Cancer Program Annual Report
2020
Contents

Oncology Committee Members 2020 ................................................................. 3
The Cancer Program at Signature Healthcare ................................................... 4

Rolf Freter, MD, PhD, Chief, Medical Oncology and Hematology, Chair, Cancer Committee .... 4
Offering the Best in Breast Healthcare ................................................................. 5

Warren Salzman, MD, Chief, Radiology & Sue Boulanger, Associate Vice President, Imaging ...... 5
Pathology Services .................................................................................................. 6

Desiree Carlson, MD, Chief of Pathology ................................................................ 6
2020 Program Highlights: Low Dose CT Lung Cancer Screening Program ...................... 9

Holly Avery, Radiology Quality Assurance Manager .................................................. 9
Patient Navigation ................................................................................................... 10

Kelly Lenzc, MSN, RN ............................................................................................. 10
Multidisciplinary Oncology Conferences .................................................................... 11

Steven Lane, M.D., Chief, Radiation Oncology, Cancer Conference Coordinator ............. 11
Clinical Trials .......................................................................................................... 12

Sarah Usher, RN, MSN, OCN® ................................................................................ 12
Rehabilitative and Support Services: Oncology Rehabilitation Program ......................... 12

Linda McAlear, PT ................................................................................................... 12
Social Work Services ............................................................................................... 13

Lisa Rule, MSW, LICSW .......................................................................................... 13
Nutrition Annual Report ......................................................................................... 14

Kathryn Morin, MEd., RD, LDN .............................................................................. 14
American Cancer Society Collaboration ................................................................... 15

Kerri Medeiros, American Cancer Society .................................................................. 15
Community Outreach ............................................................................................... 15

Hilary Lovell ............................................................................................................. 15
Cancer Registry Statistical Summary – Reflecting 2019 Data ......................................... 17

Avis Watson, BS, CTR, Cancer Registrar .................................................................. 17
Five Major Cancer Sites ........................................................................................ 17
Standard 7.2 Monitoring Compliance with Evidence-Based Guidelines ......................... 18
Prostate Cancer Treatment - 2020

Rolf Freter, MD, PhD Chief, Medical Oncology and Hematology, Chair, Cancer Committee .......
Oncology Committee Members 2020

Rolf Freter, MD, Ph.D
Oncology Committee Chairman
Chief, Medical Oncology

Lana Kordunsky, MD
Pathology

Steven Lane, MD
Cancer Conference Coordinator
Chief, Radiation Oncology

Lisa Manera, MD
Cancer Liaison Physician
Medical Oncology

Reve Shields, MD
Medical Oncology

Warren Salzman, MD
Chief, Radiology

Deepti Seshadri, MD
Surgery

Rebecca M. Weaver, MD
Thoracic Surgery

Kristen Hong
Pharmacy

Susan Lee, NP
Palliative Care Coordinator

Susan Mugford, NP
Palliative Care Coordinator/alt

Bridget Guertin
Manager, Health Informatics/IT

Linda McAlear, PT
Rehabilitative Services

Hilary Lovell
Community Relations, Marketing

Michele Daly, RN
Patient Navigator

Kerri Mederios
American Cancer Society Representative

Kathryn Morin, RD, LDN
Nutrition Services

Christine Murphy, CNOR, RN
Quality Improvement Coordinator

Susan Myers
Service Line Director, Oncology, Greene Cancer Center

Christine Rowan, LICSW
Coordinator, Social Work Services
Psychosocial Services Coordinator

Sarah Usher, RN, MSN, OCN
Radiation Oncology
Clinical Trials Coordinator

Kimberly Walsh, RN, MSN
Vice President Patient Care Services

Avis Watson, BS, CTR
Manager, Cancer Registry
Cancer Data Quality Coordinator
The Cancer Program at Signature Healthcare
Rolf Freter, MD, PhD, Chief, Medical Oncology and Hematology, Chair, Cancer Committee

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. This involves coordinated interactions among multiple specialists, with the goal of creating and implementing an effective individualized cancer treatment plan for every patient. 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 so-called “driver mutations”, altered cancer causing genes that can be targeted to attack a cancer, often with an oral medication. Weekly 90-minute Tumor Board conferences, including participation by attending pathologists and radiologists, facilitate in-depth multidisciplinary discussions of cancer diagnosis, targeted treatments, and supportive care.

We offer 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 is available to assist our patients to better cope with their diagnoses and treatments from physical, emotional, and financial perspectives.

An in-house Medical Oncology Division was formed in 2016, greatly facilitating multidisciplinary care to our patients. The growth of Medical Oncology has been rapid, with providers evaluating over 1,000 new patients with cancers and hematologic problems annually. Medical Oncology providers aim to provide next business day consultations for patients 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.

With the opening of the Greene Cancer Center in October 2017, all Medical Oncology and Radiation Oncology services, and many surgical and ancillary services, relocated under one roof. This proximity facilitates efficient multidisciplinary care for our patients. Multidisciplinary Breast Cancer and Prostate Cancer Clinics meet (virtually) weekly and allow patients with new diagnoses of breast cancer and prostate cancer to be evaluated by specialists in Radiation Oncology, Medical Oncology, and (Breast) surgery.

In 2020, the COVID pandemic placed an extraordinary strain on the Greene Cancer Center, Brockton Hospital, Signature Healthcare and the nation as a whole. The job of our colleagues in the Emergency Room, CCU, and the Hospital inpatient floors was to treat patients with COVID. In contrast, the mission of the Greene Cancer Center was to safely continue lifesaving radiation treatments and chemotherapy treatments despite the pandemic. Through aggressive screening of patients for COVID and excellent teamwork, treatment in the Greene Cancer Center continued without interruption during the pandemic. I am very proud of and grateful for, the high level of cancer care all of the teams in the Greene Center provided to our patients during this trying year. This teamwork and excellent care continues as we emerge from the pandemic. The primary goal of all staff in the Greene Cancer Center continues to be providing timely, efficient, evidence-based, personalized and compassionate care to all of our patients in 2021 and beyond.
Offering the Best in Breast Healthcare
Warren Salzman, MD, Chief, Radiology
Susan Boulanger, Associate Vice President, Imaging

2020 Radiology Update
Hologic LOCalizer and Faxitron Trident HD

This year despite all of the challenges associated with COVID-19 we were able to evaluate new equipment and technology enhancements to better serve our mammography patient population. As a result, Signature Healthcare will be introducing a new breast biopsy process as part of a joint venture between Radiology, Dr Jesse Macvicar and the Operating Room (OR). The capital request for funding consideration consisted of a wire free guidance system “LOCalizer” as well as a mobile breast specimen radiography system, “Faxitron Trident HD”.

Currently the breast surgical procedures require the patient to arrive in the OR on the morning of the exam, transfer to Radiology for placement of a localizer wire and then return to the OR for the excision of the lesion with the breast surgeon. Following the excision the surgical specimen is transported to Radiology for imaging. After confirmation that the lesion was successfully excised the specimen is then delivered to Pathology for further analysis. During this time the patient remains under anesthesia in the OR suite.

The Hologic RFID solution allows the patient to have the lesion localized with a more comfortable clip placement versus an inserted wire. The clip can be scheduled on a date prior to the surgery. The patient can now be scheduled in the OR at the convenience of the surgeon without being limited by coordination with Interventional Radiology.

The Faxitron radiography system provides the ability to image the specimen in the OR suite. The system is dedicated to small tissue imaging and is superior to imaging in the radiology suite. This allows for more accurate analysis of the surgical specimen and its borders.

The ability to image bedside in the OR decreases the patient time under anesthesia, eliminates the safety issues around moving the specimen to multiple locations and decreases the overall OR time by approximately 25 minutes per case.

We are very fortunate to have the continued vision and support from Signature Healthcare leadership in bringing new technology to our patients.
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. Any pathologist with a time limited certificate has recertified, as necessary, and participates in the maintenance of certification program. In addition, Dr. Carlson, the Chief of Pathology, has voluntarily recertified in 1997, 2007 and 2014. Three of the Pathologists are additionally certified in Cytopathology.

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 new Cancer Center conference room and can also be viewed on computers in the offices of physicians who call in. 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.
This year, like many other elective/screening exams, the CT Lung Screening program was suspended temporarily due to COVID-19. We continued to follow all patients with prior suspicious findings and provided treatment according to physician recommendations. When screening exams were approved to begin again we worked closely with Dr. Robert Weinstein and Pat Cullen to increase provider participation.

The implementation of Meditech Expanse has enabled the creation of prompts within the EMR to remind physicians that their patient could be a candidate while they are completing their note during the visit. We are investigating a more robust Low Dose CT electronic tracking system called Primordial. This system would allow us to interface with the patient’s electronic medical record eliminating hours of time consuming manual data entry.

The recruitment of a dedicated Lung Screening Patient Navigator is under consideration. The Navigator would be an immediate resource for the patient to have any questions or concerns answered timely. The navigator could more effectively guide the patient through the maze of treatment and services that are available to them while they are receiving their care. A navigator would also support the providers and help enroll patients into this life saving program.

The addition of Dr. Rebecca M. Weaver to Signature Medical Group has resulted in most of our patients receiving complete cancer care here at Signature Healthcare and eliminated most of the leakage to outside facilities.

Low Dose CT Lung Screening Statistical Data

<table>
<thead>
<tr>
<th>Year</th>
<th>Patients Screened</th>
<th>Annual Screenings</th>
<th>Positive Cancer</th>
<th>Treated at SHBH</th>
<th>Treated Elsewhere</th>
<th>Refused Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>153</td>
<td>68</td>
<td>4 Positive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>225</td>
<td>156</td>
<td>5 Positive</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>485</td>
<td>251</td>
<td>14 Positive</td>
<td>4</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>565</td>
<td>504</td>
<td>21 Positive</td>
<td>7</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>
The patient navigation program at Signature Healthcare is designed to assist patients and their caregivers throughout the continuum of care, from pre-diagnosis, throughout treatment, and into the survivorship period. The patient navigator functions as a resource during what can often be a very overwhelming and confusing time in patient’s lives, ensuring that they receive access to quality care along with education and support along the way. Through a collaborative effort with the care team, the navigator works to connect patients with resources within the organization and community, focusing on areas of financial and transportation assistance as well as addressing language and social barriers that may be present.

Patients may be referred to patient navigation services through several channels and at any point during their course of treatment. The patient navigator also maintains a relationship with the Women’s Imaging department and receives referrals for patients who have received abnormal mammogram results. After receiving a referral, the navigator can establish contact with patients very early on, creating an opportunity to identify any potential barriers to care before they impede future treatment. The navigator remains in contact with the patient, providing education and answering any questions that may arise regarding upcoming procedures. Following a positive biopsy result, the navigator ensures that the patient is scheduled promptly with the oncology team to establish their plan of care and continues to be a resource to the patient throughout their course of treatment.

The patient navigator also assists with coordination of care, which is an important aspect for those facing a cancer diagnosis. Patients may require appointments with multiple physicians across varying specialties depending on their diagnosis, which can feel overwhelming to some. The navigator works to maintain communication with all members of the care team, and acts as a single point of contact for patients if questions or concerns regarding their care arise. Additionally, the navigator can help patients to prepare for their appointments, as well as better understand the treatment plan their physician has created by connecting them with resources specific to their diagnosis.

This year, COVID-19 presented numerous challenges for both patients and healthcare facilities alike. For many, concerns regarding coming to the hospital during the pandemic caused them to put off attending important annual screening appointments. Continuing to track patients who had either cancelled or rescheduled preventative exams such as mammograms will be important in the coming months to ensure that diagnoses are not missed, which could impact patient outcomes in the future. Additionally, COVID-19 had a tremendous impact on programs relied upon for transportation to appointments. While some office visits could be conducted via telehealth, many oncology patients still needed to come to the cancer center for their chemotherapy and radiation treatments. For those without access to reliable transportation, grant funded rides were more important than ever in ensuring that they were able to safely make it their appointments without any disruptions to their care. In the coming year, the patient navigator will continue to identify resources within the community to assist patients and their families who have experienced significant additional stress related to the pandemic.
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 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.

In this pandemic year, our clinical affiliate Beth Israel Deaconess Medical Center which offers access to open clinical trials stopped all trial activity for several months in the spring and early summer. This seemed to have impacted our patients until these clinical trials were back up and enrolling. Currently there are 12 patients who have participated so far this year—possibly there are more.

Rehabilitative and Support Services:
Oncology Rehabilitation Program
Linda McAlear, PT

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.

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. Rehabilitation services for cardiac 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.
The diagnosis of cancer can have profound impacts in many areas of a patient’s life. These impacts may be felt at home, in relationships, in the workplace and beyond. As patients and families come to terms with their diagnoses and prepare for treatments, they must adapt to a “new normal.” 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 with community resources, navigating questions about insurance and employment, and referrals to outside agencies when indicated. In addition, the Oncology Social Worker provides a direct link between the outpatient oncology care team and the inpatient Social Work Department at Brockton Hospital.

All patients receiving intravenous chemotherapy are seen by the Oncology Social Worker at the beginning of their treatment, usually on the first day. Initial meetings will typically consider patient coping, family support, financial stressors, mental health concerns and patient understanding. All patients receiving oncologic treatment (chemotherapy or radiation therapy) complete a NCCN Distress Thermometer, which measures the level of distress patients may be feeling in multiple areas. Social work follows up individually with patients who indicate higher levels of distress.

Oncology social work supports patients with emotional, social and concrete needs. If patients are struggling to cope with their diagnosis or illness, the oncology social worker is there for support and counseling. The oncology social worker facilitates a monthly cancer support group, currently 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. As patients complete active treatment and move towards survivorship, the Oncology Social Worker is available to support their transition.

In 2020, oncology social work met with over 250 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.
A registered and licensed dietitian is available 24 hours per week to provide care to Greene Cancer Center patients. Services offered range from weight maintenance counseling, symptom management of anti-cancer treatments and nutrition counseling for survivorship.

From January 2020 to date, nutrition services have completed 91 initial assessments of patients with different types of cancers.

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.

- Head and Neck: 19 (20.8%)
- Lung: 10 (10.9%)
- Breast: 14 (15.3%)
- Colon: 5 (5.4%)
- Pancreatic: 10 (10.9%)
- Prostate: 2 (2%)
- Lower Esophageal/GE junction: 10 (10.9%)
- Lymphoma: 2 (2%)
- Hematology: 5 (5.4%)
- Rectal: 3 (3%)
- Liver: 0

Other: 7.6% (OBGYN, unknown primary, neuroendocrine, periauricular, cholangiocarcinoma, multiple myeloma)
American Cancer Society Collaboration
Kerri Medeiros, 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 global grassroots force of 1.5 million volunteers dedicated to saving lives, celebrating lives and leading the fight for a world without 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, better understand their options for 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 a meeting with our patient care team to accessing on-line webinars on employment rights, 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. Online and self-paced tutorials are available on our Signature Healthcare website to access from home or office for patients who can’t easily attend our on-site programs.

Spiritual support is available for patients in both the inpatient and outpatient settings. For patients who qualify, financial assistance is available through the hospital’s Hope Fund. Signature Healthcare offers assistance for patients experiencing transportation challenges, language barriers, work-related issues, and financial or insurance problems and works with the community to find resources to support patients and their families.

Free cancer screenings for the community: Due to COVID-19, no screenings were held in FY 20.
Cancer Education in the Community

- Signature Healthcare planned to host “Conversations on Cancer” in partnership with Beth Israel Deaconess Medical Center (BIDMC) in Spring 2020, but due to COVID-19 it was postponed to November 2020. With COVID-19 numbers still high, the event was put on hold until 2021.
- In the spirit of providing the best and most current information available at Signature Healthcare/BIDMC, a newsletter was prepared to keep our community up to date and describe advances in cancer care available at Signature Healthcare and with our collaboration with BIDMC.

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 need on multiple fronts. Through our hospital-based programs as well as our community affiliations and partnerships with The American Cancer Society, The Cancer Support Community, The Charity Guild, Community Servings 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 2019 Data

Avis Watson, CTR, Cancer Registrar

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 628 cancer cases were added to the Signature Healthcare Brockton Hospital Cancer Registry database in 2019. Of those, 539 patients (86%) were diagnosed and/or received all or part of their first course of treatment at Signature Healthcare Brockton Hospital (analytic cases). Eighty-nine patients (14%) were diagnosed elsewhere and received subsequent treatment at Signature Healthcare Brockton Hospital (non-analytic cases).

Five Major Cancer Sites
Breast (122 cases) cancer remains the most frequent site of cancer diagnosed and/or treated at Signature Healthcare Brockton Hospital in 2019 and this is comparable with national data. Lung cancer is the second most frequent site in 2019 with 72 diagnosed cases. Prostate (58 cases), colorectal (46 cases), and Melanoma (23 cases) round out the five most frequent cancer diagnoses.

Age Distribution All Sites
Male and Female
A total of 628 cases were diagnosed/and or treated in 2019, 311 were males (49.5%) and 317 (50.5%) were women.
Prostate Cancer Treatment - 2020

The Cancer Committee reviewed the treatment of patients evaluated in the Greene Cancer Center in 2020 for locally advanced high-risk and very high-risk prostate cancers (23 patients) and metastatic prostate cancer (7 patients). The de-identified patient data is listed at the end of this report.

High-Risk and Very High-Risk Prostate Cancers
High-risk prostate cancers are defined as cancers penetrating the capsule of the prostate gland (T3a), any cancer with an initial PSA of greater than 20 ng/ml, or a Grade Group 4 or Grade Group 5 cancer (Gleason 8, 9 and 10 scores). Very high-risk prostate cancers are defined as cancers involving the seminal vesicles (T3b), or invading structures adjacent to the prostate (T4, rectum, bladder, pelvic wall invasion), having a primary Gleason 5 pattern, or more than four prostate biopsy cores with Grade Group 4 or 5 disease.

NCCN guidelines for high-risk and very high-risk prostate cancers recommend curative intent treatment with combined modality therapy (CMT) or surgery. CMT involves external beam radiation therapy (EBRT) to the prostate or Cyberknife (CK) to the prostate, possibly with a brachytherapy boost to areas within the gland, coupled with 1.5-3 years of androgen deprivation therapy (ADT). A brief course of chemotherapy with docetaxel in addition to CMT can be considered for patients with very high-risk prostate cancers. Surgery entails radical prostatectomy and pelvic LN dissection (RP+PLND).

23/23 patients treated in 2020 for high risk and very high risk prostate cancers met the NCCN guidelines (22 patients received CMT, 1 patient underwent RP+PLND).

Metastatic Prostate Cancers
NCCN guidelines for patients with metastatic prostate cancer recommend androgen deprivation therapy (ADT) coupled with an oral androgen receptor blocker (enzalutamide) or lyase inhibitor (abiraterone). Based on the results of the CHAARTED and Stampede Trials, a brief course of chemotherapy with docetaxel, with ADT, is an alternative to using an oral agent. BRCA 1/2 testing is also recommended.

Seven patients with metastatic prostate cancer were treated in the Greene Cancer Center in 2020. Most of the patients had bony metastases. All seven patients with metastatic prostate cancers met the NCCN guidelines (6 received ADT and abiraterone/prednisone, 1 received ADT and docetaxel)

Locally Advanced High-Risk and Very High-Risk Prostate Cancers

Combined Modality Therapy

DL, Gleason 6, pretreatment PSA of 59.45 ng/ml, receiving CMT, 2 years of ADT, s/p EBRT
TK, Gleason 8, receiving CMT, 2 years of ADT, s/p EBRT
ML, Gleason 8, received CMT, truncated hormonal course due to ADT intolerance (Brajtbord), s/p EBRT
JKP, Gleason 8 receiving CMT, 2 years of ADT, s/p CK
TB, Gleason 8, receiving CMT, ADT intolerance, on Casodex, s/p EBRT
KB, Gleason 8, receiving CMT, 2 years of ADT, s/p EBRT
JL, Gleason 8, receiving CMT, 2 years of ADT, s/p EBRT
RS, Gleason 8, receiving CMT, 2 years of ADT, s/p EBRT
ML, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
ST, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
RC, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
RF, Gleason 9, CMT recommended, only received ADT given ongoing chemorx for a lymphoma, no EBRT (expired).
IG, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
CPL, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
AW, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
HB, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
MM, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
LL, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
JL, Gleason 9, receiving CMT, 2 years of ADT, s/p EBRT
AF, Gleason 10, receiving CMT, 2 years of ADT, s/p EBRT
SK, Gleason 10, receiving CMT, 2 years of ADT, s/p EBRT

Radical Prostatectomy
PM, Gleason 9 on the initial TRUS bxs, Gleason 7 on the RP+PLND specimen

Lost to Follow-up
PT, Gleason 8, offered CMT

Metastatic Prostate Cancer
DH, Gleason 9, pleural metastases, receiving ADT and abiraterone/prednisone, BRCA1/2 ordered
DB, Gleason 9, bony and lung metastases, received degarelix and abiraterone/prednisone (2019 only, expired)
DS, Gleason 9, bony and lung metastases, received ADT and docetaxel (expired)
AT, Gleason 9, bony metastases, receiving degarelix and abiraterone/prednisone, BRCA1/2 ordered
RM, Gleason 9, bony metastases, receiving ADT and abiraterone/prednisone, BRCA1/2 ordered
PH, Gleason 10, bony and bone marrow metastases, s/p bilateral orchiectomies and abiraterone/prednisone, BRCA1/2 ordered (expired)
RD, Gleason x (bx of a malignant RP LN established the dx), bony metastases and malignant retroperitoneal LNs, receiving degarelix and abiraterone/prednisone, deleterious BRCA 1 mutation