



Cancer Program Annual Report 2022

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Oncology Committee Members 2022

Rolf Freter, MD, Ph.D

Oncology Committee Chairman
Chief, Medical Oncology

Abdallah Azouz, MD

Chief, Pathology Dept.

George Bonnevie, MD

Chief, Radiology

Steven Lane, MD

Chief Radiation Oncology
Cancer Conference Coordinator

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Pathology Dept.

Steven Milman, MD

Chief, Surgery

Reve Shields, MD

Medical Oncology

Jessie MacVicar, MD

Surgery

Susan Boulanger

AVP Radiology

Matt Cadorette, CTR

Sr Cancer Registrar
Cancer Registry Quality Coordinator

Jasmyn Carter, RN

Patient Navigator

Amanda Fyotek, RD, LDN

Nutrition Services

Kristen Hong

Pharmacy

Patricia Kral, RTT

Radiation Oncology

Susan Lee, NP

Palliative Care Coordinator

Hilary Lovell

Community Relations, Marketing

Linda McAlear, PT

Rehabilitative Services

Florence Messi, OCN, RN

Nursing Manager

Christine Murphy, CNOR, RN

Quality Improvement Coordinator
Survivorship Program Coordinator

Susan Myers

Service Line Director, Oncology,
Greene Cancer Center

Lindsay Nicholson

American Cancer Society Representative

Christine Rowan, LICSW

Social Work Services
Psychosocial Services

Lisa Rule, LICSW – OSW-C

Social Work Services
Psychosocial Services Coordinator

Sarah Usher, RN, MSN, OCN

Radiation Oncology
Clinical Research Coordinator

Bibianna Von Malder

Corp. Director Health Informatics

Avis Watson, BS, CTR

Manager, Cancer Registry

The Cancer Program at Signature Healthcare

Rolf Freter, MD, PhD, Director, Greene Cancer Center, Chief, Department of Human Oncology

At Signature Healthcare we are proud to be a leader in cancer care in the region. We strive to bring the highest level of multidisciplinary cancer care to our patients in Brockton and the surrounding communities. Effective multidisciplinary cancer care involves the coordinated interactions among multiple specialists, with the goal of creating and implementing an effective individualized cancer treatment plan for every patient.

The opening of the Greene Cancer Center in 2017, preceded by the formation of an in-house Medical Oncology Division in 2016, located all Medical Oncology and Radiation Oncology services, and many surgical and ancillary services, under one roof. The Greene Cancer Center offers comprehensive diagnostic, treatment, and rehabilitative services for our cancer patients, including advanced imaging techniques, pain management, nutritional counseling, social work services and pastoral care. A patient navigator and social worker are available to assist our patients to better cope with their diagnoses and treatments from physical, emotional, and financial perspectives. The Greene Cancer Center was designated as a Comprehensive Community Cancer Center by the Commission on Cancer in 2022. The Medical Oncology Service continues to be very busy, with providers evaluating over 1200 new patients with cancers and hematologic problems in 2022. Given the emotional toll of a cancer diagnosis on a patient and their family, an initial consultation with a Medical Oncologist is offered within 1-2 business days of a referral of a patient with a new diagnosis of cancer.

Of particular importance is our affiliation with the Beth Israel Deaconess Medical Center in Boston. For the cancer program, this allows our patients access to appropriate ongoing clinical trials in Boston, Boston-based cancer specialists for second opinion consultations, and highly specialized procedures, as needed.

In recognition of the complex interplay of the many disciplines involved in modern cancer care, a Department of Human Oncology (DHO) was created in 2021, with the goal of coordinating all of the components required to provide superb cancer care to our patients. New cancer treatments initiated under the auspices of the DHO include stereotactic body irradiation, an advanced radiation technique allowing high doses of radiation to be precisely delivered to a small tumor target with only five treatments. This program was expanded in 2022 to include administering stereotactic radiation to patients with brain metastases and localized prostate cancers.

Use of radiofrequency identification tags (RFID) for women with breast cancers undergoing breast conservation surgery facilitates more convenient and less invasive breast surgeries, with the removal of less breast tissue and much better cosmetic results. Advanced prostate cancer imaging with newer positron emission tomography (PSMA) scans, and advanced radionuclide treatments for prostate cancer (radium-223) are offered. The multidisciplinary Prostate Cancer Program within the DHO continues to grow, and offers the most recent and innovative treatment approaches to men with prostate cancers in a rapidly evolving treatment landscape. With the advent of Precision Medicine, and an ever-growing knowledge of the molecular biology underpinning the development of cancers, tumor specimens are routinely analyzed for panels of so-called “driver mutations”, mutated cancer causing genes that can be targeted to attack a cancer, often with an oral medication and with dramatic effect. The driver mutation approach is particularly well-developed and effective for patients with lung cancers, but is increasingly employed and effective for patients with breast cancers and colorectal cancers. The newest advances in immuno-oncology, the use of immune checkpoint inhibitors (pembrolizumab, atezolizumab, durvalumab among others) to harness our immune systems to attack a tumor, are adopted as soon as they are approved by the FDA. Weekly 90-minute Tumor Boards review virtually all patients with a new diagnosis of cancer, or a cancer recurrence, facilitating in-depth individualized multidisciplinary discussions of cancer diagnosis, targeted treatments, and supportive care.

I am very proud of the high level of cancer care provided by all of the teams in the Greene Cancer Center to our patients. This teamwork and excellent care continues, with the primary goal of all staff in the Greene Cancer Center being providing timely, efficient, evidence-based, personalized and compassionate care to all of our patients in 2023 and beyond.

Radiology and Its Role in Support of Signature Healthcare's Cancer Program

George Bonnevie, MD, Chief, Radiology

Susan Boulanger, Associate Vice President, Imaging

The Radiology Imaging department at Signature Healthcare remains dedicated to supporting the Cancer Program and its patients at Signature Healthcare. Radiology is often the point of care for entry into the Greene Cancer Center as result of screening programs, especially in mammography and Low Dose Lung CT. Our goal is to provide timely access and quality imaging exams to identify cancers while they are treatable, allowing for better outcomes and improved quality of life.

Signature Healthcare continues to invest in the best equipment and strives to improve services to support these important programs. In the area of Women's Imaging, we are able to offer our patients advanced 3D digital mammography including 3D stereotactic biopsy. The superior imaging technology provides lower radiation doses and more accurate diagnostic images than conventional mammography. We recently added an additional mammography unit to provide faster appointment times to our growing mammography population.

Our Low Dose CT (LDCT) program continues to expand as we identify at risk patients in Brockton and neighboring communities. We have collaborated with the Signature Medical Group practices to identify patients that qualify and encourage enrollment and continued compliance with the well-developed program. Our LDCT navigator provides support to the medical group as well as community outreach. We are planning to launch a new "Incidental Lung Nodule" program. This program will service patients that do not fit the LDCT criteria but have had lung nodules that need evaluation and tracking which were "incidentally" identified on other imaging studies.

Our PET/CT prostate imaging program continues to see increased utilization in conjunction with our Signature-Shields Imaging Joint Venture. The team is planning to integrate "Subtle PET" – an artificial intelligence technology solution to improve patient throughput times and quality of interpretations.

The imaging team is committed to providing the highest level of care to our community of patients and remains dedicated to providing timely high-quality imaging support to the oncology program at the Greene Cancer Center.

Pathology Services

Abdallah Azouz, MD, Chief of Pathology

The Pathology Department at Signature Healthcare Brockton Hospital is an integral part of the overall diagnostic and management course for patients with cancer. The Department has five Pathologists, all of whom are Board Certified by the American Board of Pathology in both Anatomic and Clinical Pathology. Additionally, Dr. Kordunsky, Dr. Mondelblatt, and Dr. Moore are board certified in Cytopathology, and Dr. Azouz is board certified in Hematopathology. Any Pathologist with a time limited certificate has recertified, as necessary, and participates in the maintenance of certification program.

All pathologists are licensed to practice medicine in Massachusetts and must be able to certify that they have 100 CME credits for each two-year cycle.

The Pathologists routinely are present at the beginning of the patient's course. We work closely with the Radiologists in the CT and Ultrasound areas to render immediate evaluations of fine needle aspirations to determine if the area of interest was adequately sampled. We then direct the Radiologists to take additional core biopsy samples and place them in tissue culture media for flow cytometry for suspected lymphoproliferative disease or formalin for solid tumor diagnosis with immunohistochemical staining, as needed. The pathologist provides a written intra-procedural consultation and diagnosis which is scanned into the PACS system.

In the Operating Room, the pathologists collaborate with the surgeons to evaluate specimens for margin status during surgery to determine if adequate tissue was removed. Frozen sections and cytologic evaluations are made. Breast carcinoma specimens are oriented, inked and sent to Radiology to determine if the lesion or clip is in the resected specimen. If required, the specimen is then sectioned while the patient is under anesthesia to determine if there are adequate margins. For other cancer surgeries, the Pathologists are available to evaluate margins or open specimens to show the surgeon in the actual surgical suite. The Pathologists frequently go into the OR to see the specimen in situ and to discuss the case with the surgeon. All intraoperative consultations are called to the surgeon or presented in person. The diagnoses are written on NCR paper and a copy is placed in the patient's medical record. The method of communication to the surgeon is included on the consultation form.

In some breast cases, the Pathologists examine a sentinel lymph node intraoperatively. Two pathologists independently evaluate the touch preps or smears to ensure that no metastatic cancer is missed and also that there are no false positives which would lead to unnecessary axillary dissection.

The Pathology Department routinely utilizes the American College of Surgeons/College of American Pathologists synoptic reporting protocols for all invasive carcinomas and also for DCIS in the breast. Since April 2016, we have used electronic cancer checklists which require the pathologist to complete all the required data elements or else the report will not finalize. By using these, the required data elements for treatment decisions are consistently reported in the same format by all pathologists. This also allows patients to have their slides and our report sent out for a second opinion since all required data elements are reported.

The Pathology Department was an early adopter for the proper handling of resected breast specimens to ensure that prognostic marker results are valid. All breast specimens for both women and men except for reduction mammoplasties have the time excised and time in formalin written on the specimen label either in the OR or Radiology for core biopsies. Specimens are then fixed for at least 6 and no more than 72 hours in formalin. The cold ischemia and formalin fixation times are strictly followed. Estrogen receptor (ER) and progesterone receptor (PR) status results are obtained for all ductal carcinoma-in-situ cases. ER, PR and Herceptin (Her2) are obtained for invasive breast cancer and FISH is performed for all Her2 with a result of 2+.

The Pathology Department is actively involved in presenting cases at the weekly Tumor Board/Cancer Conference. One Pathologist takes microscopic photographs of each case. These are displayed on the screen

in the Greene Cancer Center conference room and can also be viewed on computers in the offices of physicians who call in from their offices. When the cases are discussed, the Medical Oncologists will determine which molecular or genetic tests are required to select therapeutic agents. The Pathologist will then send out the appropriate slides or blocks and report the results in an addendum to the original pathology report.

Two pathologists are the member and alternative member of the Breast Leadership Committee. We all work collaboratively to coordinate and streamline the care of women diagnosed with breast cancer. Two pathologists are similarly the member and alternative member for the Oncology Committee. The two pathologists who are members of the Breast Leadership Committee must obtain breast related continuing medical education credits by attending a national meeting, by online or written methods.

The Pathology Department is accredited by the College of American Pathologists (CAP) every other year with an onsite inspection and on the alternate year by a comprehensive self-inspection, the results of which are reviewed by the next onsite inspection team. Our performance is continuously monitored by the CAP based on our performance on proficiency testing for each type of test performed in the pathology department and laboratory.

Starting in 2016, specific breast cancer quality indicators were reported on one table to the Breast Cancer Leadership. These include:

- PQRS #99 for staging of invasive breast cancer on resection specimens. This indicator was discontinued by CMS after 2018.
- PQRS #251 for including ER, PR and Her2 results on core biopsies and resection specimens, as needed if not performed or were negative on a previous core biopsy. This indicator was discontinued by CMS after 2018.
- Breast cold ischemia time and formalin fixation time
- Correlation of sentinel lymph node touch prep diagnosis intraoperatively to the diagnosis on permanent sections which is similar to NAPBC Standard 2.4.
- Results of CAP ER/PR prognostic marker proficiency tests
- Breast core biopsy turnaround time from date of procedure to date the report is finalized.
- Breast lumpectomy or mastectomy turnaround time from date of procedure to date the report is finalized.
- Pathology synoptic report completeness.
- Comparison of our ER and PR rates for pre- and post-menopausal women to those published in the College of American Pathologists accreditation checklist.

The pathologists also compile a table each month for the Cancer Registrar showing compliance with NAPBC Standard 2.7, documenting review of outside core biopsy cases prior to definitive surgery at Signature Healthcare Brockton Hospital.

The following additional quality indicators for all other cancer cases are studied in the Pathology Department:

- Adequacy of synoptic report required data elements for all carcinomas.
- Finding at least 12 lymph nodes for colon carcinomas based on specimen length and any previous adjuvant therapy.
- CMS PQRS studies 249 for Barrett's esophagus, 250 for radical prostatectomy, 395 for lung biopsy, 396 for lung wedge/resection, 397 for melanoma reporting and 440 for turnaround time from specimen receipt in the pathology department to date the report is available to the clinician for both basal cell and squamous cell carcinomas.
- Correlation studies between current malignant diagnosis as compared to any previous cytology studies
- Frozen section to permanent section correlation.
- Comparison of intraoperative immediate evaluation of sentinel lymph nodes for both breast carcinoma and melanoma cases to the results on permanent section slides.

All pathologists participate in diagnosing unknown slides in College of American Pathologists proficiency testing programs for gynecologic (Pap smears) cytology, non-gynecologic cytology, fine needle aspiration

cytology, surgical pathology and interpretation of unknown cases for ER and PR percentage and intensity of staining.

There are criteria for second pathologist blinded review of cases including all new malignancies and core biopsy cases for possible malignancy.

When a resection case is booked for the operating room, the pathologist on-call obtains information on the prior day to include review of the previous biopsy slides if it was performed here, obtaining outside slides and reports, review of any radiologic studies and review of other information in Meditech. Surgeon offices are called to obtain office notes and whether any pathology had been diagnosed elsewhere.

Pathologists facilitate special studies on cancer cases with slide and block selection for Oncotype DX, MSI, B&T studies, next generation sequencing, molecular testing and Foundation One and include results in an addendum to the original pathology report.

There are requirements for communication of malignant and unexpected results to include calling the clinician and faxing the results to ensure that there is at least one additional method of communication other than the report being in Meditech.

When a cancer case is sent out for a second opinion based on a request from a clinician or the patient, the outside diagnosis is compared to our original diagnosis. Our report is amended if there is a significant difference. Data is reported as part of the Ongoing Professional Practice Evaluation (OPPE) to the Quality Resources Department and is used in the recredentialing process for each pathologist.

2022 CT Lung Cancer Screening Update

Holly Avery, Radiology Quality Assurance Manager

The Signature Healthcare Lung Cancer Screening Program exceeded its goal in increasing patient enrollment in our Program in 2022. There was an overall increase in both baseline patient exams and annual screenings for 2022. Baseline screenings saw an increase of nearly double from 2021. Our patient adherence rate for annual exams in 2022 was 89.5%, the highest since our program began in 2015. This adherence rate increase is the direct result of adding a Patient Navigator to the team.

We implemented the Nuance PowerScribe Lung Cancer Screening software in August 2022. This system has optimized data entry while improving the ability to track and follow up patients in real time via a web based system.

Our Radiology Department partnered with SMG Quality in 2022 to reach out to the Signature Medical Group Primary Care offices to educate the importance of documenting correct pack years to ensure patients who qualify can be counseled on this vital program for Signature Healthcare Patients. We hope to continue to work with SMG Quality to make participation efficient for patients, Providers and staff.

Dr. Milman has been instrumental in continuing to lead the Lung Steering Committee meetings to present suspicious findings during SHBH weekly multidisciplinary board. This provides physicians with a more individualized patient recommendation for nodule follow up.

Low Dose CT Lung Screening Statistical Data

3,369 Total Patients Screened
100 Positive Cancer
48 Being Evaluated

2022
883 New Patients Screened
1,170 Annual Screenings
20 Positive
16 Treated at SHBH
3 Treated Elsewhere
1 Refused Treatment

2018

485 New Patients Screened
251 Annual Screenings

14 Positive Cancer-
4 Treated at SHBH
10 Treated Elsewhere

2019

565 New Patients Screened
504 Annual Screenings

21 Positive Cancer-
7 Treated at SHBH
14 Treated Elsewhere

2020

405 New Patients Screened
709 Annual Screenings

16 Positive Cancer-
11 Treated at SHBH
3 Treated Elsewhere
2 Refused Treatment

2021

451 New Patients Screened
874 Annual Screenings

19 Positive Cancer-
6 Treated at SHBH
7 Treated Elsewhere
4 Refused Treatment
2 Expired prior to treatment

2022 Patient Navigation Report

Jasmyn Carter, RN

In 2022, the Patient Navigator role continued to expand and develop. The Navigation program individualizes assistance offered to patients as all needs are different. Patient Navigation has been and will continue to be essential by mitigating barriers of care and addressing healthcare disparities. The Patient Navigator established a positive rapport with many patients. This relationship led to a sense of trust and a safe space for patients and families to openly discuss their concerns. The Patient Navigator has continued to outreach to patients who have missed consults, follow-up's, scans and any other appointment and routine screenings necessary for continuity of care.

The Patient Navigator worked with patients to identify resources that may be available through their insurance as well as community programs. Grant funded transportation has been a valuable resource for many oncology patients who otherwise do not have other options available and need to get to their treatments and other important appointments.

The Patient Navigator maintains a relationship with the Women's Imaging department, reaching out to patients who receive abnormal mammogram results and establishing the next steps in their care as well as giving them a point of contact for any questions they may have. For patients who receive a positive biopsy result, the navigator continues to be a resource throughout their care and into the survivorship period.

In 2023, the Patient Navigator will continue to develop relationships with new patients and identifying barriers that may be present for patients as early as possible to avoid any delays or disruptions in their care. Patients who are facing a new cancer diagnosis are often understandably very overwhelmed and having a single point of contact who can assist with coordination of appointments among several providers can be an asset to them. This year it is also a priority to expand awareness of the Navigation Program among the patient population and the local community.

Multidisciplinary Oncology Conferences

Steven Lane, MD, Chief, Radiation Oncology, Cancer Conference Coordinator

At Signature Healthcare, Oncology Conferences are held weekly for all sites. All conferences are open to the entire medical staff. Conferences are multidisciplinary for review and discussion of treatment options and possible clinical trial participation.

Fifteen percent of the annual caseload must be presented at the multidisciplinary oncology conference. Signature presents over 90% of the annual caseload. Presentations may include newly diagnosed patients prior to initiating treatment, patients completing initial treatment to discuss the need for further treatment and surveillance, or patients previously discussed that need further treatment recommendations. Discussions include a review of disease presentation, personal and family history of malignancies, pertinent imaging studies, pathology specimens and laboratory studies, and surgical interventions. Treatment recommendations are based on the National Comprehensive Cancer Network (NCCN) guidelines.

Breast cancer is the leading cancer diagnosis among women at Signature Healthcare. Our goal is to present every patient case with newly diagnosed breast cancer for review and discussion of treatment options.

Our multidisciplinary team consists of representatives from Radiology, Pathology, Surgery, Medical and Radiation Oncology, Rehabilitative Services, as well as the Patient Navigator, Quality Improvement Coordinator, Cancer Registrar and Clinical Trials Coordinator. To promote continuity of care, conferences are available via secure web access to allow primary care physicians and specialists who cannot be present on site to join the conference and participate in patient discussions.

Clinical Trials

Sarah Usher, RN, MSN, OCN®

The purpose of conducting clinical trials is to gather important clinical information about disease processes and to develop new and effective treatments for cancer.

Prior to weekly tumor board, a list of pertinent clinical trials is made available to our providers for these patients. These clinical trials are offered at our affiliated institution Beth Israel Deaconess Medical Center.

We have NIH/ACS pamphlets explaining clinical trials available for patients in our exam rooms and waiting areas.

Currently there are 11 patients who have participated in clinical trials in 2022.

It is strongly believed that a good number of unknown Signature Healthcare patients are enrolling on clinical trials without our knowledge, as these larger cancer programs are unable to share this information when queried due to HIPAA constraints.

Rehabilitative and Support Services: Oncology Rehabilitation Program

Linda McAlear, Rehabilitative Services

A cancer diagnosis can be traumatic, and so can life-saving treatments. Chemotherapy, radiation therapy, and surgery can harm health and cause serious medical problems that interfere with daily function and well-being. Survivors are commonly plagued with symptoms such as fatigue, weakness, insomnia, memory loss, fear, anxiety and depression. A team of clinicians was assembled and completed a comprehensive oncology Rehab program developed by Dr. Julie Silver, assistant professor at Harvard Medical School, breast cancer survivor and co-founder of Oncology Rehab Partners. This team was certified in January of 2012 and is available to provide physical rehabilitation so survivors can recover more quickly and more completely than they would otherwise. Feeling well and being able to resume normal day-to-day activities is essential to enjoying a good quality of life.

Newly diagnosed patients may want to increase their strength and endurance and prevent future medical problems; survivors living with cancer as a chronic disease may come to us for help managing treatment-related conditions; and individuals who are cured or in remission may enroll in our program with the goal of resuming their pre-cancer activities.

In 2014 , the outpatient department added services for treatment of lymphedema which may occur following treatment of certain cancers. In 2021, Pelvic Health services was added to the treatment options provided, allowing us to expand our ability to provide care to our oncology clients. Preventative exercise and informational brochures have been developed for both post prostatectomy and Sentinel node dissection patients to provide additional support, identification and education.

Our Oncology programs rehabilitation services provided in the hospital setting and the outpatient setting are covered by most insurance plans, thus allowing an increased number of survivors to take part in the program. Our locations in the Brockton and surrounding areas improves the access for these services for our clients. Rehabilitation services for neurological and orthopedic patients have been standard practice for some time. Providing rehabilitation services for cancer patients in treatment, in remission or living with cancer is essential to enjoying a good quality of life.

Social Work Services

Lisa Rule, LICSW, OSW-C

The diagnosis of cancer can have profound impacts in many areas of a patient's life. Beyond dealing with the physical issues related to cancer and treatment, patients and their loved ones must deal with the emotional impact and the effects on one's relationships with family, friends, work, and community. As patients and families come to terms with their diagnoses and prepare for treatments, they must adapt to a "new normal." Oncology social workers are licensed mental health professionals that offer support and assistance with emotional, social, and practical needs. In 2018, Signature Healthcare hired a full-time, dedicated social worker for the Greene Cancer Center. The Oncology Social Worker is available to all cancer patients and families for emotional support, short-term counseling and education, connection to community resources, navigating questions about insurance and employment, and referrals to outside agencies when indicated. In addition, she provides a direct link between the outpatient oncology care team and the inpatient social work department at Signature Healthcare Brockton Hospital, as well as coordination with social work team at our affiliate, Beth Israel Deaconess Medical Center.

All patients receiving intravenous chemotherapy are seen by the oncology social worker at the beginning of their treatment, typically on their first day. Initial meetings will consider patient coping, family support, financial stressors, mental health concerns, and patient understanding. All patients with a cancer diagnosis will complete a NCCN Distress Thermometer, which measures the level of distress patients may be experiencing in multiple areas. Social work follows up individually with patients who indicate higher levels of distress.

The oncology social worker supports patients with emotional, social, and concrete needs. If patients are struggling to cope with their diagnosis or illness, she is available for support and counseling. She facilitates a monthly cancer support group, which remains virtual due to the pandemic. If ongoing community support is needed, appropriate referrals can be made. If patients have financial concerns due to medical bills or an inability to work during treatment, social work can advise on the process of applying for disability as well as assist patients in applying for grants to offset the expenses surrounding cancer treatment. In 2022, she assisted patients in obtaining nearly \$28,000 in grants for financial assistance. As patients complete active treatment and move towards survivorship, the oncology social worker is available to support their transition. She continues to be active in developing new resources for cancer survivors who have completed active cancer treatment. She obtained certification in oncology social work (OSW-C) in 2021, which indicates advanced experience and competence in the field.

The oncology social worker was actively involved in researching and obtaining new transportation services for our patients, including a new relationship with Uber Health. This has since been adopted system-wide for our organization. In addition, oncology social work is working with the Patient Navigator and Oncology Nutritionist to develop a formal meeting with breast cancer survivors completing treatment to assess their needs and concerns as they transition to post-treatment life. In 2022, oncology social work began training in hypnosis for cancer pain, which she hopes to offer to interested patients later this year.

In 2022, oncology social work met with over 293 patients. The most common diagnosis among these patients was breast cancer; however, many other types of cancer were seen, including lung, colorectal, prostate, hematologic cancers, and head and neck cancers, among others. The most common issues identified were emotional/family support needs and financial concerns.

2022 Nutrition Annual Report

Amanda Fyotek MS, RD, LDN

- A registered and licensed dietitian is available 24 hours per week to provide care to the center’s patients. Services offered range from weight maintenance counseling, symptom management of anti -cancer treatments and nutrition counseling for survivorship.
- Patients are referred to the dietitian, per the clinical judgment of the physician or nurse, for issues such as diagnosis, weight loss, weight gain, diminished appetite, electrolytes abnormalities, and uncontrolled GI symptoms, as well as by patient request.
- The Malnutrition Screening Tool (MST) has been incorporated into Meditech to screen for high risk patients based on appetite and weight loss. Cancer site is also used to identify patients who are at higher risk for nutrition related complications.
- From January 2022 – December 2022, nutrition services completed a total of **728** assessments
 - Including **171** initial assessments, **346** follow-up assessments, and **211** brief notes of patients with different types of cancers
- Of the 171 initial assessments, the cancer type break down includes:

Cancer Type	# patients	%
Lung	30	17%
Breast	24	14%
Head and Neck	23	13%
Pancreatic	14	8%
Colon	13	7%
Esophageal	11	6%
Multiple Myeloma	6	3%
Rectal	5	3%
Prostate	4	2%
Lymphoma	4	2%
Leukemia	4	2%
Melanoma	3	1.7%
Gastric	3	1.7%
Bladder/Uterine	3	1.7%
Other GI unknown primary likely GI (1), anal (2), biliary tract (1), gallbladder (1), liver (1), small intestine (1)	7	4%
Other Including: cervical (1), endometrial (2), kidney (1), neuroendocrine (1), ovarian (1), peritoneal (1), retroperitoneal (1), spinal (1)	9	5%
Hematology	6	3%

American Cancer Society Collaboration

Lindsay Nicholson, American Cancer Society

Signature Healthcare and the American Cancer Society share a commitment to our community to improve the quality of cancer care, increase awareness about the importance of cancer prevention and early detection, and provide patients and caregivers with information on cancer treatment and the resources and services available.

The American Cancer Society is a leading cancer-fighting organization with a vision to end cancer as we know it, for everyone. We are improving the lives of people with cancer and their families through advocacy, research, and patient support, to ensure that everyone has an opportunity to prevent, detect, treat, and survive cancer. Through our partnerships with hospital systems such as Signature Healthcare Brockton Hospital, we aim to increase access to care for cancer patients and expand our cancer control initiatives such as Colorectal Cancer Screening and HPV vaccination.

Community Outreach

Hilary Lovell

Cancer Support

A cancer diagnosis means having to cope with emotional, physical, and spiritual challenges as well as medical treatments. Although each patient's experience is unique, a support system and reliable resources are critical. A sound support system can help a patient feel less alone, understand their options for better treatment, and foster a sense of belonging, all of which improve a patient's quality of life. Finding the right type of resources and support is essential, especially for patients who are alone.

Signature Healthcare offers different types of support designed to address individual patient needs. From meeting with our patient care team to accessing online webinars, patients receive support, education, advocacy, and individual attention.

Our oncology nurses and Patient Navigator work together to provide patients general cancer support and may include discussing treatment options, how to ask questions when you speak with your physician, cancer coping mechanisms, exercise and survivorship issues as well as how to locate credible resources.

Spiritual support is available for patients in both the inpatient and outpatient settings. For patients who qualify, financial assistance is available. Signature Healthcare's "Hope Fund" assists patients experiencing transportation challenges, work-related issues, and financial or insurance problems. Staff from the Greene Cancer Center work with the community to find resources to support patients and their families.

Free Cancer Screenings for the community: Signature Healthcare participated in the Screening PDSA Project in 2022.

Cancer Education in the Community-

- Signature Healthcare hosts the Champions Fighting Cancer Walk each year in partnership with the Chrystine Sullivan Memorial Foundation. All funds raised support the Greene Cancer Center and those needing additional support during their cancer treatment. The 2022 walk took place on Sunday, May 1st when walkers met at Brockton High School and made their way to the Greene Cancer Center for a celebration. One component of the festivities was a Health Fair tent where Signature Healthcare staff provided education and highlighted the services they provide to our community. Staff from Women's Imaging, the Greene Cancer Center, Nutrition, Primary Care, Orthopedics, Interpreter Services, and members of our Portal team were in attendance.
- As part of the "Signature Series," Signature Healthcare presented on "Lung Cancer Prevention" at the Mary Cruise Kennedy Senior Center on August 18th. Thoracic Surgeon, Dr. Steven Milman was joined by Respiratory Therapist, Wendy Vargas and Jillian Gagne, Radiology Navigator, to share information on the health benefits of quitting smoking and the various lung cancer treatments available.
- Signature Healthcare has a long-standing relationship with the Old Colony YMCA. Many times each year, Signature Healthcare staff will educate YMCA members participating in their Healthy Living programs. One is Livestrong, a physical activity and well-being program designed to help adult cancer survivors achieve their holistic health goals. Amanda Fyotek, Cancer Center dietitian, presented to this group in November and December 2022 and provided nutritional guidance.

- On Thursday, November 3rd, Signature Healthcare held "Getting Healthy Together" with over 75 women in attendance. This event allowed women to enjoy an evening of relaxation while learning the importance of their annual screenings. Many women from our community attended and walked away with a better understanding of when they should schedule certain screenings and what those screenings entail. The event offered educational presentations, tables providing materials to the attendees, and an opportunity to schedule appointments for annual mammograms and Primary care visits. Signature Healthcare staff in attendance were Nadalee Angelos, NP, Internal Medicine; Donna McCann, Service Line Director for Surgical Services; Meghan Bell & Hannah Conte, Internal Medicine; Sue Boulanger & Cynthia Spencer, Radiology; Lorraine McGrath & Hilary Lovell, Marketing; Elisa Fontes & Jael Hilliard, Interpreter Services and Lisa Rule, Oncology.

Survivorship Support

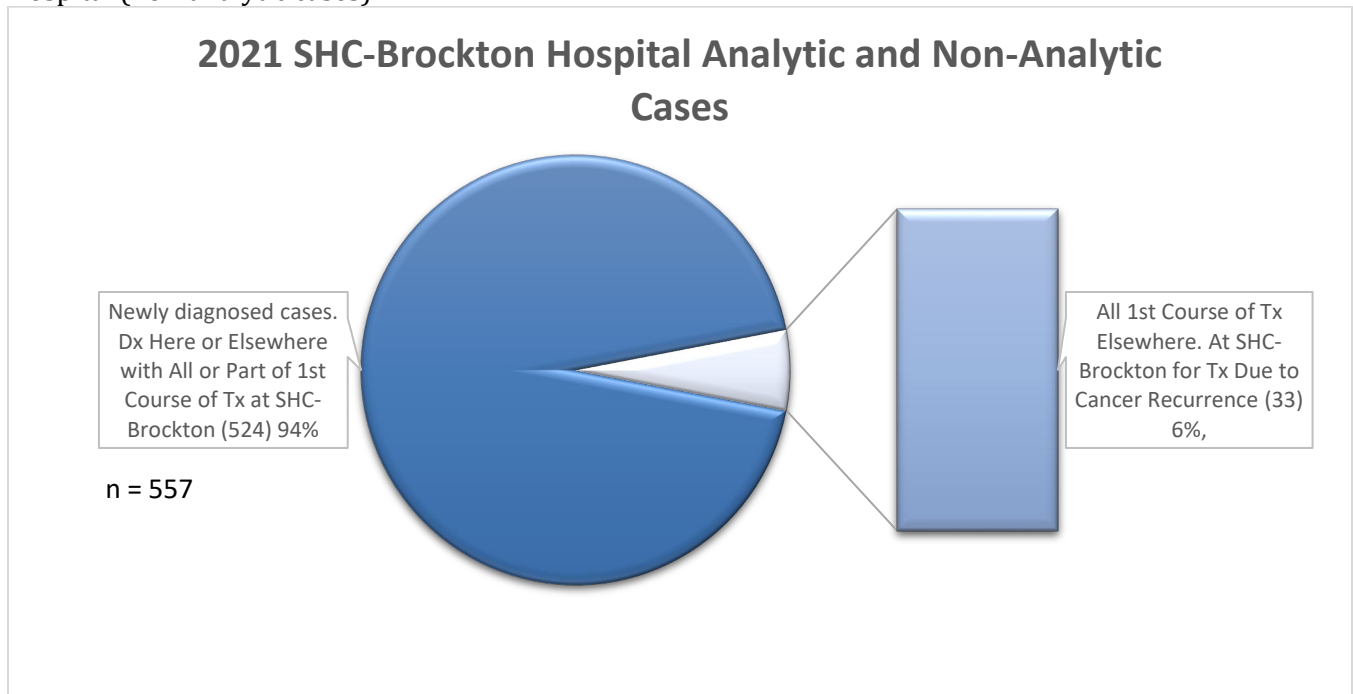
According to the Livestrong Foundation, "more than 10 million cancer survivors live in the United States today, and three out of four families will help care for a family member with cancer." Support for survivors is a critical need that is too often overlooked. Signature Healthcare is addressing that on multiple fronts. Through our hospital-based programs, as well as our community affiliations and partnerships with The American Cancer Society, The Ellie Fund, The Charity Guild and the Livestrong Program at the YMCA, we can link survivors and their family members with programs to address their needs as they move through the process of diagnosis, treatment and into survivorship.

Cancer Registry Statistical Summary – Reflecting 2021 Data

Avis Watson, Manager, Cancer Registry
& Matt Cadorette, CTR, Sr. Cancer Registrar & Cancer Registry Quality Coordinator

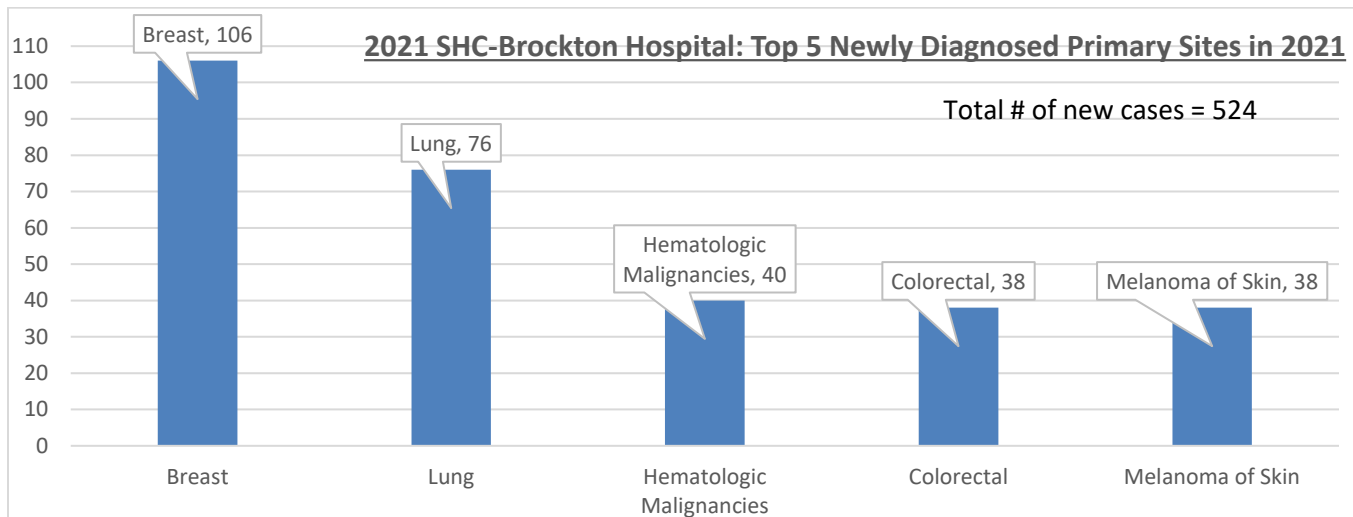
The Signature Healthcare Cancer Registry maintains data on all patients diagnosed and/or treated for cancer. All cancer cases are reported to the Massachusetts cancer registry as required by law.

A total of 557 cancer cases were added to the Signature Healthcare Brockton Hospital Cancer Registry database in 2021. Of those, 524 cases (94%) were diagnosed and/or received all or part of their first course of treatment at Signature Healthcare Brockton Hospital (analytic cases). Thirty-three cases (6%) had their first course of treatment elsewhere and received subsequent treatment at Signature Healthcare Brockton Hospital (non-analytic cases).



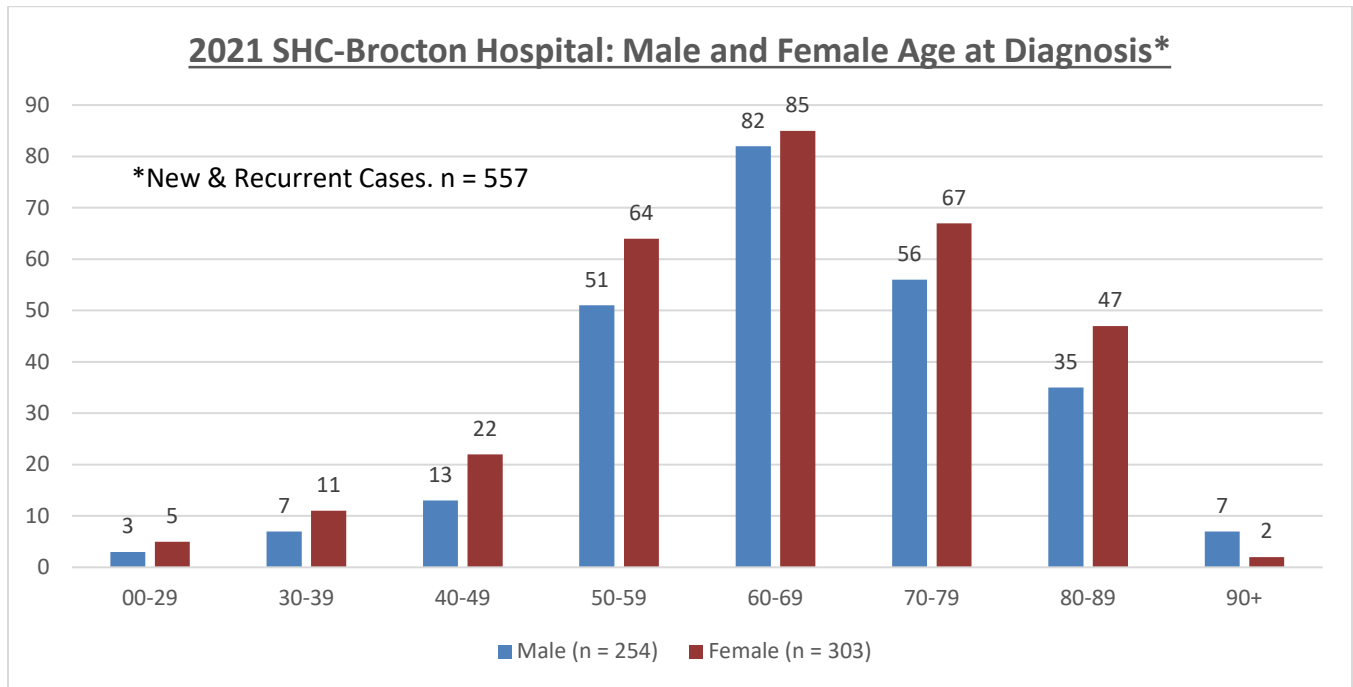
Top 5 Primary Cancer Sites (Newly Diagnosed Cases Only):

Breast cancer (106 cases) remains the most frequent site of cancer diagnosed and/or treated at Signature Healthcare Brockton Hospital in 2021 and this is comparable with national data. Lung cancer is the second most frequent site in 2021 with 76 diagnosed cases. Hematologic malignancies (40 cases), Colorectal (38 cases), and Melanoma of the skin (38 cases) round out the five most frequent new cancer diagnoses.



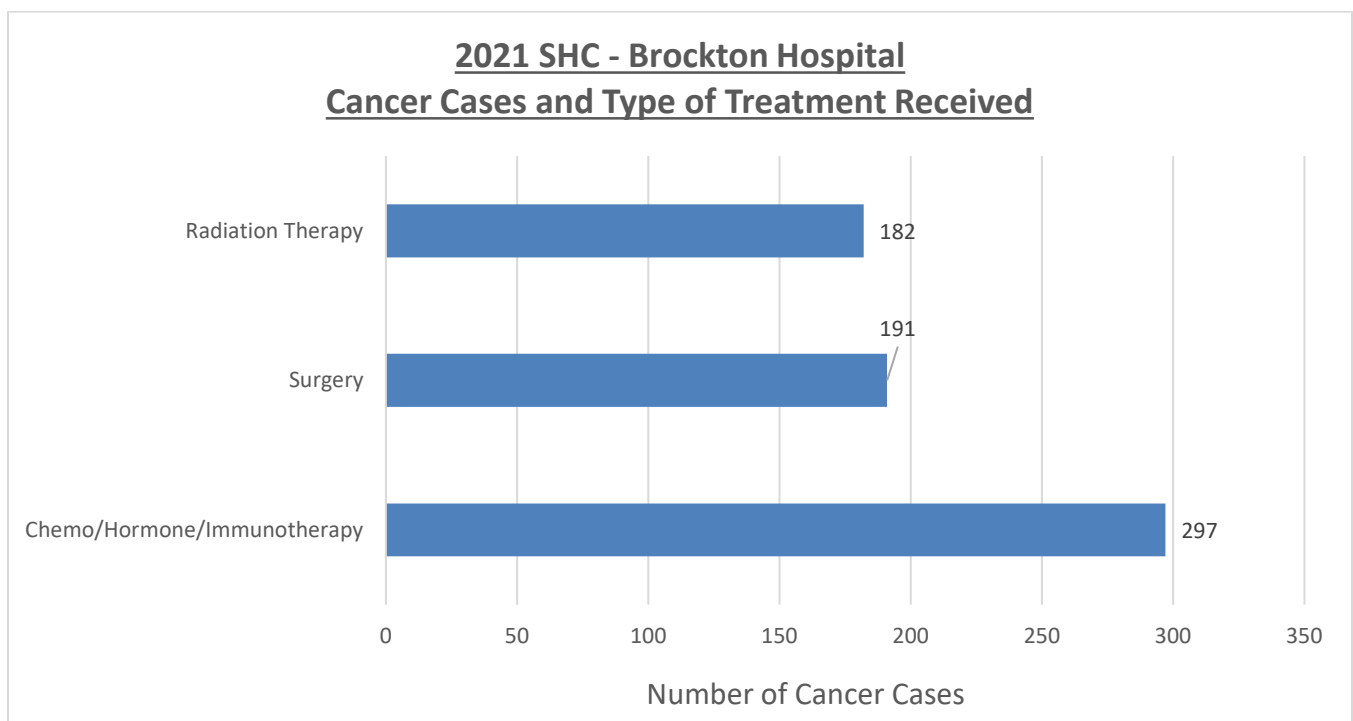
Age Distribution All Sites - Male and Female

A total of 557 new and recurrent cases were diagnosed/and or treated in 2021. 254 were males (46%) and 303 (54%) were females.



First Course of Treatment: (Excludes patients diagnosed at SHC-Brockton Hospital and all 1st course of treatment elsewhere)

378 patients received all or part of their first course of treatment at Signature Healthcare Brockton Hospital for newly diagnosed malignancies. First course of treatment included: Chemotherapy/Hormone Therapy/Immunotherapy (297 cases), Surgery (191 cases) and radiation therapy (182 cases). 65 patients did not receive first course of treatment: (41 patients refused treatment/treatment was not recommended, 20 patients were placed on active surveillance, and 4 patients were lost to follow-up.)



2022 Palliative Care Annual Report

Susan Lee, NP

Signature Health Care Brockton Hospital (SHBH) and the Greene Cancer Center are pleased to partner with Brockton VNA and Old Colony Hospice and Palliative Care to provide palliative care services to patients with serious illness and their families. Palliative care is provided from diagnosis through treatment, not just end-of-life. It aims to help persons with serious illness live well by alleviating pain and other distressing symptoms, such as nausea, shortness of breath, or loss of appetite. Advanced practice registered nurses are credentialed as members of the medical staff at SHBH to provide specialty palliative care consultation to our inpatients who may have COVID-19, heart failure, COPD, dementia, kidney disease, cancer, Parkinson's disease and other conditions. Through specialized assessments and by engaging an interdisciplinary team of social workers, case managers, nurses, chaplains, and pain management specialists, the NPs create a plan of care to help patients/families be fully informed about options for care, to reduce suffering, and to get the help they need to live well in ways that are important to them. In 2022, the palliative care NPs completed consults on 402 hospitalized patients at SHBH. The NPs also provide palliative care services in the home to patients with serious illness who are frail or homebound, always in close communication with their primary care providers and specialists.

Standard 7.2 Monitoring Compliance with Evidence-Based Guidelines

Jessie MacVicar, MD

All breast cancer patients diagnosed in 2021 in the cancer registry database who received all or a part of their treatment with Signature Healthcare were reviewed. Of the 83 cases, 81 were female and 2 were male. The patient age range of diagnosis was from 29 to 102 years old with the majority of patients falling between 55 and 79 years of age. On pathological evaluation of the carcinoma, 74.8% were ductal carcinoma, 10.8% mixed ductal and lobular and 8.4% were invasive lobular carcinoma. Using the AJCC Prognostic Staging, 8.4% of patients presented at Stage 0, 67.3% at IA, 8.5% at IB, 2.4% at IB/IIA, 6.1% at IIA, 3.7% at IIB, 1.2% at IIIA, 1.2% at IIIB and 1.2% at IIIC.

The diagnosis of breast carcinoma was made by core biopsy on 100% of the patients eligible for a core biopsy. Three patients underwent an excisional biopsy with localization as their target location was not amenable to an image-guided percutaneous biopsy. One patient was diagnosed with invasive carcinoma as an incidental finding on a biopsy done for non-malignant pathology.

Of the 83 breast cancer patients, 78.3% underwent breast conservation surgery and 19.2% underwent mastectomy. One patient elected not to undergo surgery secondary to advanced age and comorbidities. Of the patients eligible for breast conservation surgery, 96% underwent partial mastectomy while 4% (3 patients) chose to undergo complete mastectomy. The 13 other patients who underwent complete mastectomy were not eligible for breast conservation surgery secondary to either tumor burden or recurrence with prior radiation exposure. 97% of patients underwent sentinel lymph node mapping/excision. One patient refused excision. 100% of patients who were cN1 prior to neoadjuvant chemotherapy underwent axillary lymph node dissection.

Of the patients eligible, 100% of patients were recommended Oncotype dx testing. 98% of the patient actually underwent the testing with one patient refusing. Of the patients in the high risk category, 100% were recommended adjuvant chemotherapy with 91% undergoing treatment. Again, one patient refused treatment. For the patients diagnosed with TNBC, 100% of eligible patients were recommended neoadjuvant (5 of 5 patients). One patient with TNBC who had adenoid cystic carcinoma on the pathology was appropriately not recommended chemotherapy. 60% of patients who were recommended neoadjuvant chemotherapy for TNBC actually underwent treatment as 2 of the 5 patients refused systemic treatment. For HER2+ breast cancer patients, 89% underwent systemic treatment with one patient refusing any systemic treatment. 100% of the patients with Stage IIA/IIB disease received neoadjuvant chemotherapy (TCHP/ACTHP) while 100% of the patients with Stage IA received adjuvant treatment (TCHP).

For patients who underwent BCS, 98.4% underwent whole breast radiation. One patient (1 of 64) declined radiation therapy. 100% of patients with nodal disease underwent breast and axillary radiation therapy.

For patients with HR+ disease (74 of 83 patients), 100% were recommended adjuvant hormonal therapy. 92% of patients are actually receiving adjuvant hormonal therapy as 6 patients declined treatment.

Of the 83 patients treated at Signature Healthcare in 2021, 44.2% were recommended to undergo genetic testing. Of those patients, 83% actually underwent the testing while 6 patients who were recommended testing declined. One BRCA2 mutation was detected. Appropriate genetic testing recommendations have been identified as a focus for improvement.