	7	5	0
OTHER	5	5	0	5	0	0	1	2	0	1	1	0
LUNG/BRONC-SMALL CELL	64	48	16	28	36	0	4	0	10	48	2	0
LUNG/BRONC-NON SMALL CELL	348	293	55	181	167	0	78	38	67	130	35	0
OTHER BRONCHUS & LUNG	9	8	1	6	3	0	0	0	1	7	1	0
BLOOD & BONE MARROW	163	111	52	90	73	0	2	0	0	0	2	159
LEUKEMIA	76	60	16	39	37	0	2	0	0	0	2	72
MULTIPLE MYELOMA	58	34	24	32	26	0	0	0	0	0	0	58
OTHER	29	17	12	19	10	0	0	0	0	0	0	29
BONE	9	5	4	4	5	0	3	1	0	1	3	1
CONNECT/SOFT TISSUE	16	12	4	8	8	0	4	1	0	2	8	1
SKIN	36	27	9	22	14	2	5	3	4	4	15	3
MELANOMA	34	26	8	20	14	2	5	3	4	4	14	2
OTHER	2	1	1	2	0	0	0	0	0	0	1	1
BREAST	471	414	57	4	467	82	178	97	40	25	49	0
FEMALE GENITAL	256	222	34	0	256	8	119	11	46	23	48	1
CERVIX UTERI	43	36	7	0	43	1	21	4	10	2	5	0
CORPUS UTERI	125	120	5	0	125	3	75	3	14	10	20	0
OVARY	51	38	13	0	51	0	13	1	16	11	10	0
VULVA	29	20	9	0	29	4	8	1	5	0	11	0
OTHER	8	8	0	0	8	0	2	2	1	0	2	1
MALE GENITAL	137	93	44	137	0	0	27	40	5	18	46	1
PROSTATE	128	86	42	128	0	0	26	39	4	18	41	0
TESTIS	6	5	1	6	0	0	1	1	1	0	3	0
OTHER	3	2	1	3	0	0	0	0	0	0	2	1
URINARY SYSTEM	134	114	20	82	52	9	34	9	0	18	64	0
BLADDER	50	40	10	31	19	8	7	4	0	8	23	0
KIDNEY/RENAL	82	72	10	50	32	1	27	5	0	10	39	0
OTHER	2	2	0	1	1	0	0	0	0	0	2	0
BRAIN & CNS	119	108	11	45	74	0	0	0	0	0	0	119
BRAIN (BENIGN)	4	4	0	1	3	0	0	0	0	0	0	4
BRAIN (MALIGNANT)	36	35	1	24	12	0	0	0	0	0	0	36
OTHER	79	69	10	20	59	0	0	0	0	0	0	79
ENDOCRINE	84	76	8	26	58	0	16	1	8	2	32	25
THYROID	59	52	7	13	46	0	16	1	8	2	32	0
OTHER	25	24	1	13	12	0	0	0	0	0	0	25
LYMPHATIC SYSTEM	106	66	40	50	56	0	14	16	25	42	9	0
HODGKIN'S DISEASE	12	6	6	6	6	0	0	4	5	3	0	0
NON-HODGKIN'S	94	60	34	44	50	0	14	12	20	39	9	0
UNKNOWN PRIMARY	33	29	4	17	16	0	0	0	0	0	1	32
OTHER/ILL-DEFINED	14	11	3	4	10	0	0	1	2	1	4	6

Number of cases excluded: 1.

This report includes CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases

