Raish Peavey Haskell Children's Cancer and Treatment Center









# CancerCare of Maine

# Report on Cancer - 2012

Bringing Hope to Life, Research to Cures



# **EXECUTIVE DIRECTOR'S REPORT**



### Allen L'Italien, RN

It is with great pleasure that I relate the events and successes of the past year. The Lafayette Family Cancer Center building is quickly "filling up" due to the patient care additions and volume growth seen. April saw our opening of the first photopheresis treatment center in Maine. This exciting technology is used to treat key rare cancers as well as re-train the immune system of patients suffering from graftversus-host disease. The need was more than anticipated so we added a second unit in September.

Likewise, we have seen a dramatic expansion of the research capacity with the ongoing focus of oncology research at all levels. We have received numerous recognitions for the support of the specialized surgeons – thoracic surgeons, surgical and orthopedic oncologists at Eastern Maine Medical Center in providing research scientists with viable tumors that can be studied by bench scientists both in Maine and California. We very much appreciate their focus on this important research initiative.

Our region is certainly privileged, and we are deeply honored by the community support, enabling the opening of the Raish Peavey Haskell Children's Cancer and Treatment Center this December. I extend a heartfelt "thank you" from the families and children who are now able to receive treatments in this modern and inviting facility.

The January opening of the Breast Surgical Specialists service at the Lafayette Family Cancer Center with dedicated breast surgeons providing early diagnostics as well as comprehensive care planning will be a significant addition to the region.

Community support of the Champion the Cure Challenge and its fundraising success has allowed us to greatly expand research capacity within the center. Also, on a daily basis our patients with greatest need benefit from Chuck and Belinda Lawrence and their Tradewinds organization's ongoing donation, which is the largest and most impactful gift dedicated to direct patient assistance in our history. Their generosity is truly appreciated.

The portfolio of services offered continues to grow. With such, we are honored to have a meaningful impact in caring for our communities and friends. There is still much to do and we are privileged to be in the forefront of advancing cancer and hematology services to Maine citizens.

### **CANCER LEADERSHIP COMMITTEE 2012**

#### **Medical Staff**

**Paul Szal,** MD\* Radiation Oncology, Committee Chair

Kathryn Bourgoin, MD - Family Medicine Ian Dickey, MD - Orthopedic Oncology A. Merrill Garrett, MD - Medical Oncology, Medical Director - CCOM Amy Harrow, MD - Medical Imaging Peter Huang, MD\* - Surgical Oncologist, Cancer Liaison John Klemperer, MD - Thoracic Oncology Sam Lew, MD\* - Pediatric Oncology Mayur Movalia, MD - Pathology Susan O'Connor, MD - Surgery, Medical Director, Breast & Osteoporosis Center Thomas Openshaw, MD\* - Director, CCOM Clinical Research James VanKirk, MD - Palliative Care

> 2012Annual Report – 12/26/12 \*Contributors \*\*Editor

#### **Eastern Maine Medical Center and EMHS Staff**

Allen L'Italien, RN\* Executive Director CancerCare of Maine (CCOM) Committee Co-Chair Larry Beauregard, PhD, Medical Geneticist Nadine Bullion, LCSW\*\*, Manager, Support Services- CCOM

Andrea Byther, MS,RD, CSO, LD, Dietician

- Elaine Chambers, RN, MS\*, Manager, Breast & Osteoporosis Center
- **Brenda Clements,** RN, MSB, Manager, Nursing CCOM
- Carol Guptill, RTT, Manager, Radiation Oncology
- Ambie Hayes-Crosby, RN, Manager, Clinical Research
- Erin Kerns, LCSW, Hospice of Eastern Maine Bangor Area Visiting Nurses
- Ann-Marie Knowles, RN, Director Care Management
- Debi McCann, RN, Director Wellness
- Patty Miles, RN, Manager, Inpatient Oncology Cathy Mingo, RN, MS, Director, Performance Improvement / Data Management Renee Stefanik, RHIT, CTR\*, Lead Cancer Registrar Maggie Wiken, Manager, Budget– EMMC

Photos - Susan Garland, Operations Coordinator, CCOM

# **CANCER COMMITTEE CHAIR REPORT**



Paul Szal, MD

Our program was again granted full accreditation with commendation through 2014 by the American College of Surgeons – Commission on Cancer (ACOS-COC). Our physicians and staff can be proud of this achievement and recognition of the quality care they deliver on a daily basis. Our patients and referring physicians can take comfort in this validation that our program meets the highest quality standards. I would like to take this opportunity to thank members of the community, physicians and staff at Eastern Maine Medical Center who make excellence in care an everyday reality for our patients.

#### SERVICE

For those diagnosed in **2011**(last complete Cancer Registry data year), 88% of those diagnosed with cancer underwent some form of surgery; 1559 diagnostic procedures (51% completed at EMMC), over 1275 definitive surgeries (64% completed at EMMC.) Completion rate at EMMC was the same for 2011 as in 2010. During **2012**, medical oncology saw 4% growth in new patient volume (1690); radiation saw 6.5% growth (808); traditional pediatric oncology volume was stable (12). Use of Palliative Care consults in the outpatient setting was up by 10%. Grant 6 Oncology staff led the way in the TCAB initiative – increasing care at the bedside by 6% to 64%. Across 2012 multiple initiatives were launched to help patients / families manage their cancer diagnosis / treatment. Outpatient adult oncology instituted patient navigation teams to address access challenges confronting those new to diagnosis. With an NCI grant Behavioral Medicine began a project using interactive television to help our most rural breast cancer survivors address cognitive changes related to chemotherapy. Our *Image Project*, developed by a volunteer cancer survivor offers women facing hair loss on-site assistance with wig selection. In partnership with the State of Maine our system continues to be a leader in addressing access to screening for colon cancer – completing 17% more colonoscopies (122 in total) than the previous year identifying one cancer and polyps in about 25% of the cases. Genetic risk consults (117) were up 24% over last year with 59% pursuing testing. Our ACS collaboration continues through our on-site Resource Corner volunteers.

#### NEW TECHNOLOGY

Utilization of frameless Stereotactic Radio Surgery (SRS) and Stereotactic Body Radio Therapy (SBRT) is now an integral part of our practice. To address patient care needs we will be adding a second cone beam CT technology to one of our treatment machines early in 2013. Efforts continue throughout the program to increase utilization of information technology in the daily care of our patients.

### QUALITY

Annually we review the four major cancer sites, comparing stage at diagnosis and survival with most currently available data from the National Cancer Data Base (NCDB). For cases diagnosed in 2009\* stage at diagnosis for breast, colon, lung and prostate cancer were the same; for those diagnosed in 2003-2005\* our 5-year survival rate matched national levels. Utilizing ACOS-COC Cancer Program Practice Profile Reports reviewing specific aspects of cancer care for breast - referral for and completion of appropriate radiation (95%), hormonal treatment (96%) and chemotherapy (93%); for colon - initiation of chemotherapy (100%); for rectal - initiation of chemotherapy (100%) each surpasses 2010\* national rates and are above standard. For colon cancer Dr. Huang completed a review of EMMC based surgical cases (75) – removal and pathologic examination of 12 or more lymph nodes in 2010 was 82%, in 2011, 87%, the standard is 80%. Cases were reviewed for surgical complications – anastomotic leaks (3%), infections (3%), small bowel obstruction (3%) and wound healing (7%) - each was within normal limits. MSI evaluation was routine (91%); referral to genetics for those with reported instability was low. Automated alert is part of the pathology report; notification to genetics service directly has been added. \*Most current national data

Coinciding with the opening of the Raish Peavey Haskell Children's Cancer and Treatment Center is our focus on care of children and young adults. I want to thank Dr. Lew personally for his excellent report. We look forward to the benefits to quality care the new center will provide to patients, family, staff and physicians alike; our gratitude is heartfelt.

# FOCUS: CANCER in YOUTH & YOUNG ADULTS



Sam W. Lew, MD Pediatric Hematologist - Oncologist

### **Incidence - Children Ages 0 to 14 years**

In the United States in 2012, approximately 12,060 children under age 15 will be diagnosed with cancer. Over the past 20 years, there has been some increase in the incidence of children diagnosed with all forms of <u>invasive cancer</u>, from 11.5 cases per 100,000 children in 1975 to 14.8 per 100,000 children in 2004 to 15.3 cases per 100,000 in 2012. This number represents 1% of all new cancer cases across the nation.

The incidence estimate for Maine is slightly higher at 16.2 cases per 100,000 with an estimated 36 children diagnosed per year; for Penobscot County at 20.3 with 5 new cases per year. Other counties in our region are expected to see three or fewer new cases per year. The annual incidence estimates for Cumberland and York Counties are lower at 14.4 and 9.9 respectively. On average since 2000 at our center we have seen 11 new cases per year in this age group.

#### Incidence - Adolescent and Young Adults: 15 to 25 years

Cancer occurring between ages of 15 and 30 years is 2.7 times more common than cancer occurring during the first 15 years of life, yet is much less common than cancers in the older age groups and accounts for just 2% of all invasive cancer. Half of all these cases occur from 15 to 25 years with the remaining half occurring from 25 to 30 years in this exponential increase.

Data is less discretely reported for the age groups of 15 to 18; 19 to 25 making national rate comparisons more challenging. Estimates for those in the age range between 15 and 20 predict that annually in Penobscot County two cases will be diagnosed, less than one in each of our surrounding counties. Annually on average since 2000 we have seen four cases in the age group 15 to 18; thirteen cases in the age group 19 to 25.

Overall for those in aged 0 to 20 Maine's incidence rate at 18.4 cases per 100,000 is higher than the national rate of 16.9.

#### **Common Diagnoses**

The causes of childhood cancer are largely unknown. A few conditions due to genetic chromosomal anomalies or ionizing radiation are predisposing factors that cause cancer. There are familial syndromes that increase risk for cancer, but these conditions rarely result in childhood cancers.

Data available from 2000 to 2012 showed 141 cases diagnosed at Eastern Maine Medical Center that reflect the typical types of invasive cancer seen in children. Leukemia remains the most common type of cancer. Brain and central nervous system tumors are the most common type of solid tumors.

Adolescents present with a different spectrum of cancer and have a different predominance in the types of tumors that are most common. Hodgkin's lymphoma, testicular cancer and thyroid cancers predominate and have good cure rates. Leukemia is also commonly seen, but is more difficult to treat often requiring intensive and time demanding chemotherapy.

Cancer in young adults is unique in the distribution of the types that occur. Hodgkin lymphoma, melanoma, testis cancer, gynecologic malignancies, thyroid cancer, soft-tissue sarcomas, non-Hodgkin lymphoma, leukemia, brain and spinal cord tumors, breast cancer, bone sarcoma and non-gonadal germ cell tumors account for 95% of the cancers in this age group.

This distribution resembles more the types of cancer that are more common in older children than older adults. Inclusion of this population in diagnosis and treatment by pediatric oncologist is a good fit. Clinical trials aimed at

# FOCUS: CANCER in YOUTH & YOUNG ADULTS

treating malignancies more common in older children and adolescents, which are the age population of pediatric providers, would allow the young adult patients access to effective treatments. Clinical trials that target an older population with cancer have been shown to be less effective in certain malignancies found in young adults.

Cancer in young adults occurs over a relatively wide spectrum of types. Within the types of cancer are also different histologies or cell types. The histology of the cancer can tell us how easy or difficult it is to treat. Many cancers seen in these patients present with cell types that grow rapidly and are difficult to treat.

The staging of the cancer tells us how far into other parts of the body a tumor has spread. With young adults it is not uncommon to have a patient present for care at a stage where the cancer has spread because of lack of easy access to early care. Many young adults tend to ignore early signs of cancer as well.

Ability to tolerate chemotherapy is a factor in successfully treating patients. Young adults do not tolerate the side effects of chemotherapy as well as do children. Being prepared to deal with these side effects can be as challenging as planning the treatment.

Classification of malignant disorders provides information that helps direct resources to adequately treat and follow each type of malignancy. Over the past 30 years, I have been fortunate to see the progress that has been made toward providing treatments that are effective not only in providing long- term cure, but have decreased toxicity in treatment and provide better quality of life even on treatment. Better chemotherapy and treatment regimens shorten courses of treatment. Surgical advances provide better techniques for total resection of solid tumors. Radiation therapy techniques are improved with better equipment that kills the tumors while sparing normal tissue.

### Survival

About 1,545 children will die from the cancer this year. Although this makes it the leading cause of death by disease among U.S. children 1 to 14 years of age mortality has decreased by over 66% across the past 40 years. Today it is estimated that one in every 450 persons in the US is a long-term survivor of childhood cancer.

Death rates declined dramatically and 5-year survival rates increased for most childhood cancers. For example, the 5-year survival rates for all childhood cancers combined increased from 58.1 percent in 1975–77 to 79.6 percent in 1996–2003. This improvement is due to significant advances in treatment, resulting in a <u>cure</u> or long-term <u>remission</u> for a substantial proportion of children with cancer. Our survival rates mirror this success with an overall survival for those diagnosed age 0 to 25 during 2000 to 2007 of 85%. The success across the three age groups by disease shows patterns similar to national trends (see Survival Tables).

Clinical trials over the past 30 years have resulted in an expected disease-free survival in low risk acute lymphoblastic leukemia of over 95%. Children seen at Eastern Maine Medical Center with this diagnosis from 2000 to 2007 matched this outcome at 95% five-plus year survival and counting. With this success focus turns to decreasing toxicity and late effects of treatment in children with cancer. The success achieved allows us to use that experience to treat similar tumors in adolescents and young adults.

Progress in other cancers such as neuroblastoma and brain tumors has been slow; these tumors tend to contain different types of cells that are difficult to treat simultaneously. They are called heterogeneous tumors that tend to resist certain types of treatment. As we learn more about the biologic response of these tumors we are making progress toward providing long-term control and, in many cases, cure for some patients.

Adolescents who present with cancers with favorable characteristics are fortunate to achieve a cure. Survival is only part of the focus for treatment planning. As we become wiser as how to effectively treat these cancers, we can't forget that treatment planning and implementation must take into account quality of life and minimize late effects of treatment.

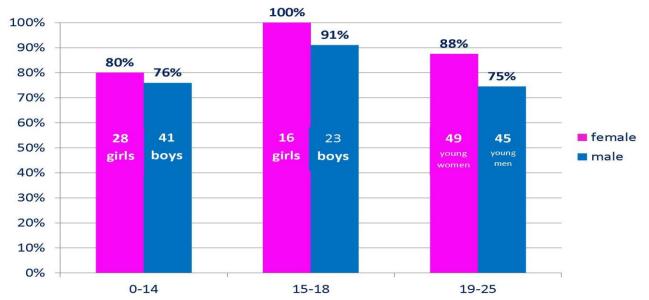
Young adults present with cancers that are very treatable when diagnosis is made early in the disease. Some cancers even respond well when they have spread, but treatment is more difficult and time consuming. Survival itself is not the end game. With advances in treatment of cancer maintaining quality of life during treatment and decreasing late effects of treatment and disease is the real goal to curing cancer.

# FOCUS: CANCER in YOUTH & YOUNG ADULTS

Difficult to treat cancers like leukemia in young adults remain a challenge. High-risk pediatric treatment protocols are providing promising results. Care of the young adults under 25 by pediatric oncologists provides these patients with treatment and support systems that may not be available to them since they have often left the financial and emotional support of families as they step out on their own to build lives for themselves, their spouses and children. The overall survival for young adults is in the 50% range. Our recent statistics tell a better story with overall survival for this group at 82%. Cooperative planning by pediatric and medical oncologists; having support systems to diagnose and treat these patients is the foundation to helping these young adults pass through a difficult part of their lives.

The opening of the Raish Peavey Haskell Children's Cancer and Treatment Center will allow us to more fully support children, adolescents and their families. Our move to the Lafayette Family Cancer Center will provide us with the opportunity to fully integrate care for young adults on Level II. As a result we know the care in our region will match the best available!

# Survival – youth and young adults cared for at EMMC

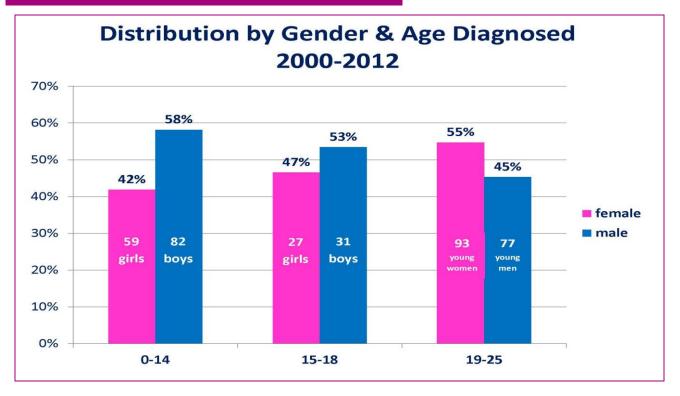


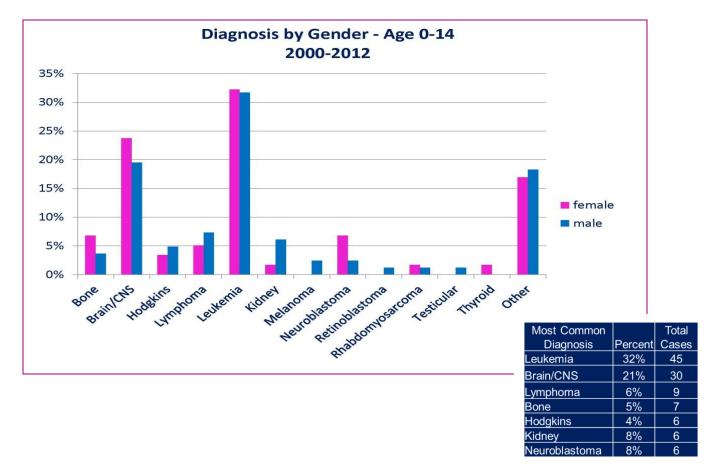
### 5-year Survival by Gender & Age Diagnosed 2000-2007

	Ages	· 0-14	Ages	15-18	Ages 19-25		
Most Common		Total	••••••	Total	<b>0</b>	Total	
Diagnosis	Survival	Cases	Survival	Cases	Survival	Cases	
Leukemia	88%	25	82%	11	67%	9	
Brain/CNS	53%	15	100%	3	55%	11	
Bone	83%	6	100%	1			
Lymphoma	83%	6	100%	5	86%	7	
Hodgkins	100%	5	100%	5	91%	11	
Neuroblastoma	67%	3					
Kidney	100%	5					
Testicular			100%	4	100%	13	
Thyroid			100%	5	100%	5	
Melanoma					100%	5	
Breast					0%	3	
Pituitary					100%	5	

# Pediatric – Adolescent – Young Adult DATA

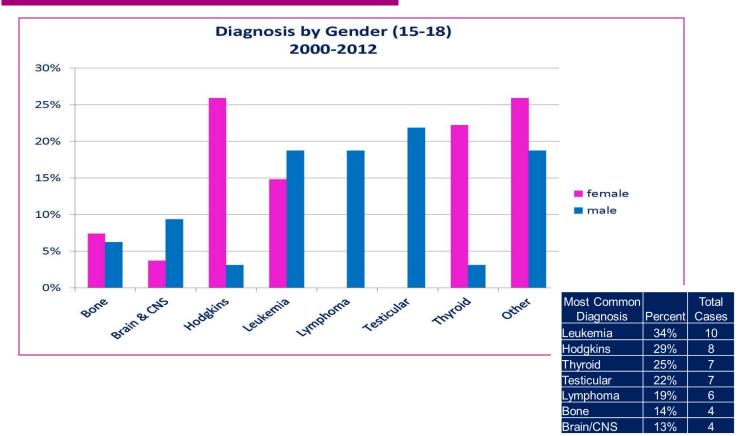
# **Incidence – cared for at EMMC**

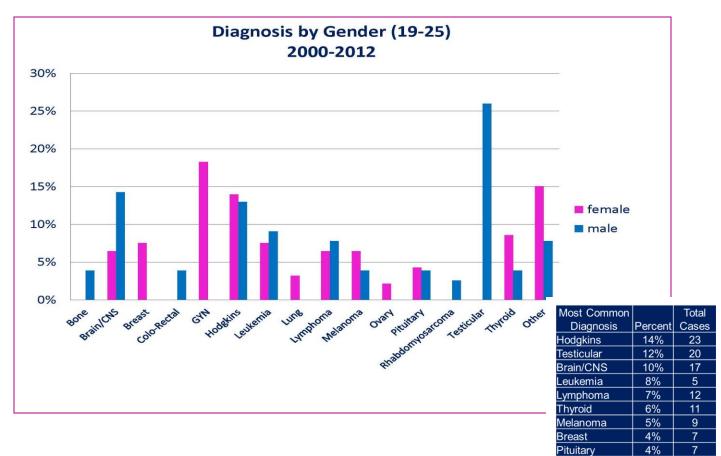




# Pediatric – Adolescent – Young Adult DATA

# **Incidence – cared for at EMMC**





# **BREAST AND OSTEOPOROSIS CENTER**



#### Elaine Chambers, RN, MS

The Breast and Osteoporosis Center is very proud to be designated as a Breast Imaging Center of Excellence through the American College of Radiology for the fifth consecutive year. Both sites offer FDA certified and ACR accredited high quality digital mammography with all of our mammograms receiving a CAD review. We continue to offer same day results for our diagnostic patients at our State Street location. Volume remains strong with completion of 16,171 examinations for screening and diagnostic services.

Through our collaboration with Caring Connections nearly 800 women participated in sessions designed to inform them of risks and best strategies for prevention and early detection related to breast, cervical cancer and bone health. In collaboration with the Maine Breast and Cervical Health Program 232 screenings were completed. For women already diagnosed an innovative program was developed – *Thrive with Exercise* to encourage participants to add exercise and weight management to their survival routine. In this pilot, nine women have participated; each with measurable gains in strength, endurance and many with sustained weight loss. For 2013 at one end of the spectrum of care we look forward to the introduction of nurse navigation for those pending or with a new diagnosis of breast cancer; at the other the development of a long-term survivor clinic.

We have been busy planning and building, preparing to welcome to the community the new Breast Surgical Specialists service, consolidating the practices of Dr. Susan O'Connor, Dr. Kimberly Lieber in affiliation with Northeast Surgery. We will be located on the third floor of the Lafayette Family Cancer Center in Brewer. Plan to join us for our open house on <u>Thursday, January 10, 4 to 7 p.m.</u> For information call us at 973-9700.

# **CLINICAL RESEARCH**



### Thomas H. Openshaw, MD

We appreciate the strong community support through funds raised by the Champion the Cure Challenge. Together with support from Eastern Maine Medical Center it has allowed us to greatly expand our research activities in the last few years. These clinical trials can bring significant benefits to current patients who participate and are also important in improving cancer treatments for patients in the future.

We are very active with Alliance for Clinical Trials in Oncology, which is a consortium of academic and community centers across the country. In 2012, Eastern Maine Medical Center was approved as a main member of this research group, the only one in the State of Maine. We continue our research in breast and colorectal cancer through the NSABP, another consortium with members across the US and Canada. While the final numbers for 2012 are not yet in, at Eastern Maine Medical Center in 2011 nearly 6% of those initiating treatment with us elected to participate in a clinical trial; another 9% elected to donate tumor tissue. In Maine, we are leading the effort to bring these treatments to patients across the state through our collaboration with doctors at the Alfond Cancer Center in Augusta. Also, in December, Pen Bay Medical Center joined our research partnership to bring these new treatments

patients in the Midcoast region. Currently, we have 40 clinical trials for adult patients with many different types and stages of these disorders at Cancer Care of Maine.

With the addition of the Raish Peavey Haskell Children's Cancer and Treatment Center to our facility in December 2012, we will make more clinical trials available to children, adolescents and young adults in eastern and northern Maine. Currently we have about 40 trials available for these age groups through the Children's Oncology Group.

The past year has brought the opportunity to bring select pharmaceutical industry trials to our center which is of benefit to our adult patients. In 2013, we expect that our research partnerships with industry will bring a number of new drugs and treatments for breast cancer, lymphoma, myeloma, melanoma and other cancers. Without this collaboration, these new treatments would not be available to people in our region.

We are particularly excited about a new research partnership with the Jackson Laboratory in Bar Harbor. With our patients' permission, the EMMC Biorepository has collected malignant tumors left after study by our pathologists. Over the past year, we have sent 108 cancerous tumors to the Jackson Laboratory, some to the facility in Sacramento, California for development of tumor grafts in mice. Using this material, Jackson Lab scientists have established new types of tumor grafts in mice that can be used to study the causes of these human cancers and also to develop new effective treatments. The collaboration between Jackson Lab scientists and CCOM cancer specialists, Dr. Jens Rueter as lead, has helped to develop this joint program.

We plan to continue to increase the number of research trials available to a larger portion of the citizens of Maine in the next year. To learn more about our cancer research program, please contact us at 207-973-4249 or on the web at www.emmc.org.

# CANCER REGISTRY REPORT



Renee Stefanik, RHIT, CTR

Cancer registrars develop a case abstract (summary) for each person diagnosed and/or receiving his or her first course of treatment at EMMC. We are required by the American College of Surgeons – Commission on Cancer (ACOS-COC) to complete this abstract within six-months of initial diagnosis for 90% of cases. Currently staff is completing this activity within 3.5 months of diagnosis. An additional ACOS-COC standard to assure accurate data for calculating survival rates is the completion of annual lifetime follow-up – monitoring diagnostic and treatment outcome. EMMC's lifetime follow-up is 89% for cases diagnosed since 1998 (standard is 80%); 92% for cases diagnosed within 5 years (standard is 90%).

Use of AJCC staging, consideration of prognostic factors and review of compliance to national treatment guidelines in the care of our patients is recommended by ACOS-COC. Our practice monitors adherence to this standard through both cancer conference case and annual chart audit. Performance by both of these measures exceeds the 95<sup>th</sup> percentile. Use of College of American Pathologists protocols for review of tumor specimens is 100%.

# Tables included reflect cancer case accessions, frequency & stage of disease at presentation and prevalence for <u>2011</u> at EMMC.

Per regulatory compliance, data are collected, maintained, and reported to the Maine State Cancer Registry and the National Cancer Data Base (NCDB). Submissions were on time; completed with a high degree of accuracy.

Case conference – Tumor Board – activity is an important part of care delivery at Eastern Maine Medical Center. Conferences held weekly provide physicians with the opportunity to prospectively discuss diagnostics and treatment options for their patients. All major cancer sites are reviewed – 11% (195) of 2011 analytic cases were reviewed in this forum; an additional 10% were reviewed in our Thoracic Conference and Breast Biopsy Committee each following the same guidelines. Participation is open to physicians and allied health professionals – either in person at EMMC's main campus, the cancer center in Brewer or via the NNETS. Call 973-7483 for info.

# CANCER OCCURENCE

### 2011 Accessioned (New to EMMC) Cancer Cases: Analytic /Non-Analytic Comparison

Total Analytic Cases	<u>2007</u> 1834	<u>2008</u> 1791	<u>2009</u> 1695	<u>2010</u> 1727	<u>2011</u> 1753
Cancer diagnosed and/or treated @ EMMC	939	910	881	903	877
Cancer diagnosed elsewhere with first treatment @ EMMC	895	881	814	824	875
Total Non-Analytic Cases	180	151	207	206	182
Cancer diagnosed & treated elsewhere; follow up @ EMMC					
Total Accessioned Cases	2014	1942	1902	1933	1935

### 2011 Most Prevalent <u>Analytic Cases</u> at Eastern Maine Medical Center (EMMC) compared to American Cancer Society (ACS) <u>Estimates</u>

	EMMC	Actual	*ACS Estimates				
	Analytic		Maine*		Nation*		
Site	20	)11	201	.1	2011		
Prostate	199	11%	1,240	14%	240,890	15%	
Breast	317	18%	1,280	15%	232,620	15%	
Lung	341	19%	1,400	16%	221,130	14%	
Colon & Rectal	133	8%	770	9%	141,210	9%	
Lymphoma	84	5%	370	4%	75,190	5%	
Melanoma	46	3%	400	5%	70,230	4%	
Bladder	62	4%	500	6%	62,920	4%	
Kidney	59	3%	***		60,920	4%	
Uterus	40	2%	300	3%	46,470	3%	
Leukemia	48	3%	260	3%	44,600	3%	
Pancreas	45	3%	***		44,030	3%	
Most Frequent	1,402	80%	6,520	75%	1,134,230	74%	
Total Cases	1,753		8,650		1,529,560		

# For more information about our programs contact us at <u>www.emmc.org</u> and

### Breast & Osteoporosis Center (BOC) (207) 973-8108

**Breast Surgical Specialists** (207) 973-9700

**CancerCare of Maine (CCOM)** (for Medical and Radiation Oncology) (207) 973-7478

**Cancer Registry** (207) 973-7483

**Pediatric-Adolescent-Young Adult Oncology** (207) 973-7520

### Primary Site – Frequency Distribution: 2011 Accessioned Cases

Primary Site	Total	Male	Female	% Analytic	# Analytic	Stage 0	Stage I	Stage II	Stage III	Stage IV
Oral	44	35	9	90.9	40	1	3	3	4	28
Esophagus	29	25	4	89.7	26	0	4	6	7	8
Stomach	15	11	4	93.3	14	0	2	6	2	4
Colon	96	45	51	91.7	88	0	16	34	16	21
Rectal	48	19	29	93.8	45	1	8	16	13	6
Liver & Biliary	16	10	6	93.8	15	0	4	1	1	7
Pancreas	47	33	14	95.7	45	0	7	11	2	25
Larynx	14	12	2	85.7	12	1	2	2	1	5
Lung & Bronchus	361	201	160	94.5	341	0	82	31	79	144
Mesothelioma	8	7	1	100	8	0	5	0	1	2
Bones & Joints	2	1	1	100	2	0	0	2	0	0
Soft Tissue	17	9	8	88.2	15	0	5	2	5	2
Melanoma	50	26	24	92	46	10	22	8	5	1
Breast	342	2	340	92.7	317	43	144	79	38	10
Cervix	13	0	13	76.9	10	0	2	1	3	4
Uterus	42	0	42	95.2	40	1	20	4	7	5
Ovary	17	0	17	70.6	12	0	2	2	5	2
Prostate	229	229	0	86.9	199	0	14	141	34	9
Testis	9	9	0	100	9	0	8	0	1	0
Bladder	80	61	19	77.5	62	18	14	13	9	7
Kidney	65	43	22	90.8	59	0	33	5	10	10
Brain & CNS	33	22	11	90.9	30	-	-	-		-
Thyroid	30	8	22	96.7	29	0	20	0	5	4
Lymphoma	96	46	50	86.5	83	0	20	15	13	33
Myeloma	21	8	13	85.7	18			-		-
Leukemia	54	33	21	88.9	48		•	-	200	-
Other	211	116	95	89.1	188	7	9	7	8	4
Total	1935	978	957	90.6%	1753	82	446	389	269	341
		50.5%	49.5%			4.7%	25.4%	22.2%	15.4%	19.5%

