GBMC

SANDRA & MALCOLM BERMAN CANCER INSTITUTE

2019 Annual Report

LETTER FROM THE DIRECTOR

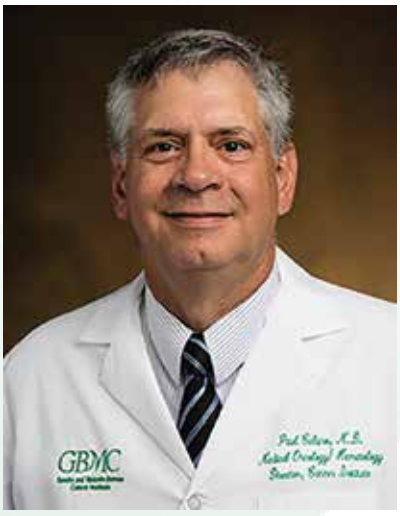
FRIENDS,

The Sandra and Malcolm Berman Cancer Institute (SMBCI) at GBMC continues to be a leader in cancer care for our community. The Berman Cancer Institute is committed to providing the highest quality in cancer care, including proper cancer screening and prevention programs, state-of-the-art diagnostic approaches, team-based treatment planning and care, access to the latest cutting edge clinical trials, symptom management, survivorship, integrative care, palliative care and psychosocial support.

Our efforts have been recognized nationally by the Commission on Cancer, which has repeatedly awarded our cancer program with COMMENDATION designation for our quality outcomes and performance. We have once again have been certified by the Quality Oncology Performance Initiative by the American Society of Clinical Oncology. The SMBCI Comprehensive Breast Care Center at GBMC has received high recognition through the National Accreditation Program for Breast Centers. Even more important than our national certification, the Sandra and Malcolm Berman Cancer Institute continues to gain excellent ratings with our patients, where we garner a 99th percentile satisfaction rating.

The SMBCI at GBMC is organized under tightly run multidisciplinary teams which have continued to be refined and expanded to provide excellent care to our patients. Our teams have defined leadership under major cancer types such as breast, head and neck, gastrointestinal, thoracic, and gynecological oncology. We also work in close collaboration with Chesapeake Urology. These teams include surgeons, medical oncologists, radiation oncology, medical subspecialists, pathologists, genetics, clinical trial support, diagnostic and interventional radiology, integrative and palliative care and social support. All cases are carefully assessed to provide the best possible diagnostic and treatment plans.

GBMC



Paul Celano, MD, FACP, FASCO

As part of the SMBI at GBMC's commitment to the total care of our patients, we continue to provide palliative and hospice care in collaboration with Gilchrist. Delia Chiaramonte, MD, MS has lead and enriched our Oncology Integrative Medicine Program. This is a comprehensive program that provides counseling and evidence-based complementary medicine services.

Our Cancer Clinical Trials program offers nearly 60 clinical trials for all major cancers through our participation with the National Cancer Institute and the pharmaceutical industry. Our trials range from personalized targeted genetic therapies to immunotherapies. These trials have provided our patients with access to the latest available therapies. Our program has again received national distinction as a High Performing Community Site by the National Cancer Institute.

The SMBCI at GBMC is committed to the absolute best for our patients, their families and their loved ones in their journey to combat cancer. We salute the tireless efforts of the physicians, nurses, administration and all the staff of the Berman Cancer Institute and GBMC Healthcare in the care of our patients. Our mission is to provide superior, compassionate and extraordinary care for cancer patients at GBMC.

Paul Celano, MD

Paul Celano, MD, FACP, FASCO
Herman and Walter Samuelson Medical Director
Sandra and Malcolm Berman Cancer Institute
Greater Baltimore Medical Center

"Our mission is to provide superior, compassionate and extraordinary care for every patient, every time."

– Paul Celano, MD, FACP, FASCO

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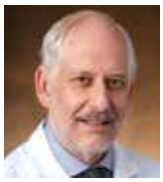
SANDRA & MALCOLM BERMAN CANCER INSTITUTE LEADERSHIP TEAM



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FEATURED PROGRAM

Thoracic Cancer Program

The Thoracic Cancer Program of the Sandra and Malcolm Berman Cancer Institute strives to care for every cancer patient by integrating cutting-edge clinical research with excellent patient-centered care.

The multidisciplinary effort is led by the center's Herman and Walter Samuelson Medical Director, Paul Celano, MD, and Medical Oncologist, Mei Tang, MD. Since its inception in 2018, it has been well-received with great support among all care teams and specialists from Radiology, Pathology, Pulmonology, Thoracic Surgery, Radiation Oncology and Medical Oncology. This conference is monitored and supported by representatives from the cancer registry and the clinical research program, as well as nurse navigators and oncology social workers.

Jennifer L. Sullivan, *MD, FACS*

It has been a great year for the program, as Jennifer L. Sullivan, MD, FACS, thoracic surgeon has joined the Thoracic Cancer Program. Her experience and expertise in endoscopic, laparoscopic and robotic surgery has propelled the multidisciplinary program to a new level, as she has employed advances in surgery that enable smaller incisions and potentially faster recovery times.

In November 2019, the newly opened endo-bronchoscopy suite greatly enhanced the center's capabilities in rapid diagnosis and interventional pulmonary therapy. This unit improves the ability for prompt pulmonary evaluation and intervention that is essential in lung cancer care, including toxicities of immunotherapy and targeted therapy.

The renowned GBMC Radiation Oncology Department is accredited by the American College of Radiology. As always, the entire group of radiation oncologists has demonstrated a strong presence in the collaborative effort. In addition, they are local principal investigators of various national clinical trials.

For 2020, the Thoracic Program has targeted the known low rate of lung cancer screening in high-risk populations as a goal for improvement. It will explore an approach of one-stop shopping, combining acquisition of low-dose CT scans with immediate scan interpretation and smoking cessation counseling (when necessary). In addition, given the migration to lung cancer characterization via biomarkers and molecular markers, the planned Molecular Tumor Board will meet the burgeoning need for more specific diagnosis and patient-tailored treatment in this field. With goals of improving detection and treatment of lung cancer, patients' access to emerging and innovative therapies will continue to improve while they are served near home in their community.

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CLINICAL PROGRAM

Oncology Clinical Trials Program

The Oncology Clinical Trials Program at the Sandra and Malcolm Berman Cancer Institute offers more than 60 trials to patients for many different cancer diagnoses including, but not limited to, breast, lung, gastrointestinal, gynecological, lymphoma, head and neck, melanoma and genitourinary cancers.

The program is an active member of the National Cancer Institute Clinical Trials Network, which includes the Eastern Cooperative Oncology Group/American College of Radiology Imaging Network, NRG Oncology, which includes the National Surgical Adjuvant Breast and Bowel Project, the Radiation Tumor Oncology Group and the Gynecologic Oncology Group.

For the second consecutive year the Sandra and Malcolm Berman Cancer Institute was selected by the National Clinical Trials Network (NCTN) Leadership Committee to participate in the High-Performance Site Initiative. This initiative is targeted to those sites that have been identified by the NCTN Leadership as "high performing sites" based on accrual, site participation and high level of data quality across the entire NCTN.

Clinical trials at GBMC are offered to patients for the prevention, screening and treatment of cancer and the treatment of side effects. Clinical trials offer patients the opportunity to take advantage of new therapies, including new drugs or new ways to use existing drugs, types of surgeries, radiation therapies and new ways to combine different cancer treatments. GBMC offers many of the same state-of-the art clinical trials as large academic programs with the benefit of receiving care close to home in a community setting.

CLINICAL PROGRAM

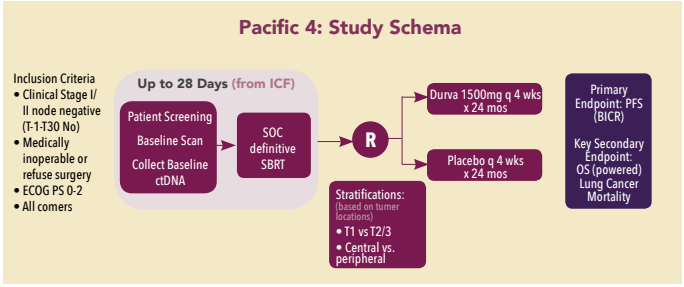
Immunotherapy – Lung Cancer

Lung cancer, both small cell and non-small cell, is the second most common cancer in both men and women and is by far the leading cause of cancer death for both. The American Cancer Society reports that each year, more people die of lung cancer than of breast, prostate and colon cancers combined.

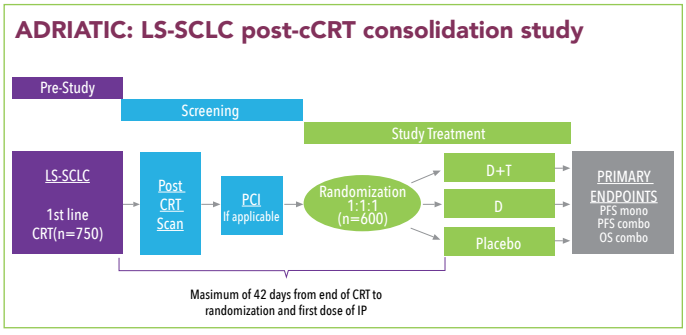
In lung cancer, clinical trials have helped lead to the discovery of targeted and biologic therapies, as well as helped to define how best to combine chemotherapy and radiation.

Immunotherapy is a major focus in lung cancer treatment research today. It is a type of cancer treatment that boosts the body's natural defenses to fight cancer. Clinical trials are ongoing, looking at new combinations of immunotherapies with or without chemotherapy. Participating in a clinical trial may give patients access to treatments that are not widely available elsewhere and may offer additional options if their cancer has returned after standard treatment.

GBMC doctors participate as investigators in many lung cancer clinical trials that test new drugs and drug combinations, surgical and radiation therapy techniques and strategies for preserving quality of life during and after treatment. Here are examples of these trials.



A phase III, randomized, placebo-controlled, double-blind multi-center international study of Durvalumab following stereotactic Body Radiation Therapy (SBRT) for the treatment of patients with unresected Stage I/II, lymph-node negative non-small-cell lung cancer (PACIFIC-4/RTOG-3515)



A Phase III, randomized, double-blind, placebo-controlled multi-center international study of Durvalumab or Durvalumab and Tremelimumab as Consolidation Treatment for patients with Stage I-III limited disease smallcell lung cancer who have not progressed following concurrent Chemoradiation Therapy (ADRIATIC D933QC00001)

CLINICAL PROGRAM

The Sandra and Malcolm Berman Cancer Institute in Owings Mills brings a full suite of medical oncology and infusion therapy services to the Owings Mills community and beyond. Located at 21 Crossroads Drive, the center includes a full medical oncology center staffed by Ari Elman, MD, a board-certified hematologist and medical oncologist, as well as a five-chair infusion center staffed by the institute's oncology-certified infusion nurses. In addition, patients have access to clinical trials, oncology support services and a system connection to the entire scope of the Sandra and Malcolm Berman Cancer Institute at GBMC. This location is meeting an important need for our patients in this community by providing convenient and timely access to the highest quality cancer care.

On-site Therapies and Services

- Chemotherapy
- Immunotherapy for cancer and other conditions
- Specialty infusions for osteoporosis, multiple sclerosis, neurologic conditions, GI conditions, rheumatic conditions, and other rare conditions
- Specialty injections such as Prolia, Sandostatin, Somatuline Depot
- Iron products
- Antibiotic infusions
- Growth factor therapies such as Retacrit and Udenyca
- Intravenous immune globulin infusions (IVIG)
- Port-a-catheter maintenance

CLINICAL PROGRAM

High-Risk Breast Cancer Assessment

In May 2019, the American Society of Breast Surgeons announced its recommendation that all women over the age of 25 should receive a formal risk assessment for breast cancer. These assessments utilize mathematical models that include family history to determine a woman's life-time risk of developing breast cancer.

High-Risk Breast Cancer Assessment

Take our online assessment to determine if you are at a high risk for developing breast cancer.

TAKE THE ASSESSMENT >

The Sandra and Malcolm Berman Comprehensive Breast Care Center at GBMC offers screenings for this purpose free of charge through its website – gbmc.org/breastcare. Women ages 25 and older are encouraged to go to the website and complete the assessment, comprised of various questions about past medical history and family history of cancer. The team at GBMC utilizes the Tyrer-Cuzick model to determine and estimate a woman's lifetime risk for breast cancer based on the answers. Upon submitting this assessment, a member of GBMC's team will reach out within two business days to discuss the results. If a woman is considered high risk, a team member can assist in scheduling an appointment to discuss the findings in greater detail.

GENETIC COUNSELING PROGRAM

Genetic Risk Assessment

While most cancer occurs sporadically, some families have an underlying hereditary predisposition. The role of a genetic counselor is to gather family-history information to assess for the likelihood of a hereditary risk factor and the chance of developing certain cancers. This allows for empowered patients and their families to understand genetic information and to make educated, informed decisions about genetic testing, cancer screening and prevention.

In recent years, more and more genes have been identified and associated with inherited susceptibility to cancer. As understanding of genetics and technologies has advanced, the offering of genetic testing to patients has broadened. Insurance coverage for genetic testing has also improved, and most patients for whom genetic testing is recommended have little to no out-of-pocket cost. For patients who had limited genetic testing in the past (for example, for the BRCA1/2 genes only), additional genetic testing may be a consideration. When genetic counselors identify an underlying genetic "explanation" for the cancer in a family, they can often recommend additional cancer screening and sometimes risk-reducing options such as preventative surgeries or medications. This information can also be extremely important for family members, as first-degree relatives typically have a 50-percent chance of having inherited the identified risk factor. Counselors also discuss ramifications of testing such as insurance coverage and long-term issues.

While broader genetic testing can be extremely helpful, it also comes with additional challenges. Sometimes, genetic testing results provide uncertain or unexpected information. Genetic counselors play an important role in these situations, interpreting genetic test results in terms of personal and family history and conveying this information to patients. Patients can then understand what their results mean in terms not only of their own health care, but also for other family members.

Patients should talk to their doctors about whether cancer genetic counseling may be helpful for them. Genetic counseling does not mean that an individual must move forward with genetic testing, it is simply an opportunity to learn more in order to make educated and informed decisions. Some indications for genetic counseling include anybody who has had: ovarian cancer, pancreatic cancer or metastatic prostate cancer, breast cancer diagnosed under 46 years or multiple family members with breast cancer, colon or endometrial cancer if diagnosed under 50 years or multiple family members with these cancers.

QUALITY IMPROVEMENT INITIATIVE

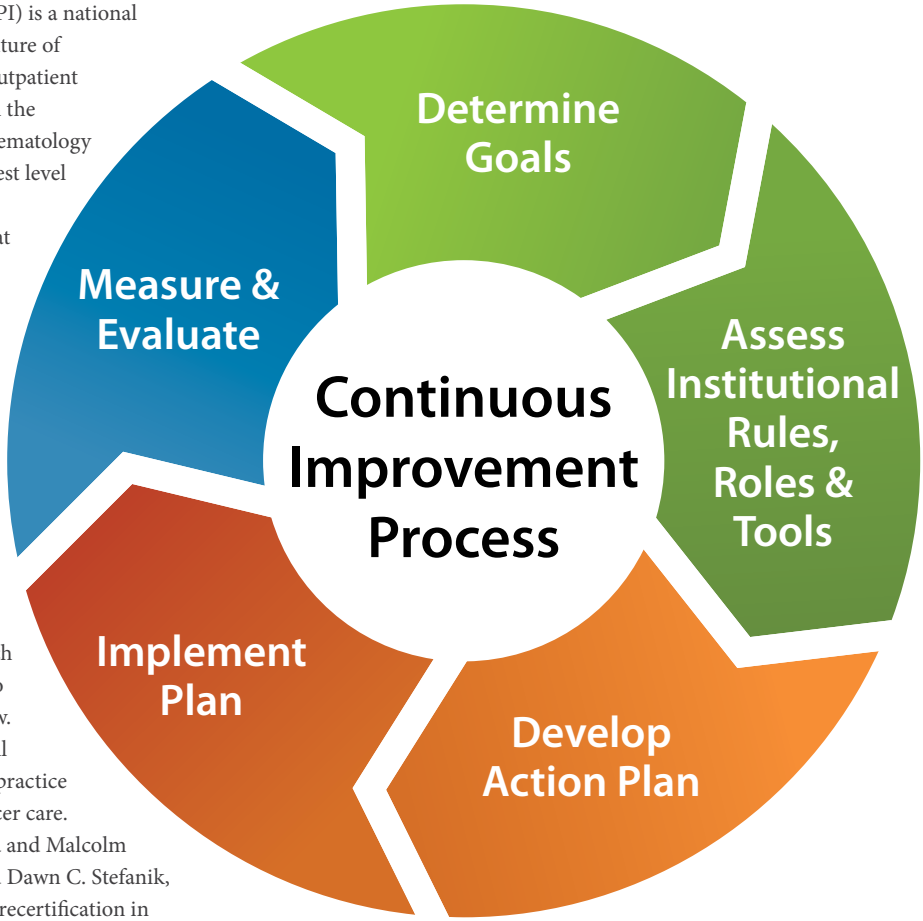
The Quality Oncology Practice Initiative (QOPI) is a national certification program designed to foster a culture of self-examination and improvement among outpatient oncology practices. It was first launched in 2010 with the primary goal of recognizing medical oncology and hematology practices that were committed to delivering the highest level of quality care possible.

The QOPI Certification Program (QCP) looks at and evaluates the performance of a practice in areas affecting patient care and safety. It is a voluntary program that has 150 evidence-based measures.

Each practice receives an individual score on these measures, and they subsequently use them to identify, develop and implement quality-improvement initiatives that lead to better care and better outcomes.

A practice must have participated in QOPI and met or exceeded a benchmark score on measures that compare the quality of its care against national standards to achieve QOPI certification. A select team of oncology professionals from QCP (such as physicians and nurses) are then chosen and will go to the practice for an on-site review and a peer review. If the practice meets the QCP's standards, the site will become certified. Earning certification indicates the practice is committed to delivering the highest quality of cancer care.

The recertification of the program at the Sandra and Malcolm Berman Cancer Institute is led by Mei Tang, MD and Dawn C. Stefanik, AA, MLT, BSN, RN, OCN. The program received its recertification in December 2019 for a three-year period. Participation in the program allows providers to focus on the highest level of quality care and safety for the patient by practicing continuous quality improvement while maintaining best practices.



The QOPI Certification Program (QCP) looks at and evaluates the performance of a practice in areas affecting patient care and safety.

QUALITY IMPROVEMENT INITIATIVE

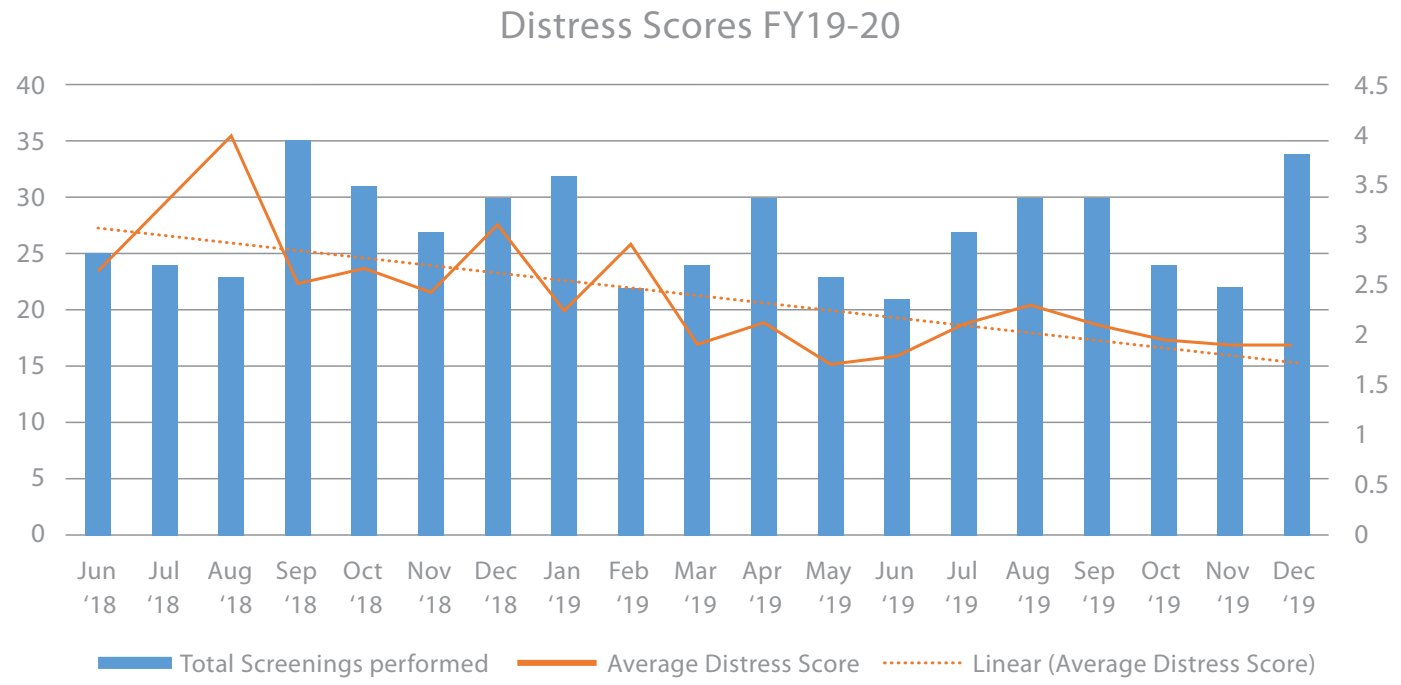
Oncology Patient Distress Screening Improvement

As part of GBMC's strategic plan, the Berman Cancer Institute set a goal for proactively addressing patient distress. Utilizing this approach would allow for deeper conversations with new patients and would result in more accurate scores on our distress screening tool. Developed by the National Comprehensive Cancer Network, the distress screening tool is designed to help patients communicate how much distress they feel, and what factors are driving this distress. These factors include financial strain, physical ailments such as pain, and mental-health concerns such as anxiety and depression. Patients provide an overall "distress score" on a scale from 1 to 10, and any patient who rates their distress as a 5 or higher receives a visit with an Oncology Support Services social worker.

While the distress tool is very helpful in determining which patients need assistance, the social work team found that, upon following up, some patients who had scored a 5 or higher no longer felt that their distress was high, and some declined to speak with a social worker. After investigating what had changed in the interim for this subset of patients, it was determined that their distress had alleviated during the new patient education session after completing the tool. Patients found that the information session alone was enough to alleviate the distress they felt previously, thus lowering their distress score.

Oncology Support Services initiated a strategy that involved addressing patient concerns and asking about a patient's distress prior to administering the distress tool. This lowered patient distress and ultimately provided a more accurate distress score. A baseline average distress score was established by calculating the average distress score for each month of the previous year and averaging out annual distress scores. The baseline average distress score was 4.8 out of 10. After initiating the new strategy, the average score began to drop month to month. Some of the initial variance in scores can be attributed to the inconsistencies that come with creating a new process, but as the team became familiar with the new process, a dramatic drop in average distress scores emerged. The accompanying chart shows the month-by-month progress.

Ultimately, the average distress scores dropped from 4.8 to 2.4. By getting a better, more accurate distress score, social workers are better able to focus their attention on the patients who need them most. Furthermore, this process helps patients for whom distress can be quickly alleviated. GBMC has continued this as standard work, and the results remain extremely positive.



REHABILITATIVE SERVICES

Oncology Rehabilitation Updates

Submitted by Alan Kimmel, MD, Medical Director, GBMC Rehabilitation

Individuals who experience the full gamut of all that comes with a diagnosis of cancer know full well that the process can be exhausting and, perhaps debilitating. Surgery, chemotherapy, radiation, imaging, other innumerable episodes of poking and prodding, sleeplessness, anxiety, fear and time away from one's usual activities can wear down even the healthiest of us.

Oncology Rehabilitation is that aspect of cancer care that encompasses treating and, more ideally, preventing many of these unintended consequences of cancer therapy. It includes a wide range of therapies designed to help one **build strength and endurance, regain independence, reduce stress and maintain the energy to participate in important daily activities**.

Why Cancer Rehabilitation is an integral part of the treatment

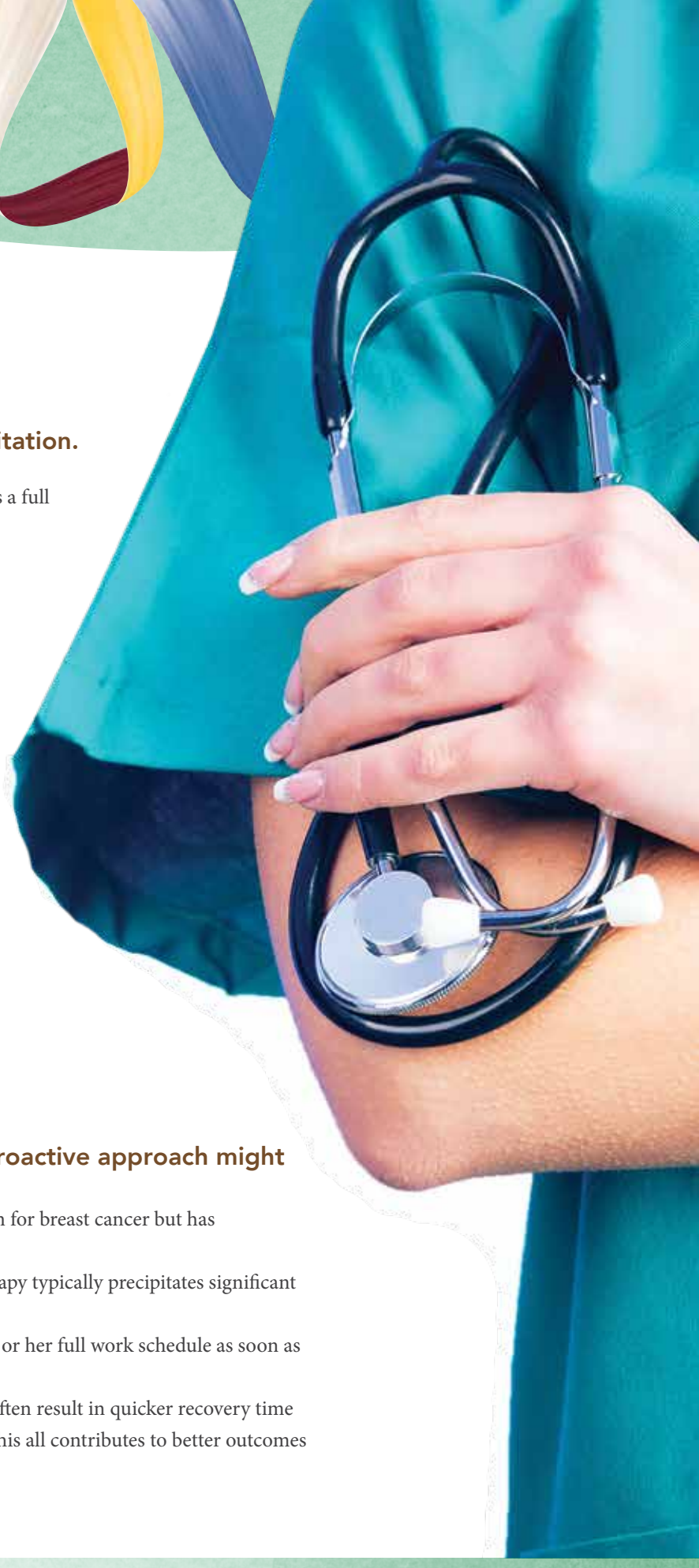
Benefits:

- Build strength and endurance
- Reduce medical weakness
- Improves quality of life of patients
- Cancer treatment is more effective and well tolerated if rehabilitation care is well adopted before, during and after the treament

Medicine, specifically for Oncology Rehabilitation.

GBMC's team of physical and occupational therapists address a full array of issues depending on the individual circumstances:

- Range of motion
- Cancer-related fatigue and generalized weakness
- Deconditioning and general debility
- Scar contracture
- Axillary web syndrome
- Neuropathy, focal weakness or palsy
- Pain
- Swelling and lymphedema
- Psychological impact
- Balance and endurance
- Activities of daily living challenges



Some specific examples in which an early proactive approach might be particularly appropriate include:

- a patient who is about to undergo surgery and radiation for breast cancer but has pre-existing arthritis or tendonitis of the shoulder
- a diagnosis for which the planned course of chemotherapy typically precipitates significant fatigue and weakness
- a person who is quite anxious about getting back to his or her full work schedule as soon as possible after completion of initial therapy
- Thinking ahead and addressing these issues early will often result in quicker recovery time with decreased pain and improved activity tolerance. This all contributes to better outcomes and improved sense of well-being.

NEW PHYSICIANS

Gang Chen, MD, PhD, is a medical oncologist and hematologist in the Sandra and Malcolm Berman Cancer Institute at GBMC. Dr. Chen earned his Doctor of Medicine degree from Xi'an Jiaotong University in China. He completed his residency at MedStar Harbor Hospital, where he spent a year as chief resident, and completed a clinical fellowship in oncology and hematology at the National Cancer Institute and the National Institutes of Health. Throughout his career, Dr. Chen has maintained interest in clinical research opportunities.

Isabelle H. Cui, MD, is a pathologist in the GBMC Department of Pathology. Dr. Cui earned her Doctorate of Medicine at the University of Maryland School of Medicine and completed an oncology pathology fellowship at the Memorial Sloan Kettering Cancer Center in New York and a gastrointestinal pathology fellowship at the University of Iowa Hospital.

Shumon Dhar, MD, is a laryngologist with Johns Hopkins Medicine at the Johns Hopkins Voice Center at GBMC. Dr. Dhar has expertise in the comprehensive management of voice, upper-airway and swallowing disorders and is passionate about treating a variety of patients including professional voice users, patients with upper-airway stenosis and those suffering from early cancer of the vocal cords. Dr. Dhar has unique training in bronchoesophagology, which positions him to treat patients with profound swallowing, reflux and motility problems from a holistic perspective.

Nina E. Ferraris, MD, is a colon and rectal surgeon at GBMC. Dr. Ferraris earned her Doctorate of Medicine from the Drexel University College of Medicine and completed her residency in general surgery at the University of Connecticut. She then completed a fellowship in minimally invasive colon and rectal surgery at Colorectal Surgery Associates in Houston, and a fellowship in colon and rectal surgery at GBMC. Prior to returning to GBMC Health Partners, Dr. Ferraris worked as a general surgeon at Memorial Satilla Health in Waycross, Ga.

Jennifer L. Sullivan, MD, **FACS**, is a thoracic surgeon at GBMC. Dr. Sullivan is a graduate of the University of Maryland School of Medicine and completed her residency in general surgery at Thomas Jefferson University in Philadelphia, her cardiothoracic residency at the University of California-Davis Medical Center in Sacramento, Calif., and a minimally invasive thoracic surgery fellowship at the University of Pittsburgh Medical Center. She has served as a clinical instructor in the Department of Cardiothoracic Surgery at the University of Pittsburgh and as an assistant professor of surgery at both the University of Tennessee Health Center in Memphis and the Hackensack Meridian School of Medicine at Seton Hall in South Orange, N.J. She has knowledge of adult thoracic oncology, minimally invasive approaches to thoracic surgery including robotics surgery, chest wall deformities, endobronchial interventions, disparities in thoracic oncology and benign foregut conditions.

Matthew Wallace, MD, MBA, is a fellowship-trained orthopaedic oncologist who cares for patients at the Sandra and Malcolm Berman Cancer Institute at GBMC. He earned his Doctor of Medicine degree from Emory University School of Medicine in Atlanta, Georgia, and completed his residency at George Washington University Hospital. Dr. Wallace went on to complete his fellowship with the Department of Orthopaedic Oncology at the University of Texas MD Anderson Cancer Center in Houston. He is well versed in the diagnosis and surgical management of benign and malignant tumors of the pelvis and extremities. Dr. Wallace treats both children and adults with bony and soft tissue masses, and believes in the value of multidisciplinary care when managing such rare entities.

ADVOCACY

Health-care advocacy is an important effort to ensure that the voices of patients, families and health-care providers are heard by national, state, and local legislatures and regulatory systems. Advocacy is critical to educating governmental officials about barriers to care that current policies can create. Active engagement helps to shape public policy for the best possible cancer care for our patients.

The leadership of the Sandra and Malcolm Berman Cancer Institute has active advocates for the care of patients. Paul Celano, MD, FACP, FASCO, Herman and Walter Samuelson Medical Director, and Executive Director, Michael Stein, MHSA, FACMPE, have made presentations regarding oncology care costs to the Health Services Cost Review Commission of Maryland, which oversees the Maryland hospital reimbursement rates. These discussions provided important input into future hospital budgeting that will have a great impact on the care of cancer patients.

In addition, Dr. Celano is a member of the Maryland Stakeholder Innovation Group, which was formed by the Maryland Department of Health to assist in achieving the goals of the Maryland Total Cost of Care Model. It is a multi-stakeholder group that includes physicians, hospitals, post-acute and behavioral health providers, payers and consumer groups with an overall mission to identify and develop health-care transformation strategies that support the goals of the Maryland Model.

As president of the Maryland/District of Columbia Society of Clinical Oncology, Dr. Celano has worked diligently over the past 10 years to educate state officials regarding barriers to cancer care. His advocacy has had important influence on funding of cancer clinical trials, proper oral chemotherapy parity for patients, chemotherapy safety regulatory efforts and establishing age restriction on electronic smoking devices in Maryland.

As Medical Director of the Sandra and Malcolm Berman Cancer Institute, Dr. Celano has taken the perspective of cancer patients treated in a community hospital to national advocacy efforts. He has participated in the White House's Cancer Moon Shot Initiative and has met with Maryland legislators.

The advocacy goals and priorities for GBMC patients fighting cancer are clearly stated by the American Society of Clinical Oncology: Pursue access to high-quality, affordable care for every patient with cancer; advance evidence-based policies and delivery system reform that supports oncology providers in their delivery of high-quality, high-value cancer care; advocate for policies that support a robust federally funded cancer research prevention, drug development and clinical trials system.

Advocacy is critical to educating governmental officials about barriers to care that current policies can create. Active engagement helps to shape public policy for the best possible cancer care for our patients.

ADVOCACY SERVICES

SUPPORT SERVICES

Boutique Salon & Wellness Center
Cancer Registry
Chemotherapy Educational Sessions
Clinical Genetics
  Cancer Genetic Counseling
Eden Energy Therapy
Financial Counseling
Financial Support for Eligible Patients
High-Risk Breast Cancer Screening Program
Integrative Medicine
Lymphedema Rehabilitation Services
Music Therapy
Nutrition Counseling
Oncology-Certified Nurses
Ostomy Care
Ostomy Support Group
Pain Management
Palliative Care Program
Pet Therapy
Psychosocial Support for Patients and Families
Speech-Swallowing-Voice-Cognitive Rehabilitative Services
Survivorship Program
Transportation Assistance

MEDICAL ONCOLOGY & HEMATOLOGY

Antibiotics
Chemotherapy, including Biotherapy/Immunotherapy
Infusion Center
Inpatient Unit
Iron
Solid Tumors
Benign Hematologic Services
Targeted Therapies

SURGICAL ONCOLOGY

Breast
General
GI/Colorectal
GYN
Head and Neck
Hepatobiliary
Intracranial
Melanoma
Orthopedic
Sarcoma
Thoracic
Urological

RADIATION ONCOLOGY

Breast HDR Brachytherapy
CT Simulator
Electron Therapy
High Dose Rate (HDR) Brachytherapy
IGRT
IMRT
IORT
Prostate Brachytherapy
Rapid Arc
Respiratory Gating
Stereotactic Ablative Radiotherapy
Stereotactic Radiosurgery (SRS)

SPIRITUAL CARE

Advance Directive Counseling
Caregivers Support Group
Chapel
Spiritual Support Team
Spiritual/Religious Resources

COMMUNITY PARTICIPATION

American Cancer Society - Relay For Life
Cancer Coalition: Baltimore County/ Health Departments
Cancerve
Komen Maryland
Hopewell Cancer Support
Leukemia & Lymphoma Society
Lung Cancer Alliance
The Red Devils
Ulman Cancer Fund for Young Adults
Zaching Against Cancer

COMMUNITY OUTREACH

Baltimore County Public School System
Community Cancer Education
Maryland Cancer Control Plan Steering Committee
Screenings for Prostate, Skin and Oral

CLINICAL TRIALS

Breast
Gastrointestinal
Genitourinary
Gynecologic
Head and Neck
Leukemia/Lymphoma/Myeloma
Lung
Melanoma and Skin

PHYSICAN STUDY

Gastrointestinal Oncology

In the United States, approximately 44,000 new cases of rectal cancer will be diagnosed in 2020, and approximately 50,000 people will die of it. Standardizing treatment for rectal cancer patients according to best practice guidelines is important, as it impacts outcomes, survival and quality of life.

One tool in standardizing treatment is to track patients' carcinoembryonic antigen (CEA), which is a complex glycoprotein produced by colorectal cancers on the surface of colonic epithelial cells. CEA is detectable in patients' serum with a simple blood test.

The National Comprehensive Cancer Network (NCCN) and the National Accreditation Program for Rectal Cancer (NAPRC) recommend testing a CEA level in all previously untreated rectal cancer patients before definitive treatment. The NCCN considers CEA an integral part of initial workup for patients regardless of their stage of disease. Serial CEAs are part of ongoing surveillance for rectal cancer patients with Stage II-Stage IV disease.

Per NAPRC guidelines, GBMC's goal is to obtain a pretreatment CEA level in 75 percent of previously untreated rectal cancer patients. To assist in this goal, all rectal cancer patients are presented pretreatment at the GBMC GI Tumor Board /Rectal Cancer Multidisciplinary Team meeting. Patients' pretreatment CEA is shared with other important data including pathology and imaging.

In addition, the Rectal Cancer Multidisciplinary Team is utilizing Epic (electronic health record) to track this data. An initial CEA is recorded in an Epic flowsheet with other data used to determine the team's recommendation for initial treatment. This summary is available in Epic for all providers and sent to the patient's primary care physician. At GBMC in 2019, 87 percent rectal cancer patients had a CEA level before definitive treatment.

Joseph DiRocco, MD, FACS, FASCRS Medical Director, Gastrointestinal Oncology; Colon and Rectal Surgeon

CANCER REGISTRY DATA

Greater Baltimore Medical Center

Colorectal Cancer Stage by Age (GBMC - 2016)

Stage	30-39	40-49	50-59	60-69	70-79	80-89	90 & over	Total N	Total %
0	0	1	4	6	1	1	0	13	11%
I	0	4	5	5	7	2	1	24	21%
II	1	3	4	14	8	4	0	34	30%
III	0	5	6	5	7	3	0	26	23%
IV	0	0	4	3	6	0	1	14	12%
UNK	0	1	0	2	0	0	1	4	3%

SANDRA & MALCOLM BERMAN CANCER INSTITUTE

REGISTRY DATA

PRIMARY SITE	ANALYTIC CASES 2018	N-ANALYTIC CASES 2018
ALL SITES		
	1659	1238
HEAD AND NECK		
ORAL CAVITY	53	19
PHARYNX	30	11
SALIVARY GLAND	14	4
LARYNX	18	8
NASAL CAVITY/SINUS	5	1
OTHER	2	0
DIGESTIVE SYSTEM		
ESOPHAGUS	16	25
STOMACH	29	23
COLON/RECTOSIGMOID	101	102
RECTUM	41	20
ANUS/ANAL CANAL	9	2
LIVER	11	36
PANCREAS	42	104
OTHER	30	28
RESPIRATORY SYSTEM		
LUNG/BRONCHUS	167	249
OTHER	4	8
BLOOD/BONE MARROW		
LEUKEMIA	26	29
MULTIPLE MYELOMA	22	25
OTHER	0	0
BONE		
	2	4
CONNECT/SOFT TISSUE		
	6	8
SKIN		
MELANOMA	30	19
OTHER	3	2

PRIMARY SITE	ANALYTIC CASES 2018	N-ANALYTIC CASES 2018
BREAST		
	410	151
FEMALE GENITAL		
CERVIX UTERI	8	11
CORPUS UTERI	87	30
OVARY	25	14
VULVA	14	6
OTHER	2	2
MALE GENITAL		
PROSTATE	144	128
TESTIS	5	2
OTHER	0	0
URINARY SYSTEM		
BLADDER	28	34
KIDNEY/RENAL	45	34
OTHER	5	4
BRAIN & CNS		
BRAIN (BENIGN)	20	2
BRAIN (MALIGNANT)	12	37
OTHER	1	0
ENDOCRINE		
THYROID	54	3
OTHER	6	0
LYMPHATIC SYSTEM		
HODGKIN'S DISEASE	4	2
NON-HODGKIN'S	82	37
UNKNOWN PRIMARY		
	0	0
OTHER/ILL-DEFINED		
	46	14
TOTALS	**1659**	**1238**

The Registry Data Site Table will show an increase in the analytic and non-analytic numbers for two specific reasons. 1. In the beginning of 2017 we were informed by the State that they will become more strict with the cases submitted to the State. Additional QA will be done and consequences will occur if all eligible abstracts are not submitted. (These are mostly non-analytic cases.) 2. Towards the end of 2017 we learned that all Gilchrist patients should be abstracted. The understanding in the past was that Gilchrist was not GBMC. (These are mostly non-analytic cases.)

COMMUNITY INVOLVEMENT

Community Outreach

- Screened nine men for prostate cancer; two participants were advised to seek further follow-up, excluding those with BPH.
- Screened 31 participants for skin cancer; two were advised to seek follow-up; and three were recommended for biopsy.
- Screened nine participants for oral cancer; zero abnormal findings and no confirmed cancer with diagnosis. Tobacco and alcohol risk reduction was discussed.
- Screened 19 participants with voice screenings at the Milton J. Dance, Jr. Head and Neck Center, with zero diagnosed cancer.
- Supported many community events and health fairs such as the Towsontown Festival, the McCormick Health Fair, T. Rowe Price, the GBMC Employee Health Fair, Baltimore County Health Awareness Day, the Cockeysville Senior Center, Blakehurst Retirement, the ACS Outrun Cancer 5K, Baltimore County, HopeWell Reach Out and Run, The Red Devils PJ5K, the Legacy Chase, and the Leukemia & Lymphoma Society's Light the Night.
- The annual Legacy Chase event held at Shawan Downs was a huge success with more than 8,000 attendees and over $220,000 raised to support oncology services at GBMC.
- The annual Cancer Survivor Celebration event had approximately 500 attendees. The event had survivors and their physicians tell their stories of survival; there was also a musical interlude and celebrations of survival by participants.
- Continued to provide oncology support programs/ services including Look Good Feel Better (38), the quarterly laryngectomy group (49) and the head and neck patient and family support group (250).
- The Community Needs Assessment Forum and Round Table met three times in FY19. The top identified needs that will be addressed are obesity, mental health/substance abuse and access to care. These needs are currently being addressed with the assistance of community and hospital resources.

COMMUNITY INVOLVEMENT

Scrapbooking Fundraiser Benefits Oncology Support Services

The Sandra and Malcolm Berman Cancer Institute held its 7th Annual Scrapbooking event in February and raised over $7,000 for Oncology Support Services. This is one of GBMC's most popular events. There were 86 participants and 16 vendors that offered raffle prizes throughout the day, and every participant received a door prize.

Blanket Donation

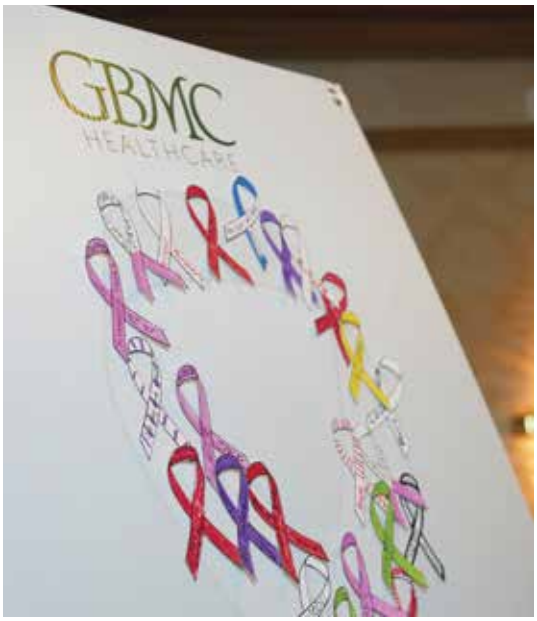
Oncology Support Services was gifted a large amount of tied fleece blankets from Dottie Pope of Stewartstown, PA to give to patients. Each blanket is unique and made with care.

COMMUNITY INVOLVEMENT

28th Annual Cancer Survivorship Celebration

In June, more than 500 GBMC patients, family and staff gathered at Martin's Valley Mansion to celebrate National Cancer Survivor Day. The program featured four GBMC cancer survivors sharing their stories. The event celebrates the strength, courage and contributions of those living with and beyond cancer.

More than 225 survivors stood for recognition and received flowers provided by Lexi and Abby from Flowers for Powers. Survivors enjoyed a photo booth, where they received a complimentary photo as well as the opportunity to win one of 50 donated door prizes.



Happy Holidays!

In November, Oncology Support Services hosted a holiday-card making event that raised $1,000. More than 40 people attended a fun evening of crafting, eating and shopping.

Shine a Light on Lung Cancer

In recognition of Lung Cancer Awareness Month this past November, GBMC joined the GO2 Foundation for Lung Cancer in a nationwide effort to bring lung cancer into focus and celebrate those impacted by the disease.

COMMITTEES

CANCER COMMITTEE

Paul Celano, MD
(Chair, Medical Director, Berman Cancer Institute)

Jennifer Billiet, MGC (Genetics)
Bishal Bista, PharmD (Pharmacy)
Judy Bosley, RN (Clinical Trials Manager)
Robert Brookland, MD (Radiation Oncology)
Neri Cohen, MD, PhD (EPIC Physician Ambassador)
Brandon Costantino (Oncology Support Program Manager)
Brittney Davis, LMSW (Psychsocial Coordinator)
Robert Donegan, MD (Medical Oncology)
Nathan A. Dunsmore, MD (Pathology)
Ari Elman, MD (Medical Oncology)
Sara Fogarty, DO (Breast Surgery/ACoS Liason)
Suzi Ford (American Cancer Society)
Claire Francomano, MD (Genetics)
Dorothy Gold, LCSW-C (Psychsocial Coordinator)
David Goldstein, MD (Urology)
Courtney Hartman (IT)
Amanda Henderson (Inpatient Nursing)
Connie Herbold (Ambulatory Practice Administrator/
Cancer Conference Coordinator)
Alan Kimmel, MD (Rehabilitation)
Felicity Kirby, RN (Survivorship Coordinator)
Kim Levinson, MD (GYN/Oncology)
Barbara Messing, SLP (Head & Neck Center)
Virginia Moratz, OTR (Rehabilitation)
Alex Munitz, MD (Radiology)
Geoffrey Neuner, MD (Radiation Oncology)
Robert Palermo, MD (Pathology)
Karen Pitman, MD (Head & Neck Surgeon)
Craig Randall, RTT (Radiation Oncology)
Frank Rotolo, MD (ACOS Liaison)
Laura Schein (Community Outreach)
Lauren Schnaper, MD (Breast Surgery)
Philip Shaheen, MD (Palliative Care)
Dawn Stefanik, RN (Outpatient Infusion Services)
Michael Stein, MHSA
(Executive Director/Cancer Program Administrator)
Vanessa Stinson, CTR
(Cancer Registry Quality Coordinator)
Karen Ulmer, RN
(Head &Neck Nursing/Quality Improvement Coordinator)

Breast Program Leadership Committee

Sara Fogarty, DO (Chair, Breast Surgery)

Jennifer Billiet, MGC (Genetics)
Judy Bosley, RN (Clinical Trials Manager)
Paul Celano, MD
(Medical Director, Cancer Institute)
Brandon Costantino (Oncology Support Program Manager)
Madhu Chaudhry, MD (Medical Oncology)
Judy Destouet, MD (Radiology)
Robert Donegan, MD (Medical Oncology)
Clair Francomano, MD (Genetics)
Connie Herbold (Ambulatory Practice Administrator)
Alan Kimmel, MD (Rehabilitation)
Felicity Kirby, RN (Survivorship Coordinator)
Virginia Moratz, OTR (Rehabilitation)
Alex Munitz, MD (Radiology)
Angela Murrell, NP-C (Breast Center)
Geoffrey Neuner, MD (Radiation Oncology)
Robert Palermo, MD (Pathology)
Kruti Patel, MD (Radiation Oncology)
Barbara Raksin, RN (Breast Center)
Frank Rotolo, MD (Breast Surgery)
Lauren Schnaper, MD (Breast Surgery)
Sheri Slezak, MD (Plastic Surgery)
Michael Stein, MHSA
(Executive Director/Cancer Program Administrator)
Vanessa Stinson, CTR (Cancer Registry)

COMMITTEES

Multidisciplinary Tumor Boards

GBMC's patient-focused tumor boards put patients at the center of available treatment options. Each includes a team of experts working together to design and deliver the most comprehensive recommendations tailored to each individual patient. Team members include medical oncologists, surgical oncologists, radiation oncologists, pathologists, radiology, clinical trials and genetics counselors. The entire team is dedicated to developing the best treatment plan for each individual patient, utilizing National Comprehensive Cancer Network guidelines.

Patient and Family Advisory Committee

The Sandra and Malcolm Berman Cancer Institute's Patient and Family Advisory Council (PFAC) is comprised of former patients and their caregivers. PFAC offers feedback to the cancer program on a wide variety of topics, using patients' and caregivers' perspectives and experiences to inform its recommendations. The Cancer Institute then uses these recommendations to improve services offered to patients, providing the most patient-centered experience possible. The improvements made by PFAC range from altering signage in the Cancer Institute to improving the website.

Over the past five years, the Cancer Institute has benefited greatly from its engagement with PFAC. The new patient orientation process has seen numerous improvements, including utilization of the distress screening tool and the order in which different topics are presented to new patients. PFAC also recommends strategies for helping patients retain more of the information they receive as new patients. The group also provides annual feedback on some of the Cancer Institute's biggest programs, including GBMC's Annual Cancer Survivors' Celebration and providing valuable feedback on the annual cancer survivors' tent at Legacy Chase.

The process for improvement is a constant cycle, allowing for learning and enhancements on an ongoing basis. Having the voice of the patients and caregivers allows the Sandra and Malcolm Berman Cancer Institute to ensure that the advances being made are in line with patient preferences.

GBMC

THE SANDRA & MALCOLM BERMAN CANCER INSTITUTE

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