About Us

Regional Medical Center of San Jose is a Level II designated and verified Trauma Center staffed by in-house specialists 24/7/365. The hospital provides a host of technologically-advanced services including Cardiovascular, Neuro, Orthopedic, Bariatric and General Surgery, Interventional Pulmonology, along with multi-organ Cancer Care, and services for Women and Children. Regional holds Joint Commission advanced certification as a Comprehensive Stroke Center and a Get with the Guidelines—Stroke Gold Plus Performance Achievement Award from the American Heart Association/American Stroke Association. It is a certified Chest Pain Center, Certified Atrial Fibrillation Program, county-designated STEMI (heart attack) Receiving Center; ACoS accredited Community Cancer Program, designated Lung Cancer Screening Center and is certified by The Joint Commission in Sepsis care. Regional is a recipient of Healthgrades 2015 Distinguished Hospital Award for Clinical Excellence and has also been awarded several clinical and program awards from Healthgrades. Regional Medical Center has been designated as an Adult Pulmonary and Cardiac Center by the Extracorporeal Life Support Organization (ELSO). The hospital has also been recognized by U.S. News and World Report and The Joint Commission as a top performing hospital. For more information, visit: www.regionalmedicalsanjose.com.
Regional Medical Center of San Jose is pleased to present our Oncology Program Annual Report 2015. This report presents a summation of the 2014 Cancer Program activities as well as tabulations on all cases that were accessioned into the Regional Cancer Registry database and reported to California State Registry as well as the National Cancer Database.

Regional’s oncology program boasts accreditation by the American College of Surgeons Commission on Cancer with 3 commendations of excellence in the field. The program and its affiliated network of physicians include more than 300 board certified medical doctors including a broad spectrum of oncologic sub-specialties. The cutting edge care provided by Regional’s physicians and staff include genetic and epigenetic analysis of tumors to provide our patients highly individualized cancer treatment strategies.

Our ancillary and administrative staff is headed by an oncologic certified nurse (OCN) and full support services including a specialized dietician, physical therapy, palliative care and hospice services as well as alternative medicine as treatment options available to our patients. Patients enroll in cutting edge cancer treatment protocols through nationalized collaborative trails including N.I.H. (National Institute of Health) and in house protocols.

Our weekly tumor board cancer conferences bring expert opinion within the field to provide prospective real time evaluation of approximately 150 of the most challenging cases encompassing the entire spectrum of oncologic diagnosis. Our patients are encouraged to use numerous support groups including American Cancer Society support groups, as well as other multi-lingual groups with the involvement of our licensed social workers.

At Regional Medical Center, we believe that in providing patients and physicians with increasingly advanced technology, keeping them on the cutting edge of treatment research, and encouraging the dissemination and sharing of information, we will continue to make strides in the war on cancer.
Cancer Registry Data Summary (2014 Statistics)

The Cancer Registry at Regional is a hospital-based data system designated for the collection, management and analysis of data on individuals diagnosed with cancer. Information is collected on all patients diagnosed and/or treated for cancer at Regional. The data collected by the Cancer Registry is used to support cancer program development, quality improvement initiatives, and outcomes analysis. Cancer Registry data is used to measure compliance with evidence based clinical practice guidelines endorsed by the American College of Surgeons Commission on Cancer through quality improvement studies. The data is reported to a central registry, Cancer Prevention Institute of California (CPIC), where it is integrated into a population-based data system which is used to study trends in cancer incidence, diagnosis and treatment patterns, survival rates, and to investigate possible cancer clusters within the county and state.

Data from the American Cancer Society's: Facts and Figures for 2014 estimated that there will be over 1,665,540 new cancer cases in 2014. 171,730 will be diagnosed in California. The cancer registry at Regional accessioned 455 new cases into the cancer database in 2014. A total of 262 which were analytic cases (initially diagnosed and/or received first course or part of first course of therapy at Regional). Of the 455 cases, the non-analytic cases included 193 that were seen for recurrent or progressive disease (Classes 30 – 38).

The top 5 primary sites seen at Regional in 2014 were Lung, Breast, Colon, Non-Hodgkin’s Lymphoma and Liver. Lung cancer remains the top site diagnosed at Regional slowly increasing from 56 cases in 2010 to 76 cases in 2014, with a spike of 99 cases in 2013 shown in Figure 1. Breast Cancer is the 2nd top diagnosed site with stable growth from 52 cases in 2010 to 58 cases in 2014, again with a spike of diagnoses in 2013 as reflected in Figure 1. Though a spike of cancer diagnosis was noted in 2013, Regional continues to maintain the number of cases presented yearly. With the growth of our neurology department as well as the opening of our Breast Center we plan to see a steady increase in diagnosis over the coming years.
Aggregate data from the Cancer Registry is routinely analyzed by the Cancer Care Operation Improvement Committee and is a valuable resource for oncology clinicians and program administrators. Our Cancer Registrars capture a complete summary of each cancer case from diagnosis through treatment and post-treatment follow-up which is maintained in an electronic database and can provide data for overall evaluation. The integrity of the data is closely monitored through dedicated quality control measures while strict confidentiality is maintained to protect privacy.

In addition to adding new cases annually, the Cancer Registry is responsible for conducting yearly follow-up on all living patients in the database. The Commission on Cancer sets a standard of 90% follow-up rate for eligible cases from the last 5 years. For all eligible analytic cases, an 80% follow-up rate is to be maintained from the cancer registry reference date of 2013. Currently Regional’s cancer registry maintains a 90% follow-up rate maintaining compliance for both standards which allows for accurate analysis of survival outcomes, disease recurrence rates, and monitoring the development of secondary malignancies.

More than 50% of the patients seen at Regional in 2014 were of Asian descent as shown in Figure 2. According to the National Cancer Institute, the top two cancer sites among Asian/Pacific Islanders are breast and lung cancer. Unfavorable patterns of stage at diagnosis for these two tops sites seen at Regional, as shown in Figure 1, suggests a need for cancer control interventions. Gender Distribution revealed 56% male patients and 44% female patients as demonstrated in Figure 3.
Figure 4 looks specifically at the cases diagnosed at Regional in 2014, Age by Stage Distribution. Regional continues to diagnose our patients at a higher stage in the older age groups. Studies have shown that those who lack health insurance are more likely to be diagnosed at an advanced stage. Again Regionals high Asian population may also attribute to this trend. According to Asian American & Cancer, Intercultural Cancer Council; large percentages of individuals in the Asian American community use herbal remedies as treatment, have lower participation in self-examination, as well as a lack of knowledge of self-examination testing, all which may attribute to larger percentages of cancer diagnosis.

Figure 5 describes the Gender of our patients by Age at time of diagnosis. Regional has a larger male population than female as shown previously in Figure 3, which may also attribute to a larger number of diagnoses at a later stage. According to studies performed by the American Cancer Society, men have about a 1 in 2 chance of developing cancer at some point in their lives, compared with women, who have a 1 in 3 chance. In addition, men are diagnosed with lung cancer at a rate of 2 ½ times more than women. Although breast is Regional’s 2nd top cancer diagnosis, lung, colorectal and liver are among the top 5 cancer sites which supports the gender trend due to these sites having a higher incidence in the male population.
Multidisciplinary Cancer Conferences

To facilitate a multidisciplinary approach to cancer diagnosis, staging, and treatment planning, Regional Medical Center holds educational cancer conferences to improve the care of patients with cancer. These weekly sessions are attended by a multidisciplinary team including medical oncology, radiation oncology, radiology, pathology and surgery. Nursing and ancillary staff also attend these conferences, which helps to ensure comprehensive representation.

The goal of the conference is to offer patients the best and most current therapy by sharing information and ideas in a strictly confidential manner. Together, the attendees review cases in detail and discuss stage, prognostic indicators, national comprehensive cancer network (NCCN) guidelines, and plan for appropriate diagnostic studies, therapies and clinical trials in order to create the best treatment or management plan for individual patients.

These prospective, patient-oriented and multidisciplinary physician care planning meetings provide free consultations to our patients while educating the medical and hospital staff who participate.

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<th>PRIMARY SITE</th>
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Consultative Cancer Conference Outcomes for 2014

During 2014, a total of 20 general cancer conferences, 10 lung cancer conferences, and 11 CNS cancer conferences took place. Special presentations/review of randomized trials at cancer conferences in 2014 included:

- Prevalence & impact on survival of positive surgical margins in partial nephrectomy for renal cell carcinoma: population-based study review.
- NANETS Consensus Guideline for the Diagnosis and Management of Neuroendocrine Tumors
- Outcome & Patterns of failure in pathologic stage I-II papillary serous carcinoma of the endometrium: implications for adjuvant radiation therapy.
- Phase III, Open-Label, Randomized Study Comparing Concurrent Gemcitabine Plus Cisplatin and Radiation Followed by Adjuvant Gemcitabine and Cisplatin Versus Concurrent Cisplatin and Radiation in Patients with Stage IIB to IVA Carcinoma of the Cervix.
- Case Report & Literature Review: Syringocystadenoma papilliferum in the right lower abdomen.
- Thermal Ablation Matches Sublobar Resection Outcomes in Older Patients with Early-stage Non-small Cell Lung Cancer.
- Radical pleurectomy/decortication followed by high dose of radiation therapy for malignant pleural mesothelioma.
- Role of Radiation Therapy in the Combined-Modality Treatment of Patients with Extensive Disease Small-Cell Lung Cancer: A Randomized Study
- Chest Wall Invasion in Non-Small Cell Lung Carcinoma: A Rationale for En Bloc
- Radiotherapy plus cetuximab for locoregionally advances head and neck cancer: 5-yaer survival data from a phase 3 randomized trial, and relation between cetuximab-induced rash and survival.

Cancer Care Operations Improvement Committee 2014 Membership

The Cancer Care Operations Improvement Committee (Cancer Committee) at Regional Medical Center is dedicated to promoting a coordinated approach to patient care management.

The Cancer Care Operations Improvement Committee’s success depends on an effective, multidisciplinary cancer committee. With representatives from each of the specialties that participate in cancer-related care, including allied health departments, the Committee is responsible for goal setting, planning, initiating, implementing, evaluating, and improving all cancer-related activities in the program to ensure the highest level of quality through every aspect of the continuum of care.
Annual Mammogram Screening Outcomes

The Cancer Committee assesses the needs of the community to provide early detection, prevention and screening programs that reduce the incidence of breast cancer. National screening guidelines are utilized to detect cancers at an early stage, which improves the likelihood of increased survival and decreased morbidity.

The following assessment was utilized to determine the needs of our community:

Breast cancer is the most common type of cancer among women in the U.S. other than skin cancer. The California Cancer Registry reports that each year, about 4500 Greater Bay Area women are diagnosed with breast cancer, making it the most common cancer in the Bay Area. Breast cancer was the most common cancer in the Santa Clara Region, comprising about a third of all invasive cancers diagnosed in females. For invasive breast cancer cases, age-adjusted incidence rates averaged 135 cases per 100,000 females; for in situ cases, 28 per 100,000.

The top three issues selected by the community in the Santa Clara County Status of Vietnamese Health Report, 2010, Santa Clara County Public Health Department are health insurance and healthcare access, mental health, and cancer and cancer screening. Cancer accounts for a larger percentage of the total number of deaths among Vietnamese (32%) than for all county residents.

For the fourth year in a row, RMC has sponsored a Complimentary Screening Mammography Program during Breast Cancer Awareness Month. This service is provided to underserved/non-insured patients in the community. The radiologists of Central Valley Imaging have cooperated with RMC in providing this complimentary service.

- On Friday, October 11th and Saturday October 12th – 24 screening mammograms were performed. 20 were read as negative and 4 are awaiting prior images for comparison.
- There are 28 patients scheduled for screening mammograms on Friday October 24 and Saturday October 25th.

The recipients’ of this program have shared their gratitude with the Imaging management team.

CANCER COMMITTEE MEMBERS

PHYSICIAN MEMBERS

Morteza Dowlatabshahi, MD – Cancer Committee Chair/Radiation Oncology/Clinical Research Coordinator
Ly Do, MD – Cancer Liaison Physician/Radiation Oncology/QI Coordinator
Raymond Lee, MD – Medical Oncology/Cancer Conference Coordinator
Tin Hla, MD – Medical Oncology
Thomas Hirai, MD – Surgery
Christopher Kim, MD – Surgery
Conway Lien, MD – Radiology
Keith Kwok, MD – Radiology
Arash Padidar, MD – Interventional Radiology
Jyothsna Narla, MD – Pathology
Gerald Weiss, MD – Pathology

NON-PHYSICIAN MEMBERS

Alvin Haynes, MD – Chief Medical Officer
Tina Bray, RN – Chief Nursing Officer
Toni Arman, RN – Assistant Chief Nursing Officer
Nancy Fore, RN – Chief Quality Officer/Quality Management
Michelle Kern, CTR – Cancer Program Manager/Community Outreach Coordinator
Marianne Heltzel, CTR – Cancer Registrar/Cancer Registry Quality Coordinator
Angie Pronio-Gill, RN – MS ONC Director/Pain Management
Rancelle Ablan, RN – OBS/Infusion Services
Christine Teklehaimanot – Palliative Care
Steve Walters – Radiology Director
Lan Cao, RN – Social Work
Jen Huang – Pharmacy Director
David Beckham – Laboratory
Nancy Bugwadia – Director Nutritional Services
Cheryl Sinclair – American Cancer Society
Site Study: Lung Cancer

There is a mistaken impression that lung cancer is a disease that only strikes people who smoke. This is not the case. While cigarette smoking is the greatest risk factor for the development of lung cancer, an increasing number of patients are developing lung cancer with no history of smoking or smoke exposure. Lung Cancer in its early stages has no symptoms. Often, it is picked up on an x-ray or CAT scan as an incidental finding. As the disease progresses, symptoms such as chest pain, shortness of breath, cough and weight loss can develop.

According to data from the American Cancer Society’s: Facts & Figures for 2014 an estimated 224,210 new cases of lung cancer are expected in 2014, accounting for 13% of all cancer diagnoses.

15% of Regional’s analytic cancer diagnosis were lung cancer. The following study looks specifically at the 42 analytic cases (initially diagnosed and/or received first course or part of first course of therapy at Regional).

The most important determinants of how a patient will be treated are the stage of the cancer (whether the tumor is localized in the lung or if it has moved), along with the patients overall health conditions. As demonstrated in Figure 6, the diagnosis of In Situ Lung cancers at Regional is on track with the diagnosis of all Stage 0 cases diagnosed state wide and across the US. However, the rate of lung cancer diagnosed at Stage I, II and III falls slightly below current averages causing our rate of Stage IV or metastatic lung cancer to be diagnosed at a high rate. Because the lungs are large, tumors can grow in them for a long time before they are found. Even when symptoms—such as coughing and fatigue—do occur, people think they are due to other causes. For this reason, early-stage lung cancer (stages I and II) is difficult to detect. Most people with lung cancer are diagnosed at stages III and IV. Still, Regionals patient population and community require improved outreach methods and screening to prevent and decrease the rate of our patients being diagnosed at a later stage of disease.

Lung Cancer accounts for more deaths than any other cancer in both men and women with an estimated 159,260 deaths expected in 2014, according to the American Cancer Society’s: Facts & Figures for 2014, which accounts for 71% of all diagnosed. Figure 7 reveals, 20 of the 42 (48%) analytic lung cancer cases diagnosed at Regional are now deceased though 85% of those deceased patients were diagnosed with stage IV disease at diagnosis. The development of a LDCT screening program aimed at the early detection of lung cancer coupled with innovative treatments holds promise for improved survival in the future.
Though the leading risk factor for lung cancer is cigarette smoking, lung cancer is a multifactorial disease. Many factors work together to either cause or prevent cancer. The second leading cause of lung cancer in North America has been found to be exposure to radon (gas released from soil and building materials). Occupational or environmental exposure to secondhand smoke, asbestos, radiation, air pollution, diesel exhaust and certain metals are additional risk factors. Genetic susceptibility plays a role in contributing to the development of lung cancer as well as individuals with a medical history of tuberculosis. Risk levels increase with both quality and duration of smoking.

When a person is diagnosed with lung cancer, looking at biopsied cells under the microscope also helps doctors determine the type of lung cancer. It is important to know the specific type because this information helps doctors recommend the best treatment. The two main types of lung cancer are classified as small cell or non-small cell lung carcinoma. Non-small cell lung cancer is much more common than small cell lung cancer as demonstrated in Figure 8 with 95% of the lung cancer cases diagnosed at Regional diagnosed histologically as non-small cell carcinoma (NSCLC). Nationally NSCLC account for 85% of all lung cancer diagnosis. Small cell lung cancer grows more rapidly and spreads to other parts of the body earlier than NSCLC. It is also more responsive to chemotherapy.

In most cases, the treatment of lung cancer is determined by its stage. Localized cancers are treated by surgery. Figure 9 reveals Regional cancers are treated by a combination of therapies including chemotherapy, radiation and surgery. Distant disease is treated by chemotherapy. For early stage NSCLC, surgery is usually the treatment of choice; chemotherapy (sometimes in combination with radiation therapy) is often given as well. Advanced-stage NSCLC patients are usually treated with chemotherapy alone or in combination with radiation. As demonstrated in Figure 5, (12%) of cases diagnosed at Regional underwent surgery whether alone or with adjuvant therapy. 14 (33%) were treated with chemoradiation and 31% receive no treatment at this facility which is due to the large number of stage IV or incurable cases.

Until recently, studies evaluating the efficacy of early detection tests for lung cancer (chest x-rays, analysis of cells in sputum, and fiberoptic examination of the bronchial passages) did not find a reduced risk of lung cancer death with screening. In 2010, results from the National Lung Screening Trial (NLST) showed 20% fewer lung cancer deaths through early detection.
among current and former heavy smokers who were screened with spiral CT compared to standard chest x-ray. Current evidence suggests that screening for lung cancer is most beneficial among people at high risk for developing lung cancer. The American Cancer Society recommends that clinicians with access to high-volume, high-quality lung cancer screening and treatment centers should initiate a discussion about lung cancer screening with apparently healthy patients 55 to 74 years of age who have at least a 30 pack-year smoking history and who currently smoke or have quit within 15 years. Regional is dedicated to focus on the educational and screening activities to decrease late stage lung disease and will begin Low Dose CT screenings in 2015.

Due to Regional’s increased advanced lung cancer case rate, this was the impetus which led our cancer physicians to conduct a retrospective study on our outcomes of stage IV non-small cell lung cancer cases. The outcome of the study was reported by the Chief of Oncology Services here at Regional at the International Lung Cancer Congress in 2014. The following 1-½ pages show the results of the study.

Outcomes of stage IV non-small cell lung carcinoma treated with chemotherapy with or without palliative chest radiotherapy

Participating Physicians

Ly Do, MD  
Morteza Dowlatshahi, MD  
Khiem Tran BS  
Eng Huan MD  
Tin Hla MD  
Raymond Lee, MD,  
Sharon Bogerty MD  
Sang Lee MD  
Peggy Lu MD  
Manoj Agarwal MD  
CANCER CARE INSTITUTE, San Jose  
CANCER CARE INSTITUTE, Morgan Hill/Gilroy

Purpose

Stage IV non-Small Cell Lung Carcinoma (NSCLC) is treated with systemic chemotherapy with radiation reserved for palliation. The purpose of our study was to investigate the outcomes of patients who received chest palliative radiation (CPR) in addition to their chemotherapy versus those who received non-thoracic palliative radiation with their chemotherapy or no radiation at all (NTPR).
Methods
This is a retrospective analysis of 58 consecutive patients with stage IV NSCLC who were referred to us for palliative radiotherapy to the chest or non-thoracic sites from 02/2001 to 08/2013. Patients were staged using CT scans, PET/CT, MRI of the brain, bronchoscopy, and biopsy. All patients received chemotherapy that consisted of Cisplatin and Etoposide or Carboplatin and Taxol. 29 (50%) patients received CPR and 29 (50%) received NTPR. CPR was delivered to a median dose of 5580 cGy. Statistical analysis was performed by use of the Log-Rank and Wilcoxon tests. Overall Survival (OS) was determined by the Kaplan-Meier method. Patients who passed away within 6 months of diagnosis were presumed to have progression, and their death dates were used to censor their progression free survival (PFS) time.

Results
Median age was 67.5 years. There was a statistically significant benefit of PFS and OS seen in CPR patients. Median PFS time was 2.3 months for patients who received NTPR and 4.9 months for patients who CPR (p > 0.01). 6-month PFS for patients with NTPR is 20.7% and with CPR was 48.3%. 12-month PFS for patients with NTPR is 5.2% and with CPR is 43.5%. The median OS time for all patients was 4.9 months; 3.1 months for patients with NTPR and 5.1 months for patients with NTPR is 38.0% and with CPR radiation was 48.3%. 12-month OS for patients with NTPR is 17.2% and with CPR was 34.5%.

Conclusion
Our study’s outcomes are likely a reflection of the biology of disease. However, our study may suggest a benefit with the addition of chest radiation in improving locoregional disease. With improvements in chemotherapy regimens, the control of locoregional disease may become more important in the future. More studies should be performed to validate our provocative findings.

REFERENCES:
1American Joint Committee on Cancer 2009 (7th Edition)

TNM Lung Cancer Staging

Primary Tumor (T)
Tx: Primary tumor cannot be assessed, or tumor proven by the presence of malignant cells in sputum or bronchial washings but not visualized by imaging or bronchoscopy
T0: No evidence of primary tumor
Tis: Carcinoma in situ
T1: Tumor 3 cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the hilar bronchus
T1a: Tumor 2 cm or less in greatest dimension
T1b: Tumor more than 2 cm but 3 cm or less in greatest dimension
T2: Tumor more than 3 cm but 7 cm or less in greatest dimension, involves main bronchi, 2 cm or more distal to the carina; invades visceral pleura; associated with atelectasis or obstructive pneumonitis that extends to the hilar region but does not involve the entire lung
T2a: Tumor more than 3 cm but 5 cm or less in greatest dimension
T2b: Tumor more than 5 cm but 7 cm or less in greatest dimension
T3: Tumor more than 7 cm or one that directly invades any of the following: parietal pleura (PL3), chest wall (including superior sulcus tumors), diaphragm, phrenic nerve, mediastinal pleura, parietal pericardium; or tumor in the main bronchus less than 2 cm distal to the carina but without involvement of the carina; or associated atelectasis or obstructive pneumonitis of the entire lung or separate tumor nodule(s) in the same lobe
T4a: Tumor of any size that invades any of the following: mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, carina, separate tumor nodule(s) in a different ipsilateral lobe

Regional Lymph Nodes (N)
NX: Regional lymph nodes cannot be assessed
N0: No regional lymph node metastases
N1: Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension
N2: Metastasis in ipsilateral mediastinal and/or subcarinal lymph node
N3: Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)

Distant Metastases (M)
M0: No distant metastasis
M1: Distant metastasis
M1a: Separate tumor nodule(s) in a contralateral lobe, tumor with pleural nodules or malignant pleural (or pericardial) effusion
M1b: Distant metastasis (in extrathoracic organs)

Graph 1. Overall Survival (months). Of the 12 patients who were EGFR positive, 6 received CPR and 6 received NTPR.

Graph 2. Progression Free Survival Time (months).
As an accredited cancer center, Regional Medical Center takes a multidisciplinary approach, with consultation among surgeons, medical and radiation oncologists, diagnostic radiologists, pathologists, and other cancer specialists. This multidisciplinary partnership results in improved patient care.

To earn voluntary CoC accreditation, our cancer program was initially required to meet or exceed 25 specific CoC quality care standards. To maintain accreditation the program will be evaluated every three years on all 34 CoC standards through a survey process, and maintain levels of excellence in the delivery of comprehensive patient-centered care.

The CoC Accreditation Program provides the framework for Regional Medical Center to improve its quality of patient care through various cancer-related programs that focus on the full spectrum of cancer care including, prevention, early diagnosis, cancer staging, optimal treatment, rehabilitation, life-long follow-up for recurrent disease, and end-of-life care. When patients receive care at a CoC hospital, they also have access to information on clinical trials and new treatments, genetic counseling, and patient centered services including psycho-social support, a patient navigation process, and survivorship care plan that documents the care each patient receives and seeks to improve cancer survivors’ quality of life.

Like all CoC-accredited facilities, Regional maintains a cancer registry and contributes data to the National Cancer Database (NCDB), a joint program of the CoC and American Cancer Society (ACS). This nationwide oncology outcomes database is the largest clinical disease registry in the world. Data on all types of cancer are tracked and analyzed through the NCDB and used to explore trends in cancer care. CoC-accredited cancer centers, in turn, have access to information derived from this type of data analysis, which is used to create national, regional, and state benchmark reports. These reports help CoC facilities with their quality improvement efforts.

About the CoC

Established in 1922 by the American College of Surgeons, the CoC is a consortium of professional organizations dedicated to improving patient Outcomes and quality of life for cancer patients through standard-setting, prevention, research, education, and the monitoring of comprehensive, quality care. Its membership includes Fellows of the American College of Surgeons. For more information, visit: www.facs.org/cancer
## 2014 Site Distribution Table

This table summarizes primary sites seen at Regional Medical Center by Class of Case, Gender and Stage of Disease at diagnosis.

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<tr>
<td>Lung/Bronchus-Non SM Cell</td>
<td>76</td>
<td>40</td>
<td>36</td>
<td>54</td>
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<tr>
<td>Leukemia</td>
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<td>7</td>
<td>6</td>
<td>8</td>
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<tr>
<td>Myeloma</td>
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<td>8</td>
<td>12</td>
<td>13</td>
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<tr>
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<td>8</td>
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<tr>
<td>Soft Tissue</td>
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<td>5</td>
<td>4</td>
</tr>
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<td>Melanoma of Skin</td>
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<tr>
<td>Breast</td>
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<td>Ovary</td>
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<td>17</td>
<td>20</td>
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<tr>
<td>Bladder</td>
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<td>6</td>
<td>3</td>
<td>8</td>
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<td>Kidney and Renal Pelvis</td>
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<td>7</td>
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<tr>
<td>Eye</td>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Brain</td>
<td>15</td>
<td>11</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Other Nervous System</td>
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<td>5</td>
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<td>Thyroid</td>
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<td>Other Endocrine</td>
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<td>3</td>
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<td>Hodgkin's Disease</td>
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<td>Non-Hodgkin's Lymphoma</td>
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<td>9</td>
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<tr>
<td>Unknown or Ill-Defined</td>
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2013 Clinical Data Comparison

Data submitted to the National Cancer Database (NCDB) is used to provide feedback and assess the quality of patient care. The feedback enables Regionals cancer program to compare our outcomes with regional, state, and national outcomes and patterns of care.

The NCDB is a nationwide oncology outcomes database used as a clinical surveillance mechanism to monitor changes and variations in patterns of cancer care and patient outcomes. NCDB data serves as useful benchmarks for patient care and continuous quality improvement for cancer programs.

The following data outcomes are Regionals initial feedback following our first data submission to the NCDB. The data analysis compares Regional with all other accredited Community Cancer Programs (CCP’s) in the nation, reflecting where our program is in comparison with those in the same CCP designation. The following data reflect cases diagnosed in 2013 only, as this is the first year we submitted data to the NCDB following our initial accreditation in 2014. 2014 data will be reflected in the 2016 annual report.

Figure 10 above reveals that the ages of Regional’s patients tend to be older (70+) compared to other CCP’s in the US. We have significantly less patients diagnosed in the middle age group (50-60) which may account for our population having a larger percentage of diagnosis at a later stage as seen in Figure 12 on the following page.

It is likely that these findings reflect differences in awareness of possible symptoms and/or differences in healthcare-seeking behavior. If we better understand who is at risk of advanced stage diagnosis, then we will be able to better focus research and policies to achieve faster and greater gains in earlier diagnosis of cancer, leading to better survival outcomes. Our focus is community outreach and early detection for our top diagnosed sites.
As seen in Figure 11, Regional falls 11% below the national average rate for early stage disease (stage I and stage II) and is 8% above the national average for advanced stage (Stage III/IV). Lower socioeconomic status is associated with more stage III/IV diagnoses which as previously dictated accounts for the large majority of patients seen at Regional.

Regional in comparison to all other 478 CCP’s in the NCDB also has a significantly higher Asian and Hispanic Population, shown in Figure 12 which supports for the higher stage and age at diagnosis.
Oncology Program Support & Service

Advanced Interventional Radiology
Interventional radiology, also known as vascular and interventional radiology or surgical radiology is an independent medical specialty providing minimally invasive image-guided diagnosis and treatment of diseases in every organ system. The unifying concept behind these therapies is the use of the most modern, least invasive technique available in order to minimize risk to the patient and improve health outcomes. Services provided at regional are as follows:

- Theraspheres: radioactive beads that are injected into the artery of a tumor. Used for liver metastases.
- Chemo Emobilization: Local delivery of cancer fighting drugs directly into the blood vessel feeding a tumor.
- Drug Eluting Beads: Beads infused with cancer fighting drugs that are injected into the artery leading to the tumor.
- PercuNav: Allows radiologists to overlap multiple images to more accurately reach and diagnose suspicious masses.

Alternative Medicine
Non-Invasive treatment options for various oncologic conditions are available to Regionals patient through referral offering natural healing modalities such as; acupuncture, herbal medicine, chiropractic and physiotherapy.

Breast Care Center
At Regional Medical Center of San Jose Breast Care Center, we understand the anxiety surrounding breast cancer. That’s why we make sure that we provide a safe, comforting environment where you can get the results you need, quickly and compassionately. Our staff has extensive experience in diagnostic imaging technology, and our medical center has invested in the most accurate equipment available for mammography, breast ultrasound exams and stereotactic biopsy. At the Breast Care Center, part of our women’s health care services; you can rest assured that you will receive excellent service from our talented team of radiologists, and technologists. Services offered include:

- Digital mammography
- Stereotactic breast biopsy
- Breast ultrasound
- Outpatient laboratory
- Bone density scanning

Cancer CAREpoint
CAREpoint provides support services for anyone in Silicon Valley whose life is touched by cancer. In March 2012, the Cancer CAREpoint Resource Center opened to provide a convenient, welcoming place for individuals and their families and caregivers to come for help through the cancer journey. Here you can meet one-on-one for free private consultations, attend educational programs, receive therapies, and find more information about cancer, treatments and side effects, prevention and support groups.

Cancer Navigation and Survivorship
Patient navigation in cancer care refers to specialized assistance to overcome barriers in receiving care and facilitating timely access to clinical services and resources. Regional offers an Oncology Certified Nurse (OCN) to help those diagnosed with cancer whether newly diagnosed, currently involved in cancer treatment, or experiencing a recurrence.
**Cancer Screenings**

Our cancer program offers a free mammography screening to the community each year. The Mammography Screening clinic is traditionally held over two days in October. Low Dose CT Screening Program for the early detection of lung cancer launched in 2015.

**Da Vinci® Robotic Surgery**

Regional Medical Center of San Jose is a national leader in single-site robot-assisted oncologic surgeries. Over 500 robotic cases have been performed at Regional. The da Vinci® Single Incision & Multi Port Minimally Invasive Surgical System provides surgeons with an alternative to both traditional open surgery and conventional laparoscopy, putting a surgeon's hands at the controls of a state-of-the-art robotic platform. The da Vinci System enables surgeons to perform even the most complex and delicate procedures through very small incisions with unmatched precision. The da Vinci system assists in general, gynecologic and urologic surgeries specific to cancer care.

**Cytotechnologist**

Regional now employee's a certified specialist in the preparation and screening of cytology specimens. These specimens include GYN and non-GYN smears, body fluids, FNAs, ENB’s, discharges, urines etc.

**Genomic Testing**

Cancer is a condition triggered by mutations (changes) in the genes of a cell that result in uncontrolled, abnormal cell growth. Some families have gene mutations that are passed down from one generation to the next. Genetic testing is available to our patients to help make informed decisions about how to manage future risks of cancer. Genetic testing may help individuals determine if their cancer was due to an inherited gene mutation or if they are at greater risk of developing the same cancer again or of developing another type of cancer.

**Neurosurgery/Brain Lab**

The Neurosurgery team includes neurosurgeons with specialized skills in Stereotactic Neurosurgery. Sophisticated imaging techniques are used to accurately identify the positions and dimensions of lesions. Innovative Brainlab Neurosurgery stereotactic equipment has been added to the neurosurgical operating rooms space. As a result of Regional Medical Centers’ continuous drive to introduce new technologies (all 10 of the top ranked hospitals for neurology and neurosurgery in the US, according to US News & World Report, use Brainlab surgical navigation technology). Brainlab Cranial Software is designed for both routine and complex surgical procedures. This technology assists the surgeons in determining the best approaches for Stereotactic Neurosurgery intervention. In addition, there is a dedicated team of nurses and therapists who specialize in the care of neurological patients.
Nutrition Services

Regional nutrition services provide safe and effective nutrition care across the cancer continuum (prevention, treatment, and survivorship) and are essential to promoting quality of life. Registered dieticians are available to consult with patients regarding nutritional needs during treatment and can develop a plan to meet their specific needs.

Palliative Care

Palliative care focuses on providing patients with relief from the symptoms, pain, physical stress, and mental stress of their cancer diagnosis in order to improve quality of life for both the patient and the family.

Psychosocial Services

Psychosocial services are provided to patients with cancer and their caregivers throughout the continuum of care. These services address physical, psychological, social, spiritual, and financial support needs that result from a cancer diagnosis and help ensure the best possible outcome.

Radiation Oncology

The broadly based practice at The Cancer Care Institute offers its patients accessibility to the highly specialized principles of radiation therapy. The department is equipped with some of the most advanced technology including:

- Stereotactic Radiosurgery (SRS)
- High-Dose Radiation (HDR) Brachytherapy
- Intensity Modulated Radiation Therapy (IMRT)
- Image-Guided Radiation Therapy (IGRT)
- Volume Intensity Modulated Arc Therapy (VMAT)
- AccuBoost
- Lung Symmetry
- 3D CT Planning
- Stereotactic Body Radiation Therapy (SBRT)
- Strontium Contact Radiation Therapy
- Electron Beam Radiation Therapy

Rehabilitation

Cancer rehabilitation services and treatments help patients cope with activities of daily living affected by the cancer experience and enable them to resume normal activities. Rehabilitation assists cancer patients and survivors to improve functional status and quality of life. Rehabilitation services provides at Regional are as follows:

- Pain Management
- Physical Impairments & Disabilities
- Physical and Exercise Therapy
- Occupational Therapy
A dedicated oncology unit with all private rooms offers a specialized patient care experience. Cancer patients are cared for by an interdisciplinary team that includes medical directors, oncologists, radiation oncologists, surgeons, oncology nursing staff, social workers, physical rehabilitation, pharmacists, dietitians, discharge planners, and chaplains.

Research, Studies and Clinical Trials

Clinical research studies offer patients the opportunity to enroll in treatment or observational research studies and trials. The following are available at Regional.

**INVESTIGATIONAL RESEARCH TRIALS:**
- STOP Trial: Use of Therasphere stent in unresectable Liver Carcinoma
- EPOCH Trial: Targeted chemotherapy treatment for lymphoma

**HUMANITARIAN USE DEVICE STUDIES:**
- Therasphere: Device in treatment of metastatic liver tumor

Support Services

Regional Medical Center San Jose is committed to supportive programs long after the patients leave our care. We have implemented a support network that provides ongoing education and emotional support to patients, families, staff, and physicians. Our programs are offered through Regional Medical Center and the American Cancer Society. Patients, families, and caregivers can attend our bi-weekly support group with no registration required. Regional hosts quarterly LGFB sessions in partnership with the American Cancer Society. This program offers woman time with a trained volunteer cosmetologist to teach them how to cope with skin changes and hair loss using cosmetics and skin care products donated by the cosmetic industry.

**CANCER CARE SUPPORT GROUP**
1st and 3rd Friday of each Month
11:00am to 1:30pm
Hosted by Cancer Care Institute
Contact 888-762-8881

Surgical Oncology

Regional’s surgeons and surgical oncologists are highly-skilled generalists, each with a range of special interests in many of the latest surgical techniques and treatments. Our team of specialized surgeons is as listed below.

- General Surgeons
- GYN Surgical Oncologists
- Neurological Surgeons
- Hepatobiliary Surgeons
- Cardio-Thoracic Surgeons
- Orthopedic Surgeons
Expert Cancer Care Team

The Cancer Care team of Oncology professionals is extremely dedicated to providing outstanding patient care. The team has in-depth knowledge about the disease and is continually striving to know how cancer affects the lives of our patients and their families.

**RADIATION ONCOLOGY**
Ly Do, MD  
Morteza Dowlatshahi, MD  
Catherine Su, MD

**MEDICAL ONCOLOGY**
Adour Adrouny, MD  
Manoj Agarwal, MD  
Tin Hla, MD  
Priya Kumaravelu, MD  
Raymond Lee, MD  
Jiali Li, MD, PhD  
Alexander Pham, MD

**PALLIATIVE CARE**
Satya Chelamkuri, MD

**ANATOMIC PATHOLOGY**
Jyothsna Narla, MD  
Gerald Weiss, MD  
Dorothy Wong, MD  
Wendy Yang, MD

**DIAGNOSTIC RADIOLOGY**
Keith Kwok, MD  
Conway Lien, MD  
Caroline Yu, MD  
Kyle Yu, MD

**INTERVENTIONAL RADIOLOGY**
Paul Cipriano, MD  
Lotfi Hacein-Bey, MD  
Reza Malek, MD  
Arash Padidar, MD  
Lindsey Pierce, MD

**GENERAL SURGERY**
Jefferson Bastidas, MD  
Scott Benninghoven, MD  
Patrick Garlard, MD  
Kelly Gonzales, MD  
Thomas Hirai, MD  
Christopher Kim, MD  
Rick Kline, MD  
Rohanejaj Mohammadreza, MD  
Huy T Nguyen, DO  
Nang Nguyen, DO  
Christopher Traver, MD  
Min K. Yi, MD

**UROLOGY**
Hossein Habibi, MD  
Yu Hwong, MD  
David King, MD  
Han Lo, MD  
David Noller, MD  
Mark Noller, MD  
Terry Sullivan, MD

**NEUROSURGERY**
Kenneth Blumenfeld, MD  
Serwin Hua, MD  
Emeka Nchekwube, MD  
Adebukola Onibokun, MD  
Rosario Marshall, MD  
Ali Shirzadi, MD  
David Yeh, MD

**PULMONOLOGY**
Sanjay Agarwal, MD  
Ali Bassiri, MD  
Emiro Burbano, MD  
Eng Huan, MD  
Thomas Lei, MD  
Srilakshmi Vemulakonda, MD

**ENT**
Richard Eng, MD  
Karen Fann, DO  
Richard Trevino, MD

**CARDIOTHORACIC SURGERY**
Sang Lee, MD  
Eddie Tang, MD

**THORACIC SURGERY**
Sharon Bogerty, MD  
Hossein Yazdy, MD

**GYN ONCOLOGY**
Samuel Ballon, MD  
James Lilja, MD  
Jeff Lin, MD

**GASTROENTEROLOGY**
Eduardo DaSilveira, MD  
Hashem Farr, MD  
Ruel Garcia, MD  
Rasik Kansara, MD  
Kenneth Kelsen, MD  
Brian Levitt, MD  
Hugh Mai, MD  
Sally Nacianceno, MD  
Huy Nguyen, MD  
Khanh Nguyen, MD  
Suknwindar Sandhu, MD  
Huy Trinh, MD  
Harsha Vittal, MD  
Sudin Vittal, MD  
Jenny Yang, MD
REGIONAL MEDICAL CENTER STAFF
Regional’s Cancer Care staff is helpful, friendly, and knowledgeable. Nursing care is provided by nurses with specialized knowledge and skills in oncology. Competency is evaluated annually.

Tumor Board Case Presentation Request Line .................. (408) 347-4007
Cancer Navigation Program ............................................. (408) 259-5000 x2352
Cancer Care Institute ....................................................... (408) 729-4673
Oncology Program Manager ............................................ (408) 928-6213
Inpatient Oncology Department ................................. (408) 259-5000 x5230
Cancer Support Groups ...................................................... (888) 762-8881
Nutrition Services ............................................................... (408) 259-5000 x2211
Rehabilitation ................................................................. (408) 259-5000 x2882
Social Services ................................................................. (408) 259-5000 x2239
Find a Physician ............................................................... (888) 762-8881

HELPFUL LINKS
Regionals Home Page
http://regionalmedicalsanjose.com/home/
Regional Oncology Page
http://regionalmedicalsanjose.com/service/cancer-care-in-your-community
American Cancer Society
http://www.cancer.org/
American College of Surgeons
https://www.facs.org/