



Cancer Care

*Bringing Hope to Life,
Research to Cures*

2016



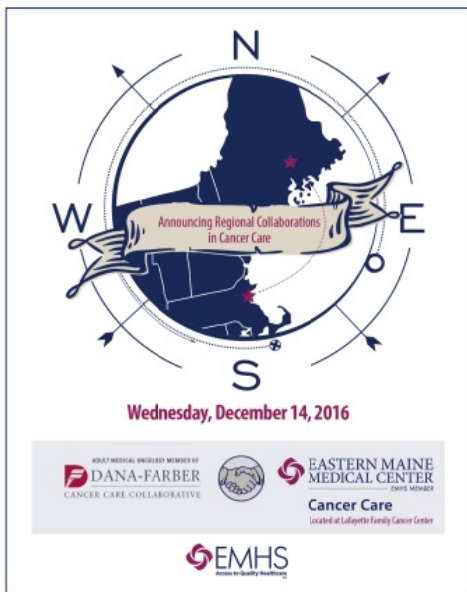
**EASTERN MAINE
MEDICAL CENTER™**

EMHS MEMBER



Allen L'Italien, RN, OCN

Thanks to the ever increasing pace of scientific research, the application of knowledge each year generates more hope for cancer and hematology patients. The physician team's skill is demonstrated by the significant increase in utilization of precision medicine in addition to or instead of chemotherapy. Targeted therapy opens the door to a new and exciting treatment modality. Yet, with each passing month it becomes clearer that cancer is many diseases that can readily transform and adapt to a barrage of attacks. Thankfully, treating with an aggressive array of drugs as well as sometimes complex treatment schedules is making a meaningful difference.



Late in 2016, EMMC Cancer Care reached an exciting and critical juncture in our role as a leader in cancer care delivery in our state. Our adult medical oncology program was approved as a full collaborator with the Dana Farber Cancer Institute. Bringing the expertise of such a highly respected cancer research institution into all areas of medical oncology assures we will continue to maintain the highest level of care possible. Likewise, physicians and patients now have a much wider range of options when the established treatment plans just will not deliver what everyone is hoping for. Being the only Dana Farber clinical collaboration site in the state will save many patients hours of travel time and significant expense compared to the need to travel to Boston for consultation or treatment. We are impressed with the Dana Farber team's desire to help make a real impact on the burden of cancer for rural Mainers.

Additionally, it is a year to be thankful to all the extraordinary specialty surgeons, specialists, and oncologists who have chosen to come to this area to stay and care for our friends and families. Their efforts are essential to the availability of the best quality care.

Finally, we are each amazed at the unbelievable generosity of the Tradewinds Corporation's leadership groups. They provide many thousands of dollars to directly help relieve the personal financial burden that patients endure when frequently traveling for treatment. Their generosity has made a real difference to thousands of patients and their families. A very appreciative "Thank You" from the entire Cancer Care team on behalf of the patients we are privileged to serve.



Thomas H. Openshaw, MD

I would like to again thank the physicians and staff of Eastern Maine Medical Center's cancer program for their excellent work in 2016. We have worked to broaden care available to patients in Maine, actively collaborating across our region.

Most exciting this year is the entry of EMMC Cancer Care of Maine into the Dana Farber Cancer Institute (DFCI) Cancer Care Collaborative which will greatly increase our joint clinical and research opportunities.

Clinical Care Statistics:

- 1,418 surgical procedures related to cancer were completed at EMMC (representing 65% of all cancer related surgical procedures for those diagnosed and beginning treatment at EMMC in 2015).
- 1,737 patients began care in Medical Oncology.
- 917 patients initiated Radiation Oncology treatments.
- 14 pediatric-adolescent-young adult patients (ages 0-25) were newly diagnosed.

Clinical Highlights – New in 2016:

- In Radiation Oncology, use of new technology enables treatment to be more focused, requiring fewer treatments. More than 8% of patients served had conditions appropriate for this type of care. While time spent in any given treatment is longer, the total number was greatly reduced, reflected in a 3% reduction in overall volume and substantially increased patient satisfaction.
- Through our active radiopharmaceutical program, we have increased the use of Radium 223 for those with advanced prostate cancer, reducing pain and extending survival of patients with this disease.
- The move of Supportive Care consultation service to the Lafayette Family Cancer Center resulted in improved access to care; more than 35% of all those diagnosed with later stage cancers were seen. Nearly 70% of those with late stage lung cancer opted for consultation. EMHS based hospice care was provided to more than 200 patients.
- Expanded cancer genetic services resulted in 75% more patients completing consult. Of those, 87% went on to complete testing.
- Hannah Castrucci, MD continues as our orthopedic oncologist, advising patients not only about new bone and muscle cancers, but advising us on the treatment of bone metastases from more common cancers.
- Two of Maine's five surgical oncologists continue their active practice in this region.
- The role of financial navigator was added to reduce patient cost concerns about paying for treatment and increase the likelihood of treatment completion.

Clinical Staff

Joining our EMMC team this year are Zarah Dulce Lucas; MD in Medical Oncology; Janeen Daniels, MD, in Radiation Oncology; and Sophia Villanueva, MD in Surgical Oncology. Amy Harrow, MD, was recognized in the community by Caring Connections for her outstanding commitment to breast health. Jens Rueter, MD, has taken on a new role with the Jackson Laboratory as medical director of the Maine Cancer Genomics Initiative. Lastly, we said farewell to Paul Szal, MD as he stepped into retirement with deep gratitude for his 35 years of service.

Screening and Early Intervention Services

Since beginning in 2014 the lung cancer prevention and screening clinic under the direction of Gary Keller, MD, has coordinated screenings for nearly 600 patients identified as high risk. Twenty percent had “positive findings” (nodules greater than 6 mm). In conjunction with other community screening efforts, 22 patients were identified as needing surgical intervention. Of those, 75% had early stage cancer compared to the 15% rate of early stage diagnosis due to symptoms. The program helps people to access care, education, and smoking services to reduce the risk of lung cancer and other tobacco-related diseases. For more information call **207-973-5293**; to schedule a screening CT, call **207-973 -8150**.

Through focused effort and using technological advantages, EMMC primary care practices made significant improvements in age appropriate screening rates across our Accountable Care Organization participants for both breast (74.1% to 85.5%) and colon (74.3% to 81.9%) cancer. These rates are well above the targeted 77% and national rates of 62% (breast), and 57% (colon).

As a joint project through the Bangor Y and EMMC, *Caring Connections* continues to actively screen for early breast and cervical cancers. Through the program, 179 mammograms and 181 well women exams were provided with 2 cancers identified. Screening early for lymphedema is a priority. Through our on-site EMMC Lymphedema Clinic, 118 women were seen. A specially trained physical therapist provides evaluation, education, and treatment to reduce the development and impact of lymphedema. The Bangor Y and *Caring Connections* have an off shoot of “Thrive with Exercise” called “**LIVESTRONG** at the Y”, open to all individuals with a cancer diagnosis. The program encourages beginning or continuing activity during treatment and beyond. There is no cost to participate. For more information about this exciting program, call **207- 941-2808**.

Cancer Case Multidisciplinary Review

Each meeting is designed to maximize interdisciplinary discussion, review of best treatment options, timely completion of diagnostics, and engagement of the entire team on behalf of the individual newly diagnosed with cancer. These include:

- A weekly cancer case conference where new patients are discussed and plans made for further diagnostic studies and treatment by surgery, medical oncology, and radiation oncology, as well as referral for participation in clinical trials and genetic consultations.
- A weekly review of new breast cancer cases including early referral to clinical research trials, genetic and/or behavioral medicine consultation.
- A weekly review of new lung cancers and other thoracic malignancies needing special diagnostic procedures or multimodality treatment.
- A semi-monthly review of new urologic cancer cases including prostate cancers.
- Added this year was a molecular case review, enabling providers to review the impact of tumor genetics on treatment decision making.

To make a referral for review, please call 207-973-7483.

A High Quality Program the American College of Surgeons Commission on Cancer Standards

Our program meets or surpasses standards of care set by the American College of Surgeons Commission on Cancer (ACoS-CoC). As recommended by ACoS-CoC, we annually review the four major cancer sites of breast, colon, lung, and prostate cancer, comparing stage at diagnosis with the most current data available from the National Cancer Data Base (NCDB). For cases diagnosed at EMMC in 2014*, we found that stage distribution at diagnosis for these cancers was essentially the same as reported nationally in the NCDB. Across these diseases, our survival rates parallel nationally published rates.

Our ACoS-CoC Cancer Program Practice Profile Reports demonstrate excellent adherence to recommended standards of practice. In each of the breast cancer standards, our performance exceeded that of the 2014* national database on the following measures: use of image/hand guided biopsy for initial diagnosis, appropriate referral for radiation therapy following a mastectomy for node positive disease, referral for endocrine therapy for hormone receptor positive disease, and referral for medical oncology consultation for hormone receptor negative disease.

Performance on measures for the care of individuals with colon and rectal cancer exceeded the national standard, including surgical removal and pathologic examination of 12 or more lymph nodes at the time of surgery and referral of patients for consideration of chemotherapy.

** Most current comparative NCDB data available*

Our participation in ACoS-CoC Rapid Quality Reporting System allows us to monitor ongoing compliance to practice standards in the treatment of breast and colon cancers. In our most recent monitoring of 2016 case activity, performance at EMMC met or exceeded national rates on all standards.

Throughout the year, led by Peter Huang, MD we have examined our collective performance in the care of those diagnosed with cervical, esophageal, and gall bladder cancers. In each comparative analysis, EMMC met stage at diagnosis and outcome expectations. Enclosed is a broader look at melanoma. Quality review for each case diagnosed in 2015 was completed reporting staging as accurate and treatment as appropriate when compared to national guidelines.

Educational Offerings for Health Care Providers

In May, we held our third annual Spring Topics in Cancer Care conference, which focused on screening, diagnosis, and treatment of prostate cancer. Included was special focus on management of post treatment effects featuring Ravi Kacker, MD, Men's Health Boston. It was well attended by primary care providers and allied health professionals across the region. Our 2017 topic is **melanoma**, scheduled for Thursday, **May 18, 2017**.

In October, the Seventh Annual Partridge Breast Cancer Symposium was held. Speakers were nationally recognized specialists in medical, radiation, and surgical oncology along with Dr. Amy Harrow's presentation on management of radiologic finding – "dense breast." More than 130 health professionals from Maine attended this event. Our fall symposium is scheduled for Thursday, **October 26, 2017**.

Strong Research Program Brings Treatment Trials to Maine

In December 2015, Helen Hsu, MD, MS joined our team to expand the oncology research program; help broaden research opportunities for our patients. Her report highlights the scope of the program. Our cancer clinical trials program is active with more than 50 adult trials and 30 pediatric-young adult trials available for enrollment. Affiliations are in place with programs in Augusta, Belfast, Portland, and Rockport. Our rate of enrollment is in the top 20% across the nation.

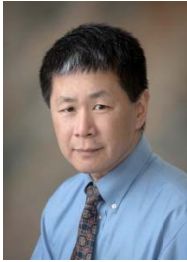
Our investigators have been co-authors on peer-reviewed publications this year. One publication studied the use of antihistamine to prevent bone pain caused by use of growth factors with chemotherapy. Another publication studied and endorsed specific guidelines for the use of chemotherapy, hormonal therapy, and other medical therapies for early stage breast cancer.

Activity in our bio-repository and research laboratory continues through the collection of blood, bone marrow and tumor tissue. Collected specimens are preserved for later use in laboratory studies. Nearly 250 patients participated in this program in 2016.

New Directions for 2017

In recognition of growing use of oral agents in the management of cancer, Medical Oncology service initiated work with EMHS outpatient pharmacy – Miller Drug to offer specialty pharmacy services to our patients. The team will include dedicated pharmacists, nurses, and patient advocates. Each will have a role alongside the patient's physician in obtaining medications at the best cost to the patient, monitoring use, and helping to address any related side effects.

We continue to expand the number of clinical trials available to our patients and across the region and we look forward to working in the Dana Farber Cancer Care Collaborative to bring more opportunities for patients to receive newly developed cancer treatments in Maine.



Peter Huang, MD, FACS

It is estimated that over one million skin cancers are diagnosed in the United States annually. Squamous cell carcinomas and basal cell carcinomas account for the vast majority of these cancers. They generally are non-aggressive malignancies that do not tend to spread to other sites, and complete surgical removal is generally curative. Melanoma is a cancer that begins in skin cells called melanocytes. These cells make melanin, which gives skin its color, and also protects the deeper layers of the skin from the sun's harmful ultraviolet (UV) rays. While melanoma accounts for only about 4% of new skin cancers, they are responsible for the majority of deaths from cutaneous malignancies. During the last 10 years, there have been 473 melanomas diagnosed at EMMC. While the incidence of melanoma is relatively low, it has been increasing steadily over the last 30 years. In 2001 there were 51,400 new diagnoses of melanoma -- in 2016 it is estimated that there will be 76,380 new cases of melanoma diagnosed and 10,130 individuals will die of this disease.

Melanoma is slightly more common in men than women and increases in incidence with age, though melanoma can be found in young adults and even children. Individuals with fair skin, red or blond hair, and large numbers of moles (nevi) - particularly if these moles harbor atypical or dysplastic features - are at an increased risk for developing melanoma. A prior history of melanoma increases the risk for the development of additional new melanomas. Immunosuppressed individuals are also at increased risk. Approximately 10% of melanoma patients will have a close relative with melanoma. Much of this association can be attributed to similar environmental exposure or physical characteristics, though a small number are related to inherited genetic mutations of DNA repair or tumor suppression genes. The most significant environmental factor (and the only risk factor that can be influenced by individual choice) is exposure to UV radiation which causes direct damage to cellular DNA. Extreme exposure resulting in sunburn; and exposure during childhood are particularly implicated in subsequent melanoma risk. This risk is conferred regardless of whether the source of UV radiation is from the sun, from artificial lamps, or tanning booths.

The early diagnosis of melanoma is extremely important, and self-examination is an important component of early detection. Characteristics of skin lesions that raise the suspicion for melanoma include an asymmetric shape, irregular borders, variable color, diameter greater than 5mm and change in appearance over time. One should also be alert for lesions that are ulcerated or bleed. For suspicious lesions, the diagnostic method of choice is a full-thickness excisional biopsy of the skin. If excisional biopsy is not possible due to lesion size or location, an incisional or punch biopsy of the most suspicious portion of the lesion is sometimes necessary.

Common subtypes of melanoma have been described. Superficial spreading melanomas are the most common and have a more outward (radial) growth pattern. Nodular melanomas tend to have a more vertical growth pattern. Acral lentiginous melanoma is seen on the palms and soles and under the nails and are the most common form of melanoma in Asian and African-Americans. Lentigo maligna are lesions that do not tend to be invasive, though they can grow to large size.

Diagnosis of melanoma at an early stage is an important determinant of successful treatment. Independent of tumor subtype, the most important feature of melanoma and one of the important staging criteria in the American Joint Committee on Cancer (AJCC) system is the tumor, or Breslow, thickness. The presence of ulceration is also extremely important. Stage 0 melanomas are non-invasive or in situ lesions that have an excellent prognosis. Stage I melanomas are those with a Breslow thickness up to 1.0mm, or between 1.01-2.0mm without ulceration. Stage II melanomas are those between 1.01-2.0mm with ulceration or tumors greater than 2.0mm without lymph node spread. Stage III melanoma refers to patients with spread to lymph nodes. Individuals with Stage IV melanoma have metastases to distant sites. The stage distribution for patients at EMMC over the last decade include patients with Stage 0 disease at 18.9% (vs. 25.9% nationally), Stage I - 37.3% (vs. 42.9%), Stage II - 20.1% (vs. 12.7%), Stage III - 16.6% (vs. 8.4%), and Stage IV - 5.3% (vs. 4.5%).

The most effective treatment for melanoma is a wide and complete surgical excision. For localized melanomas, wide excision alone can result in cure rates of 60% to nearly 100% depending on tumor thickness and presence of ulceration. Melanomas that spread will most commonly do so to lymph nodes, and the presence of nodal metastases is best determined with a technique called sentinel lymph node biopsy. In this technique, a combination of radioactive tracer and blue dye are injected at the site of the primary melanoma. Lymph nodes that receive dye are removed and analyzed for possible tumor spread. At EMMC, sentinel node biopsy was performed in 91.3% of patients with primary tumors for which this procedure is appropriate. Those without lymph node spread generally require no further treatment. If lymph node metastasis is found, more extensive lymph node surgery is generally recommended. At EMMC, this additional surgery was performed in 100% of patients for whom it was indicated, and appropriate referral was made in all cases to our Medical Oncologists for consideration for additional adjuvant therapy. All cases (42) diagnosed in 2015 were reviewed for staging accuracy and treatment in accordance to national guidelines. Each met standard expectations.

For advanced melanoma, new drugs are available that allow the patient's immune system to more effectively control the disease. These drugs that use the immune system fall into two categories. Drugs called CTLA-4 inhibitors can help white blood cells called T cells to fight cancer cells. Other drugs called PD-1 or PD-L1 antibodies interfere with mechanisms by which cancer cells can escape detection and eradication by the immune system. These drugs can be used singly or in combination. They can result in improved survival. Similarly, medications that target specific mutations found in some melanomas can be used singly or in combination for control of disease.

Our current portfolio of clinical trials at EMMC Cancer Care will help to further refine the use of these drugs. In patients at high risk of relapse after melanoma surgery, the use of a PD-L1 antibody is being compared to current standard therapies to prevent recurrence. In patients with a specific mutation, another study aims to determine the best schedule of targeted drug combinations in advanced disease. Other studies are investigating the use of currently available drugs in combination with these new immunotherapies. We hope that the results of these studies carried out here and in major medical centers across the country will contribute to better outcomes in patients with advanced melanoma.

Upcoming professional educational opportunities

Fourth Annual Spring Cancer Topics – Melanoma

May 18 – Bangor Hilton Garden – 8 a.m. to 3:30 p.m.

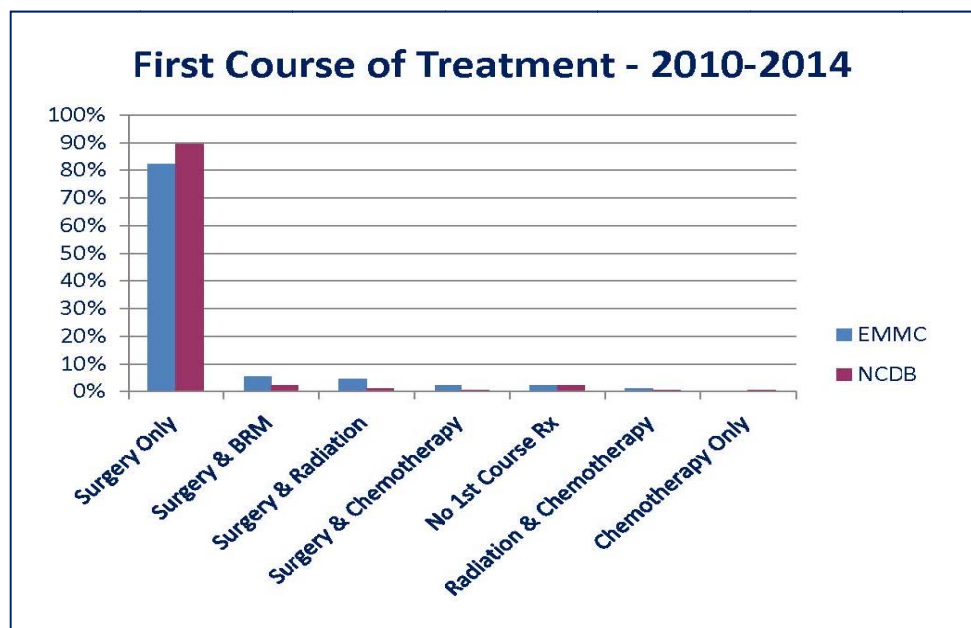
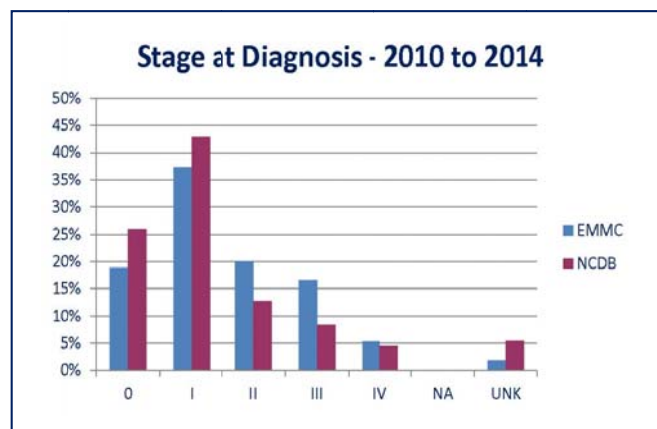
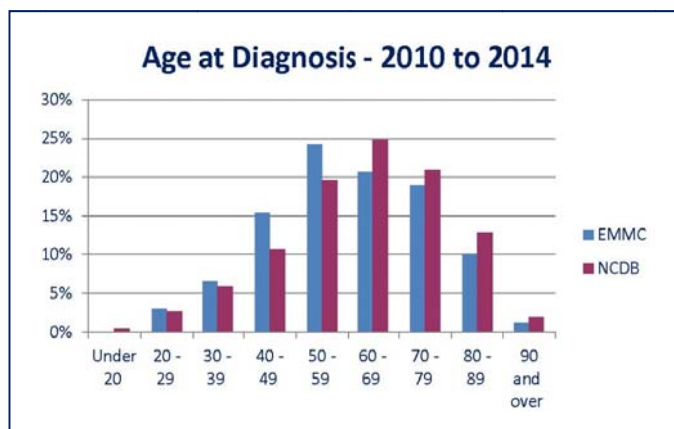
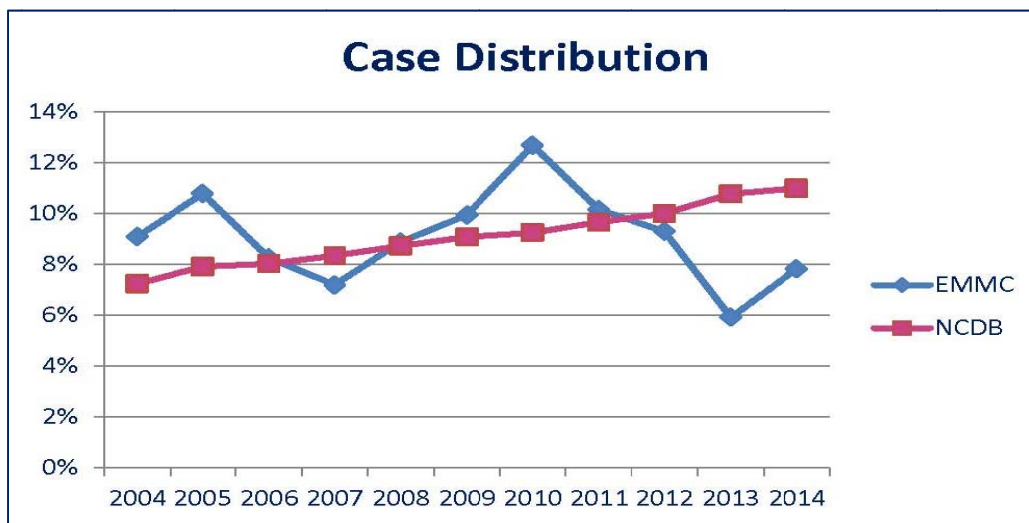
Eighth Annual Partridge Foundation – Breast Cancer Symposium

October 20 – Bangor Hilton Garden – 8a.m. to 3:30 p.m.

Call **973-7483** for more information or to register

Report Focus – Melanoma – Data

*Cases diagnosed from 2010 to 2014– most current comparisons available through the American College of Surgeons Commission on Cancer (CoC) Number of cases – EMMC – 169; NCDB - 194840





Helen Hsu, MD, MS

Across 2016 **change** has been the focus for our research department. During this time we built a streamlined multi-disciplinary approach; developed a platform for medical and scientific researchers, patients and community people, to work together to advance cancer research in our community.

Clinical Research

As described by Dr. Openshaw in his report, we have expanded the portfolio with increased clinical trials for both adults and pediatric patients, offering more than 80 clinical trials.

BioBank

The BioBank at Eastern Maine Medical Center, established in 2010, provides our patients with the opportunity to donate samples for research. On average the BioBank consents more than 200 patients per year for these collections. The BioBank has created a network of collaborating sites for sample procurement throughout the state. New in 2016 was the development of The Maine Cancer Biorepository Portal (MCBP), a collaboration between EMMC and Maine Medical Center (MMC) supported by a grant from the Maine Cancer Foundation. It will serve as the nexus between basic and clinical sciences.

Translational Research

Cancer Care's Translational Research was established literally to "translate" research findings in the laboratory into clinical trials for patients. Its activities involve identifying patient populations in need of better therapies, testing new drugs on tumor cells in the lab, and analyzing tumor cells to find new drug targets. In 2016, research projects were initiated in the areas of breast, lung, colon cancers, and leukemia/lymphoma. Among the year's firsts were establishing a flow cytometry facility to analyze tumor cells, entering a collaboration with a pharmaceutical start-up company, and supplying an abstract of research findings for presentation at an international cancer research conference.

To learn more about our work find us on the WEB at <http://www.emmc.org/Cancer-Research.aspx>

Growth and Community Education

Joining our team in 2016 were an additional research assistant, BioBank technologist and research nurse. Importantly we were hosts to students from the University of Maine and Husson University through both formal internships and job shadowing opportunities. We also welcomed high school students interested in learning more about career opportunities. The research team was active in promoting the **EMMC Champion the Cure Challenge** and providing on-site updates regarding our research initiatives.



August 19, 2017

www.ctcchallenge.org

Where: EMMC Cancer Care (33 Whiting Hill Road, Brewer)

EMMC Champion the Cure Challenge offers something for everyone! Choose from: a 1K, 5K or 10K walk/run, a 25, 50, 75 or 100 mile bike ride or a 58.9 mile motorcycle ride. You can even choose to be a virtual participant! People of all ages are invited to participate. In order to help reach our goal, participants are asked to meet minimum fundraising goals. Over 2.7 million dollars has been raised since 2010. Every penny raised stays right here in our community to support local cancer research!



Elaine Chambers, RN, MSB

The Breast and Osteoporosis Center at EMMC continues to explore the opportunity to bring **3D** mammography (tomosynthesis) to the community in 2017. Both EMMC sites (located on EMMC State Street and Union Street campuses) offer FDA certified and American College of Radiology (ACR) accredited high quality digital mammography with computer aided diagnostic (CAD) review. We continue to offer same day mammogram results for our diagnostic patients at the State Street location.

Our Breast Patient Nurse Navigator, Nancy San Antonio, RN, CBCN, CN-BN, located in the Breast and Osteoporosis Center on State Street, has been very busy in 2016 helping more than 96% women with complex diagnostic requirements and their referring providers. This service has been instrumental in coordinating seamless supportive care during a very stressful experience.

January 1, 2017 celebrates the fourth anniversary of the opening of EMMC Breast Surgical Specialists. Located on the third floor of the Lafayette Family Cancer Center in Brewer, this practice specializes solely in breast health.

In our institutional quality review of breast cancer cases and in our image-guided breast biopsy case review, we continue to meet or exceed all breast care benchmarks. This review underscores the fact that patients throughout the region are receiving excellent care.

EMMC Breast Surgical Specialists continue to screen patients at risk for developing lymphedema using the LDex method. The Breast Lymphedema Clinic on the first floor of the Lafayette Family Cancer Center, in collaboration with EMMC Physical Therapy department, continues to be a great asset for women in our service area with this specialized need.

Caring Connections, a collaborative program between EMMC and The Bangor Y had over 746 women participated in services designed to provide information about breast health, risk reduction, early detection of breast and cervical cancer, and maintenance of bone health. In addition we have either hosted or attended 52 events and spoken with 2,506 people on these issues. This past year we recognized Amy Harrow, MD, radiologist with Spectrum Radiology and Section Head, EMMC Breast and Osteoporosis Center for her outstanding work and support of women undergoing breast care.

Transitioning from *Thrive with Exercise*, specifically designed for breast cancer survivors, our goal this year was to train staff and implement the *LiveStrong* program. As a nationally validated exercise program it is designed to meet the needs of any cancer survivor regardless of diagnosis. The program available at no cost to participants is designed to make exercise a part of each individual's survival routine!

For information call us at 207-973-9700.



Renee Stefanik, BAS, RHIT, CTR

Services

The Cancer Registry collects and maintains a computerized database of all patients with a diagnosis of cancer and conducts lifetime follow up. This resource provides the means for monitoring and evaluating the success of the cancer program. The Cancer Registry at Eastern Maine Medical Center has five Certified Cancer Registrars; one in training; and one assistant.

The Cancer Registry holds 29,855 **analytical** cases (first diagnosed and/or received all or part of first course treatment at EMMC) and 22,446 **non-analytical** (first seen at EMMC after completion of a full course of therapy at another facility, coming to EMMC for recurrence, and/or subsequent treatment). These numbers represent registry data collected from 1987 to 2016.

In 2015, the Cancer Registry accessioned 1,956 cases. 1,679 were analytical, and 277 were non-analytic. Annual follow-up is required on all cases. For those diagnosed within the last five years, the follow up rate required is 90%. Our follow-up rate on the 5,482 cases diagnosed 2011-2016 was 97.56%. For those diagnosed from our reference year of 1998 the required follow up rate is 80%. Our review of 12,382 cases resulted in a follow-up rate of 95.62%. For both we exceeded the standards set by the Commission on Cancer.

The Cancer Registry at EMMC also reports cases to the state for The Aroostook Medical Center and Northern Maine Medical Center. We are currently working with Mercy Hospital to initiate coverage for their reporting as well.

Quality

The Cancer Registry participates in the National Cancer Data Base (NCDB) call for data annually. Hospital data is also reported to the Maine Cancer Registry quarterly.

A quality review was performed on the Cancer Registry data by eighteen physicians (medical oncologists, radiation oncologists, and surgeons). Fifteen percent of the 2015 analytic caseload was reviewed. This represents 262 cases of a total analytic caseload of 1,676. Review requirement is 10%. 11,790 data elements were reviewed. Forty three required correction. This represents a 99% accuracy rate. All suggested corrections were reviewed and made.

At EMMC held weekly are a multi-disciplinary cancer conference, breast conference, breast correlation biopsy conference, and thoracic cancer conference. In addition there is genito-urinary conference and a molecular tumor conference each month. These conferences discuss AJCC (American Joint Committee on Cancer) staging and treatment guidelines for all major sites. In 2016, 672 cases were presented, over 43% of our analytic case load. The requirement is 15%.

Call 207-973-7483 for info.

Cancer Registry Data Tables in this report reflect cancer case accessions (cataloged for the first time at EMMC), frequency and stage of disease at presentation and prevalence for 2015.

Cancer Registry Data – 2015 Cases

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Total Analytic Cases	1,752	1,674	1,708	1,746	1,679
Cancer diagnosed and/or treated at EMMC	877	899	928	959	910
Cancer diagnosed elsewhere with first treatment at EMMC	875	775	780	787	769
Total Non-Analytic Cases	182	224	246	216	277
Cancer diagnosed and treated elsewhere; follow up at EMMC					
Total Accessioned Cases	1,934	1,898	1,954	1,962	1,956

Cancer Site / Type	EMMC <u>Actual</u> Cases		*ACS <u>Estimates</u> Maine*		Nation*	
	2015		2015		2015	
Breast (female)	372	19.02%	1,010	11.46%	231,840	13.98%
Lung	366	18.71%	1,360	15.44%	221,200	13.34%
Prostate	203	10.37%	1,100	12.49%	220,800	13.31%
Colo-Rectal	114	5.82%	610	6.92%	132,700	8.00%
Bladder	72	3.68%	540	6.13%	74,000	4.46%
Melanoma	60	3.07%	320	3.63%	73,870	4.45%
Lymphoma (non-Hodgkins)	99	5.06%	390	4.43%	71,850	4.33%
Uterus	35	1.79%	340	3.86%	54,870	3.31%
Leukemia (all types)	59	3.02%	320	3.63%	54,270	3.27%
Cervix	6	0.31%	50	0.57%	12,900	0.78%
Total # of Cases	1,956	70.86%	8,810	68.56%	1,658,370	69.24%

Cancer Registry Data – 2015 Cases

Primary Site	Total	% Total Cases	Male	Female	Stage 0	Stage I	Stage II	Stage III	Stage IV	% Early (O,I,II)
Oral	75	3.8%	53	22	1	11	10	7	25	29.3%
Esophagus	35	1.8%	30	5	0	4	4	12	8	22.9%
Stomach	27	1.4%	16	11	0	5	7	7	3	44.4%
Colon	79	4.0%	38	41	0	10	19	22	18	36.7%
Rectal	35	1.8%	19	16	0	4	8	11	8	34.3%
Liver & Biliary	20	1.0%	12	8	0	7	0	3	3	35.0%
Pancreas	45	2.3%	25	20	0	7	17	4	13	53.3%
Larynx	26	1.3%	20	6	1	9	3	5	6	50.0%
Lung & Bronchus	366	18.7%	183	183	1	96	33	68	139	35.5%
Mesothelioma	2	0.1%	0	2	0	0	0	1	0	0.0%
Bones & Joints	4	0.2%	2	2	0	0	2	0	1	50.0%
Soft Tissue	6	0.3%	3	3	0	1	0	3	0	16.7%
Melanoma	60	3.1%	36	24	7	18	14	6	1	65.0%
Breast	372	19.0%	2	370	59	159	75	20	10	78.8%
Cervix	6	0.3%	0	6	0	3	1	1	1	66.7%
Uterus	35	1.8%	0	33	0	21	2	6	2	65.7%
Ovary	10	0.6%	0	10	0	2	3	3	1	50.0%
Prostate	203	10.4%	203	0	0	5	83	25	19	43.3%
Testis	6	0.3%	6	0	0	4	0	1	0	66.7%
Bladder	72	3.7%	60	12	26	12	17	5	4	76.4%
Kidney	70	3.6%	39	31	5	33	3	9	9	58.6%
Brain & CNS	41	2.1%	22	19	**	**	**	**	**	
Thyroid	33	1.7%	16	17	0	12	3	7	8	45.5%
Lymphoma	115	5.9%	67	48	0	25	17	13	37	36.5%
Myeloma	28	1.4%	16	12	**	**	**	**	**	
Leukemia	59	3.0%	31	28	**	**	**	**	**	
Other	126	6.4%	67	61	3	7	11	14	10	16.7%
Total	1,956	100.0%	966	990	103	455	332	253	326	45.5%

*This graph reports case distribution by STAGE for ANALYTIC CASES only, for some cases the appropriate classification was other than a specific stage thus when adding by stage the total does NOT always equal total reported cases.



EASTERN MAINE MEDICAL CENTER™

— EMHS MEMBER

Medical Staff Committee Members

Thomas Openshaw, MD**

Medical Director, Clinical Oncology Research,
EMMC Cancer Care,
Cancer Leadership Committee Chair

Kathryn Bourgoin, MD

Family Medicine

Amy Harrow, MD

Medical Imaging

Peter Huang, MD, FACS

Surgical Oncologist, American College of Surgeons
Commission on Cancer - EMMC Cancer Liaison

John Klemperer, MD

Thoracic Oncology

Sam Lew, MD

Pediatric Oncology

Susan O'Connor, MD

Surgery, EMMC Breast Surgical Specialists

Margaret Rieley, MD

Medical Genetics

Jens Rueter, MD

Director, EMMC Translational Research

Marek Skacel, MD

Pathology

Paul Szal, MD; Kurt Snyder, MD*

Radiation Oncology

James VanKirk, MD

Palliative Care

Staff Committee Members

Allen L'Italien, RN, OCN*

Executive Director, EMMC Cancer Care (EMMC CC)
Cancer Leadership Committee Co-Chair

Nadine Bullion, MSW, LCSW**

Manager, EMMC CC – Support Services

Andrea Byther, MS, RD, CSO, LD,

Dietician

Tracey Carter, RTT*

Supervisor, EMMC CC - Radiation Oncology

Elaine Chambers, RN, MSB*

Manager, EMMC – Comprehensive Breast Care

Brenda Clements, RN, MBA, OCN

Manager, EMMC CC – Nursing

Helen Hsu, MD, MS*

Director, EMMC CC - Oncology Research

Erin Kerns, MSW, LCSW, Manager, Hospice –

Palliative Care Services, VNA Home Health Hospice

Debi McCann, RN, BSN, CES, CHFNC

Director, EMMC Wellness

Patty Miles, RN, OCN

Manager, EMMC Inpatient Oncology

Cathy Mingo, RN, MS, Director, EMMC

Performance Improvement/Data Management

William Seavey, PharmD, BCPS, Director,

Pharmacy and Care Delivery, Beacon Health, EMHS

Renee Stefanik, BAS, RHIT, CTR*

Lead Cancer Registrar, EMMC Cancer Registry

Maggie Wiken, Manager, EMMC Budget;

Eric Quint, Manager, Financial Planning

Ann-Marie Williams, RN, MBA

Director, EMMC Care Management

2016 Annual Report – 12/27/16

*Contributors

**Editor along with Kris Currier, EMMC Community Relations

Cover Photo – Susan Garland, EMMC CC, Operations Coordinator

Important Contact Information

At the Lafayette Family Cancer Center

EMMC Breast Surgical Specialists

207-973-9700

EMMC Cancer Care

BioBank – 207-973-9875

Cancer Registry – 207-973-7483

Clinical Research – 207-973-4249

Medical Oncology – 207-973-7478

Radiation Oncology – 207-973-4280

Raish Peavey Haskell Children's

Cancer & Treatment Center -

Pediatric-Adolescent-Young Adult

– 207-973-7572

At the State Street Campus

EMMC Breast & Osteoporosis Center

207-973-8108

EMMC Cardiothoracic Surgery of Maine

207-973-5293

EMMC Northeast Surgery of Maine

207-973-8881

EMMC Orthopedic Surgical Specialists

207-973-9980

EMMC Urologic Surgery of Maine

207-947-0469

Or on the web at cancer.emmc.org