Proving the promise of ***Complete connected care***[SM]

Annual Report 2014

Cancer Registry

Head and Neck Cancer

Cancer Committee Members

Lowell General Hospital
THE CANCER CENTER

Complete connected care[SM]

Cancer Registry

Our cancer registry team reviews, analyzes, abstracts and reports data to the Department of Public Health, Massachusetts State Cancer Registry. Here our data is combined with other Massachusetts hospitals to assist in gathering incidence reporting of cancer by site for our state by region. It is important to note that the data collection process does not stop at the state level; the data is also sent by each facility once a year to the National Cancer Data Base Call for Data that happens each January. This reporting process is extremely important in helping physicians and scientists understand the behavior of cancer cells so that they can come up with treatments such as chemotherapy and radiation therapy to eradicate this disease.

Over time, there have been great strides made in the diagnosis and treatment of cancer. More patients are living longer, cancer-free lives due to the continued tracking that contributes to the understanding of this disease.

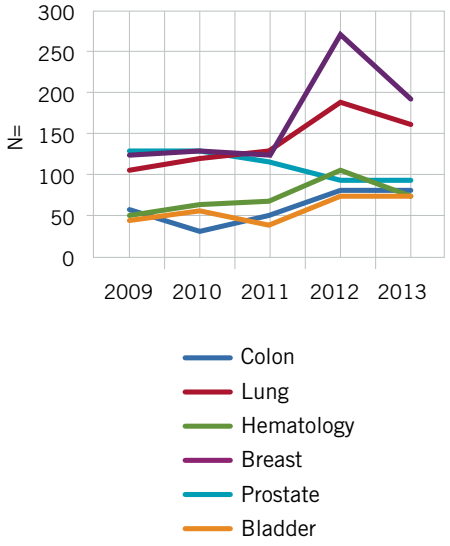
Multidisciplinary Site Specific Conferences and Clinics 2013

103	Breast Cancer patients seen in clinic
31	Lung patients
8	Urology
3	Gynecologic
20	New patient consults for ENT
129	Patients were followed in the ENT clinic

Tumor Board Conferences

112 patients cases were discussed by a team that consisted of Medical Oncology, Radiation Oncology, Surgery, Pathology, Radiology, a representative from Research and Social Work, as well as other ancillary staff. The newly diagnosed cases included: colon, rectum, GI, head and neck, genitourinary, lymphoma and leukemia. On average, 15 providers discussed each case during Tumor Board meetings.

Top Cancer Sites



Statistics collected by the Cancer Registry:

National Cancer Data Base Quality Measures

The Measure	2009	2010	2011
Radiation is administered one year (365) days after diagnosis for women under 70 who received breast-conserving cancer surgery.	97.1%	100%	100%
Combination chemotherapy is considered within four months (120 days) of diagnosis for women under age 70 with AJCC T1cN0M0, or Stage II or III hormone receptor negative breast cancer.	71.4%	100%	100%

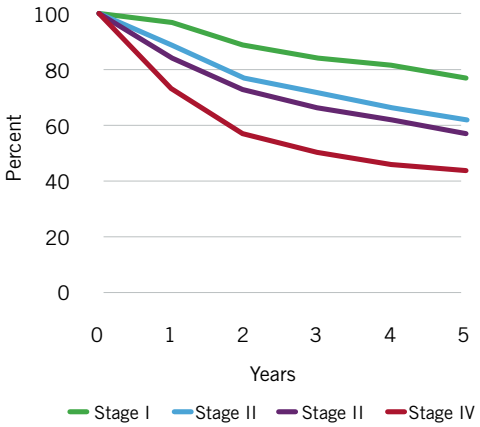
Pathology of Head and Neck Cancers

Pathology of head and neck cancers include tumors of the oral cavity, larynx, salivary glands, ears, eyes, nose and paranasal sinuses and the bones of the head and neck.

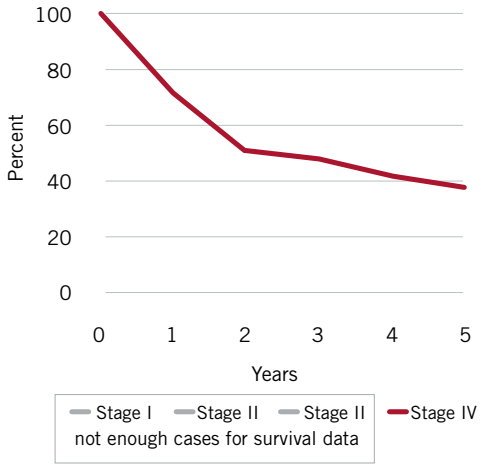
Squamous cell carcinoma of the oral cavity is the most common among these tumors. They are related to tobacco, alcohol, and human papillomavirus infections. This type of tumor can be diagnosed by biopsy and early detection of the pre-neoplastic lesions, in the form of low or high-grade squamous intraepithelial lesions help stem the invasive form of the disease. Pathologic examination and immunohistochemistry studies aid in identifying and stratifying different prognostic groups. Stains for p16, a surrogate marker for human papillomavirus, is routinely performed on all patients with this type of cancer at Lowell General Hospital. This and other molecular markers for gene expression profiling can predict survival. These tumors often spread to the lymph nodes of the neck.

Tumors of the salivary glands are another major category of head and neck cancers. These include tumors involving the major and minor salivary gland. Rates of malignancy vary depending on the type of salivary gland that is affected by the tumor. Fine needle aspiration and cytologic examination can be used to diagnose the type of tumor. This technique may guide the clinical and surgical management of a patient with salivary gland tumors. Immunohisto chemistry stains help the pathologist differentiate the various types of salivary gland tumors. However, molecular profiling methods are not as frequently used in salivary gland tumors as in oral squamous cell carcinomas.

Five Year Survival Rate NCDB



Five Year Survival Rate Lowell General Hospital



Signs and Symptoms

Signs and symptoms may include: trouble breathing, frequent headaches, pain or ringing in the ears, trouble swallowing or ear pain.

Prevention, Screening and Risk Factors

High risk factors for head and neck cancers are heavy exposure to tobacco and heavy use of alcohol. Poor nutrition and vitamin deficiencies have also been linked to laryngeal and hypopharyngeal cancers. Eating a well-balanced healthy diet may help lower the risk of these cancers. A screening physical exam of the neck, base of tongue and the mouth has been widely adopted as part of a routine dental exam.

The Role of Radiation and Medical Oncology

In 2013, over 50,000 people will be diagnosed with head and neck cancer. Radiation therapy can often be used instead of surgery as an organ-preserving treatment. Sometimes, chemotherapy and/or targeted system therapy will be used with radiation to make it more effective.

Before beginning treatment, patients are scheduled for a planning session to map out the area the radiation oncologist wishes to treat. This procedure is called a simulation, which involves having a CT scan. To help patients maintain immobilization during treatment, the doctor may use a plastic mask over the head and shoulders of the patient to ensure the treatment is safe and accurate.

Face Mask Immobilizer

photo courtesy of Orfit

Radiation treatments are usually scheduled daily, Monday through Friday, for five to seven weeks. During that time, patients are scheduled to see the doctor about once a week to monitor progress and help with any side effects that the patient may experience as a result of treatment.

Chemotherapy is typically used in combination with radiation treatments. This is called chemoradiation. The most commonly used chemotherapy drugs include cisplatin, fluorouracil, methotrexate, carboplatin, paxitaxel, docetaxel, and cetuximab.

As part of our services to our Head and Neck patients, we offer a Multidisciplinary Clinic that is led by Dr. Arthur Lauretano, Director of Otolaryngology. It is attended by a representative from Radiation Oncology, Radiology, Pathology, Social Work, Dietary, and Speech Therapy.

An evaluation by the speech-language pathologists (SLP) is important to determine the nature of any swallowing disorder that may require a change in diet. The patient may require a feeding tube post-surgery until the swallowing returns to normal status.

Primary Site	Total	Analytic	Male	Female
ALL SITES	**1103**	**1069**	**495**	**608**
Oral Cavity and Pharynx	**22**	**20**	**17**	**5**
Lip	3	3	2	1
Tongue	7	6	5	2
Gum & Other Mouth	1	1	0	1
Tonsil	4	4	4	0
Nasopharynx	1	1	1	0
Hypopharynx	3	3	2	1
Oropharynx	2	2	2	0
Digestive System	**213**	**208**	**107**	**106**
Esophagus	18	18	11	7
Stomach	20	19	10	10
Small Intestine	7	7	4	3
Colon excluding Rectum	78	78	29	49
Rectum & Recto-sigmoid Junction	27	27	13	14
Anus, Anal Canal & Anorectum	7	6	3	4
Liver & Intrahepatic Bile Duct	18	17	16	2
Pancreas, Gallbladder and Other	37	36	21	17
Respiratory System	**164**	**159**	**86**	**78**
Nose, Nasal Cavity & Middle Ear	1	1	1	0
Larynx	14	14	10	4
Lung & Bronchus	148	143	74	74
Soft Tissue	**7**	**4**	**3**	**4**
Skin excluding Basal & Squamous	8	7	4	4
Melanoma-Skin	7	6	3	4
Other non-epithelial skin	1	1	1	0
Breast	**180**	**178**	**0**	**180**
Female Genital System	**72**	**63**	**0**	**72**
Cervix Uteri	13	12	0	13
Corpus and Uterus, NOS	38	38	0	38
Ovary	9	8	0	9
Vulva, Vagina and Other Organs	12	5	0	12
Male Genital System	**93**	**89**	**93**	**0**
Prostate	88	84	88	0
Testis	5	5	5	0
Urinary System	125	125	84	41
Urinary Bladder	71	71	51	20
Kidney, Renal Pelvis Ureter, & Other	54	54	33	21
Brain & Other Nervous System	**53**	**51**	**22**	**31**
Brain	23	23	13	10
Cranial Nerves, Other Nervous System	30	28	9	21
Endocrine System	**37**	**37**	**12**	**25**
Thyroid	30	30	10	20
Other Endocrine including Thymus	7	7	2	5
Lymphomas	**39**	**39**	**23**	**16**
Hodgkin Lymphoma	4	4	2	2
Non-Hodgkin Lymphoma	35	35	21	14
Myeloma	**19**	**19**	**6**	**13**
Lymphocytic Leukemia (ALL, CLL & Other)	**15**	**15**	**8**	**7**
Myeloid & Monocytic Leukemia	**7**	**7**	**5**	**2**
Mesothelioma	**2**	**2**	**0**	**2**
Ill-Defined and Unspecified Sites	**46**	**45**	**24**	**22**

Cancer Committee Members 2013

Anamur, Murat, MD	Chairman
Abel, Scott, MD	Radiology
Childs, Eileen, RN, BSN	Pain Management Center
Colburn, Geri, NP	Cancer Center
Hilbert, Heather	Community Health & Wellness
Lin, David, MD	Surgery
Dwarakanath, Gopala, MD	Pain Management Center
Edry, Ellen, CTR	Cancer Center
Grace, Julie, DPT	Rehabilitation
Ennis, Cheryl	Pathology
Katz, Matthew, MD	Radiation
Mazraany, Waasim, MD	Surgery
Bemiss, Kathleen, MSCCC	Rehabilitation
Griffin, Janet, RN, OCN	Radiation
Brennan, Kimberly, DO	Medical Oncology
Hincks, Gayle, RN, OCN	Research
Wolman, Kathryn	Speech
Howard, Terry, MD	Associate Chair
Huberty, Susanne, NP	Medical Infusion
Jo, Tamara, NP	Cancer Care Associates
Katz, Matthew, MD	Radiation
Lemire-Berthel, Meg, MSW	Social Work
Phan, Syphorn, Pharm.D	Pharmacy
Roberge, Sherry, BSRT (R,T)	Radiation
Antolini, Claudia, RN	Administration
Sheehan, Susan, RN, OCN	Medical Oncology
Shore, Rebecca, MD	Cancer Liaison Physician/Surgery
Buckley, Monica, RN, OCN	Education
Dwarakanath, Shashikala, MD	Pathology
Wandrey, Margaret, RD, LDN	Food and Nutrition
Dennington, Leigh	American Cancer Society
Lija, Joseph, MD	Pathology

Team*Walk* 2013

On Sunday, May 19, 2013, Lowell General Hospital held its 14th annual Team*Walk* for CancerCare at the Tsongas Center at UMass Lowell. More than 5,000 walkers, volunteers, sponsors and supporters raised a record-breaking $920,000 for Team*Walk's* cause. Attendees wrote messages of love on the Wall of Hope mural that is now proudly displayed inside the main campus as well as viewed hundreds of team t-shirts honoring loved ones on the "Clothesline of Love" that stretched around the grounds of the Tsongas Arena.

Rene Rancourt, known for his spirited singing at the Boston Bruins home games, joined the cause and kicked off the event with his famous rendition of the National Anthem. Walkers, decked out in their team shirts, followed the 3-mile route in downtown Lowell and the 6-mile route around the Riverwalk. At the closing ceremony, Team*Walk* chairman Kevin Campbell thanked everyone for coming out and supporting such an amazing event which allows Lowell General to continue to support those battling cancer.

Lowell General Hospital
TeamWalk
FOR CANCERCARE

Team*Walk* funds have made a difference in the lives of over 18,000 cancer patients in the past 14 years by paying for medications, nutritional supplements, wigs and prostheses, support groups, skilled nursing visits, transportation, mini-grants and supportive services to patients with all cancer types. Each and every dollar raised stays within the communities that Lowell General services, helping our friends, family and community members. These funds allow Lowell General Hospital to provide assistance, support and services to help people feel better, build confidence and instill hope through their battle with cancer.

Lowell General Hospital

Complete connected care℠

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